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Too Early for Foreign Languages! A Critical Review of Young Children's Internal Readiness for Language Learning

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Abstract

This study aims to explore the internal mechanisms, aptitude, intelligence, motivation, and cognitive style that influence second language (L2) acquisition among early childhood learners. Grounded in psycholinguistic and developmental perspectives, this research addresses the lack of contextualized strategies for foreign language instruction at the early childhood education (ECE) level in Indonesia. This qualitative study employed a library research design, using thematic analysis of selected scholarly works from 1959 to 2025. Sources were classified into three thematic clusters: (1) internal processing mechanisms (e.g., phonological memory, LAD function), (2) aptitude and intelligence (e.g., MLAT, linguistic universals), and (3) motivation and cognitive style (e.g., intrinsic-affective-social motivation, field-dependence). Data synthesis was conducted to classify key constructs and pedagogical implications. The results revealed that young learners acquire L2 more effectively through emotionally engaging, context-rich, and multisensory exposure rather than formal grammatical instruction. Children benefit from environments that support referential learning, phonological sensitivity, and social-linguistic modeling. Formal instruction was found to be less effective due to developmental mismatches. A classification model was constructed to visually present the findings. This study offers a comprehensive synthesis that bridges second language acquisition theories with early childhood development. It presents an original classification framework linking cognitive-affective variables with instructional strategies suitable for L2 exposure in early childhood. This research provides critical insights for curriculum developers, early childhood educators, and policymakers aiming to implement developmentally

appropriate foreign language instruction. The findings support the need for translanguaging, play-based, and emotionally supportive environments for optimal early language acquisition.

Keywords: Early childhood; Foreign language learning; Internal readiness.

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1. Introduction

In recent years, early childhood education (ECE) in Indonesia has shown a growing trend of introducing foreign languages, particularly English, starting from the kindergarten level. Many educational institutions compete to highlight foreign language skills as a flagship program, even treating them as indicators of educational quality pendidikan (Amalia, 2021; Binarkaheni, 2016; Fajriani et al., 2025; Masruroh et al., 2018; Nida et al., 2023; Pransiska, 2024; Prasetiawati et al., 2021; Sulaeman, 2020). This phenomenon is grounded in the assumption that the earlier a child is exposed to a foreign language, the greater the likelihood of successful acquisition. However, this assumption may not align with the actual cognitive and linguistic developmental dynamics of young children.

Young learners are in a critical phase of first language (L1) acquisition—typically the mother tongue or local language in the Indonesian context—alongside acquiring the national language, Indonesian, as their second language. At this stage, their language system is still developing and remains unstable. Exposure to a foreign language in the midst of acquiring two other languages that are not yet fully consolidated may impose additional cognitive and linguistic burdens. Meanwhile, there is still a lack of critical discourse questioning the internal readiness of young children to cope with foreign language exposure, particularly in the context of formal education systems (Bialystok, 2001; Brown, 2013; Cook, 1977; Kharkhurin, 2008; Matusevych et al., 2017; Siregar et al., 2024; Yuliasari et al., 2024).

Theoretically, language acquisition—especially of a second or foreign language (L2)—involves complex internal processes. Dulay, Burt, and Krashen (1982) explain that language learning encompasses the organization of input, affective and motivational filtering, and linguistic monitoring. In young children, these processes are not yet fully developed (Dulay et al., 1982; Liu, 2023; Morgan, 2025; Wade & Whiting, 1986). This raises a critical question: Are young children truly capable of optimally absorbing a foreign language within a formal educational setting?

This paper aims to offer a critical reflection on the practice of introducing foreign languages too early in childhood education. Drawing on the framework of internal processes (organization, filter, and monitor) as well as individual learner factors such

as aptitude, intelligence, motivation, and cognitive style, this study explores children's internal capacities in the face of foreign language exposure. Furthermore, it discusses the pedagogical and institutional preparations required to ensure that early foreign language instruction, if implemented, aligns with principles of child development.

2. Method

This study adopts a qualitative approach using library research as the primary method of inquiry. The purpose of this research is to critically examine key psychological and linguistic factors influencing early childhood foreign language acquisition (L2), particularly focusing on the internal processing mechanisms, aptitude and intelligence, as well as motivation and cognitive style in early learners.

The analysis is conducted through a critical content analysis of theoretical and empirical literature sourced from scholarly publications that meet the following inclusion criteria: (1) peer-reviewed journals and academic books in the fields of developmental psychology, applied linguistics, and early childhood education; (2) literature that discusses second language acquisition (SLA) in young children; and (3) works that are explicitly cited and listed in the reference section of this study. All materials reviewed were selected based on their relevance, conceptual contribution, and empirical grounding, as reflected in the curated list of references.

The data analysis process involves identification and classification of key concepts across three major domains:

a) Internal Processing Mechanisms in L2 Acquisition: including how young learners respond to lexical exposure, instinctive referential patterns, and the role of the Language Acquisition Device (LAD).
b) Language Aptitude and Intelligence: including sensitivity to linguistic universals, phonological awareness, and the role of general intelligence in early foreign language learning.
c) Motivation and Cognitive Style: covering intrinsic, affective, and social dimensions of motivation in children, as well as their holistic, contextual, and field-dependent cognitive tendencies in learning.

Rather than generating new empirical data, this research emphasizes theoretical integration and pedagogical reflection. The analysis is interpretive and aims to derive meaningful implications for early childhood foreign language instruction by synthesizing diverse perspectives found in the literature. The validity of this study is maintained through triangulation of sources, iterative reading, and cross-theoretical interpretation, ensuring coherence and critical depth. By drawing from authoritative and varied academic sources, this study seeks to construct a comprehensive understanding of how foreign language instruction at the early childhood level should be aligned with the natural developmental traits of young learners—both cognitively and emotionally.

3. Discussion

3.1. Result

This section presents the results of a critical literature review focusing on the identification and classification of three major factors affecting foreign language

acquisition (L2) in early childhood: (1) internal processing mechanisms, (2) language Aptitude and intelligence, and (3) motivation and cognitive style. Findings are synthesized from more than 60 peer-reviewed references and theoretical contributions in developmental psychology and second language acquisition (SLA).

3.1.1. Classification of Key Determinants in Early L2 Acquisition

The classification of findings is summarized in the following table:

Table 1 - Summary of Key Factors in Early Childhood Second Language Acquisition (L2)

Category	Indicators	Key References	Findings Summary
Internal Processing Mechanisms	- Lexical exposure - Phonological imitation - LAD-based acquisition	Brown (2013); Krashen in Dulay et al. (1982); Cook (1977); Matusevych et al. (2017); Siregar et al. (2024)	Young children acquire L2 primarily through natural exposure and contextualized communication rather than explicit instruction. LAD allows intuitive language mapping.
Language Aptitude and Intelligence	- Sensitivity to phonological patterns - Verbal memory - Pattern recognition and inference	Carroll & Sapon (1959); Genesee (1976); Bonar (2005); Rysiewicz (2008); Doughty (2019); Oller (1981); Sasaki (1993)	Language aptitude is rooted in phonemic awareness and symbolic patterning; intelligence supports early language generalization but varies by context.
Motivation and Cognitive Style	- Intrinsic interest - Affective involvement - Holistic/contextual learning - Field-dependence	Deci & Ryan (1985); Carlton & Winsler (1998); Gardner (2007); Guay et al. (2010); Guilford (1980); Riding & Rayner (2013); Sternberg & Grigorenko (1997)	Early learners are motivated by emotion, play, and interaction, with a cognitive style that favors concrete experiences and social-contextual learning.

