Chapter -I <u>Introduction</u>

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Introduction

1.1 Background of the study

Multilingualism from an early age has been shown to enrich a child's overall development in many meaningful ways. Research in child development and education suggests that learning more than one language doesn't confuse young learners—in fact, it benefits them. Studies in cognitive science show that children who grow up speaking multiple languages often develop stronger attention skills and greater mental flexibility. Instead of struggling, they actually become better at switching between tasks and staying focused.

In the classroom, young bilingual or multilingual children actively participate in reading, speaking, and play, naturally illustrating how learning in multiple languages can become part of a joyful and engaging learning environment. Far from being a disadvantage, this early exposure to more than one language helps children grow into well-rounded individuals. They not only gain academic strengths—like the ability to read and write in more than one language—but also build a deeper sense of cultural identity and social confidence.

Of course, there can be some initial challenges. Children may take a little longer to master vocabulary or grammar in each language. But with patient, supportive teaching, these hurdles are easily overcome. Over time, children who learn in bilingual or multilingual environments often become more adaptable, empathetic, and open-minded. They learn to navigate different cultural and social settings with ease, which is a valuable skill in today's global and diverse world.

In essence, early multilingual education lays the groundwork for cognitive growth, emotional intelligence, and cultural awareness—turning young learners into capable and confident individuals who are prepared to thrive in any environment.

1.1.1 Cognitive Development

- Executive Function and Attention: Many studies reports that bilingual children outperform monolingual peers on nonverbal executive-control tasks. They show stronger inhibitory control (ignoring distractions) and cognitive flexibility (shifting tasks). For example, bilingual kindergartners often switch more easily between tasks and resist irrelevant cues. This bilingual advantage seems strongest on demanding tasks, especially those requiring conflict resolution.
- Theory of Mind (Perspective-Taking): Bilingual experience also appears to accelerate social-cognitive skills. Meta-analyses find a small bilingual advantage in theory-of-mind tasks (understanding others' beliefs and perspectives). In practice, bilingual children often grasp that people can hold different thoughts and emotions, possibly because they negotiate meaning across languages.
- Memory and Problem-Solving: Some research suggest bilinguals may show enhanced working memory when task demands are high (e.g. multi-step instructions), as managing two languages trains memory systems. They may also excel at problem-solving and mathematical reasoning, possibly due to better sustained attention and practice with abstract symbols.
- Reliable after correcting for publication bias. Effects can vary by age and task. In summary, bilingualism tends to correlate with sharper cognitive control in early childhood, but the magnitude of the effect is modest.

1.1.2 Academic Performance

• Literacy (Reading and Writing): Early studies often find initial literacy scores slightly lower for bilingual beginners than monolingual peers. In one study of 5—6-year-olds, monolingual children outperformed bilinguals on most early reading tasks. This gap largely reflects differences in language exposure rather than ability;

bilingual children have less vocabulary in each language at school entry. Importantly, however, learning to read in **the home language** provides a strong foundation. Children who develop phonics and vocabulary in their first language can transfer those skills to the second language, often catching up in reading by middle childhood.

- Biliteracy Advantages: When both languages are supported, bilingual children often develop heightened phonological and metalinguistic awareness. A systematic review found that biliteracy boosts phonemic awareness and writing skills. In other words, reading and writing in two languages promotes deeper understanding of language structure, which in turn supports academic reading comprehension. Bilingual programs (dual-language instruction) typically produce reading outcomes equal to or better than monolingual programs by upper primary grades.
- Numeracy: Bilingualism itself does not impair mathematical learning. Research suggests numeracy skills are comparable between monolingual and bilingual children, except in problems with heavy language demands. For example, bilingual kids may struggle more with word problems if they have weaker vocabulary in the language of instruction. However, general math concepts (counting, arithmetic) are acquired normally. In fact, the enhanced executive control in bilinguals can aid concentration and multi-step calculation in math.
- Overall Outcomes: In well-supported settings, any early academic differences
 usually diminish. By late primary school, bilingual students often match their
 peers academically. The key is adequate support: ensuring strong L1 instruction
 and building L2 language skills. With such support, bilingualism is associated
 with long-term academic benefits, including the ability to learn additional
 languages more easily.

