



## The Importance of Learning a Second Language Acquisition started from 5 Years Old

Indah Marliana<sup>1</sup>, Murwati Murwati<sup>2</sup>, Tri Rahayu<sup>3</sup>

<sup>1,2,3</sup>Universitas Indraprasta (Unindra) PGRI Jakarta, Indonesia

Korespondensi penulis: [atashiwa.tori@gmail.com](mailto:atashiwa.tori@gmail.com)

**Abstract.** The early acquisition of a second language is increasingly acknowledged for its benefits in cognitive development, social skills, and academic performance. This journal explores the importance of beginning second language education at the age of five, focusing on the developmental benefits, effective teaching methods, and long-term outcomes. This journal article aims to enhance the current understanding by offering empirical insights into the experiences and perceptions of parents, teachers, and children concerning early second language learning. Through qualitative data analysis from interviews, observations, and documentation of 22 participants. Consisting of 10 parents, 10 students with an age range of 4-6 years, and 2 teachers at the Bimba Aiueo H. Shibi unit South Jakarta, PAUD Institution. This research was conducted from 10 June 2024 to 13 July 2024. Using qualitative descriptive methods, this research seeks to explain the impact of learning a second language acquisition on children's development.

**Keywords:** Early acquisition, second language, developmental benefits, teaching methods.

### 1. INTRODUCTION

This journal investigates the advantages of early second language acquisition, particularly starting at the age of five, and its effects on children's cognitive, social, and academic development. Research by cognitive neuroscientist Ellen Bialystok reveals that bilingual children outperform monolingual peers in problem-solving and cognitive flexibility. Vygotsky's theory underscores the importance of social and cultural environments in cognitive development, suggesting that early language learning enhances cultural sensitivity and communication skills.

In the educational setting, the journal explores effective teaching strategies for young children learning a second language, such as game-based learning and language immersion programs, which keep children engaged and motivated while facilitating language acquisition. The study uses a qualitative descriptive approach, incorporating theories from experts like Lev Vygotsky, Jean Piaget, and Ellen Bialystok, among others. Through interviews and observations, it provides empirical insights into the experiences and perceptions of parents, teachers, and children regarding early second language learning, aiming to offer a comprehensive understanding of its benefits on linguistic abilities, cognitive flexibility, cultural awareness, and academic performance.

## **2. METHODOLOGY**

This research employs a qualitative descriptive methodology to thoroughly understand the significant effects of second language learning starting at age five on children's cognitive, social, and academic development. The study included 22 participants and involved interviews with 10 parents to gain insights into their views on the benefits and impacts of second language learning on their children. Additionally, interviews with 2 teachers were conducted to explore their experiences and teaching methods in second language instruction. Classroom observations focused on 10 students aged 4-6 years, who were part of a second language learning program at Bimba Aiueo H. Shibi unit in South Jakarta, to observe their development in the context of second language learning.

The research also involved analysing school documents such as teaching materials, curriculum, and student progress reports to understand the structure of the second language learning programs and student academic outcomes. The qualitative data collected, including interview transcripts, observation notes, and school documents, will be meticulously analysed to identify key themes. These themes encompass parent perceptions, teacher teaching strategies, and the impact of second language learning on children's development.

## **3. ANALYSIS**

### **How Second language learning starting at age 5 affects cognitive, social, and academic development**

Second language acquisition involves studying how to learn additional languages and the factors that impact this process. Introducing a child to a second language early in life maximizes their learning potential, shaping the brain during its most flexible stage. Young children are especially well-equipped to learn a second language, and doing so at a young age is as cognitively straight forward as learning their first language.

#### **a. Cognitive Development Analysis**

Cognitive development involves the stages of change throughout human life in understanding, processing information, solving problems, and acquiring knowledge. Jean Piaget, a prominent figure in this field, outlined four stages of cognitive development:

1. **Sensory Stage (0-2 years):** Babies cannot differentiate themselves from their environment, a process known as "decentration."
2. **Preoperational Stage (2-7 years):** Children start representing the world with words and pictures, showcasing symbolic thinking.

3. Concrete Operations Stage (7-11 years): Children think logically about concrete events and categorize objects but struggle with abstract problems.
4. Formal Operations Stage (11 years - adulthood): Adolescents develop abstract, logical, and idealistic thinking.

The preoperational stage is critical for language development as children begin using words and pictures to communicate. Effective methods for teaching a second language at this age include songs, stories, and games.

Ellen Bialystok, a renowned cognitive neuroscientist, has extensively researched the cognitive advantages of bilingualism. Her findings show that bilingual children outperform monolingual peers in tasks requiring problem-solving and cognitive flexibility. Introducing a second language early maximizes learning potential when the brain is most adaptable, making it as natural as learning the first language.