3.1.2. Synthesized Observations from Literature

Based on the above classification, several key results emerge:

a) Internal Processing in Children Differs Greatly from Adults
   Children do not respond well to formal instruction or decontextualized grammatical drills. Instead, they rely on phonological memory, imitation, and meaningful interaction (Brown, 2013; Matusevych et al., 2017). Exposure, not explanation, is essential.

b) Language Aptitude Is Closely Linked to Phonemic Sensitivity and Symbolic Intelligence
   Aptitude in children manifests through their ability to identify sound patterns and learn through auditory and visual cues, especially when paired with engaging tasks (Carroll & Sapon, 1959; Genesee, 1976; Oller & Perkins, 1978).

c) Motivation Is Intrinsic and Socially Driven

Unlike older learners, young children are driven by joy, play, and emotional bonds. Motivation in early years is not utilitarian or goal-oriented but arises from safe, stimulating environments (Deci & Ryan, 1985; Gardner & MacIntyre, 1991; Carlton & Winsler, 1998).

d) Cognitive Styles Are Holistic and Contextual
Young learners are field-dependent, using environmental and social cues to construct meaning. They do not isolate abstract linguistic structures but learn through multisensory, contextual engagement (Guilford, 1980; Riding & Rayner, 2013).

e) Educational Implication
The alignment between children's developmental profile and L2 instruction is critical. Formal methods emphasizing metalinguistic awareness or academic targets are ineffective and potentially harmful in early childhood contexts (Fajriani et al., 2025; Pransiska, 2024).

The findings from the exploration of various literature sources can be visually summarized as follows.

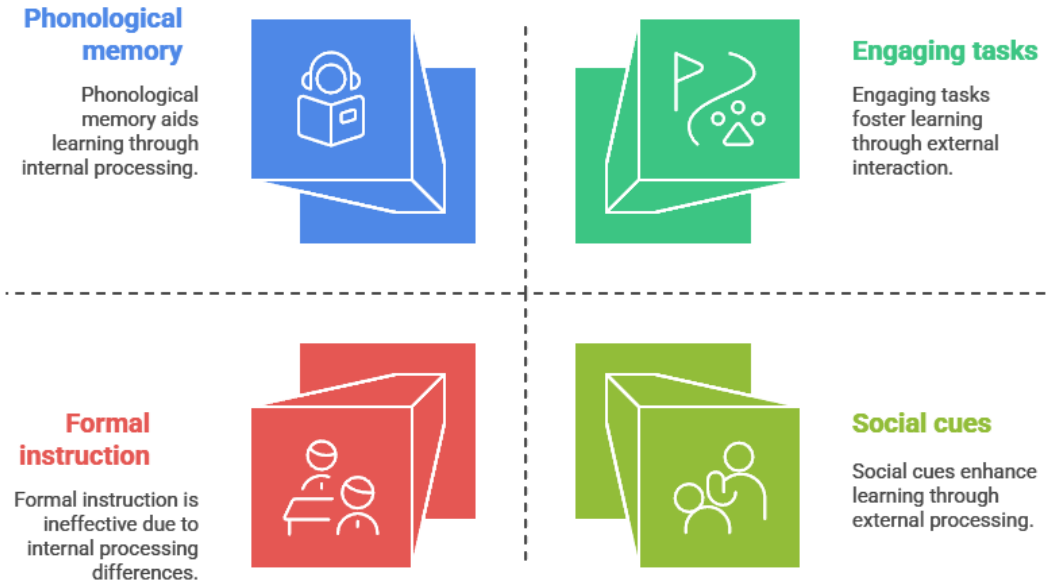

Figure 1 Critical Components Influencing Language Acquisition in Early Childhood

The illustration highlights four critical components influencing language acquisition in early childhood. Phonological memory supports internal processing, allowing children to store and retrieve sound patterns, which is essential for learning new vocabulary and structures. In contrast, engaging tasks such as games and storytelling promote learning through external interaction, making language exposure enjoyable and meaningful. Social cues, including gestures, expressions, and peer interactions, also enhance external language processing by providing contextual scaffolding. Meanwhile, formal instruction is shown to be less effective for young learners due to a mismatch with their internal processing development, emphasizing the need for experiential, interactive, and emotionally supportive learning environments.

3.2. Discussion

3.2.1. Internal Processes and Their Challenges in Early Childhood Language Learning

Before delving into discussions of language aptitude, motivation, and cognitive styles, it is essential to understand how individuals acquire a language. The process begins with exposure to a new linguistic environment, followed by internal processing, and culminates in the verbal production of the "new" language. Language acquisition does not occur spontaneously; instead, it progresses through a series of complex internal mechanisms. This process starts with linguistic exposure, proceeds through input processing, and eventually leads to language production.

In the framework of second language acquisition theory proposed by Dulay, Burt, and Krashen (1982), this internal process consists of three major mechanisms: organization, filtering, and monitoring (Brown, 2013; Dulay et al., 1982; Liu, 2023; Morgan, 2025). Understanding these three processes is crucial in evaluating whether young children are developmentally prepared to handle foreign language exposure (L2). Technically, the internal processes involved in acquisition or learning can be illustrated as follows:

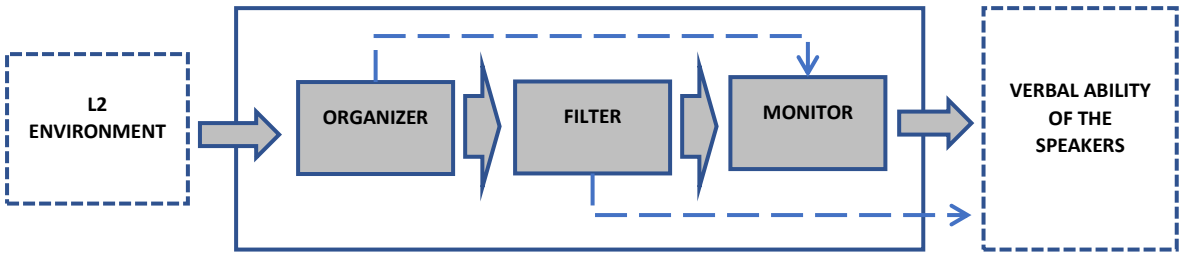

Figure 2 Internal Processes in Language Learning

3.2.1.1. Organization (Organiser)

The term *organizer* refers to an internal system that operates subconsciously to arrange the linguistic structure received by the learner. This process is intuitive and based on cognitive principles—specifically, the brain's natural tendency to analyze and organize knowledge according to patterns and logic. The function of the organizer can be observed in three main phenomena:

1. The emergence of transitional constructions—temporary linguistic forms produced by children before they master the target structure.
2. The presence of systematic errors in children's utterances, which indicate an internal processing of rules.
3. The gradual development of mature linguistic structures over time.

