

**AN EVALUATION OF THE PRE-SCHOOL EDUCATION
PROGRAMME IN THE GOVERNMENT PRIMARY SCHOOLS
IN MIZORAM**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
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THE GOVERNMENT PRIMARY SCHOOLS IN MIZORAM**

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**Submitted
In partial fulfillment of the requirement of the Degree of Doctor of Philosophy
in Education of Mizoram University, Aizawl**



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CERTIFICATE

This is to certify that **Ruth Rosangpuui**, a Ph.D. scholar of the Department of Education, Mizoram University with the Registration No. **MZU/Ph.D/1144 of 26/4/18** has written her thesis titled, ‘**An Evaluation of Preschool Education Programme in the Government Primary Schools in Mizoram**’ under my supervision and guidance.

I hereby certify that Ruth Rosangpuui has complied with all the requirements as laid down by the Ph.D. Regulations of Mizoram University and that the thesis is the original work of the scholar and have not been submitted for any degree to any other university.

Dated:

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DECLARATION
MIZORAM UNIVERSITY
DECEMBER, 2025

I **RUTH ROSANGPUII**, hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form basis of the award of any previous degree to me or to do the best of my knowledge to anybody else, and that the thesis has not been submitted by me for any research degree in any other University/ Institute.

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CHAPTER 1

INTRODUCTION/ BACKGROUND OF THE STUDY

1.1. Pre-school Education and Childhood

Education is an essential asset to achieve ideals of peace, freedom and social justice as it is one of the key means available to cultivate a deeper and more harmonious form of the development of human beings (Delors et al., 1996). Educational outcomes are seen as paramount to a promising future (Hillary & Phillipson, 2016) and the hidden treasure in every human being must be given an opportunity to blossom - memory, reasoning power, imagination, physical ability, aesthetic sense, the aptitude to communicate with others and the natural magnetism of leadership (Delors et al., 1996). Education is also a social practice through which children learn about themselves and others, a platform to build up interpersonal skills, and attain basic knowledge and skills (Delors et al., 1996). These experience and familiarity should begin in early childhood or the pre-school years. Educational contents should be designed to evoke excitement and stimulate a love and aspiration for learning and knowledge (Delors et al., 1996).

For centuries philosophers have thought deeply about the nature of childhood including the Western thinkers like Rousseau, Froebel, Dewey, and Montessori to name a few (Government of India, 2016). They have been pioneers in the spearheading the movement on early childhood education. Even the Indian thinkers like Gandhi, Tagore, Aurobindo, Gijubhai Badekha and Tarabai Modak were guided and influenced by their thoughts and observations (Government of India, 2012). They conceptualize a child-centered approach to the care and education of young children and that the mother tongue be the means through which education is imparted (Government of India, 2016). This would enable the child to freely express thoughts and feelings and learning could be connected to the child's social and cultural environment (Government of India, 2012). As stated in the UNESCO document *Learning: The Treasure Within*, "It is important to understand that we perceive information in two ways which is concrete and abstract which implies that

learning will be effective using the five senses and through intuition and imagination.” (Delors et al., 1996).

Dewey (1859-1952) stressed on the importance of providing wonderful learning opportunities which are occurring everyday through the child’s experiences and he also strongly believed and pointed out that the child’s own instincts, activities and interests should be the starting point of education. Froebel (1782- 1852) emphasized that action and direct observation were the best methods in educating these children in the early stages. Their ideas have opened the way for sensorial and practical activities as an unavoidable part of the curricular content and their insights into the importance of exploration and play, art, rhythm, rhyme, movement and active participation of the child led to the inclusion of these elements in classroom dynamics (Government of India, 2016). Jerome Bruner (1915-2016) propounded that there are three different modes which are interrelated such as action based, image based and language or symbol based (Government of India, 2016) through which children represent information and knowledge in their memory. Vygotsky (1896-1934) believed that there is active interaction between children and others who are more experienced and that children are engaged in social and cultural experiences in the process of learning and development (Government of India, 2016). Piaget emphasized that children constructed their knowledge by assimilation of the experiences and then accommodates them within their own understanding, making adjustments and constantly use the new information to make meaning of perceptions and their experiences (Government of India, 2016). Considering the insights and philosophies of these practitioners and thinkers, understanding the patterns of development and learning that define the essential nature of childhood should be the base of early childhood education (Government of India, 2012).

It is often supposed that a child does not know what is happening around her and cannot make sense of events and we often think that children are immature, irrational, inaccurate in their understanding of events and therefore cannot do any task given to them (IGNOU, 2006). Children have thoughts and emotions just as adults do, though they view the world in a different way and their way of expressing feelings are also different (IGNOU, 2006). Children are keen to explore the world and are

untiringly curious which is why exploration and questioning are the ways through which children learn (IGNOU, 2006). Though childhood has a different meaning for every child, children from diverse backgrounds, regions and countries are similar in many ways and many experiences of childhood are universal and an inevitable part of growing up (IGNOU, 2006). The number of people in the family, the customs, traditions, values and beliefs of the family and community, economic status, residence in a village, a city, or a tribal settlement, whether in the hills, plains, desert or sea coast- these are some of the factors that influence childhood experience (IGNOU, 2006).

The period of childhood is from two to twelve years of age (Tanner, n.d.). During this period the child refines the skills she has acquired during infancy and learns new skills as well and the period of childhood is divided into two stages- the period of early childhood (2-6) years and the period of middle childhood (6-12 years) (IGNOU, 2006). The period of early childhood is also referred to as the pre-school age because at this stage the child is learning skills that will help her to do tasks associated with schooling (Government of India, 2016). Therefore, making best of the opportunities for learning during this period of childhood is very crucial. As mentioned in the National Early Childhood Care and Education Curriculum Framework 2012, research evidences reveal that some aspects of development occur most efficiently at certain points in the life span (Government of India, 2012). For example, the optimal period for oral language development in children is in the first three years of life, peer social skills are developed effectively during 3-5 years of life and it is important to use these windows of opportunity (Government of India, 2012) and ensure that the children get the needed environmental inputs and supports for a particular kind of learning and development at its prime time (Government of India, 2012) for desired outcomes.

Pre-school education is child-centered and focuses on the holistic development of the child and it provides a stimulating play environment for intellectual language, emotional, physical and social development of the child (Commonwealth Educational Media Centre for Asia & Krishna Kanta Handiqui State Open University, 2021) through play-way and activity approach. It is the

preparation of children for primary schooling and aims to develop the foundation of reading, writing and arithmetic. Scientific researches also indicate that within the span of the early childhood years, there are certain sensitive periods or critical periods for development of some cognitive, linguistic, social and psychomotor competencies (Government of India, 2012). Early childhood is the foundation on which children build their lives (Aggarwal, 2007). Children do not develop in stages as traditionally defined. That is, their behaviour changes gradually not abruptly, they develop at different rates in different domains rather than showing synchronous change across domains, and different children develop in different ways (Feldman, 1980; Flavell, 1982b). Playing and conversing are the primary methods through which young children absorb information about themselves or people and also about their immediate environment. It is obvious that children deprived of the opportunity to play and converse do not thrive (ERIC Clearinghouse on Elementary and Early Childhood Education, n.d.). Interaction with adults and peers is of central importance to a child's development and children who are encouraged to think for themselves are more likely to seek knowledge and to be eager to learn (Aggarwal, 2007).