This study observed cognitive development in young students' English language skills using data from "student development data" sheets recorded at each meeting. Additionally, the study linked cognitive development with social development, presenting data on both aspects.

b. Social Development Analysis

According to Vygotsky (1986), speech is primarily for communication and social contact from early life stages, becoming truly human through social environmental influences. Learning a second language requires social interaction, which enhances cognitive abilities like problem-solving and creative thinking. Early exposure to a second language promotes flexible thinking and communication skills, allowing children to tackle problems from various perspectives. Immersion in a foreign-language environment helps children develop social skills by adjusting their speech to their audience. As their language abilities improve, they become more aware of social contexts and better at regulating their behaviour and thoughts.

In this study, researchers found that students acquired English as a second language through environmental influences in their English class, where bilingualism was encouraged during play and social interactions. This immersive approach helped children acquire English vocabulary and improved their cognitive and social skills. The following is an example of acquiring English vocabulary in children:

Name	Word Acquisition	Incident
Abizar	Good morning	Abizar kindly greeted the teacher with " <i>good morning</i> , ibu guru", when he entered the class.
Adiba	Please	Adiba asked the teacher for help to open the snack wrapper he had brought from home, "bu guru, tolong bukain jajanannya bu... <i>please</i> ."
Nayra	Butterfly	Nayra is a shy student. As usual, before starting class, the teacher opens with a positive affirmation chat to the children. Teacher: "Nayra you are very beautiful this morning. What hair clips are you using? Very nice" In a soft, whispering voice, Nayra shyly answered " <i>butterfly</i> "
Fatimah	Cat	As usual, after class finished before going home the children lined up to leave the classroom in an orderly manner. When the door was opened, there was a cat sitting relaxed outside the classroom. Fatimah spontaneously shouted happily, "iihh... <i>cat..cat..cat..</i> " while pointing and approaching the cat.
Echa	Cat	At the same time, Echa shouted cheerfully, "bu guru, ada <i>cat</i> bu"
Adrian	Dog	When class was about to start, Adrian suddenly shouted while taunting his friend, "hey, dasar kamu <i>dog</i> ". Of course, this action was not commendable and the words were considered impolite in Indonesian culture, therefore the teacher reprimanded Adrian and gave positive affirmations about his actions when the class situation was conducive.
Fatimah	Red	Fatima lost her pencil, she asked the teacher about it. Fatimah: "teacher, where is my pencil?" Teacher: "What kind of pencil?" Fatima: "pensilnya masih baru bu, belum diraut. Warnanya " <i>Red</i> "

c. Academics Development Analysis

Early second language acquisition can support a child's academic growth. Bilingual children have a better grasp of the broad symbolic representation of print compared to monolingual children. Thomas and Collier (1997) found through their research that starting second language education at an early age, particularly by age five, leads to notable academic advantages later on compared to children who only speak one language. Their study underscores the enduring cognitive benefits of early bilingual education, such as improved problem-solving abilities, enhanced cognitive adaptability, and overall academic achievement. The research suggests that early

exposure to a second language fosters improved linguistic and metacognitive development, which contributes to superior academic performance across different subjects, including mathematics and science.

### **Effective pedagogical strategies in teaching a second language to 5 years old children and how these strategies can be applied in the context of early childhood education (PAUD)**

Pedagogy, derived from Ancient Greek roots denoting "child" and "guiding," encompasses the principles and methods of educating children. Initially referring to attendants who accompanied children to school in Ancient Greece, it now encompasses educational theory and practice, focusing on goals, methods, tools, and the roles of both students and educators. Effective pedagogical strategies are essential when teaching a second language to five-year-old children to ensure an engaging and productive learning process. These strategies encompass immersion programs, learning through play, and active engagement of parents in the learning journey.

#### **a. Immersion Program**

Immersion programs immerse children in a second language through various everyday situations, aiming to replicate the natural learning process seen with first languages. Genesee (1984) explains that these programs integrate the second language into academic subjects rather than treating it separately, creating an environment where learning occurs similarly to how children acquire their first language through daily interactions and social engagement.

Lambert and Tucker, in their book "Bilingual Education of Children: The St. Lambert Experiment," endorse immersion programs by illustrating their success in improving both academic and language abilities. They observe that students in bilingual immersion programs often achieve equal or superior performance compared to those in monolingual programs, enhancing proficiency in both their primary and secondary languages. This approach effectively fosters second language acquisition and overall linguistic competence in children.