In early childhood, the organizer system is still in a critical phase of development, particularly for the first language (L1). At this stage, children are not yet fully able to differentiate between their native language system and the newly introduced foreign language. If exposure to a second language (L2) occurs too early, it may result in interference between L1 and L2 constructions, which can disrupt the consolidation of the primary language. The cognitive overload can lead to structural confusion, language delay, or non-functional code mixing.

3.2.1.2. Filtering: Emotional and Motivational Screening in Language Input

Filtering refers to the internal process by which language input is screened based on motivational and affective factors. This system determines: 1) Which target language

becomes the learner's focus; 2) Which elements of the language are noticed first; 3) How long the child remains engaged in the acquisition process; and 4) The general pace of language acquisition.

In early childhood, filtering is strongly influenced by emotional comfort, a sense of safety, intrinsic motivation to interact, and support from the social environment. A child who feels anxious, fearful, or disconnected from the language being introduced is likely to develop a high affective filter, which blocks effective input processing. Therefore, if teachers present a foreign language through formal or pressuring methods, rather than through playful and engaging approaches, the child's filter system is likely to reject the input. This highlights the importance of child-friendly pedagogical approaches in foreign language instruction.

3.2.1.3. Monitor: Conscious Linguistic Control

The monitor functions as a conscious mechanism for linguistic control, typically developed through formal instruction. It becomes active when learners explicitly study grammatical rules, participate in structured language lessons, or read materials that explain linguistic principles (Dulay, 1982:58). The monitor enables learners to examine and correct their utterances either before or after producing them.

However, in early childhood, the monitoring mechanism is underdeveloped due to limited metalinguistic awareness. Children at this stage are not yet capable of consciously evaluating grammatical forms or selecting appropriate syntactic structures. Consequently, presenting foreign language instruction in explicit formats—such as teaching tenses, vocabulary lists, or grammar rules—is incompatible with children's natural cognitive abilities. Rather than supporting language development, such practices may overload their cognitive system and disrupt the ongoing acquisition of the first language (L1).

3.2.1.4. Challenges of Internal Processes in Early Childhood

The three mechanisms—organizer, filter, and monitor—demonstrate that acquiring a foreign language requires a complex set of internal preparations. In early childhood, these systems are not yet fully developed. Language organization is still dominated by L1 constructions; filtering is highly dependent on emotional well-being; and monitoring is largely inactive due to the absence of linguistic self-awareness.

Introducing foreign languages through formal instruction during this period is not only ineffective but may also pose risks to children's natural linguistic and cognitive development. Therefore, educators and policymakers must recognize that children's readiness for foreign language acquisition is not determined by instructional hours, but rather by the maturity of their internal linguistic systems. Inappropriate interventions can result in long-term linguistic and cognitive complications, underscoring the need for developmentally appropriate practices.

3.2.2. Language Aptitude and Intelligence in Early Childhood Foreign Language Acquisition

One of the key considerations in introducing foreign language learning during early childhood lies in individual differences, particularly language aptitude and intelligence. These two factors are often cited as primary determinants of success in acquiring a second or foreign language (L2 or L3). However, in the context of early childhood, the

relationship between these cognitive attributes and the child's internal processing system requires more critical and nuanced examination.

Unlike older learners, young children are still in the early stages of cognitive, emotional, and linguistic development. As such, the way aptitude and intelligence influence language acquisition in this developmental period cannot be assumed to mirror adult or adolescent learning processes. Instead, both constructs must be interpreted within the framework of naturalistic acquisition, developmental readiness, and the interaction between innate capacity and environmental support.

The following sections will explore how aptitude—as a set of specific cognitive traits related to language learning—and intelligence—as a broader academic competence—interact with the internal mechanisms of young learners. The discussion will also consider how these individual differences affect children's ability to absorb and use foreign language input, particularly when such input is introduced during a phase when the first and second languages are still under development.

3.2.2.1. *Language Aptitude* vs. Intelligence: What's the Difference?

In general, intelligence refers to broad academic abilities, including logical reasoning, abstract understanding, and systematic information processing. In the context of language learning, intelligence plays a key role in understanding grammar structures, formal rules, and conceptual aspects of a foreign language—particularly when taught explicitly.

In contrast, language aptitude is a more specific ability that is intuitive in nature. It refers to an individual's sensitivity to the sounds, patterns, and structures of a new language, often even before these are consciously understood. This aptitude is closely aligned with what Chomsky described as the Language Acquisition Device (LAD)—a biologically inherent capacity in humans to acquire language naturally, without formal instruction.

In early childhood, both intelligence and language aptitude are still developing. However, it is the natural language aptitude that tends to dominate at this stage, manifesting through the intuitive ability to absorb vocabulary and speech patterns from the surrounding environment. This explains why toddlers are able to use words like "mimik" (drink) meaningfully even though they have yet to grasp their grammatical form.

3.2.2.2. Intelligence and Foreign *Language* Acquisition

Intelligence is commonly referred to as a "general factor" underlying one's ability to master a range of academic skills. But how does this general factor influence second language (L2) acquisition? Oller and Perkins (as cited in Ellis) argue that the general factor in language acquisition may be identical to general intelligence. However, this view presents a challenge when considering first language (L1) acquisition, where intelligence does not seem to play a significant role. Nearly all children—except those with severe cognitive delays—develop grammatical competence in their L1 successfully. If intelligence is not a key variable in acquiring L1, it may also be of limited importance in acquiring L2, especially when learned through naturalistic exposure (Bonar, 2005; Ellis, 1994, 2015; Oller, 1981; Sasaki, 1993; Teepen, 2004).

Several studies have shown mixed relationships between intelligence and language proficiency. Cummins proposed a distinction between two types of language proficiency:

- Cognitive/Academic Language Proficiency (CALP): related to academic language and reasoning skills.
- Basic Interpersonal Communicative Skills (BICS): related to conversational fluency and sociolinguistic competence.

In other references, Genesee also found a correlation between intelligence and language skills. However, this relationship was limited to writing abilities—not speaking abilities. Another finding by Ekstrand also indicated the same pattern, showing that intelligence had a significant correlation with reading, dictation, and free writing skills—but not with listening tests or spontaneous speaking. This may be because learners with higher intelligence tend to perform well in written language tasks, as these provide sufficient space to utilize their reasoning abilities. In contrast, in oral tests, their reasoning may be hindered by various factors such as time pressure, performance anxiety, or difficulty in verbal expression (Cummins, 2017; Ekstrand, 1976; Genesee, 1976; Genesee & Hamayan, 1980; Kristiansen, 1990; Rivera, 1984).