1.2. Developmental domains during the Pre-school years

The pre-schooler has mastered the words to ask questions about things and people (IGNOU, 2006). They learn about numbers, colours, shapes, and doing various activities and learn to make friends and value relationships with people (IGNOU, 2006). The ability to imagine receives a major spurt during this period (IGNOU, 2006) and children enjoy pretend play and make-believe. The various developments that take place and need to be considered seriously during the pre-school years are classified as physical and motor development, social development, emotional development, cognitive development (IGNOU, 2006) and language development and this has an impact throughout the life of an individual. Pre-school education aims at the all-round development of the child that is physical which included both fine and gross motor development, cognitive, language, social and emotional development, by providing the child stimulating experiences and opportunities for play and exploration. By exploring their environment using their senses like touching, tasting, smelling, seeing and hearing, children learn actively

and they improve their skills perceptually. Development and learning take place in all domains and the development in one domain influences the other (MWCD, 2014). Hence, it is of utmost importance that all the domains of development are developed during this period.

The rate of development in these areas- physical, cognitive, language, social and emotional is the most rapid during these years (IGNOU, 2006). In this period, it is possible to learn skills which become difficult and at times impossible to acquire at the later age (IGNOU, 2006). A considerable amount of learning takes place in this period which prepares the child for adulthood (Government of India, 2012). The grounding for becoming adults begin during childhood which is partially an outcome of direct teaching by the teachers or parents and also partially by observation and imitation of the adults around them. Development and learning follow a sequence in which abilities acquired later like skills and concepts are built upon what children already know and apply (Government of India, 2016). The growth and development follow a predictable pattern in the first few years of life but the way these changes are demonstrated may vary in different context and culture (Government of India, 2016). Each child has an individual pattern, timing of growth and development and learning styles with her own strengths (Government of India, 2016). Learning and acquiring skills continue throughout life but never again will the person acquire such a diverse range of skills in such a short period (IGNOU, 2006). The early experiences of children had a long-lasting effect not only on their learning but on their well being. To develop to their full potential, children need safe and stable housing, adequate and nutritious food, access to medical care, secure relationships with adult caregivers (Sandstrom & Huerta, 2013). Favourable conditions will, at the same way foster development. Love, nurturance and care are central to the development in all areas (IGNOU, 2006) and ethic of care should be an ideal of professionalism in the pre-school stage. It is of much importance that the pre-school teachers maintain professional image and calibers as part of their professional development. Development does not result in the mechanical act of feeding, bathing and physical care but rather a feeling of total well-being that arises from growing up in an atmosphere of love and warmth with opportunities for learning (IGNOU, 2006).

For the youngest children, trusting relationships provide security, influence how their brains are wired, how they cope with stress, and how they learn (Association Montessori Internationale, n.d.). Such feelings of security actually increase children's capacity to learn and to develop mentally and physically (Celinska,2024). Positive experiences are important as the foundation of feelings of security and confidence are laid in the early years (IGNOU, 2006). Defining the professional status of pre-school education can be challenging because of the diversity of the field- working with different age groups of children, philosophical and pedagogical positions, informal and formal contexts and the relations between care and education (Hillary & Phillipson, 2016).

Physical development refers to the physical changes in the size, structure and proportion of the parts of the body that take place from the moment of conception (IGNOU, 2006). Motor development means the development of control over body movements (Johnson & Williams, 2009). This results in increasing coordination between various parts of the body (IGNOU, 2006). Gross motor skills refer to the development of coordination and control of large motor muscles, developing strength and coordination of small motor muscles, integrating the movements of many parts of their body, development of a sense of balance in movement, recognition of the importance of safety rules, demonstrate the use of body with proper sense of space and direction, coordination of fine muscles with dexterity and eye hand coordination (Government of India, 2012).

Language development is the ability to communicate with others, to comprehend speech and express thoughts (NCERT, 2015). It refers to the development of active listening skills and comprehension skills, use of expression and receptive communication skills, development of vocabulary and used language to engage in conversations, development of verbal and non-verbal communication skills, display of emergent literary skills such as identification and differentiation of sounds, phonological awareness, print awareness and concepts, recognition of letters, letter-sound correspondence, segmentation, building words and sentences, display the use of pre writing skills like scribbling, marking, drawing etc. for variety of purposes, development of interest and ability in writing, development of competency

in home language while acquiring beginning proficiency in language of school transaction and/or English if needed (Government of India, 2012).

Cognitive development concerns the emergence of thinking capabilities in the child (IGNOU, 2006). It refers to the thinking process, understanding of concepts, mathematical thinking and problem-solving. It also includes development of the five senses like sight, hearing, touch, taste and smell through graphic, aural, olfactory and experiential opportunities, controlling their reflex actions coordinating sensory perceptions as well as movement patterns. It also includes demonstration of awareness of position and spatial understanding and object permanence, categorizing by perception based on the appearance of things, texture and taste, recalling people they meet, things and events, vocabulary development and skills which are associated with comparing, classifying, seriating, spatial concepts, quantity, etc. Skills like observing things, reasoning and critical thinking, exploring their immediate environment through manipulating things, questioning, estimating and synthesizing information, understanding of pre-number and number concepts, predicting patterns and make guessing in measuring things, data handling, thinking sequentially, differentiating beginning, middle and end about events or stories and association between people, places and regions (Government of India, 2012).

Socio-emotional development combines two inter related components that are social and emotional referring to the development of those characteristics that help the children to adjust with their environment (NCERT, 2017). It includes development of certain characteristics in children like being aware about themselves regarding their capabilities, choices and tendencies, sense of self, self-regulation and caring for one-self. It also refers to taking initiatives and inquisitiveness, self-reliance, impact of their behaviour on others and things, increase in attention span, engaging and participating in activities and perseverance, imaginative play and representing things with objects, development of friendship, cooperating and associating with other children, formation of attachment with adults, development of compassion and understanding others, demonstrating feelings appropriately, acceptance and tolerance of differences in people, development of good habits and development of pro-social skills (Government. of India, 2012).

