

# A Case Study Analysis on Foundational Literacy Skill Among Children with Intellectual Impairment

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**Abstract—** The Foundational Literacy skills are beginning stage in the Language development process of Children with Intellectual Impairment. These Skills can give awareness of the language development of reading, writing and oral communication in evolutionary steps for children with intellectual impairment. In this process we can explore the relationship between letters and sounds. The foundational vocabulary skill also includes vocabulary, spelling, and comprehension, fluency. Most Special educators consider foundational skills to be included in print concepts, teaching materials for phonological awareness, phonics, and fluency. These skills often appear in primary grade of the student's educational process and develop the children to be a successful readers and writers. This research paper is based on experimental study (pre test and post test) of children with intellectual impairment. The sample for the study is selected by using purposive sampling technique. Sample size 4-6 children's with intellectual impairment of Alagappa University Resource School Differently Abled (ID) Karaikudi will be selected and intervention on their functional literacy skills will be carried out and the progress will be analyzed and interpreted. This study will be a limelight for the development of communication among children with intellectual disability. It helps special educator to take innovative strategies to improve communication among children with intellectual disability.

**Index Terms—** Foundational Literacy skills, Intellectual Impairment, Language development, Communication

## I. INTRODUCTION

Foundational literacy is the pre-existing knowledge of language helps in building literacy skills in languages. The key components in foundational literacy are reading fluency which refers to the ability to read a text with accuracy, speed (automaticity), expression (prosody), and comprehension that allows children to make meaning from the text. Many children recognize aksharas, but read them laboriously, one-by-one; reading comprehension which involves constructing meaning from a text and thinking critically about it.

This domain covers the competencies of understanding texts and retrieving information from them, as well as interpreting texts. Writing domain includes the competencies of writing aksharas and words as well as writing for expression.

## Children with Intellectual Disability

Intellectual disability (or ID) is a term involved when an individual has specific constraints in mental working and abilities, including communication, social and taking care of oneself abilities. These restrictions can make a youngster create and learn more leisurely or uniquely in contrast to a commonly creating child. Intellectual disability can happen any time before a child turns 18 years of age, even before birth. Intellectual disability previously known as mental retardation can be brought about by injury, sickness, or an issue in the mind. For some youngsters, the reason for their Intellectual disability is obscure. Certain purposes of Intellectual disability, for example, down condition, Fetal Liquor Disorder, Fragile X syndrome, birth deformities, and diseases can occur before birth. Some occur while a child is being conceived or not long after birth. Different reasons for Intellectual disability don't happen until a kid is more established; these could incorporate serious head injury, diseases or stroke.

## II. PROCEDURE FOR PAPER SUBMISSION

### A. Review Stage

Eveline Van et.al. (2018) explored that cognitive constraint on the simple view of reading: A longitudinal study in children with intellectual disabilities. In this study concluded that intellectual disabilities can affect the development of reading comprehension indirectly via linguistic skills but also directly via nonlinguistic nonverbal reasoning ability. Claire M et. al. (2007) finds the improving mental health literacy as a strategy to facilitate early

intervention for mental disorders. The researcher on interventions to improve the mental health literacy and skills of young people has been relatively scarce and at times poorly evaluated. Susan & Elizabeth (2016) were discussed about teaching reading and literacy skills to students with intellectual disability. They are finding out the outcomes of basic reading skills are also associated with improved health. Carolyn A et.al. (2022) determined a meta-analysis of the effects of foundational skills and multi component reading interventions on reading comprehension for primary-grade students. This meta-analysis examined the effects on reading comprehension of foundational reading skills and multi component reading interventions provided to students with or at risk for reading difficulties or disabilities in kindergarten. Laurice et.al. discussed reading comprehension instruction for students with intellectual disabilities: A systematic literature review. They discussion about the finding including limitations and directions for future research are presented.

**B. Objectives of the Study**

The overall objective of the research is to elucidate the influence of foundational literacy skill among children with intellectual impairment. This study examined the potential causes and consequences of a lack of fundamental literacy skills among children with intellectual impairment. The research aims to identify the level of foundational literacy skills among children with intellectual impairment (ID) and their caregivers. This study not only provides a possible theoretical framework for understanding the roles that formal and non-formal education play in this population group, but it also aims to understand some of the complexities involved in providing educational assistance to people with intellectual impairments. The objective of this study is to analyze the backgrounds and theories concerning the factors associated with foundational literacy skills among children with intellectual impairments. To examined the relationship between foundational literacy skills and learner outcomes.