1.1.3 Social-Emotional Development

- Cultural Identity & Confidence: Maintaining a home language strengthens a
 child's sense of identity. Being bilingual helps young learners keep "strong ties
 with their family, culture, and community," which are key to healthy self-esteem.
 Children who can communicate with parents and elders without a language
 barrier typically feel more confident and secure.
- Empathy and Peer Skills: Navigating two languages often comes with exposure to multiple cultures. Bilingual children frequently demonstrate advanced perspective-taking and empathy for others. This is consistent with cognitive findings: bilinguals showed a slight edge on theory-of-mind tasks. In practice, they may be more adept at understanding peers' feelings and viewpoints, and they can form friendships across linguistic groups.
- **Self-Regulation:** Surprisingly, even infants in bilingual households have shown better early self-control than those from monolingual homes. Good self-control in toddler hood is a strong predictor of later social and academic success. This suggests that the mental exercise of handling two languages helps young children develop patience and focus.
- Challenges: Some social-emotional aspects develop at a different pace. For instance, bilingual children may take slightly longer to acquire complex emotion-related vocabulary in each language. One study found bilingual 5–6-year-old were marginally behind monolinguals in understanding the "mental causes" of emotions. In everyday life, this might mean a bilingual child needs more time or explicit teaching to label and discuss emotions. In contexts where the home language is undervalued (e.g. peers teasing code-switching), children may also need support to maintain pride in their heritage. Overall, however, bilingualism has no inherent social-emotional costs longitudinal data show bilingual children do not differ from monolinguals in social adjustment, and in fact often have fewer behavioral difficulties as they grow.

1.1.4 Language Development (L1 and L2)

- Separate Language Systems: Children learning two languages form two distinct systems. They can keep them apart from infancy. Importantly, "bilingualism does not trigger confusion". Children might mix words (code-switch) while speaking, but this is a normal part of learning multiple languages, not a cognitive mix-up. Over time, they learn the conventions of when to use each language.
- Vocabulary Size: Bilingual children typically have smaller vocabularies in each language than monolingual peers of the same age. For example, a bilingual 6-year-old might know 800 English words and 600 Spanish words, whereas a monolingual knows 1,000 English words. However, bilinguals often know two words for many concepts (one in each language), so their total vocabulary across languages is comparable or greater. In the long run, children catch up: any early language gap usually disappears by middle childhood. One working-paper analysis found no significant long-term difference in overall language proficiency once family and schooling factors are accounted for.
- Language Proficiency and Age: Children who are exposed to both languages from birth (simultaneous bilinguals) progress on par with monolingual norms. Those who learn a second language later (e.g. after age 3) may simply need more time or instruction to reach the same level as monolinguals in that second language. In practice, schools that support both languages enable dual-language learners to become fully proficient in each.
- Metalinguistic Awareness: A benefit of managing two languages is heightened
 metalinguistic skill thinking about language itself. Bilingual children often
 grasp grammar and word play more readily. For example, they learn that "cat" in
 English and "gato" in Spanish refer to the same animal, reinforcing the concept of
 synonyms and categories. This awareness underlies the literacy advantages noted
 above.

• Literacy Transfer: Learning to read in a strong first language provides transferable skills. Research shows that when children are literate in L1, they pick up reading in L2 faster. Classroom programs that build on home-language literacy (through phonics and vocabulary) help bilingual students become biliterate with confidence.

1.1.5 Benefits of Multilingualism

- Enhanced Cognition: By juggling two languages, children exercise their brains.
 They often develop stronger attention control, multitasking ability, and problem-solving skills. This cognitive flexibility is linked to better performance on memory and reasoning tasks.
- Cultural and Social Assets: Bilingual children maintain connections to two
 cultural communities. This widens their social world and deepens emotional
 bonds. They tend to be more culturally aware and can communicate with a
 broader group of classmates and family members. Many studies note bilinguals
 are more adept at perspective-taking (since they see the world through multiple
 linguistic lenses).
- Academic and Future Opportunities: In today's global society, knowing more
 than one language opens doors. Bilingualism promotes higher-order thinking
 (abstract thought) and makes learning additional languages easier. Long-term,
 biliterate individuals often have greater educational and career choices.
 Importantly, strong early literacy in both languages is associated with better
 reading and academic outcomes later on.
- Early Self-Regulation: Even very young bilingual children often exhibit better self-control and task persistence. This self-regulation is a key advantage for school readiness and learning in the classroom.

1.1.6 Needs of Multilingualism in preparatory stage

Multilingualism plays a very important role in preparatory stage, when young kids learn more than one language early on, it helps them think better and talk more clearly. It also teaches them to appreciate different cultures and makes learning easier as they grow.

- 1. Learning more than one language at an early age helps kids think better and remember more.
- 2. It makes it easier for them to talk and connect with different kinds of people.
- 3. They start to understand and respect different cultures and ways of life.
- 4. Being multilingual opens doors for future studies and exciting job opportunities around the world.
- 5. It also lays a strong foundation for learning and reading as they grow.