Examples of Immersion Program Activities for Early Childhood

Theme	Adventures at the Zoo
Objective	<ul style="list-style-type: none"> <li>- Develop second language skills through fun and interactive activities.</li> <li>- Introducing vocabulary related to animals and zoos.</li> <li>- Encourage active participation and cultural understanding.</li> </ul>
Description of Activities	<p><i>Introduction (10 minutes)</i></p> <ul style="list-style-type: none"> <li>- The teacher opens by greeting the children in the second language and introducing the day's theme: "Adventures at the Zoo".</li> <li>- The teacher shows a picture or short video about the zoo and some of the animals there.</li> </ul> <p><i>Main Activity (20 minutes)</i></p> <p>Zoo Virtual Tour:</p> <ul style="list-style-type: none"> <li>- Teachers guide children on a "virtual tour" of the zoo using large pictures or a projector.</li> <li>- Every time they "visit" the animal pen, the teacher introduces the animal's name and makes the animal's sound.</li> <li>- Children are invited to imitate the sounds and movements of animals, while learning new vocabulary (for example, "lion", "elephant", "monkey", etc.)</li> </ul> <p><i>Interactive Game (10 minutes)</i></p> <ul style="list-style-type: none"> <li>- The teacher distributes cards with animal pictures to each child.</li> <li>- Children have to describe the animal on their card without saying the name of the animal (for example, with a sound or movement), and their friends have to guess the name of the animal in the second language.</li> </ul> <p><i>Songs and Stories (10 minutes)</i></p> <p>Singing and Listening to Stories:</p> <ul style="list-style-type: none"> <li>- The teacher invites the children to sing children's songs about animals in a second language.</li> <li>- The teacher reads a short story about an adventure at the zoo, using dolls or props to make the story more alive.</li> </ul> <p><i>Closing (10 minutes)</i></p> <ul style="list-style-type: none"> <li>- The teacher reviews the vocabulary and activities that have been carried out.</li> <li>- The teacher gives stickers or tokens of appreciation to children who participate actively.</li> <li>- Children are invited to tell about their favourite animals from the zoo in a second language.</li> </ul>
Tools and Materials	<ul style="list-style-type: none"> <li>- Animal picture cards.</li> <li>- Puppets or props for stories.</li> </ul>
Evaluations	<ul style="list-style-type: none"> <li>- Child participation in activities and games.</li> <li>- Children's ability to imitate animal sounds and movements.</li> <li>- Ability to remember and use vocabulary that has been taught.</li> </ul>

b. Play-Based Learning

Dorothy G. Singer, in her book "Play = Learning: How Play Motivates and Enhances Children's Cognitive and Social-Emotional Growth," advocates for play-based learning as a method to increase children's motivation, cognitive development,

and social-emotional skills. This approach is particularly effective in supporting second language learning by making the process engaging and interactive. Play-based activities enhance children's attention, creativity, positive peer interactions, and overall mental well-being.

The curriculum at Bimba Aiueo H.shibi unit, game-based learning methods, known as the Fun-Learning approach, to teach English as a second language. This method proves highly effective as it enables children to learn English materials effortlessly while enjoying the process with peers and teachers. Students at Bimba Aiueo are enthusiastic and motivated, finding it easier to grasp English concepts quickly compared to peers using traditional teaching methods. This fun-learning approach not only facilitates rapid understanding of English but also fosters a supportive and enjoyable learning environment.

Below we present a table of research data obtained from research for approximately 1 month at the Bimba AIUEO unit H. Shibi:

Table 1: Week 1

Providing animal vocabulary in English and its meaning in Indonesian by sounding word and singing

No	Name	Age	Vocab1: Dog (anjing)	Vocab2: Cat (kucing)	Vocab3: Butterfly (kupu2)	Vocab4: Fish (ikan)	Vocab5: Duck (bebek)	Vocab6: Mouse (tikus)
1.	Abizar	5	v	v	-	-	-	v
2.	Adiba	6	v	v	-	v	-	v
3.	Adrian	6	-	-	-	-	-	-
4.	Arjuna	5	-	v	-	v	-	-
5.	Fatima	5	v	v	-	-	-	v
6.	Gevin	4	-	-	-	-	-	v
7.	Echa	4	-	-	-	-	-	-
8.	Khalif	5	v	v	-	-	-	-
9.	Ariq	4	-	-	-	-	-	-
10.	Nayra	4	-	v	-	-	-	v

Table 2: Week 2

Providing animal vocabulary in English and its meaning in Indonesian by sounding word and singing