1.3. Programme Planning in Pre-school Education

Planning is an important part of creating and implementing the curriculum. Since the pre-school programme has to be framed and transacted keeping the specific developmental objectives in mind, systematic and detailed planning is a must and this will also open an opportunity for the teachers to work together in a team. Programme planning for pre-school is not a rigid schedule as programmes for pre-school are not geared to the clock but are rather planned according to the needs and levels of the children (NCERT, 2014). The approach should be innovative and non-formal. The non-formal approach requires ready availability of various of games and activities, a number of materials for play, stories for reading, songs and music etc. The teachers should aim for the long-term developmental objectives towards which the programme is geared and the materials and activities the teacher will use with the children to meet these objectives. Through proper planning, the teacher will be able to be aware of the procedure for the activity from the beginning to completion of the pre-school programme (Government of India, 2012).

In planning for a quality pre-school programme, it is important that the environment includes and caters to the many learning styles of the children and they learn best through direct sensory encounters with the things around them (Government of India, 2016). The indoor and outdoor play areas should facilitate and provide opportunities for children to explore, discover and learn in a safe environment and it should be noted that learning materials are modified for children with special needs (MWCD, 2014). The indoor environment should be spacious and equipped with pictures displayed on the walls, proper furniture and mats, shelves and essential learning and play materials. The outdoor environment must provide adequate space for social interactions, exploration and different kinds of play for physical movement and balance. The classroom should be arranged so that it can be adjusted to lesson plans and activities such as large groups for singing, storytelling and smaller groups for drawing, blocks and individual play (Government of India, 2016). It should have learning corners such as reading corner where there are plenty of children's books, drama corner, manipulative play corner, creative expression corner and corner for science learning and experiments.

The use of a theme-based approach is a powerful methodology providing teachers with opportunities to teach a range of skills and content by integrating curriculum areas around themes (Government of India, 2016). This method of teaching includes the interests of the children and provides for opportunities to build on their interests and it helps the children develop knowledge and skills in meaningful ways (Government of India, 2012). Themes can be developed using the following principles according to the National ECCE Curriculum Framework 2012:

- Building activities keeping in mind children's interests,
- Creating activities that will encourage exploration through the senses,
- Giving children the opportunity to investigate and manipulate by providing hands on experience with real objects,
- Helping children develop new knowledge and skills, based on what they already know and can do,
- Providing activities that deal with all aspects of development such as language, cognitive, social, emotional, creative and physical,
- Providing children with multiple opportunities to experience movement and physical activity, social interactions, independence and positive self-esteem,
- Respecting individual differences in relation to cultural backgrounds and home experiences children bring with them in the classroom (Government. of India, 2012)

Long term planning deals with the entitlement of broad and balanced curriculum (Government of India, 2012) which addresses the long term goals of all the different domains of development which are physical and motor, socio emotional and cognitive areas and should cover the length of time that children spend in the pre-school setting. In pre-school education all areas of development are likely to be included in their daily experiences but certain aspects within those areas of learning are emphasized in different ways from one term or space of time to the next

(Government of India, 2012). The long-term planning, according to the National ECCE Curriculum Framework 2012 must have the following traits-

- The budget required for implementing the plan.
- Programme rich hands-on experiences.
- Programme with a multi-sensory approach.

The yearly plan is then divided into term/quarterly wise plans, monthly plans, weekly plans and daily plans. Medium term planning addresses continuity and progression from one stage to area of learning to the next, and from one setting or class to the next, drawing on the long-term goals, curriculum policies and principles and identifying skills, knowledge and dispositions to which children will be introduced over a specific period of time (Government of India, 2016). It is in this stage that the curriculum may be seen as most effectively organized by linking the different areas of learning through themes or topics and draw upon the progression of concepts, skills, knowledge and attitudes in each area of development (Government of India, 2016). Short term Planning is concerned with weekly and daily activities which is laid out with differentiation and planning to address the needs of groups as well as individual children (Government of India, 2016). The specifics about activities, experiential learning, resources, groupings, and teaching strategies which have been identified through ongoing observations and assessment is provided and the long term and middle term plans have already highlighted what is to be taught and what is be in place, therefore short term planning means it is the time to make decisions about how these concepts, skills and attitudes are to be introduced to the children in the ways that are relevant and meaningful to them (Government of India, 2012).

1.4. Assessment in Pre-school Stage

Assessment is an integral component of a pre-school programme as it identifies what children know, what they understand, their capabilities and abilities, their feelings and their interests and achievements at the different stages of the learning process during the pre-school programme. Evaluation and assessment of the

progress of the pre-school children should be through observation of various activities and recording impressions from these observations. The experiences and activities which are planned according to the development of the child should be used as a yardstick for the assessment of children (MWCD, 2014). In other words, these observations and records should be evaluated against the norms of child development for different age groups in different developmental objectives which means that it should be child centric. Evaluation should be comprehensive and continuous, which implies that its sole purpose is to encourage a child to progress, to develop a positive self-concept, to identify their strengths and weaknesses and also to develop a positive attitude towards learning. The evaluation of the child should be done in a variety of ways and should cover all aspects of physical, cognitive, socio-emotional and language. The progress of each of the children should be evaluated on an ongoing basis by using various tools like observation of behaviour, interactions and their art works, portfolios, anecdotal records, checklists and rating scales and should be based on qualitative judgments.

1.5. Transition from Pre-school to Primary School and School Readiness

The National Early Childhood Care and Education Curriculum Framework 2012 published by the Ministry of Women and Child Development stated that any discussion or conclusion regarding school readiness and what we expect children to know and do before entering formal school will be guided by three basic factors (WCD, 2012) which are:

- the diversity of children's early life experiences as well as inequity in experiences
- the wide variation in young children's development and learning, and
- the degree to which school expectations of children entering kindergarten are reasonable, appropriate, and supportive of individual differences (WCD, 2012)

The transition from home to a pre-primary setting is the right opportunity to involve parents in the child's education. Parents need to be made aware of the nature

and characteristics of pre-school education and that it is the responsibility of both parents and not only the mother. When the children are moving from the pre-school to Class-I, it is best that besides the parents, the teachers in Class-I, be informed about the relevant information of the children to help the teacher understand the children better. This will create continuity in children's transition from pre-school to primary school (NCERT,2017). It would be most beneficial for the children if the Class II and III teachers are included in the early childhood education programme to make sure that children experience smooth transitions from one class to the other during the early years of primary education as well. Continuous interaction between the pre-school and early primary teachers is an important feature (NCERT,2017). The concept of readiness includes much more than children's readiness and school readiness is defined by three interlinked dimensions which are (i) ready children, (ii) ready schools, and (iii) ready families and communities (Government of India, 2012). The pre-school should be ready in terms of trained and qualified teachers, infrastructure, complete programme and daily schedules, teaching strategies, learning environment, teaching learning materials, appropriate teacher-student ratio and adequate child-child and teacher-child interaction programme as it is the responsibility of the schools to meet the requirements of the children so as to unfold their full potential (NCERT,2017). Children should not be forced into any type of learning and the pre-schools should not be a mere downward extension of primary schools. Classrooms need to be attractive with print-rich environment and all pictures displayed should be at the eye level of children, there should be sufficient materials and equipment for the children to manipulate and play with.

