



## **Between Global Aspirations and Developmental Considerations: Pre-service Teachers' Beliefs about English Instruction in Indonesian Early Childhood Education**

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### **Abstract**

This research examines the beliefs of pre-service early childhood education (ECE) teachers in Indonesia regarding the integration of English in early childhood environments. As English becomes more important around the world, people are starting to wonder where it fits into early learning environments and whether future teachers are ready to teach it. Using a qualitative descriptive approach, data were gathered from six pre-service teachers via open- and closed-ended questionnaire responses and analyzed thematically. The results indicate that participants predominantly perceive English as essential for children's future communicative competencies and global involvement. At the same time, their answers show that they are being careful: most people think that English should be an extracurricular subject rather than a core part of the curriculum, which shows that children's developmental stages should come first. Participants stressed how important it is for young learners to have simple, contextual vocabulary and fun ways to learn. They also voiced worries about the teachers' abilities, how well they pronounced words, and how little help they got from the school. The study indicates that although pre-service teachers are favorably disposed towards early English instruction, they remain cognizant of both practical and pedagogical challenges. These insights highlight the necessity of enhancing teacher preparation programs and offering more explicit policy guidance to facilitate developmentally appropriate English instruction in Indonesian early childhood education settings.

**Keywords:** early childhood education, English instruction, pre-service teacher beliefs

### **Abstrak**

Penelitian ini menelaah keyakinan mahasiswa calon guru Pendidikan Anak Usia Dini (PAUD) di Indonesia terkait integrasi bahasa Inggris dalam lingkungan pendidikan anak usia dini. Seiring meningkatnya peran bahasa Inggris secara global, muncul pertanyaan mengenai posisi bahasa Inggris dalam pembelajaran awal serta kesiapan calon guru mengajarkannya. Dengan pendekatan kualitatif deskriptif, data dikumpulkan dari enam calon guru melalui kuesioner dengan pertanyaan terbuka dan tertutup, kemudian dianalisis secara tematik. Hasil penelitian menunjukkan bahwa sebagian besar partisipan memandang bahasa Inggris penting untuk membangun kompetensi komunikasi anak di masa depan dan mendukung keterlibatan dalam konteks global. Namun, mereka juga menunjukkan kehati-hatian: mayoritas menilai bahasa Inggris lebih tepat ditempatkan sebagai kegiatan ekstrakurikuler, bukan bagian inti kurikulum, demi mengutamakan kesesuaian dengan tahap perkembangan anak. Partisipan menekankan perlunya materi yang sederhana dan kontekstual, terutama kosakata dasar, serta strategi pembelajaran yang menyenangkan. Di sisi lain, mereka mengungkapkan kekhawatiran tentang kemampuan guru, ketepatan pelafalan, dan terbatasnya dukungan sekolah. Temuan ini mengindikasikan bahwa calon guru cenderung positif terhadap pengajaran bahasa Inggris sejak dini, tetapi tetap menyadari tantangan pedagogis dan praktis. Oleh karena itu, program pendidikan guru perlu diperkuat, disertai panduan kebijakan yang lebih jelas agar pembelajaran bahasa Inggris dapat diterapkan secara tepat perkembangan dalam setting PAUD Indonesia.

**Kata kunci:** pendidikan anak usia dini, pembelajaran Bahasa Inggris, keyakinan calon guru

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## A. Introduction

As English has become more common in global communication, it has slowly changed schools all over the world, even in early childhood education (ECE). In numerous contexts, English is no longer perceived solely as a foreign language subject but as a conduit to global engagement, information access, and prospective academic mobility (Azizi, 2024). Being able to speak English well greatly increases academic mobility and job opportunities by making it easier to get higher-paying jobs, raising income levels, and making it easier to move up in globalized labor markets (Hossain et al., 2025). In Indonesia, conversations about starting English lessons in early childhood continue to come up in both public and academic settings. Some people think that exposing children to things early on is a good way to invest in their future, while others wonder if it's the right thing to do for their development and if it's even possible. These different opinions show that the problem isn't just about language; it's also about values, priorities, and how we think about education.