Intelligence may serve as a predictor of success in second language (L2) acquisition within formal classroom settings, especially when related to structured instructional methods. However, it has less influence on naturalistic L2 acquisition, where language knowledge is developed through communicative use rather than formal rule-learning. The research by Oller & Perkins (as cited in Ellis) shows that general intelligence does influence language acquisition, but primarily in academic areas such as writing, reading, or grammatical analysis. Studies by Genesee and Ekstrand similarly suggest that intelligence correlates significantly with written language skills, but is less relevant in aspects such as speaking or spontaneous communication (Ekstrand, 1976; Ellis, 2015; Genesee, 1976; Oller, 1981; Oller & Perkins, 1978).

For young children, whose language learning process is mostly natural and interaction-based, formal intelligence is not yet a dominant factor. This is because they do not yet possess sufficient reflective and metalinguistic capacity to engage in explicit or conscious language learning. Therefore, relying on formal teaching methods based on academic intelligence is not appropriate in the context of early childhood.

3.2.2.3. Language *Aptitude* and Children's Natural Abilities

Language aptitude in early childhood is most evident in a child's ability to imitate sounds, respond to conversational contexts, and use simple linguistic symbols communicatively. Children do not need to be formally taught sentence structure in order to convey meaning. What they need is rich exposure to vocabulary and interactive contexts. Aptitude, as defined in the glossary of *Second Language Acquisition* (Rod Ellis), refers to a learner's specific ability to acquire a second language (L2). This is hypothesized to be distinct from general academic ability, which refers more closely to intelligence (Ellis, 2015).

Reexamining the concepts of the organiser and monitor within the internal process reveals the existence of an unconscious knowledge of language rules and structures—or in other words, a form of metalinguistic awareness. Knowledge of L2 acquired through formal instruction primarily aims to strengthen the monitor by teaching grammatical rules. However, this does not necessarily guarantee that all the rules will be used in actual communication. Some learners continue to seek ways to produce sufficiently complex language without fully applying all of the grammatical rules. When formal

instruction is absent, it indicates that learners are also acquiring L2 naturally, guided by a relatively simple goal: to communicate.

Language aptitude is not easy to define. Aptitude can be operationally defined by the tests used to measure it, such as the *Modern Language Aptitude Test* (MLAT) developed by Carroll and Sapon in 1959, and the Language Aptitude Battery (LAB) developed by Pimsleur in 1966 (Carroll & Sapon, 1959; Doughty, 2019; Rysiewicz, 2008; Sasaki, 2012; Smith & Stansfield, 2017; Stansfield & Reed, 2004). Before delving deeper into the discussion of language aptitude and its testing, we must first reinforce our understanding of the following distinction: intelligence has implications for academic language skills, while aptitude has implications for communicative language ability. This can also be compared to Chomsky's distinction between *competence* (representing aptitude) and *knowledge* (representing intelligence). Next, we shall see how aptitude is defined through testing instruments.

The Modern Language Aptitude Test (MLAT) for second language acquisition, introduced by John Carroll in the mid-20th century, required prospective language learners (before beginning foreign language instruction) to complete tasks such as learning numbers, distinguishing sounds, interpreting spelling cues and grammatical patterns, and memorizing word meanings—all conducted in the learner's native language (Brown, 2013; Carroll & Sapon, 1959; Stansfield & Reed, 2004).

MLAT Components and the Challenges in Measuring Language Aptitude
The Modern Language Aptitude Test (MLAT) consists of three main components:

1. Phonetic coding ability, which includes the capacity to perceive and memorize sounds in a new language.
2. Grammatical sensitivity, or the ability to demonstrate awareness of syntactic patterns within the sentence structure of a language. Carroll (in Dulay) explains that performance in this component does not require the learner to possess explicit grammatical terminology. Instead, it also includes a metaconscious awareness of grammar (Carroll & Sapon, 1959; Dulay et al., 1982). In this way, it is possible to assess whether a learner can grasp grammatical rules, recognize their functions, and reorganize scrambled structures.
3. Inductive ability, which refers to the ability to examine language materials and forms in order to identify relational and correspondence patterns, including grammatical forms or meanings. This reveals the learner's grammatical and semantic understanding of the second language (L2).

These three test items refer to the concept of linguistic universals, where every language possesses "universal rule forms" that can be applied universally. Returning to the distinction between cognitive/academic language and communicative language, this aptitude test can only effectively describe natural aptitude if administered to a new learner who has not yet received any formal instruction about L2 grammar. If it is used with learners who have already received formal instruction, the intelligence factor may blur the description of innate aptitude.

This issue was raised by Krashen (in Ellis) in his experiments with MLAT. Initially, Krashen emphasized the distinction between *acquisition* and *learning*. Acquisition is defined as the unconscious internalization of L2 knowledge that occurs naturally and spontaneously. Learning, on the other hand, refers to the conscious study of language rules. Based on his findings, Krashen concluded that MLAT correlates more with learning

than with acquisition. Another MLAT study was conducted by Cummins with natural learners. Yet the results still indicated that there was no significant relationship between aptitude and L2 acquisition. Findings about aptitude remained limited to its relationship with L1 acquisition, and this was then assumed to apply equally to L2. Hence, the paradigm linking aptitude to L2 acquisition is being reexamined. The emergence and application of aptitude may depend on age. At a mature age, individuals have typically received extensive instruction, meaning that their aptitude—however natural it may appear—is actually constructed from accumulated experiences (Ellis, 2015; Liu, 2023).

Language aptitude tests such as the MLAT—which measure the ability to memorize sounds, grammatical sensitivity, and inductive ability—suggest that aptitude operates most effectively before formal instruction takes place. However, Krashen's research (in Ellis) noted that MLAT is more strongly correlated with formal language learning, not natural acquisition (Ellis, 2015; Liu, 2023). This reinforces the notion that in early childhood, when academic exposure is minimal, the dominant mechanism is natural language acquisition rather than formal learning outcomes.

In practice, young children frequently apply transfer strategies from their first language (L1) to the foreign language (L2) by relying on familiar structures. For example, when a child says, “I sick,” they are drawing on the Subject + Predicate (S + P) structure acquired from their first language. This demonstrates that their linguistic aptitude functions by generalizing language patterns naturally, even if the result is not yet grammatically correct.

As an illustration of the function of language aptitude, we may refer to toddlers acquiring L1. Children, as L1 learners, often focus on the goal of communication by directly producing the predicate or object. For example:

- ‘Ingin minum’ (*want to drink*) → [mik] or [ʧuʧu]
- ‘Ingin makan’ (*want to eat*) → [ʔaʔɛm] or [ʔaso]

In the utterance [mik], the child simplifies the Javanese word *mimik* /mimik/, meaning ‘to drink’. Similarly, [ʧuʧu] is used to refer to *susu* /susu/ (‘milk’). This substitution of the phoneme /s/ with [ʧ] (or /c/) illustrates a common articulatory phenomenon in early childhood called substitutive dyslalia—the replacement of one sound with another due to immature articulatory control. This type of phonological process is developmentally normal but may persist if not corrected. In fact, when adults imitate such utterances (e.g., saying “cu cu” instead of “susu”), they may unintentionally reinforce the incorrect articulation.