1.1.7 Challenges of Multilingualism

- Initial Language Delays in Each Language: Bilingual children may lag slightly behind monolingual peers in vocabulary and reading in the majority language, simply because their learning time is split. Educators should recognize that this is a quantity effect, not a deficiency in ability. Without adequate support, bilingual students can fall behind in early literacy. For example, English-language reading scores may initially be lower for English-language learners if they lack English exposure.
- Need for Support: Success in bilingual settings depends on consistent exposure
 and instruction in both languages. Schools need resources (bilingual teachers,
 dual-language materials) to nurture each language. Otherwise, the child's weaker
 language may stagnate. Sequential learners, in particular, often need extra time
 and targeted help to reach grade-level skills.
- Social and Identity Factors: In some settings, children might feel caught between cultures. They may face peer pressure to speak only the majority

language, which can affect self-esteem if not addressed. Educators must create an inclusive environment where all languages are valued.

 Code-Switching Misunderstood: Because young bilinguals naturally mix languages, adults must be careful not to interpret code-switching as confusion or misbehavior. In reality, it is a normal stage of language learning. Children who are unfairly corrected or reprimanded for code-switching may become anxious. Awareness by teachers and parents is needed to support healthy bilingual language use.

1.1.8 Promoting Multilingualism through NCF 2005: A Child-Centered Approach to Language Learning.

- Three-Language Formula: The NCF 2005 encourages schools to follow a three-language formula to help children become comfortable using more than one language. Under this system, students learn three languages during their school years. These typically include their mother tongue or regional language, a second language (which could be Hindi or English, depending on where they live), and a third language (usually another Indian language or English, if not already studied). This balanced approach helps children grow up multilingual and ready to engage in a diverse society.
- Mother Tongue as Medium of Instruction: The framework strongly supports using the child's home language or mother tongue for teaching, especially in the early years of school. Learning in a language they understand well helps children grasp concepts more deeply and feel more confident in the classroom. It also builds a strong foundation for learning new things as they grow.
- Promoting Linguistic Diversity and National Integration: Multilingual education is seen as a powerful way to celebrate India's rich language diversity. It helps students appreciate different cultures and communities while also bringing them together as part of one nation. Learning multiple languages creates bridges between people from different backgrounds and strengthens national unity.

- Cognitive and Educational Benefits: NCF 2005 also highlights that learning more than one language can actually improve how children think and learn. Multilingual children often develop stronger problem-solving skills, better focus, and more flexible thinking. Importantly, the framework encourages this without putting too much pressure on the child—language learning is meant to be a natural and enjoyable part of their growth.
- Language Learning in Context: The choice of which languages to teach
 depends on the region and the child's background. The NCF recommends that
 schools pick second and third languages in a way that makes sense for their local
 context. This ensures that language learning stays relevant, meaningful, and
 connected to the students' lives.

1.1.9 "Introduction to Multilingualism in Foundational Learning: Context and Perspectives from NCF-SE 2023"

- A Fresh Vision for Language Learning- The National Curriculum Framework
 for School Education (NCF-SE) 2023 brings a new and thoughtful perspective to
 how children in India learn languages. Inspired by the National Education Policy
 (NEP) 2020, it places multilingualism at the center of early education, treating
 language as more than a subject—it becomes a bridge to culture, thinking, and
 learning.
- Celebrating India's Linguistic Diversity- India is home to hundreds of languages and dialects. NCF-SE acknowledges this richness and encourages schools to embrace multiple languages so that children can learn in a way that respects and reflects their own backgrounds.
- Three-Language Formula: Flexible and Practical- Children are expected to learn three languages during their schooling, defined as:
- R1: The first language, ideally the mother tongue or most familiar language, used to begin literacy.

- **R2:** A second language, different from R1.
- **R3:** A third language, different from both R1 and R2. At least **two of these three languages should be Indian languages**, keeping the focus on cultural connection.
- Starting with What Children Know By starting literacy in R1—the language
 the child is most comfortable with—the framework helps children connect
 learning to their home life, making it easier to understand new ideas and
 concepts.
- Developmentally Appropriate Language Learning
- In the **Foundational Stage**, children focus on speaking and understanding R1, while getting familiar with R2 through listening and speaking.
- In the **Preparatory Stage**, children begin reading and writing in both R1 and R2, progressing gradually to more complex language use.
- Using Modern, Everyday Language in Class- Especially in the early years,
 NCF-SE recommends using simple, modern language that children hear and use
 in daily life. Over time, students are gently introduced to more literary and
 classical forms of language to help them appreciate traditional literature.
- Making Space for All Languages In many schools, there are students who
 speak different mother tongues. NCF-SE suggests that if using a child's exact
 mother tongue isn't practical, schools should adopt a familiar local language as
 R1 to ensure inclusion and ease of understanding.
- Building Strong Vocabulary- To help students learn new ideas easily, the
 framework calls for developing new, easy-to-understand words in Indian
 languages. Language Academies are encouraged to help with this so that
 vocabulary across schools remains consistent and relevant.