Pre-school education helps in the smooth transition of the child from home to primary school and strengthens motivation for schooling as this stage is a preparation for formal schooling. Pre-school education is a play and activity-based programme with a well-planned and well- organized curriculum in terms of duration and utilization of time, content to be covered and how it is to be taught. Every pre-school in addition to class-room should have enough space for displaying children's art and work and other materials at eye level of children. Curriculum is an organized framework that delineates the content children are to learn, the processes through

which children achieve the identified curricular goals, what teachers do to achieve these goals, and the context in which teaching and learning occur (NAEYC & NAECS–SDE, 2009). Developing curriculum or deciding whether a particular curriculum is appropriate for a specific group of children is a complex task that requires consideration of many variables (Kalapriya, 2011). The daily duration prescribed in pre-schools is three to four hours a day. All the activities should be strategically planned to realize the aims of different domains of development. And to accomplish the aims of early learning, trained and qualified teachers, teaching learning material, play materials and play equipment should be made available by the pre-school services.

School readiness and the smooth transition from and proper linkage between the pre-school and primary school is an important factor in giving the children the right and quality education. Readiness simply means that a child had reached the stage in which she is ready to learn in a conducive learning environment without much of emotional disturbance. It should always be remembered that the pace and ways of the development of children is different for each child. Children should never be forced beyond their capacity, rather, a stimulating environment and different opportunities to provide to the diverse requirements and needs of the children should be created. The pre-school children, when attempting new tasks should show curiosity and should be able to communicate their needs, requests, and feelings. It is also very important for the teacher to know that school readiness approaches are most effective when children's home culture and linguistic backgrounds are responded.

The adult's ability to handle complex situations is built upon the child's capability of doing simpler tasks and the ability to take decisions in adult life develops out of the childhood experiences of selecting which game to play, or which book to read (IGNOU, 2006). Every development is grounded on the previous development. Each child will bring her personal characteristics and past experiences to bear upon how she will handle the present situation (IGNOU, 2006). Earlier experiences add up and influence the child's perceptions of the present situations which is why the period of infancy and early childhood has been acknowledged as

the most significant in the life of an individual (IGNOU, 2006). The first few years of life influence later behavior to a large extent and many of the ways of thinking and behavior of adults can be traced to early childhood experiences (IGNOU, 2006). It is only fair that we help children learn through ways they enjoy and make learning a stimulating and rewarding experience for them and respect the different pace of development of all children (IGNOU, 2006). An ideal learning programme at the early childhood period helps in ensuring the right and developmentally appropriate experiences for all round development during the early years. Early intervention is important for children or infants having delays in development, disabilities and who belong to economically disadvantaged families. These problems like biological and environmental disadvantages can be counteracted to a great extent by giving opportunity to the brain to respond to early stimulation.

1.6. Initiatives on Pre-school Education

There are different terms used by various organizations for referring to the the programme for the children who are not yet ready for formal schooling. This may be presented in a table as indicated below:

Table 1.6.1. Terms used by organisations to refer to children not ready for formal school

SN	Organization	Term used
1	UNICEF and World Bank	Early Childhood Development (ECD)
2	Organization for Economic Cooperation and Development	Early Childhood Care and Development (ECCD)
3	United National Educational, Scientific and Cultural Organization (UNESCO)	Early Childhood Care and Education (ECCE)
4	Swaminathan Study Group	Pre-school
5	Child and Integrated Child Development Services (ICDS)	Pre- School Education
6	National Council for Teacher Education (NCTE)	Pre-school Education

The Government of India had taken many initiatives for the promotion and development of pre-school education in the country and early childhood care and education had always been included in the Five-Year Plans. The National Policy for Children 1974, Integrated Child Development Services (ICDS) 1975, National Policy on Education 1986, Programme of Action 1992, District Primary Education Programme (DPEP) 1994, SSA 2001, 86th Amendment Act in the Constitution under Article 45 of the Directive Principles of State Policy in part IV, National Plan of Action 2005, RTE Act 2009, and the government initiatives on the development of strategy for gradual shift of the pre-primary year from the purview of ICDS to the primary schools had all attempted the promotion and endorsement of early childhood care and education (India, NITI Aayog, 2013). Therefore, several steps had been taken by developing documents to be used by all the states and those valuable documents are the Position Paper: National Focus Group on Early Childhood Education developed by the National Council of Educational Research and Training in 2006, National ECCE Policy developed by the Ministry of Women and Child Development (MWCD) in 2013, National ECCE Curriculum Framework developed by the Ministry of Women and Child Development in 2012, Quality Standards for ECCE and Age Appropriate Assessment Cards developed by the MWCD in 2014, and Quality in ECCE: Pictorial handbook for Practitioners MWCD and UNICEF 2014.

Though the mentioned documents were developed, they could not have much impact in attainment of quality ECCE. The introduction and review of quality standards, curriculum frameworks and teacher qualifications are part of a broader attempt by government to define early childhood care and education or pre-school education programme (Hillary & Phillipson, 2016). To understand the minimum prerequisite of quality ECCE or pre-school education, it is necessary to highlight the non-negotiable indicators stated in the Quality Standards for ECCE by MWCD in 2014:

- An ECCE programme of 4 hours duration with break time of half an hour,

- One classroom measuring at least 35 square meters for a group of 30 children and availability of adequate (30 sq.m) outdoor space for a group of 30 children
- Adequately trained staff,
- Age and developmentally appropriate, child centric curriculum transacted in the mother tongue,
- Adequate developmentally appropriate toys and learning materials,
- The building should be structurally safe and within easy approach. It should be clean and have surrounding green area,
- Adequate and safe drinking water,
- Adequate and separate child-friendly toilets and hand wash facilities for girls and boys,
- Separate space allocated for cooking nutritionally balanced meals and nap time for children,
- Immediate health service in terms of First Aid/ Medical Kit available at the center,
- The adult/ caregiver: child ratio 1:20 for 3-6 year old children and 1:10 for under 3s should be available at the ECCE center and children should not be unattended at any given point of time (MWCD, 2014).