The word [ʔaʔɛm] comes from the Javanese *maem* /maʔɛm/, meaning ‘to eat’, and [ʔaso] is a reduced form of *bakso* /bakso/, meaning ‘meatball’. These examples represent omissive dyslalia, where one or more phonemes are omitted—e.g., the omission of the initial syllable in *bakso*.

These examples are linguistically important because they reflect how children prioritize content words—especially verbs and nouns—in their early speech production. During the early stages of language development, children tend to focus on action verbs (e.g., ‘eat’, ‘drink’) and tangible objects (e.g., ‘milk’, ‘meatball’) relevant to their immediate needs and environment.

This aligns with findings in child language acquisition that emphasize semantic saliency in early word learning. In the context of second language acquisition, especially

for young learners, this natural developmental pattern suggests that teaching should begin with high-frequency, functional words, particularly verbs and nouns, delivered in meaningful, interactive contexts. Thus, understanding these phonological and semantic tendencies can inform more developmentally appropriate strategies in foreign language instruction for early childhood education.

These model described can be understood as a practical manifestation of the Language Acquisition Device (LAD), a concept introduced by Noam Chomsky to describe the innate, biologically-driven mechanism that enables human beings—especially children—to acquire language naturally. Within this framework, a child requires only a minimal lexical stimulus to activate their communicative intention. This reflects what linguists call referential function—the use of language primarily to point to or denote objects, actions, or concepts in the environment.

At the early stages of language development, the child does not yet process or produce grammar in the adult sense. Rather, what the child intuitively grasps is how to associate a word with a referent. Therefore, the key driver in language production at this stage is not syntactic competence but lexical access and referential mapping. When the child is given an appropriate vocabulary prompt (e.g., "drink" or "eat"), the LAD is activated to construct meaning through rudimentary structures that are semantically loaded, even if morphosyntactically incomplete.

When moving to second language acquisition (L2), particularly in the case of young Indonesian learners, what appears to guide initial production is the child's sensitivity to linguistic universals rather than formal instruction. Consider the following examples based on interlanguage production:

- L1 (Indonesian):
    - *itu kursi* → "it chair"
    - *harganya seribu* → "price one thousand"
    - *saya minum* → "I drink"

Here, the child directly transfers the S + P structure from their L1 into English without modifying for grammatical differences (e.g., absence of articles, auxiliary verbs, or plural markers). The utterances are not target-like in a prescriptive sense but functionally adequate for basic communication.

In another instance:

- L2 (English, correct modal): *I have lunch*
- L2 (overgeneralized structure): *I have sick*

This second case illustrates overgeneralization, a common developmental process in which the child applies a known syntactic pattern (e.g., *S + have + N*) to semantically incompatible contexts (e.g., substituting an adjective instead of a noun). Despite its grammatical inaccuracy, this utterance is linguistically insightful—it demonstrates that the child is hypothesizing grammatical rules based on available input and prior linguistic models, echoing what Chomsky termed the creative aspect of language use.

In the early stages of second language (L2) learning, particularly for young children, the focus of instruction should ideally shift away from rigid grammatical rules and instead emphasize functional and intuitive language use. This kind of instruction is grounded in what is often termed general grammar—the basic subject-verb (S–V) or subject-verb-object (S–V–O) structures that naturally appear in children's first language

(L1) development. These structures emerge not through formal teaching, but through exposure, interaction, and repetition.

Rather than prioritizing grammatical accuracy, educators are encouraged to center their teaching around referential clarity—that is, ensuring children can clearly associate words with their meanings and communicative purposes. Using a core vocabulary that aligns closely with the child's environment and prior knowledge enhances this clarity. Furthermore, providing comprehensible input—language that is slightly above the child's current level of understanding but still accessible—is crucial. When this input mirrors the simplicity and pattern of the child's native language, it becomes easier for the child to internalize and use.

This naturalistic approach brings several developmental advantages. First, it supports semantic-pragmatic growth, where the child learns to focus on conveying meaning rather than mastering abstract grammatical forms. Second, it fosters early vocabulary acquisition, enabling children to connect new words with familiar contexts and concepts. Third, it promotes spontaneous verbal interaction, which is far more effective in stimulating language development than structured, rule-based learning—especially at a young age when the child's language systems are still forming.

To conclude, formal instruction in grammar is not necessary for children to begin acquiring a second language. What they truly need is rich exposure to meaningful words within natural communicative contexts. This activates the child's innate language faculty—the Language Acquisition Device (LAD)—and utilizes their inherent drive to name, describe, and connect with the world. Therefore, teaching English or other foreign languages to Indonesian children should be modeled after the process by which they acquire their first language. Starting with simple and intuitive expressions that prioritize communication over correctness not only aligns with established theories in developmental linguistics but also builds a strong and sustainable foundation for bilingual competence in the future.

3.2.2.4. The Problem of Foreign Language Teaching Without Considering Children's Aptitude and Intelligence

One of the most common mistakes in early childhood education practice is equating the language acquisition process in children with the learning process of adults. Children are not yet ready to be burdened with structural analysis or memorization of formal vocabulary. When foreign language instruction is imposed using methods that rely heavily on academic intelligence, it may hinder the development of the first language, cause emotional discomfort, or even lead to resistance toward the foreign language itself.

In contrast, when foreign language learning in early childhood is guided by leveraging children's natural abilities—such as phonological sensitivity, imitation, and contextual association—the process can become more effective and enjoyable. Teachers should present the foreign language through songs, games, and meaningful social activities, rather than focusing solely on grammar drills or vocabulary memorization.

3.2.3. Motivation and Cognitive Style in Early Childhood Foreign Language Learning

Foreign language learning in early childhood cannot be separated from an understanding of children's motivation and cognitive style. Both play an essential role in how children absorb, process, and use the new language they encounter in educational settings.

However, the motivation and thinking style of young children cannot be equated with those of adult learners. Therefore, foreign language teaching approaches must be adapted to the motivational and cognitive characteristics specific to early childhood.

3.2.3.1. Motivation: Emotional and Social Drives in Language Learning

Motivation is one of the key elements in the process of language acquisition, including in the context of young children encountering a foreign language. Unlike adults who can build learning orientation based on long-term goals—such as career needs, academic advancement, or cultural integration—young children do not yet have the cognitive and social capacities to develop such awareness. Therefore, children's motivation in learning a foreign language tends to be more situational, affective, and social in nature.

Ellis states that motivation is closely related to attitude, which is reflected in the extent to which a learner shows persistence, engagement, and interest in the learning process. However, in early childhood, these attitudes and motivations are not the result of rational reflection, but are driven by emotional comfort, positive interpersonal relationships, and a joyful social atmosphere (Ellis, 1994, 2015). This means that children are more easily motivated to learn when they feel loved by the teacher, receive support from peers, and are in a cheerful learning environment.