- Language Learning for Real Life and the Future- Learning multiple languages isn't just about passing exams. According to the framework, it:
- Improves communication skills
- Strengthens cultural awareness
- Boosts brain development
- Multilingualism as a Strength, not a Challenge- Finally, NCF-SE 2023 views
 multilingualism as a valuable skill that helps children become confident,
 capable, and compassionate citizens. Learning multiple languages doesn't slow
 them down—it helps them grow mentally, socially, and emotionally.

1.1.10 Understanding Multilingual Education Through the Kothari Commission's.

The Kothari Commission played a pivotal role in shaping how languages are taught in Indian schools. It introduced the idea that children should learn three languages during their schooling years—starting with their mother tongue, which helps them feel connected and comfortable in the classroom. This approach, known as the Three-Language Formula, was designed not just to help students succeed academically, but also to preserve India's incredible linguistic diversity. By encouraging the use of regional languages alongside Hindi and English, the Commission hoped to bring people from different parts of the country closer together, while also preparing students to thrive in an increasingly globalized world. Its vision was rooted in the belief that language is more than a subject—it's a bridge to culture, identity, and understanding.

• Three-Language Formula Recommendation

The Kothari Commission laid the groundwork for India's multilingual education policy by proposing the now well-known Three-Language Formula. According to this approach:

- 1. The first language should be the child's mother tongue or regional language, which ensures a strong start in learning.
- 2. The second language would be Hindi in non-Hindi-speaking states, or another Indian language in Hindi-speaking regions.
- 3. The third language could be English or any other modern Indian language not already studied.

• Promoting National Integration

The Commission believed that knowing multiple languages would not only help students communicate better, but also:

- 1. Bridge the gap between different linguistic regions,
- 2. Promote national unity by connecting diverse groups, and
- 3. Strengthen a shared Indian identity, while still allowing students to take pride in their local language and culture.

• Respect for Mother Tongue

The Kothari Commission placed great importance on learning in one's mother tongue, especially in the early years of schooling. It felt this:

- 1. Helped children understand concepts more easily, and
- 2. Created an emotional connection to what they were learning.
- 3. It also recognized regional languages as powerful carriers of culture and early learning.
- 4. Balanced Language Learning Rather than promoting one language over others, the Commission stressed the need for a balanced and fair approach. It encouraged schools to give equal value to all major Indian languages, fostering respect and inclusivity in education.

• English as a Link Language

The Commission acknowledged that English was important:

- 1. For global communication,
- 2. For accessing science and technology, and
- 3. For higher education opportunities.

At the same time, it warned against allowing English to overshadow Indian languages, advocating for a healthy coexistence.

• Linguistic Pluralism as a Strength

Perhaps most importantly, the Kothari Commission viewed India's linguistic diversity not as a problem, but as a strength. It encouraged policies that would:

- 1. Celebrate and support multilingualism, and
- 2. Ensure that students could grow up speaking multiple languages confidently, while still feeling part of a united nation.

1.2 Rational of the study

India is a rich tapestry of languages and cultures, and this diversity is reflected in its classrooms. The National Curriculum Framework for School Education (NCF-SE) 2023 recognizes this by encouraging multilingual learning right from the early years of schooling. It promotes the use of the mother tongue or regional language as the foundation for literacy, along with learning additional languages through the Three-Language Formula. This approach aims not only to help children develop strong language skills but also to support their cognitive growth, cultural identity, and academic success (NCF-SE, 2023).

Despite these clear policy directions, there is still limited research focusing on how this multilingual environment actually impacts young learners during the foundational and preparatory stages. Early childhood is a crucial period where children develop the language and thinking skills that will serve them throughout their lives (Cummins, 2000; Bialystok, 2017). Understanding how multilingual

instruction shapes these early experiences can help teachers, parents, and policymakers create better learning environments that foster both academic achievement and social-emotional wellbeing.