1.7. Issues and Challenges to Pre-school Education in Mizoram

The general problems of curriculum conceptualization discussed in the *Learning Without Burden* report of the National Advisory Committee (1993) formed by the MHRD can all be seen reflected in the emerging pre-school sector. Despite official stipulations that no textbooks be used at this stage, pre-school teachers and parents in the urban center are feeling compelled to burden the young child with textbooks and formal learning they represent (MHRD, 2007). The sense of compulsion comes from a widespread feeling that unless academic training of a child starts early, she/ he cannot cope with the fast-paced pedagogy and competitive ethos of the later school years (MHRD, 2007). The pernicious grip of this false argument manifests itself in absurd and of course deeply harmful, practices in pre-schools and

primary schools such as early emphasis on shapely drawing, writing, and memorizing information and intrinsic motivation and the child's natural abilities are being smothered at a scale so vast that it cannot be correctly estimated (MHRD, 2007). Our national commitment to the development of human resource is daily challenged in our nurseries and primary schools (MHRD, 2007). To cure this prevailing problem of standardization and quality of pre-school education, professional development opportunities for teachers of pre-schools needs to be in place. Though there is an NCTE approved course for Diploma in Pre-school Education, the course is not offered in any of the Teacher Education Institutions in Mizoram. Diploma in Early Childhood Care and Education offered through distance mode by IGNOU is the only professional course available in Mizoram other than the 6 Months Certificate Course in ECCE for in-service primary school teachers offered by SCERT. This implies that a great majority of those working in the entire private and government sector in pre-school sections were untrained or not qualified.

Complying with the Govt. of India's policies, the schools of Mizoram were instructed to admit children of 6 years to class I. But in reality, many parents with children below 6 years of age were coming for admission of their ward into class I (Malsawmthangi, 2009). There was also a problem in documenting enrolment figures for Class I. While many schools submitted figures including the junior group of class I to their administrative officers, some excluded these children from the figures submitted. Then again, the same schools which submitted the full enrolment figures could, in the next year, exclude enrolment of the junior group, thereby making enrolment figures constantly fluctuate and leading to errors in data documentation and errors in database due to doubling and dropping. Another problem was that pre-school children could not be covered by the Midday Meal Scheme as it was meant for elementary school children from 6 years of age only. So in a school where teachers reported actual enrolment figures, whatever was received in cash or in kind was shared by all younger and older students of class I. This problem had been persisting since the introduction of the midday meal scheme (Malsawmthangi, 2009). It was clearly indicated in the Twelfth Five Year Plan that every primary school would be equipped with a pre-school section to provide a school readiness

programme for children who are four to six years old. Children who participated in pre-school programmes were more equipped and ready for schooling and these children were less probable to be detected as special needs children or retained in the elementary stage of schooling than children who were not part of pre-school programmes. Studies also show clear positive effects on children's early literacy and mathematics skills (McKenna, 2019). Therefore, pre-school section was introduced by the state government in the 66 Primary Schools from the academic session 2015-16. Curriculum and teaching learning materials as well as source book for the said stage were developed by the team of experts formed by SCERT. This pre-school education programme was an Early Childhood Education (ECE) programme which was meant for 3–6-year-olds (e.g.; nurseries, kindergartens, pre-primary etc.) and did not have provision for health or nutrition.

1.8. Implementation of NEP 2020 for the Foundational Stage in Mizoram

As per the National Education Policy 2020, the highest priority of the education system is to achieve universal foundational literacy and numeracy in primary school by 2025 (Government of India, 2020). The rest of this Policy will become relevant for our students only if this most basic learning requirement (i.e., reading, writing, and arithmetic at the foundational level) is first achieved (Government of India, 2020). National Mission on Foundational Literacy and Numeracy (FLN) would be set up by the Ministry of Education (Government of India, 2020). Accordingly, all State/UT governments would immediately prepare an implementation plan for attaining universal foundational literacy and numeracy in all primary schools, identifying stage-wise targets and goals to be achieved by 2025, and closely tracking and monitoring progress of the same (Government of India, 2020). For successful implementation of ECCE and FLN highlighted in the National Education Policy 2020, 6 months certificate course for ECCE has been implemented since 2019-2020 at the SCERT, Mizoram. In-service government primary school teachers were deputed by the Directorate of School Education and 130 primary school teachers have completed the course so far. Ten days orientation for primary school teachers who were not yet deputed for the 6 Months Certificate Course was also organised to give awareness and guidance to the pre-primary teachers in

implementing ECCE in their respective schools. Training for Key Resource Persons on ECCE was organized by SCERT, Mizoram during 6th- 9th Sept 2022 in which 15 Lecturers from the 8 District Institute of Education and Training (DIET)s and 27 Block Resource Centers (BRC) Coordinators from all the Districts within the state participated. The Samagra Shiksha Abhiyan (SSA) took the initiative in opening pre-school sections in 597 government primary schools. For co-location of Anganwadi and primary schools as outlined in the National Education Policy 2020 (NEP2020), 766 Government Primary Schools had been paired with Anganwadi Centers who are within 500 meters. However, there were 73 Government Primary Schools which did not have Anganwadi Centers which were within 500 meters. The state had taken steps for effective implementation of ECCE through development of School Readiness indicator, Pre-school a Tih Turte (Pre-school Activity Book) for the teachers, Pre-school Curriculum, Pre-school Manual for Teachers and State Minimum Specifications for Pre-schools were recently developed by the SCERT, Mizoram and were in the process of printing to be disseminated to all the Primary Schools. Besides these, a Learning App for children in the foundational years was also in the process. Zirtirh Bu and Nambar Bu, the activity books for children in the Balvatika Stage were also developed in the regional language and were used from 2023-24 academic session.

For successful implementation of National Initiative for Proficiency in Reading with Understanding and Numeracy Bharat Programme (NIPUN Bharat) in the state for Foundational Literacy and Numeracy (FLN), State and District Missions on FLN had been set up. The State Mission was headed by State Project Director, Samagra Shiksha and the District Mission was headed by Deputy Commissioner. State and District Steering Committee, under the aegis of the Department of School Education, for NIPUN Bharat was constituted on 29th November, 2021. The Committee was headed by a senior level official, and the District Project Management Unit (DPMU) at the district level was headed by the Deputy Commissioner. Academic Task Force (ATF) for Mizoram for National Resource Group (NRG) for implementation of the (NIPUN Bharat) was constituted on 20th October, 2021. An important step for NIPUN Bharat was Vidya Pravesh or Zirna Kailawn (Learning Ladder) in Mizo

which was a National Mission on FLN Mission of the Government of India and NCERT aligned to the key competencies and the learning outcomes of Balvatika and this preparatory module should be used for all Class 1 students across the country (Ministry of Education, 2021). It was meant to be implemented in government schools through the newly launched 'NIPUN Bharat' scheme (Ministry of Education, 2021). *Zirna Kailawn* based on *Vidya Pravesh* was to address the developmental and learning needs of all children who enter Grade I, and who might or might not had any prior pre-school experience (Ministry of Education, 2021). It would facilitate teachers to make children's entry in school education smooth, fearless and joyful and the school preparation programme was designed for initial three months of Grade I which could be transacted for four hours per day (Ministry of Education, 2021). It followed play-based pedagogy and promoted experiential learning with emphasis on the use of developmentally appropriate activities and local play materials (Ministry of Education, 2021). The SCERT therefore organized training of primary school teachers on *Zirna Kailawn*. This was three (3) month play based pedagogy and four training programme were organized in the first phase. National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA) 3.0 was launched in Mizoram on 1st October, 2021. The training was undertaken in two languages, Mizo and English and 2673 primary school teachers completed the 12 courses. Posters for awareness on FLN Framework and Goals have also been developed in regional language for display in schools by the SCERT.