No	Name	Age	Vocab1: Dog (anjing)	Vocab2: Cat (kucing)	Vocab3: Butterfly (kupu2)	Vocab4: Fish (ikan)	Vocab5: Duck (bebek)	Vocab6: Mouse (tikus)
1.	Abizar	5	v	v	-	v	-	v
2.	Adiba	6	v	v	-	v	v	v
3.	Adrian	6	v	v	-	-	-	v
4.	Arjuna	5	v	v	-	v	-	-
5.	Fatima	5	v	v	v	-	-	v
6.	Gevin	4	v	v	-	-	-	v
7.	Echa	4	-	v	-	-	-	-
8.	Khalif	5	-	v	-	-	-	-
9.	Ariq	4	v	v	-	-	-	-
10.	Nayra	4	v	v	-	-	-	v

Table 3: week 3

Providing animal vocabulary in English and its meaning in Indonesian by sounding word and singing

No	Name	Age	Vocab1: Dog (anjing)	Vocab2: Cat (kucing)	Vocab3: Butterfly (kupu2)	Vocab4: Fish (ikan)	Vocab5: Duck (bebek)	Vocab6: Mouse (tikus)
1.	Abizar	5	v	v	v	v	v	v
2.	Adiba	6	v	v	v	v	v	v
3.	Adrian	6	v	v	-	v	v	v
4.	Arjuna	5	v	v	-	v	v	v
5.	Fatima	5	v	v	v	-	v	v
6.	Gevin	4	v	v	-	v	-	v
7.	Echa	4	v	v	-	-	v	v
8.	Khalif	5	v	v	-	-	v	v
9.	Ariq	4	v	v	-	v	-	v
10.	Nayra	4	v	v	v	-	-	v



Table 4: Week 4

Providing animal vocabulary in English and its meaning in Indonesian by sounding word and singing

No	Name	Age	Vocab1: Dog (anjing)	Vocab2: Cat (kucing)	Vocab3: Butterfly (kupu2)	Vocab4: Fish (ikan)	Vocab5: Duck (bebek)	Vocab6: Mouse (tikus)
1.	Abizar	5	v	v	v	v	v	v
2.	Adiba	6	v	v	v	v	v	v
3.	Adrian	6	v	v	v	v	v	v
4.	Arjuna	5	v	v	v	v	v	v
5.	Fatima	5	v	v	v	v	v	v
6.	Gevin	4	v	v	-	v	-	v
7.	Echa	4	v	v	v	-	-	v
8.	Khalif	5	v	v	v	v	v	v
9.	Ariq	4	v	v	-	-	v	v
10.	Nayra	4	v	v	v	v	v	v

Note : v (understand), - (not yet)

Table 1-4 indicates the development of children's ability to understand English vocabulary over 4 weeks. Through this table, it is clear that there is a significant increase in the English language skills of children who are taught and exposed to simple English vocabulary repeatedly and continuously in a fun learning atmosphere. These findings have important implications for language education in early childhood, emphasizing the importance of creating a pleasant classroom atmosphere so that children remain enthusiastic and in a good mood, so that the material taught can be well received and quickly understood. This research also highlights the importance of continuous repetition of material, so that what they have learned can be understood and remembered automatically.

#### c. Parental Involvement

Parents play a vital role in children's language development, influencing each developmental stage from infancy onward, as highlighted by Papalia et al. (2008) in Nofita, A. (2020). Consistent use of the second language by parents enriches children's vocabulary and continually enhances their listening and speaking abilities. During the critical early years, parents are instrumental in creating enriching environments that support motor skills, cognitive development, creativity, and language acquisition, particularly in learning a second language.

Effective methods include activities such as singing, storytelling, watching television together, practicing pronunciation, and narrating stories in the second

language. Parental engagement strengthens children's learning experiences at home, ensuring continuity and bolstering their proficiency and confidence in the second language, such as English in this specific study. Researchers conducted interviews with parents to investigate their involvement in their children's English language learning journey and its impact on their overall development.

From the results of these interviews, it can be concluded that parents see learning a second language at the age of five as providing significant benefits in their children's cognitive and social development. Although there are challenges in implementing and consistently using a second language at home, support from the school and a supportive environment is perceived as the key to success. Parents' hopes for their children's future bilingualism indicate a belief in the long-term value of early second language learning.

#### **4. CONCLUSIONS**

Second language acquisition from the age of five offers many cognitive, social, and academic benefits. Early language education encourages cognitive flexibility, improves communication skills, and provides more academic and career opportunities. By implementing effective pedagogical strategies and encouraging parental involvement, educators can maximize the benefits of early bilingualism. The long-term impact of second language acquisition at an early age emphasizes its importance in preparing individuals for success in an increasingly connected world.

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