In the classical theory proposed by Gardner, two main types of motivation are identified: integrative motivation, which is the drive to become part of the culture and society of the target language speakers; and instrumental motivation, which is oriented towards practical benefits such as employment or social status (Gardner, 2007; Gardner & MacIntyre, 1991; Gholami et al., 2012; Quan, 2014; Swari et al., 2023). However, if this dichotomy is directly applied to young children, it creates an imbalance. Children do not yet have abstract awareness of foreign cultures, nor do they understand the economic value of the language they are learning. They do not possess complex social identities, so their learning orientation is more dependent on the “here and now.”

For young children, the more dominant motivation is intrinsic motivation, which is spontaneous and emotional in nature (Carlton & Winsler, 1998; Deci & Ryan, 1985; Guay et al., 2010). They are interested in learning foreign languages because the activity itself is enjoyable, such as singing songs, role-playing, imitating the teacher, or associating the language with things that make them laugh, move, or feel secure. For instance, when a teacher invites children to sing “Head, Shoulders, Knees, and Toes” while dancing and pointing to body parts, children are not only learning English vocabulary, but also experiencing social joy that strengthens their emotional connection to the foreign language. The emotional and moral approach—aimed at stimulating children's socio-emotional development—in language learning can even be delivered through more narrative forms of language exposure (Rokhmawan et al., 2022; Sari, 2024).

In addition to intrinsic motivation, social identification also becomes a strong motivational factor for children (Deci & Ryan, 1985; Guay et al., 2010). Children naturally want to be part of their peer group. When their peers use foreign words or phrases that are considered cool, funny, or “close to the teacher,” other children are likely to be motivated to say them too. This is a form of social-imitative motivation, which, although unconscious, plays a significant role in encouraging children to recognize and produce foreign language spontaneously. In this case, language is understood not only as a communication tool but also as a symbol of belonging and social

acceptance. This is clearly not the same and cannot be equated with the methods used by teachers in teaching foreign languages to adolescents, which tend to be more formal and may even be based on the understanding of foreign cultures (Rossa et al., 2023; Wahyuni, 2022).

One crucial point that educators and adults must recognize is that children's motivation can easily fluctuate depending on the social and emotional responses they receive. When a child is praised for saying a word in a foreign language, their motivation increases. Conversely, if they are scolded for mispronouncing a word or feel embarrassed in front of their peers, their affective filter rises and their motivation can disappear instantly. This aligns with the concept of the affective filter (Dulay, 1982), which explains that negative emotional states can be a major barrier to language input entering the learner's cognitive system.

Thus, the primary challenge in developing young children's motivation to learn foreign languages does not lie in mastering linguistic structures or using sophisticated media, but in the teacher's ability to create a safe, supportive, and joyful emotional and social environment. Effective foreign language learning activities for early childhood must be designed to spark curiosity, involve physical movement, contain social interaction, and allow for playful and free imitation without pressure.

Finally, it can be concluded that the motivation of young children in foreign language learning is not merely a cognitive issue, but rather an emotional and social drive that is highly contextual. Therefore, pedagogical approaches that are sensitive to children's emotions and social interactions must be the foundation in designing any foreign language learning for early childhood.

3.2.3.2. Cognitive Style: How Young Children Process Language Information

In understanding early childhood abilities in facing foreign language exposure, we cannot overlook the role of cognitive style as a crucial part of the internal learning process. Cognitive style refers to an individual's tendency in perceiving, organizing, processing, and representing information received from the environment. Unlike intellectual ability, which measures how much someone can understand, cognitive style concerns how someone understands (Guilford, 1980; Riding & Rayner, 2013; Sternberg & Grigorenko, 1997).

In early childhood, cognitive styles are generally holistic, contextual, and grounded in concrete experiences. This aligns with Piaget's theory of cognitive development, which views the child as an active learner who constructs knowledge through direct interaction with their environment. During the preoperational stage (approximately ages 2–7), children are not yet capable of systematic abstract thinking, but they have strong capacity to understand meaning through symbols, movement, sound, and physical involvement in everyday activities. In addition, we must also pay attention to the use of context, themes, schemata, memory, and cognition in order to support language learning as a vehicle for acquiring knowledge (Rokhmawan, 2018).

Figure 3 Illustration of Foreign Language Exposure through Singing Vocabulary and Simple Commands

The implications of this cognitive style are evident in language learning. Young children tend to understand language not as a system of abstract rules, but as part of socially and emotionally meaningful events. For instance, phrases like *"let's go!"* or *"clean up!"* are far more meaningful and comprehensible when delivered during play or classroom routines, rather than explained through linguistic or grammatical instruction. This shows that language learning that is presented in whole, contextual, and multisensory formats is far more effective for children, as it aligns with how they naturally process information.

In educational psychology and applied linguistics, there is also a well-known classification of cognitive styles based on the dichotomy between field-dependent and field-independent orientations (Hansen & Stansfield, 1981; Stansfield & Reed, 2004). Young children generally exhibit *field-dependent* characteristics—being more reliant on social context, external references, and concrete learning models. They learn language by imitating the teacher's speech, following sound patterns, mirroring gestures, and drawing meaning from accompanying social situations. Language processing at this stage is driven by imitation and association, rather than linguistic analysis or reflection.

On the other hand, *field-independent* cognitive style, which is more analytical, systematic, and autonomous, emerges later in development when children gain the ability for concrete operational and eventually formal operational thinking. In this mode, learners are able to see language as a structured system, perform grammatical generalizations, and detach meaning from specific contexts. Therefore, foreign language instruction that overly emphasizes structural or grammatical rules is misaligned with how young children think.

The contextual nature of young children's cognitive style also highlights the importance of social interaction, emotional involvement, and visual and kinesthetic support as vital components in the language learning process. Children are more likely to remember vocabulary when paired with songs or body movements, or when the words are used in joyful peer-based activities. They also acquire speech patterns more quickly

when phrases are repeated by trusted and admired adults. In this context, teachers and the social environment serve as *scaffolding*—enabling children to grasp meaning and form verbal associations.

Cognitive style also explains why some children appear to acquire a foreign language more quickly than others, despite being of the same age. Differences in learning tendencies—whether visual, auditory, or kinesthetic—determine the effectiveness of teaching strategies. For instance, visually-oriented children benefit from images or visual aids, while kinesthetic children absorb language more easily through movement or motor-based games.

Based on this understanding, foreign language learning for young children should not focus on memorizing vocabulary or grammatical structures, but instead offer language experiences as part of meaningful, enjoyable, and age-appropriate activities. Teachers should act as sensitive facilitators who recognize each child's learning style, use a variety of multisensory approaches, and create a socially rich environment for interaction.

Thus, the cognitive style of young children is not an obstacle to foreign language acquisition, but rather a crucial guide for educators in selecting appropriate and humane strategies. When teaching approaches are aligned with how children think and feel, foreign language learning ceases to be a burden and becomes an integral part of play and growth.

3.2.3.3. Implications of Motivation and Cognitive Style for Foreign Language Teaching

A deep understanding of early childhood motivation and cognitive styles has significant implications for the design of foreign language instruction in early childhood education settings. Recognizing that children do not acquire language in the same way as adults requires educators to develop approaches aligned with how children naturally think, feel, and interact.