Studies show that teaching English to young children can help them grow mentally, socially, and emotionally, as well as improve their language skills. The next parts talk about the most important parts of this way of teaching. Learning English at a young age can help you think critically and solve problems better (Danijela Prošić-Santovac & Vera Savić, 2022). Learning a foreign language helps people talk and interact with each other, which makes them more socially competent (Tu, 2024). Children learn about other cultures, which helps them understand and care about people from all over the world (Danijela Prošić-Santovac & Vera Savić, 2022).

But just introducing something early doesn't mean it will work out well. The quality of the interaction, the way the teacher teaches, and the teacher's skill level are all very important. In early childhood environments, where play, socio-emotional development, and comprehensive growth are paramount, the incorporation of English necessitates meticulous deliberation. It should not interfere with basic developmental goals or put academic pressure on young students. Previous studies underscore critical competencies for instructing children in English, integrating findings on effective methodologies and emphasizing the significance of motivation, interaction, classroom management, and technology in enhancing language acquisition and facilitating successful educational experiences. Children learn language naturally when they play and have sensory experiences (Tu, 2024). Using different materials and activities makes learning fun and interesting (Jingga, 2022). Even though there are many benefits to teaching English to young children, some studies also point out possible problems, like the risk of overwhelming kids or the chance that they will develop negative attitudes toward learning a language if it is not done correctly (Trilestari et al., 2024).

In Indonesia, English is not required as a mandatory subject in formal early childhood curricula. Its presence is often determined by institutional policy, parental demand, and the availability of teacher resources. Because of this, implementation varies a lot: some schools offer English as an extra or enrichment activity, while others don't offer it at all. This variability is a sign of bigger doubts about the priorities of the curriculum, the readiness of teachers, and the direction of national education. In this context, teachers' beliefs hold significant sway. The 2013 Curriculum does not require English even in primary education, allowing schools to decide based on local needs (Umroh & Artha, 2017). The Merdeka Curriculum also positions English as optional, which may limit early exposure to the language (Damayanti et al., 2023).

It is well known that teachers' beliefs affect how they teach, what they teach, and how they carry out the curriculum. What teachers think about kids, learning languages, and educational goals often decides how they teach, even if the rules say otherwise. Beliefs are particularly significant for pre-service teachers, as they constitute the foundation of their

future professional practice. These beliefs are influenced by previous educational experiences, teacher training programs, sociocultural contexts, and overarching societal narratives regarding English. Prior research underscores that preschool teachers' beliefs regarding English language instruction encompass the significance of bilingual education, the necessity of recognizing children's individual traits, the imperative for curriculum modifications, and the impact of teachers' experience on effective pedagogical approaches in English language acquisition (Iskanda et al., 2024).

Even though there is more and more talk about English in early education, not much has been said about how pre-service early childhood teachers think about its role. A significant portion of current research concentrates on either primary or secondary education, or on in-service teachers possessing prior classroom experience. However, it is essential to comprehend the perspectives of pre-service teachers, as they constitute the forthcoming generation of educators who will interpret and apply curriculum policies in practice. Investigating how they manage the conflict between global ambitions and developmental factors provides significant insights into the future trajectory of English instruction in Indonesian early childhood education. In light of these factors, this study seeks to examine the beliefs of pre-service early childhood teachers regarding the teaching of English in Indonesian early childhood education settings. The study employs a qualitative descriptive methodology to elucidate the perceptions of future educators regarding the significance, positioning, challenges, and expectations associated with early English instruction. This research enhances ongoing discussions regarding teacher preparation, curriculum development, and the equitable incorporation of global competencies in developmentally suitable early childhood education.

## **B. Literature Review**

Studies on English in early childhood education (ECE) indicate that educators' endorsement of early English instruction is frequently influenced by an equilibrium between perceived global significance and apprehensions regarding developmental suitability. A systematic review of studies from 2012 to 2022 revealed that preschool teachers predominantly held positive views regarding the introduction of English; however, these views were often contingent upon child-centered pedagogy, achievable learning objectives, and adequate institutional support. The review also points out common problems that make teachers feel like what they can do in practice is limited, such as not being able to speak English well, not getting enough training, having unclear curriculum, and not having enough resources (Mohamad et al., 2024).