Another initiative by the central and state government was *Jadui Pitara*. Upon receiving the *Jadui Pitara*, SCERT Mizoram reviewed its content and determined that certain elements needed to be contextualized to better align with Mizo culture and the experiences of Mizo children. *Jadui Pitara* was renamed *Thiamna Thûl*, as *Thiamna* refers to knowledge and skills while *Thûl* refers to a container traditionally used by Mizo women to store their most prized possessions. *Thiamna Thûl* was a thoughtfully curated collection of 30 Learning and Teaching Materials (LTMs) designed for Mizo children aged 3-8, covering all domains of foundational learning. After this rigorous process, *Thiamna Thûl* was officially released in December 2024. It was noteworthy that Mizoram was the only state in the North East to successfully

complete the contextualization and adaptation of Jadui Pitara. The mass production, distribution, and implementation of the project would be managed by Samagra Shiksha Mizoram. In such a progressive context of pre-school education this study was proposed in 2018.

1.9. Need of the Study

The world today is one with rapid scientific and technological progress and requires life skills and high capacity to sustain and maintain the pace of progress in the society. Creativity, intelligence and good self-concept are among the most important individual characteristics in a progressive society. To cater to the requirement of our society today we need to look deeper into the education system and check on whether it will be able to produce creative, intelligent and efficient individuals. And the pre-school stage is the most important step as it is the period where the foundation of a child's development is formed which definitely will have consequences in the later years of life. One needs to be mindful about the current curriculum and whether it is appropriate for children whom the grade is planned. Our system of education especially in the pre-school and primary stages need special attention and careful planning. Otherwise, there might be a failure in producing individuals who possess the kind of higher-order thinking and problem-solving abilities that will be needed in the 21st century and beyond. A study in the US also demonstrated that investments in the early years of life prior to schooling give greater returns than later investments (Kaul & Sankar, 2009). As also noted in the National Policy on Education 1986 (as modified in 1992):

A full integration of child and pre-primary education will be brought about, both as a feeder and a strengthening factor for primary education and for human resource development in general (Government of India, 1992).

In the Twelfth Plan, integration of pre-school education with primary schooling in order to lay a strong foundation for primary school (India, NITI Aayog, 2013) was an important strategy for elementary education. If the foundations are strong and solid, many of the later problems that children encounter both academically and non-academically would be reduced (Government of India, 2012).

To increase the status of pre-school education to benefit the children, families and communities, issues of concern should be raised with local and national government and exchanging of information and resources and involvement in research and writing are important aspects as well (Hillary & Phillipson, 2016).

In Mizoram, the Anganwadi centers had been set up in every locality for children in the age group of 0-6 years and were running under the Social Welfare Department, Government of Mizoram. Though academic guidelines like the pre-school curriculum had been developed by the State Council of Educational Research and Training (SCERT) in 2009, these centers did not seem to make use of it. The Anganwadi centers did not foster parents' satisfaction in the academic perspective as children were not provided with the necessary skills for school readiness (Nunhlimi, 2017). This creates various problems as it led to under aged children coming in to primary schools which had a negative impact in the quality of classroom interaction and caused fluctuation in enrolment data as children tend to drop out and sometimes were retained. The enormity of underage enrolment in government schools also reflected the many problems faced due to underage enrolment and thereby, the need for a pre-primary section of one or two years in government schools as part of elementary schooling had emerged (Malsawmthangi, 2009).

Expanding primary education without providing adequate early childhood education centers leads to children coming into schools without attaining adequate school readiness (Ritu, 2021). In 2000-2001, under the scheme of SSA, ECCE Centers were opened in 397 selected centers under the intervention of Innovative Schemes with a very limited budget but was abruptly discontinued from 2013-14. The Government of Mizoram selected 66 Primary Schools to run pre-school education programme vide No.B.14011/31/2013-EDN of 4th February, 2015; it was started from 2015-16 academic session. The SCERT developed reading and study material for children enrolled in these schools and organized sensitization programmes for the headmasters of these schools and teachers from these selected schools were given training on pre-school education 2015. However, printing of materials for the children could not be continued due to lack of funds though children were entitled to free textbooks and writing materials; this was the area where

research was necessary to know how the pre-school programme was running without such materials in the schools. An interesting factor was the reason that compelled the pre-school programme to be re-opened after many years of shutting it down after the establishment of Anganwadi centers. By the year 2018, total 115 government primary schools had been recorded as having introduced pre-school programmes, but the actual number may be higher as many schools did not seek permission before starting these programmes. Therefore, making a precise estimation was impossible. The present study targeted 66 schools as those were the only government primary schools known to have received official permission to operate pre-schools prior to the implementation of the National Education Policy 2020. But as per the best of the knowledge of the researcher at the time of proposal as well as till the drafting of the research work no teacher was recruited by the state government for such pre-schools. In such a unique establishment of pre-schools and demand in Mizoram it became imperative to evaluate the functioning of such schools. Some basic questions came in the mind of the researcher such as who were the teachers in those schools, what books were followed by the teachers and what activities were conducted.

An in depth understanding and exploration into the status and scenario of the pre-school programme in Mizoram is a necessity to promote planned educational change. Therefore, the curriculum followed and its transaction in the pre-schools in the government primary school in terms of its developmental appropriateness needed to be understood and explored. An observation of the infrastructure and facilities of the government primary schools was also imperative as students' performance was reported to be enhanced in schools with better physical learning environments (Barrett et al., 2019). Parents needed to be included in the study because as children's development strongly influenced by their families and through their interactions with other people and environments before coming to school (Maxwell & Clifford, 2004). In this study, the term stakeholder typically referred to anybody who were involved in education of children which includes educational administrators, teachers, and parents. Stakeholders were included in the study as they were an important aspect and determining factor of the successful implementation of pre-school education programme in the state. Evaluation is an integral component of the pre-school

programme and studying and understanding the process and procedure of the evaluation system practiced in the pre-school was an essential part of the research. Further assessment of the language development among the children who just completed pre-school programme would be included as language is a crucial indicator of a range of developmental tasks. Also, language is the foundation for learning and understanding and enhancing cognitive development (Halliday, 1993). Language development is one of the most critical aspects of early childhood education, serving as the foundation for all future learning (School, 2024). No teaching and learning is possible in language free environment. When children are learning language, they are learning the basis of learning (Halliday, 1993). Hence, language development of pre-school children becomes synonymous to school readiness.