**C. Need for Study**

The need for this research is to find out the present status of children with intellectual impairment in the education system, and analyze its causes. The aim is to study the cognitive outcomes of these children before they are identified as having any form of intellectual impairment and explore their ability to acquire fundamental literacy skills. This is an important issue

because children with intellectual disabilities (ID) make up a significant proportion of the students in most schools today. Furthermore, despite their impairments and disabilities, they are expected by teachers and parents alike to master many basic tasks required for learning in school. This study was conducted to determine the need of foundational literacy skills among children with intellectual impairments. The study aims to determine level of learning and knowledge of children with intellectual impairment by observing their performance in reading. The researcher also wants to know how much help they need to become more effective learners. This study aimed to determine the prevalence of foundational literacy skills among children with intellectual impairments and their role in learner outcomes.

**D. Methodology**

A case study is a research approach that is used to produce an in-depth, multi-faceted understanding of a multipart issue in its real-life framework. Collective case studies: These engage studying a group of individuals. Researchers might study a group of people in convinced surroundings or look at a whole community.

**E. Sample of the Study**

The researcher were selected of sample size 6 children's with intellectual impairment of Alagappa University Resource School Differently Abled (ID) Karaikudi will be selected and intervention on their functional literacy skills will be carried out and the progress will be analyzed and interpreted.

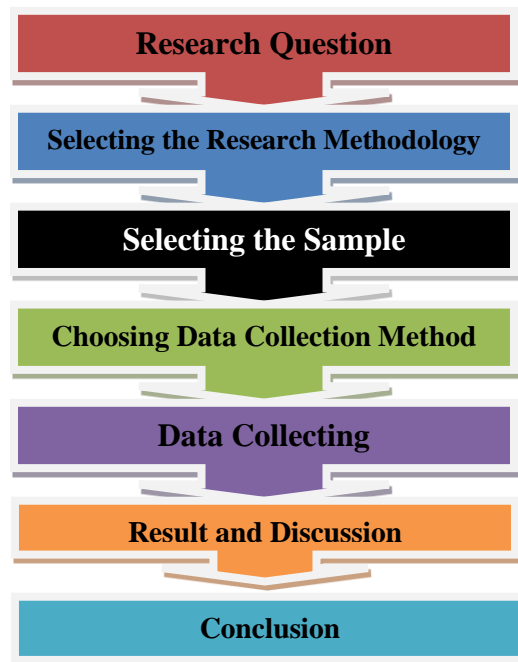


Chart: Research Plan

### III. RESULT AND DISCUSSION

Pre Observation- Before undertaking this study, the students were lagging in their communication, basic reading and writing skills. Some students had some confusion regarding the letter identification. They are not able to match the letters, not able to identify the letters when spelled and they couldn't identify the vowel and consonants. In order to know their prior knowledge, worksheets were given to them and pre assessment was done. The students were lagging behind in their communication and basic foundational literacy skills.

Post Observation- In the case study analysis, intervention was carried out using the prepared worksheets of letter identification, letter matching, vowel and consonants classification etc., The students were taught about the vowels and consonants, shape of letters and letter matching and made them to write and read. After the intervention the students wrote and spelled letters better than before. They wrote correctly without forgetting the shape of letters. Based on the findings of this study, students' level of Foundational Literacy Skills improved significantly. After they were taught about the vowel and consonant letters the students were able to spell and write through worksheet activities. The students demonstrated significant improvement in reading and writing of letters correctly. The students were able to do letter identification, classification, letter matching and connecting letters. The intervention showed marked difference in their foundational literacy skills. The study findings conclude that children with intellectual impairment can be taught to read and write better by using the adopted interventional strategies. Children are taught with basic literacy skills through the process of phonics and phonemes. As a child makes progress on learning and mastering letters, words are broken down into smaller units which become easier to understand. For children to progress, these skills must be developed step by step so as they can learn each lesson as quickly as possible. This research implies that the teaching strategies with innovative worksheets can bring new learning among children with intellectual disabilities and the mere rote learning has

to be put end and new innovative and interactive worksheets help in hand to promote better learning and form good foundation on literacy. Thus this study result showed effective and efficient teaching strategies to be adapted to the children with intellectual impairments to develop their literacy skills which in turn lead to better communication ability among children with intellectual disabilities. The experimental results revealed a significant difference between groups when considering their reading, writing and spelling scores. Thus this case study analysis on foundational literacy skills among children with intellectual impairment was found significantly effective.

### IV. CONCLUSION

In accordance with the literature, this study found out that there is a significant change in their foundational literacy in their pre and post observations. The results of this research indicate that children with intellectual impairment do excel in their receptive and expressive literacy skills when interactive and innovative communication worksheets were prepared depending upon the students' ability and disability level. This study will serve as a limelight to the special educators to prepare innovating teaching methodology for developing communication among students with intellectual disabilities. Thus, this study will also reframe the teacher education programme curricula to include the innovative teaching strategies for children with intellectual disabilities.

### ACKNOWLEDGMENT

This paper was presented in the National Seminar on Role of Early Childhood Care and Education (ECCE) for Children with Communication Disorders with reference to National Education Policy 2020 organized by All India Institute of Speech and Hearing, Mysore, Karnataka, India on 14 & 15 December, 2022.

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