A common theme in many situations is the difference between what teachers want to do and how ready they feel to do it. A qualitative study involving kindergarten teachers in Kuwait revealed that educators perceived early English instruction as increasingly essential; however, they encountered difficulties stemming from inadequate preparation, curriculum deficiencies, and disparate levels of English proficiency. These obstacles influenced educators' classroom choices and led to careful, occasionally limited methods of instructing English to young learners (Alenezi et al., 2023). This indicates that convictions regarding "what ought to be taught" are intricately linked with convictions concerning "what can be taught" in authentic classroom settings.

Another significant body of literature situates educators' beliefs within extensive discussions regarding multilingual development and inclusion in early childhood education. A prior study indicated that educators' perceptions frequently categorize multilingualism as a challenge, a right, or a resource, highlighting tensions that may influence language support practices. The review emphasizes that educators may support multilingualism in theory while remaining uncertain about its implementation, particularly when professional expertise and guidance are insufficient (Zheng, 2025). This is very

important for teaching English to young children because English is often taught at the same time as their first language(s). This raises questions about fairness, identity, and language experiences that are appropriate for their age.

In Indonesia, teachers generally value young children's exposure to English, but they often stress the need for more professional help. A study examining the requirements of early childhood educators for effective English instruction revealed that teachers emphasized training in instructional materials and learning media, reflecting a firm conviction that proficient early English education relies on practical pedagogical resources and systematic capacity development (Harmanto et al., 2021). This is in line with what other countries have found: having positive beliefs is not enough without real preparation, resources, and guidance from the institution.

Research on pre-service teachers elucidates the evolution of beliefs prior to full professional engagement, influenced by teacher education, practicum experiences, and shifts in policy. In Indonesia, pre-service teachers instructing English to young learners under the Kurikulum Merdeka experienced both motivation and challenges, indicating the development of new beliefs influenced by swift pedagogical shifts and the demands of early-grade teaching (Khunaivi et al., 2023). Prior research suggests that both pre-service and in-service teachers generally exhibit optimism regarding early English education; however, they frequently convey caution based on perceived competence, pedagogical approaches, and systemic support. This underscores the timeliness and necessity of belief research in PAUD/ECE contexts. Even though there is more and more research on early English and early multilingualism, we still don't know much about what pre-service early childhood teachers believe, especially in places like Indonesia where English in PAUD is often optional and not always used the same way in all schools. Studies involving in-service kindergarten teachers consistently demonstrate that beliefs are influenced by the dichotomy between enthusiasm for English and apprehensions regarding readiness, curriculum clarity, and resource availability (Alenezi et al., 2023; Mohamad et al., 2024).

## **C. Method**

### **1. Research Method**

This study utilized a qualitative descriptive design to examine the beliefs of pre-service early childhood educators regarding the instruction of English within Indonesian early childhood education settings. A qualitative descriptive methodology was chosen because the objective of the study was not to formulate a comprehensive theory, but to deliver a detailed, unembellished representation of participants' viewpoints as articulated in their own language. This method is especially appropriate for exploratory research involving a limited sample size, emphasizing the collection of participants' meanings, interpretations, and reflections concerning a particular educational issue.

### **2. Research Context**

The research was executed within an Early Childhood Education (PAUD) teacher education program at a higher education institution in Indonesia. In this context, English is not a mandatory subject in the national early childhood curriculum; nevertheless, discussions regarding early English exposure frequently arise in teacher preparation programs. The participants had taken courses on child development and teaching, but they had different amounts of experience teaching English.

### **3. Participants**

Six pre-service early childhood teachers in the PAUD program took part in this research. They were chosen through purposive sampling because they were active students getting ready to become early childhood teachers. Everyone who took part in the study did

so of their own free will. The sample size, though limited, was deemed suitable for an exploratory qualitative study focused on obtaining profound insights rather than broadly applicable conclusions.

#### **4. Data Collection**

A structured questionnaire with both closed-ended and open-ended questions was used to collect the data. The closed-ended questions were used to find out how people generally feel about the importance of English in ECE and where it should be taught. The open-ended questions let people go into more detail about their beliefs, expectations, perceived challenges, and views on institutional and policy support. The questionnaire was given out online so that everyone could access it and think about their answers. Participants were given enough time to think about their answers.