The primary purpose of this study, in addition to gaining insight into prior or existing initiatives, was to enable reflection and assist in the identification of future change. Without an in depth understanding of the real situation and quality of the pre-school education programme that had been put into practice and implemented by the government, there could be no improvement in the system as such. Though few studies had already been conducted in Early Childhood Care and Education in the context of Mizoram (Chuaungo, 2001; Nunhlimi, 2017), research on the pre-school education programme running within the premises of the government primary schools had not been the part of those studies. Therefore, the present study had been taken up with the expectation that the following questions would be answered:

1. What is the scenario of pre-school education programme under the government Primary Schools in Mizoram in terms of monitoring system, demand for pre-school and quality of the programme?
2. What curriculum framework and curriculum are followed in the pre-school education programme under the government primary schools?
3. What is the language competency of children who completed pre-school education from the government primary schools?

4. What is the profile of functionaries implementing the pre-school education programme in the government primary schools?
5. Are the infrastructure facilities available in the government primary schools appropriate for pre-school children?
6. What are the tools employed for evaluating children development in the pre-school education programme under the government primary schools?

1.10. Statement of the problem

The problem of the present study has been stated as follows:

An Evaluation of the Pre-school education programme in the Government Primary Schools in Mizoram

1.11. Operational definitions of the terms used

Evaluation

Evaluation in this study means a systematic acquisition and appraisal of information regarding the quality, value and worth of the programme to provide useful feedback about the evaluated educational programme.

Pre-school education

A pre-school education programme for children before they begin compulsory education (Class-I) at government primary school.

Government Primary Schools

In this study, government primary school stands for those schools where the pre-school education programme were established.

1.12. Objectives of the study

1. To find out the scenario of pre-school education in Mizoram
 - 1.1. Monitoring system for pre-school education programme;
 - 1.2. Demand of pre-school education programme;

- 1.3. Quality of the pre-school education programme.
2. To analyze the curriculum followed in the pre-school education programme in the government Primary Schools.
 - 2.1. Pre-school Curriculum published by SCERT in 2009;
 - 2.2. Books prescribed and used;
 - 2.3. Outdoor activities organized in the pre-school;
 - 2.4. Indoor activities organized in the pre-school;
 - 2.5. Programme Planning by the teachers;
 - 2.6. Role of parents in curriculum implementation.
3. To assess the language development of the pre-school children in the government Primary Schools.
4. To analyze the profile of the functionaries implementing the pre-school education programme in the government Primary Schools.
5. To observe the appropriateness of infrastructure and facilities available for pre-school children in government primary schools.
6. To find out the evaluation procedure adopted in the pre-school education programme in the government Primary Schools in Mizoram.
7. To make suggestions for improvement of the pre-school education programme in Mizoram.

1.13. Delimitations of the study

The study was delimited to the 66 government primary schools only which were permitted by the state government to run pre-school education programme. The total number of government primary schools in the state was 1,282. The study did not include Anganwadis, private stand-alone pre-schools, private English medium schools or government schools that were not part of the pre-school education programme.

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1. Introduction

The chapter presents a brief source of the related literature both theoretical and applied levels. Every researcher needs to write a review of related literature because it not only assesses what research has been conducted in the past years on one's topic, but it also appraises, encapsulates, compares, contrasts, and correlates various scholarly books, research articles, and other relevant sources that are directly related to the current research (Khan & Sharma, 2018). Besides, it helps the researcher to avoid unintentional plagiarism and also refines one's focus of the study. It is also important to point out the variances in ideas and opinions, contradiction in findings and the dissimilarity of explanations or clarifications about the conclusions and differences made by other researchers. In certain situations, the investigation of these factors helps a researcher understand various aspects of a multifaceted matter and this analytical process can even pave a way for a new area of inquiry that can be investigated upon in the ongoing research. Therefore, review of literature is a vital part of a research study.

This review is divided into six broad categories- policy and quality of pre-school education, infrastructure and facilities, quality of teachers, practices and professional development, matters regarding the parents and school readiness- each of them highlighting important contextual bearings on the evaluation of government pre-school education programmes. The reviews are a mixture of researches conducted in India, with the aim of identifying the subtle elements that impact the quality of pre-school education. The reviews also include international studies which offer insights and comparative view that discloses both worldwide and the Indian context influencing the fundamentals of pre-school education.

This review of worldwide studies give an insight into how different countries implement pre-school education and the many aspects that impact its quality. Insights into these global views make it possible to learn common problems and

effective methods which might be applicable to the Indian as well as Mizoram setting. The comparative lens reveals the common components that are vital for the foundation of pre-school education, as well as the various characteristics that may be different depending on cultural, social, and economic conditions.

The extensive range of studies conducted in India are explored as it is important for understanding the detailed features and characteristics that effect pre-school education in India. This review aimed to uncover and learn the key components that pave the way for a high-quality pre-school education, as well as the problems that needs to be attended. This chapter also emphasized effective programmes and initiatives that plays important role on the implementation of pre-school education in India.

Overall, this review intended to give a comprehensive knowledge of the rudiments influencing the quality of pre-school education in India and globally as well. By reviewing studies from both settings, the researcher is able to attain a better understanding of the multifaceted interaction of issues that defined pre-school education and evolve methods for the betterment and growth of the quality of pre-school programmes.

Research reviewed were categorized into six groups. Though categories were not exclusive, those were decided on the base of the focus of the study.

2.2. Research Studies Reviewed

2.2.1. Literature Reviewed on Policy and Quality of Pre-school Education

Blackstone (1970) studied *Pre-School Education in Europe* which revealed that children's lack of development in areas of imagination, creativity, innovation, and intellectual reasoning was caused by inadequate early educational opportunities and limited methods. To resolve this, universal pre-school education needs to be implemented as early as ages between two and three, and by the age of five, compulsory attendance may be imposed. The role of home and school should be complementary and balanced as well. The main key points from the case studies comprised of support for working mothers, integration of pre-school with primary

education, obligation on the part of the government, quality of the caregivers, partnership with parents, content and structure of pre-school education, research, evaluation, and also the usage of educational technology. Central governments should be accountable for making plans and financing pre-school education, while at the same time, qualified caregivers and parental participation were also important. The content and structure of pre-school education should aim in preserving the creativity and freedom while avoiding over-structuring is a must, and special support should be provided for children who were physically challenged and disadvantaged.

Daniels (1995) studied *how Pre-school Education Affect Children's Achievement in Primary Schools*, in the United Kingdom. The study revealed that the outcomes of the assessment of national curriculum for seven-year-olds was significantly affected by pre-school experience in the first two runs. The outcome was over and above the positive advantage, beyond the advantages of age and social group. It was steadily significant in reading, writing, number, as well as in science. It was also found that the nursery and playgroup experiences both had a positive impact on children's accomplishments when compared with that of children who did not attend the programme. Those children with experience in the nursery setting were mostly belonging to economically disadvantaged group, while the playgroup were comprised of children belonging to a more advantaged group. The study recommended that comparison of the results from the experiences of children from the nursery and playgroup was injudicious since it was irrational to expect the academic opportunities for the economically disadvantaged group which was lacking resources to be comparable to the children in the play group who were equipped with better resources.