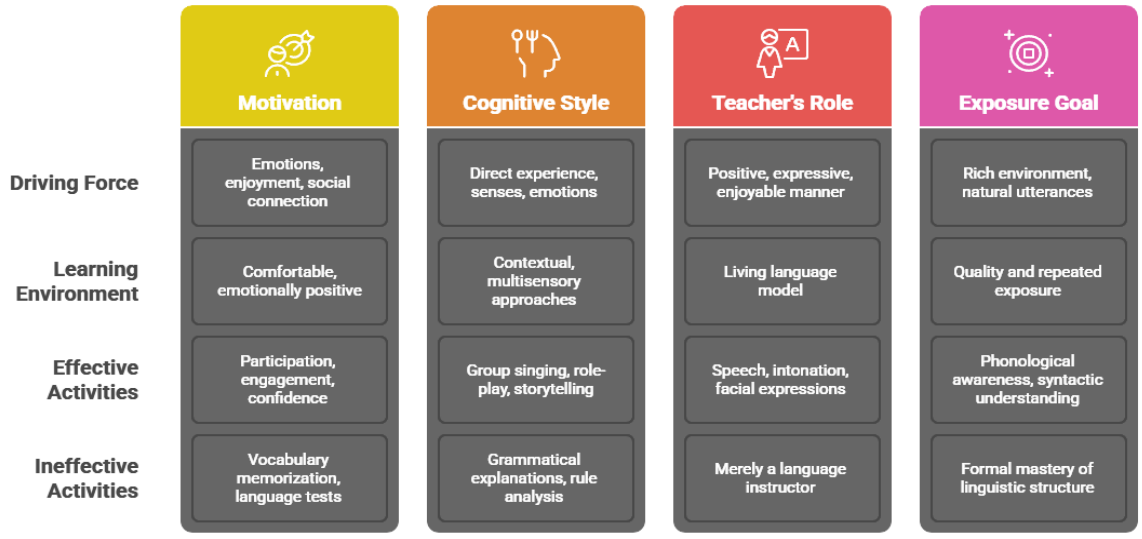

Figure 4 A Schematic Representation of Cognitive Style Implications, Teacher Roles, and Learning Material Exposure

First, from a motivational standpoint, young children are not driven by academic or economic goals, but by emotions, enjoyment, and positive social relationships. Therefore, the learning environment must be as comfortable and emotionally positive as possible. When instruction takes place in a high-pressure setting—such as with vocabulary memorization demands or language tests that are developmentally inappropriate—the outcome is not a healthy linguistic foundation but the activation of an *affective filter* that hinders language acquisition. Teachers must avoid approaches that overly emphasize performance outcomes and instead adopt strategies that prioritize participation, engagement, and the child's confidence.

Second, in terms of cognitive style, young children are concrete, intuitive learners who rely heavily on social context. They do not learn through grammatical explanations or linguistic rule analysis but through direct experiences that engage the senses, emotions, and interpersonal connections. Contextual and multisensory approaches are therefore essential in introducing a foreign language at this stage. Activities such as group singing, role-play, storytelling with visuals, and interactive games are far more effective than written drills or rote vocabulary memorization. Language must be embedded in the child's lived experience—not treated as an isolated and unfamiliar academic subject.

Third, the teacher must act as a living language model, not merely a language instructor. Because young children tend to imitate and construct identity through authoritative figures in their environment, it is crucial for teachers to present the foreign language in a positive, expressive, and enjoyable manner. The teacher's speech, intonation, facial expressions, and emotional responsiveness are key in conveying linguistic meaning. Beyond "teaching words," the teacher creates enjoyable linguistic experiences that lay the foundation for future language acquisition.

Fourth, it must be emphasized that the goal of early foreign language learning is not formal mastery of linguistic structure, but rather quality and repeated exposure. By providing a rich environment filled with natural and meaningful foreign language utterances, children gradually become accustomed to hearing, recognizing patterns, and developing linguistic sensitivity. This exposure builds phonological awareness, early syntactic understanding, and confidence in language use, which will eventually support more formal language learning during later developmental stages.

Another implication of this understanding is the importance of flexibility in teaching strategies. Not all children are motivated by the same things, and not all children have identical cognitive styles. Teachers must therefore recognize the diversity of learning styles in the classroom and provide broad opportunities for exploration. Auditory learners may benefit from songs, kinesthetic learners from movement and dramatization, and visual learners from images or symbols. This means that foreign language learning design in early childhood must be adaptive, dynamic, and child-centered. Ultimately, effective foreign language instruction for young children requires teachers to understand developmental psychology and language acquisition principles—not merely linguistic content. Educators must cultivate a warm, inclusive, and responsive environment that addresses children's emotional and social needs. In doing so, a foreign language becomes not a developmental burden, but an integral part of the child's experience of play, learning, and holistic growth.

3.2.4. Implications and Critique of Foreign Language Instruction in Early Childhood Education

In recent decades, the teaching of foreign languages in early childhood education has seen a significant increase, both in formal institutions and non-formal educational settings. English has become the most commonly chosen foreign language, and in some international schools, it is even used as the primary medium of instruction. However, the implementation of foreign language instruction at this early stage must be critically examined in terms of children's linguistic, cognitive, and emotional readiness, as well as its relevance to the sociocultural context in which the child is raised.

One of the main risks of overexposure to a foreign language is the potential imbalance between the development of the first language (L1) and the foreign language (L2). In early life, children are still constructing the foundation of their first language—whether it be a regional mother tongue, a home language, or the national language (Indonesian). When a foreign language is introduced intensively without first strengthening the L1 foundation, children are at risk of experiencing linguistic disorientation, where their L1 fails to develop optimally while their L2 remains only partially acquired.

A common phenomenon in such cases is code mixing, an imbalanced blending of linguistic elements, as well as regression in the use of the first language. Over time, this may affect the child's verbal reasoning, concept formation, and the construction of cultural identity. This is crucial, as the first language is not merely a tool for communication—it is also a medium for thinking, logical development, and understanding the social world contextually.

Additionally, cognitive and emotional pressures pose serious concerns. As discussed in previous sections, young children have still-developing cognitive capacities and rely heavily on positive emotions and social support. When foreign languages are taught through formal, high-pressure, or accelerated methods, children may experience confusion, a decline in self-confidence, or even resistance to learning. Linguistic demands that exceed developmental readiness can disrupt their sense of security and diminish motivation.