#### **5. Data Analysis**

The data underwent thematic analysis. The analysis went through a number of steps. First, we read all of the answers over and over again to get a full picture of the data. Second, we came up with the first codes by finding important phrases and ideas that kept coming up in conversations about beliefs about importance, where the subject fits into the curriculum, teaching methods, challenges, and expectations. Third, the codes were put into larger groups that showed how the answers of all the participants were similar. During the analysis, care was taken to keep the original meanings of the participants and not read too much into things. The closed-ended responses were summarized descriptively to bolster the qualitative findings.

#### **6. Trustworthiness**

To improve the reliability of the results, the analysis included careful rereading and consistent coding of all responses. We looked at the emerging themes across all participants to make sure they showed patterns that were shared by all of them, not just individual statements. Thick descriptions of participants' perspectives were supplied to enable readers to contextualize the findings. Because the study was exploratory, the goal was to be clear and open, not to make generalizations based on statistics.

### **D. Result and Discussion**

The analysis identified five principal themes that illustrate how pre-service teachers perceive English instruction in early childhood education: (1) English as a future investment, (2) developmental caution in curriculum positioning, (3) a focus on simple and contextual content, (4) perceived pedagogical and institutional challenges, and (5) expectations for systemic support.

#### **1. English as a Future Investment**

The majority of participants held favorable views regarding the incorporation of English into early childhood education. People often said that English was important for the whole world and that it would help kids get ready for the future. One person said, "English is important because it is an international language and will help children compete in the future" (P2). Another person said, "Children should learn English early so they aren't surprised when they learn it at higher levels" (P5).

These statements show that English is seen as a tool for global communication and competition, which is an instrumental view. This finding corroborates prior research suggesting that educators frequently link early English exposure to subsequent academic and professional benefits (Mohamad et al., 2024; Hossain et al., 2025; Azizi, 2024; Li, 2024). Participants acknowledged its significance, yet their responses indicated a nuanced comprehension of early childhood priorities.

## **2. Developmental Caution in Curriculum Positioning**

Most of the people who took part in the study thought English was a good thing, but most of them saw it as an extracurricular activity rather than a core subject. One person said, "English is important, but it shouldn't be the main focus of development in PAUD" (P1). Someone else said, "It can be given as extra learning, not as a main subject" (P4).

This distinction implies that participants are reconciling global ambitions with developmentally suitable practices. Their caution shows that they know that early childhood education puts a lot of emphasis on overall growth, including social and emotional growth and basic literacy in the first language. Similar tensions between enthusiasm and developmental considerations have been documented in early childhood contexts globally (Alenezi et al., 2023).

## **3. Focus on Simple and Contextual Content**

When asked what kind of content was appropriate, participants always said basic words like numbers, colors, greetings, and everyday phrases. For example, one person said, "The material should be simple, like introducing animals, colors, or greetings in a fun way" (P3). Another said that learning should be a part of play: "It has to be through songs or games so kids will enjoy it" (P6).

These responses show that the people who answered prefer play-based, developmentally appropriate methods over formal instruction. Their beliefs are in line with early childhood education ideas that stress learning in context and meaningful interaction over academic pressure. This corroborates previous research indicating that educators' favorable perceptions of early English are frequently associated with child-centered approaches (Harmanto et al., 2021).

## **4. Perceived Educational and Institutional Obstacles**

Even though they were positive, the participants were worried about the teachers' skills and the school's readiness. Many of the people who took part said they had trouble with pronunciation, weren't very confident, and didn't get enough training. One participant honestly said, "Not all teachers are sure of their English speaking skills, so it can be hard" (P2). Another person said, "Teachers need training so they can teach English the right way" (P5).

These worries show how beliefs and self-efficacy are connected. Participants' endorsement of early English was moderated by their recognition of their own readiness and the inherent constraints of educational institutions. This aligns with extensive research indicating that educators' perceptions of feasibility significantly influence their instructional decisions (Mohamad et al., 2024). In this context, belief is both ideological and pragmatic. A prior study indicated that beliefs regarding their capacity to teach English to young children are essential for ensuring sufficient English exposure and enhancing children's linguistic proficiency (Rosli & Radzuan, 2020).