This study aims to fill that need by examining the real-world effects of multilingual education on early-stage students, looking at how it influences their language development, cognitive flexibility, and sense of cultural belonging. These insights will contribute to improving teaching practices and language policy implementation in line with the goals of NCF-SE 2023.

Research Gap

Although global research shows that multilingualism can enhance cognitive abilities and sociolect-emotional skills in children (Bialystok, 2017; Adipose et al., 2010), there is a lack of focused studies within the Indian context, especially considering the recent changes brought by NCF-SE 2023. Most existing studies either explore multilingualism broadly or focus on older students and do not consider the unique linguistic diversity and policy specifics relevant to India's early education system (Annamalai, 2005; Mohanty, 2010).

Furthermore, while policy documents emphasize the mother tongue's role and flexible language choices, there is less empirical evidence about the challenges and successes experienced by young learners and educators in multilingual classrooms, such as managing multiple languages, availability of resources, and students' engagement with different languages (Dixit & Purohit, 2019).

This study seeks to address these gaps by providing detailed insights into how multilingualism affects early learners in today's Indian schools under NCF-SE 2023, thereby helping to guide future curriculum development and teaching strategies.

1.3 Research Questions

- 1. How does multilingualism affect the cognitive development of early-stage students according to NCF-SE 2023?
- 2. In what ways does multilingualism influence the academic performance of early-stage students?
- 3. How does exposure to multiple languages affect the social and cultural awareness of children in the preparatory years?
- 4. What challenges do early-stage students face while learning multiple languages, and how can these be addressed?
- 5. What is the impact of multilingualism on the language skills of young learners in the Early-stage?

1.4 Statement of the problem

"A Study on the Role of Multilingualism on the Language Development of Preparatory Stage Students in the Context of NCF-SE 2023"

1.5 Operational definition of the terms used

1.5.1 Multilingualism

Multilingualism refers to the student's ability to understand, speak, read, and write more than one language. It can be individual or societal, referring to a person's ability to use multiple languages or a community's reliance on multiple languages for communication.

The term "multilingualism" can refer to either the language use or the competence of an individual or to the language situation in an entire nation or society. However, at the individual level it is generally subsumed under "bilingualism." This may be because, while there are probably more bilinguals in the world than monolinguals, there are not perceived to be so many people who use more than two languages habitually. There are, of course, many rich multilingual situations in the world (see, e.g., Khubchandani, 1988, on India and

Søndergaard, 1991, on the Dano-German border, to cite only two researched areas). For individuals, "normative" definitions (Van Overbeke, 1972) requiring those termed bi - or multilinguals to have equal competence in the languages, to have acquired them simultaneously, or to use them in the same contexts have proved unrealistic (cf. Haugen, 1973). Thus, definitions now tend to be general ("methodological" in Van Overbeke's sense). A common definition of "multilingualism" would then be – "the use of more than one language" or "competence in more than one language." This allows for further refinement in the actual description to cover different levels of command or use of the various languages.

1.5.2 Early-Stage

Early-stage students are children in the foundational and formative years of formal schooling, typically from Grade I to Grade V, which includes ages 6 to 11 years. This stage focuses on the development of core skills such as language, literacy, numeracy, and social-emotional learning

NCF-SE 2023 stands for National Curriculum Framework for School Education 2023. It is a program created by the Government of India that outlines what children learn in schools, how they are taught, and how their learning outcomes are assessed. The framework is based on the ideas of the National Education Policy (NEP) 2020, which aims to make education more meaningful, flexible, and connected to real life.

NCF-SE 2023 aims to make learning more enjoyable, inclusive, and appropriate for every child. It focuses on helping children learn in a way that matches their age and stage of development. It divides schooling into four stages:

- Foundational stage (ages 3-8)
- Elementary stage (ages 8-11)
- Middle stage (ages 11-14)
- Secondary stage (ages 14-18)

One of the most important ideas in the NCF-SE 2023 is to encourage multilingualism – children are supported to learn in their mother tongue or home language, especially in the early years. This helps them understand better and feel more engaged with their learning.

1.6 Research objectives

- To examine the effects of multilingualism on early literacy and cognitive development.
- To identify the challenges faced by educators and students in multilingual classrooms.

1.7 Null Hypothesis (H_0) :

There is no significant impact on the cognitive and academic development of early-stage students as per the NCF-SE 2023 framework.

1.8 DELIMITATION OF THE STUDY

- This study was restricted to Demonstration Multipurpose Higher secondary School (DMS) and Banyan Tree High school of Bhopal district.
- This study was delimited to students studying in grade IV and V only.
- This study was delimited to 100 students studying in grade IV and V.
- This study was limited to only girls and boys.