Nevertheless, if foreign language instruction remains part of the Early Childhood Education curriculum, the approach must be cautious, selective, and grounded in child development principles. Several key strategies should be considered:

1. Adopting play-based and contextual approaches (natural exposure). Foreign language input should be embedded in meaningful play experiences—such as through songs, stories, games, or movement—not treated as a separate subject requiring children to sit still and memorize.
2. Avoiding formal emphasis on grammar or linguistic structure. Instruction should not focus on mastering abstract linguistic rules. Instead, foreign language learning should be based on experience, interaction, and contextual understanding.
3. Designing linguistic interventions that integrate the first language (L1) and national language (Indonesian). This reflects a *translanguaging* strategy, a flexible use of the child's full linguistic repertoire. Children should feel free to use their mother tongue, Indonesian, and the foreign language in the same context without fear of error. This allows all their languages to develop synergistically and reinforce one another.
4. Providing Early Childhood Education teachers with training in adaptive translanguaging strategies. Educators must be equipped with foundational linguistic

knowledge, child language development principles, and creative methods for delivering foreign language input naturally. This training is essential to prevent teachers from imposing foreign languages formally and instead enable them to integrate language with positive emotions, social interaction, and playful learning.

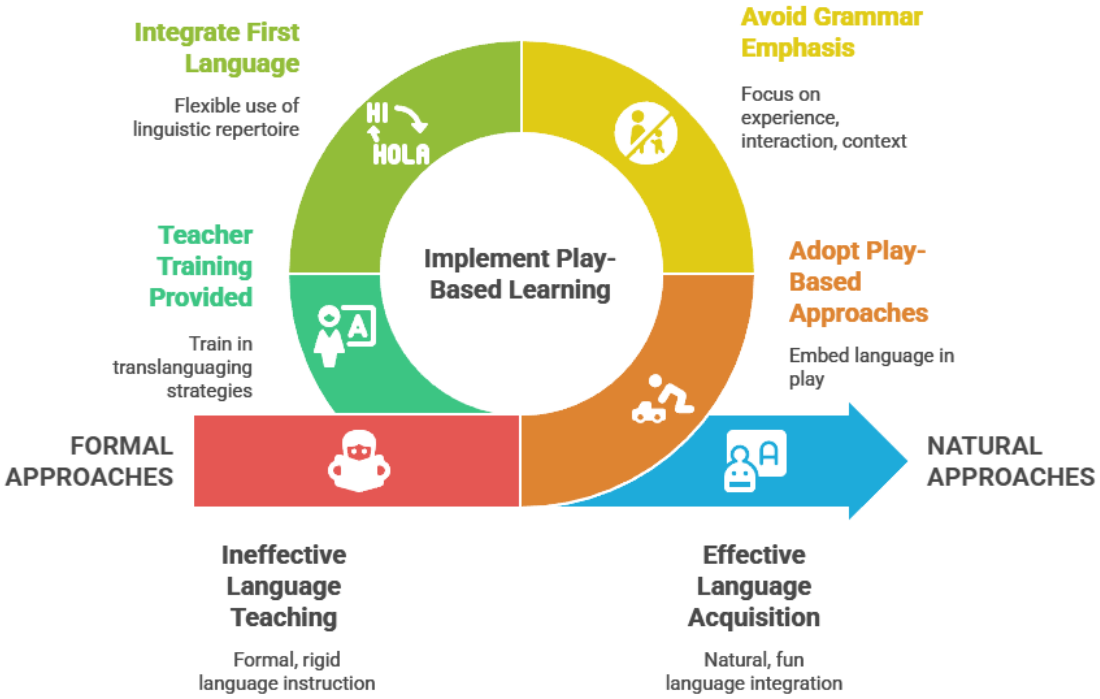

Figure 5 A spectrum of Foreign Language Instructional Models for Early Childhood, From Formal to Natural Approaches

This diagram presents a continuum of foreign language teaching approaches for young children, ranging from highly formal to highly natural. At one end lies the Grammar-Based approach, which emphasizes mastery of linguistic rules such as sentence structure and grammar. While common in conventional language teaching, this approach may cognitively burden young learners, who are not yet ready for abstract thinking and learn more effectively through concrete experiences.

With such child-sensitive and developmentally appropriate approaches, foreign language teaching in early childhood no longer becomes a developmental burden but rather an enriching linguistic experience that broadens the child's world in a safe and meaningful way. From this foundation, we can propose a spectrum of instructional models that range from formal to natural approaches for use by early childhood educators.

At the opposite end lies the Play-Based approach, which integrates language into everyday play activities. This aligns closely with how children naturally learn—through joyful, social, and meaningful experiences. When foreign languages are introduced via songs, movement, or games, children grasp meaning more easily without feeling like they are engaged in formal learning.

In the middle lies the Translanguaging approach, which allows children to use all their linguistic resources—mother tongue, national language, and foreign language—flexibly and contextually. This approach acknowledges that children often do not use a single language in isolation but mix and switch languages according to their needs and

context. Translanguaging enables children to construct meaning in the way that feels most natural to them, without the pressure of avoiding language mixing.

Overall, this continuum highlights the importance of aligning language teaching methods with the developmental characteristics of early childhood. Overly formal approaches can hinder language acquisition, while natural, contextual, and flexible strategies—such as play and translanguaging—are far more effective. Therefore, teachers must understand that the primary goal of introducing foreign languages in early childhood is not structural mastery, but rather providing enjoyable and meaningful linguistic experiences that lay a strong foundation for future language development.

4. Conclusions

Motivation and cognitive style are two critical components that influence how young children respond to foreign language exposure. At an early age, children tend to possess motivation that is intrinsic, emotional, and socially driven, rather than functional or integrative as found in adult language learners. They also exhibit cognitive styles that are more contextual, holistic, and grounded in direct experiences. Consequently, foreign language learning strategies must be designed with these characteristics in mind—through playful, contextual, multisensory approaches enriched by joyful social interaction.

Foreign language instruction in early childhood education cannot be imposed formally without considering children's linguistic and psychological developmental readiness. Poorly managed overexposure to foreign languages risks creating developmental imbalances between the first language (L1) and the foreign language (L2), as well as disruptions in the child's emotional well-being and linguistic identity. However, when designed using developmentally appropriate pedagogical approaches—such as translanguaging, positive modeling, mother tongue integration, and emotionally safe learning environments—foreign language instruction can become an enriching stimulus rather than a disruptive burden. This is important considering that learning for early childhood requires extensive stimulative conditioning to ensure they are willing and able to receive it effectively (Fitriyah et al., 2021).

Therefore, educational institutions and early childhood educators must critically re-evaluate the practice of teaching foreign languages at the preschool level. The focus should not lie in mastering linguistic structures, but in fostering a positive, flexible language environment aligned with how children think and learn. In this context, the question, "Are young children capable of coping with foreign language exposure?" cannot be answered with a simple yes or no. The answer depends entirely on how the educational system manages the *method* and *context* of exposure—whether it aligns with the child's developmental needs or exceeds the thresholds they are not yet ready to meet.

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The authors are academics and practitioners in the fields of language education and developmental psychology, with a particular focus on early childhood. This critical review serves as a foundational reference for future research on language learning practices and early childhood education that align with the natural developmental trajectory (*fitrah*) of young learners.

Conflict of Interest

The authors declare no conflicts of interest. All authors affirm that there are no personal, financial, or professional relationships that could be perceived as inappropriately influencing the representation or interpretation of the research findings presented in this article.

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