## **5. Expectations for Systemic Support**

Participants also stressed the need for support from the government and other institutions. They said they wanted guidelines for the curriculum, learning materials, and professional development. One participant said, "If English is to be taught in PAUD, the government should provide training and clear guidelines" (P1).

This indicates that pre-service teachers do not view English instruction merely as an individual obligation, but rather as a systemic concern necessitating policy coherence. These expectations align with findings in the Indonesian context, indicating that professional preparation and structured support are crucial for sustainable early English implementation (Harmanto et al., 2021). Prior studies underscore that proficient EFL instruction necessitates

specialized competencies and continuous professional development for educators (Tu, 2024).

## **6. Integrative Discussion**

The findings collectively indicate a complex belief system. Pre-service teachers exhibit optimism regarding English as a global asset while concurrently applying pedagogical prudence informed by developmental principles. Instead of blindly supporting early English as a core subject, they see it as an extra that needs to fit the needs of the kids and the teacher's abilities. Teacher beliefs have a big impact on how young children learn English by affecting how they teach, how they interact with each other, and how they test their students. Strong beliefs lead to good lesson planning, emotional support for students, and a positive learning environment, all of which help students learn new languages (Astuti & Astuti, 2024).

International research has also shown that there is a conflict between global goals and developmental needs. Preschool teachers frequently advocate for early English exposure while concurrently voicing apprehensions regarding readiness, curriculum overload, and age-appropriate pedagogy (Alenezi et al., 2023; Mohamad et al., 2024). Research regarding early childhood educators' beliefs about multilingualism indicates that while teachers may support additional language acquisition in theory, they may exercise caution in its implementation when professional training or structural assistance is insufficient (Zheng, 2025). The current findings reflect these trends, demonstrating that pre-service teachers are already engaging with broader educational discourses before their full professional practice.

Significantly, the participants' focus on training and policy guidance highlights that belief is not solely attitudinal but profoundly linked to perceived competence and systemic conditions. Prior studies in the Indonesian context indicate that successful early English instruction necessitates focused professional development and well-defined institutional frameworks (Harmanto et al., 2021). The current study enhances this comprehension by demonstrating that these concerns already exist at the pre-service level. This indicates that teacher education programs are essential in influencing not only the knowledge and skills but also the confidence and pedagogical approach that future educators adopt in early English instruction.

In general, these results support the idea that the beliefs of pre-service teachers are always changing, depend on the situation, and are connected to both global stories and local facts. This study contributes to ongoing discussions regarding the integration of English into Indonesian Early Childhood Education (ECE) in ways that are developmentally appropriate, professionally sustainable, and congruent with teachers' evolving identities by documenting early-stage belief formations

## **E. Conclusion**

This research examined the beliefs of pre-service early childhood educators regarding the instruction of English within Indonesian early childhood education settings, revealing a reflective equilibrium between global ambitions and developmental factors. Participants generally believed that English was important for children's future communication and participation in the world, but they were careful not to make it a core subject. Instead, they stressed its role as an enrichment that fits with play-based, developmentally appropriate practice. Their responses showed that they had both positive and negative feelings about teacher competence, pronunciation, too much work, and not enough support from the school. This study provides context-specific insights into belief formation at the pre-service level, an area that has not been thoroughly examined in early childhood English education research. The results suggest that teacher education programs ought to incorporate enhanced training in developmentally suitable English pedagogy, cultivate linguistic confidence, and

promote critical awareness of multilingual environments. To make sure responsible implementation, policy-level changes are needed to make the curriculum clearer and to keep up with professional development. However, the study is constrained by its limited sample size and dependence on self-reported questionnaire data from a singular institution, which hinders generalizability. Future research ought to engage larger, more heterogeneous samples, integrate interviews or classroom observations, and investigate the evolution and implementation of these beliefs in actual teaching practice over time.

## References

- Alenezi, H., Ihmeideh, F. M., & Alshaboul, Y. (2023). Kindergarten teachers' challenges in teaching English as a foreign language to children. *Early Years*, 43(5), 1140–1157. <https://doi.org/10.1080/09669760.2022.2137782>
- Astuti, L., & Astuti, W. (2024). Peran teacher belief terhadap pembelajaran Bahasa Inggris anak usia dini. *Murhum: Jurnal Pendidikan Anak Usia Dini*, 5(1), 155–169. <https://doi.org/10.37985/murhum.v5i1.502>
- Azizi, E. (2024). The role of English language proficiency standards in academic and career success in Iran. *ICTLE Conference Proceedings*, 1(1), 41–51. <https://doi.org/10.33422/ictle.v1i1.627>
- Damayanti, N. A., Sitoresmi, W. E., & Machmud, M. (2023). Is it a good move to release policy of making English language as optional subject in elementary school? *Elementary School Journal PGSD FIP UNIMED*, 13(1), 1–8. <https://doi.org/10.24114/esjpgsd.v13i1.43963>
- Harmanto, B., Wijayanto, H., Rahmawati, I. Y., & Fadlillah, M. (2021). The early childhood education teachers' needs of being able to teach English well. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(3), 1382–1392. <https://doi.org/10.31004/obsesi.v6i3.1256>
- Hossain, K. I., Mahmud, M. S., Islam, R., & Emon, A. I. (2025). The influence of English proficiency on financial stability and career advancement: A review. *IUBAT Review*, 8(1), 258–274. <https://doi.org/10.3329/iubatr.v8i1.83670>
- Iskanda, M., Suziyani, M., & Abu, K. (2024). Preschool Teachers' Issues and Beliefs in English Language Teaching: A Systematic Review (2012-2022). *European Journal of Educational Research*. <https://doi.org/10.12973/eu-jer.13.1.281>
- Jingga, J. (2022). Teaching English language in early childhood. *Journal of Applied Linguistics*, 2(1), 46–54. <https://doi.org/10.52622/joal.v2i2.78>
- Khunaivi, H., Anshori, M. L., & Hidayah, S. F. (2023). “It’s exciting and motivating”: Pre-service teachers in teaching English to young learners in Kurikulum Merdeka implementation. *Syekh Nurjati International Conference on Elementary Education*, 1(0), 26–37. <https://doi.org/10.24235/sicee.v1i0.14580>
- Li, J. (2024). The role of English language support programs on international academic mobility of university students in Shandong College of Economics and Business, China. *Pacific International Journal*, 7(1), 168–173. <https://doi.org/10.55014/pij.v7i1.546>
- Mohamad, M. I., Mohamed, M. S., & Abu Bakar, K. (2024). Preschool teachers' issues and beliefs in English language teaching: A systematic review (2012–2022). *European*



*Journal of Educational Research*, 13(1), 279–296. <https://doi.org/10.12973/eu-jer.13.1.281>

- Prošić-Santovac, D., & Savić, V. (2022). English as a foreign language in early language education. In M. Schwartz (Ed.), *Handbook of early language education* (pp. 449–473). Springer. [https://doi.org/10.1007/978-3-030-91662-6\\_13](https://doi.org/10.1007/978-3-030-91662-6_13)
- Rosli, A. K., & Radzuan, N. R. M. (2020). Pre-school teachers' beliefs towards their abilities of teaching English to pre-schoolers in Pahang, Malaysia. *Aulad: Journal on Early Childhood*, 3(2), 103–114. <https://doi.org/10.31004/aulad.v3i2.66>
- Trilestari, K., Manurung, R. M. L., & Simangunsong, V. N. (2024). The benefits of learning English in early childhood: Positive and negative effect. *Esteem Journal of English Education Study Programme*, 7(2), 669–681. <https://doi.org/10.31851/esteem.v7i2.16151>
- Tu, N. C. (2024). Essential skills in teaching English to children: A comprehensive overview and research-based analysis. *International Journal of Social Science and Human Research*, 7(10), 7655–7657. <https://doi.org/10.47191/ijssshr/v7-i10-36>
- Umroh, J. F., & Artha, S. C. D. (2017). Teaching English and character values to young learners by using fiction (pp. 201–210). <http://utns.proceedings.id/index.php/utns/article/download/43/43>
- Zheng, Z. (2025). Teachers' beliefs about multilingualism in early childhood education settings: A scoping review. *Education Sciences*, 15(7), 849. <https://doi.org/10.3390/educsci15070849>