Taiwo and Tyolo (2002) studied *the effect of pre-school education on academic performance in primary school: a case study of grade one pupils in Botswana*. The study showed that pre-school education was critical for children's achievement in primary school. It aided in adapting to the school environment and develop important social skills, averting peer rejection as well as academic failure. The 'Head Start programme in the US, Ireland, the UK, and Africa had revealed optimistic outcomes for children belonging to disadvantaged backgrounds. In

Botswana, though pre-school education was not yet part of the formal education structure, its value was documented in national policies. Pre-school facilities emphasised on developing the basics of social, numeracy, writing, and communication skills. Comparative studies showed that children having pre-school experience perform better than children who did not have pre-school experience in key subjects like English, math, and science. The integration of pre-school programmes with formal education for ensuring that all children benefited from early childhood or pre-school education is a universal belief.

Marcon (2002) studied the *relationship between the pre-school model and later school success* in the United States, which provided follow-up data for one cohort of low-income, minority children who had attended two years of pre-school before they enter Grade I. The transition of children from third to fourth grade was also examined. It was found that children with pre-school experiences which was child-initiated showed more efficient basic skills at the end of the programme than those children where learning was more formal.

Rhee (2007) in a study on the *status and major issues of the childcare policy in Korea* indicated that due to the low birth rate and high old age rate; the Korean government gave much importance to childcare policy as a national mission. In the First Scheme of the National Childcare Support Policy in 2004, the Committee stated the necessity for active involvement in the development of the country's future human resources which could be addressed through providing wide-ranging childcare support programmes for young children. The meeting also identified certain glitches in the existing childcare policies as well as the concepts related to childcare and early childhood education for children aged between 0 to 8 years. It came to the conclusion that launching of systematic childcare policies was an urgent and important mission. In the next Scheme, visions were set which comprised of the development of human resources for future generations, increase in the participation of women in economic activities, and growth in birth rate. Also, increase in the accessibility of childcare facilities and kindergartens and decreasing the fees for childcare services and improvement in the quality of childcare services were included. The policies of government for easing the cost of childcare comprised of

increasing budget for childcare, implementation of childcare support depending on the difference in family income levels, and providing basic subsidies as an increased proportion of childcare costs which would be covered by the government. The allocation of budget for childcare facilities was increased by twenty-fold by the government of Korea for improving the physical environment of childcare facilities. Besides this, appropriate laws were also amended. Even in the private childcare centers, the government introduced the idea of linking accreditation system with the salary of teacher and also use certain amount of subsidies for teachers in order to improve their payments. Nevertheless, parents were not entirely pleased with the childcare services and the disparity that exists between the government and private run childcare centers still a point of friction.

Barnett (2008) in his studies on *Pre-school Education and Its Lasting Effects: Research and Policy Implications* in the United States found that well-designed pre-school education programmes resulted in long-term improvements in academic success which includes higher achievement test scores, lower rates of repeating in the same grade and special education, and also in attaining higher education. He was of the opinion that pre-school programmes must continuously assess the development and learning of children as a means for monitoring their performance in achieving their goals.

Barnett and Frede (2010) studied *why we need early education for all* in the United States. Their study revealed the benefits in development provided by pre-school programmes such as better readiness for formal schooling and better economic returns later. They also deliberated on how quality pre-school education can decrease future costs related to remedial education, welfare, and the criminal justice system. It paved way for social equity and also reduced the achievement gap between children belonging to different socio-economic backgrounds. The long-term effect of pre-school extended into adulthood, as children who were attending pre-school tend to finish high school and pursue higher education, and also have steady employment. Pre-school education also influenced health outcomes and social participation positively. The book supported universal access to pre-school, quality standards, and unceasing development and also suggested various funding

mechanisms which includes federal and state investments as well as ensuring accessibility and high-quality programmes. Supporting families was also vital for effective implementation. In conclusion, "The Promise of Pre-school: Why We Need Early Education for All" advocated for the extensive adoption of early childhood education.

Care and Rao (2012) studied *Early Childhood Care and Education* in India. It was found that the District Primary Education Programme (DPEP) in India aimed to achieve Universal Elementary Education (UEE) by boosting enrollment, improving retention, and enhancing learning quality. ECCE played a critical role in attaining UEE by improving enrollment, improving retention, and enhancing the quality of learning. DPEP strategies included firming up the pre-school education component in ICDS, creating new ECCE centers in remote areas, and expansion to ensure all-inclusive coverage. DPEP had conducted orientation programmes and workshops to facilitate the planning and implementation of ECCE interventions. Challenges comprised of variability in the quality of ECCE programmes, insufficient coverage in remote areas, the necessity for continuing professional development for educators involved in ECCE, and the development and dissemination of good quality teaching learning materials. Recommendations included quality improvement through improved training and resources, phase-wise expansion to ensure accessibility to ECCE centres, strengthening linkages between ECCE setting with that of primary education, and strong supervision, monitoring and evaluation mechanisms for ensuring the effectiveness of ECCE programmes.

In a study conducted by **Choudhary (2012)** titled *Policies and Programmes on ECCE in India: An Evaluation*, it was revealed that The World Education Forum in Dakar, Senegal, endorsed a vision for Education For All (EFA) in 2015, focusing on six goals: Early Childhood Care and Education (ECCE), universal primary education, gender equality, education for youth and adolescents, adult education, and overall quality of education. The first goal of EFA was to expand and improve all-inclusive ECCE, aiming the most vulnerable and disadvantaged children. India's commitment to quality education can be seen through the Constitution which makes free and compulsory education for children up to the age of 14. For attainment of

universal education, various programmes had been implemented over the last sixty years. This led to the current progress in school enrolment and participation rates. This paper examined various policies and programmes on ECCE and their impact and effectiveness. It concluded that the country's commitment to achieving EFA goals led to remarkable development in education and the allocation of resources.

Based on the *study of global and Indian documents*, **Chandra (2016)** in her qualitative study highlighted that the policies and pledges of the Government of India reflected the influence of and adherence to global trends. All indispensable components of quality ECCE which ranged from development and care of children; child oriented, play-way, and hands on experience in teaching and learning; developmentally suitable practices and age-appropriate curriculum; using of mother tongue or home language were reflected in the Government of India's initiatives. The paper emphasized that India was ready and moving towards assuring quality ECCE and most importantly, it made it a right of every child. However, the implementation could be complicated and the achievement of the target might be challenging in a vast and populous country like India.

Earle, et al. (2018) used a new, global data source based on the latest available data on *free and compulsory pre-primary education in nations around the world* and examined whether the provision of at least one year of free/ compulsory pre-primary education aided in primary school completion. In their study, it was evident that enrolment in pre-school education improved school readiness and higher rate of achievement in primary school. The study also mentioned that the constant gap existing between the rates of enrolment and completion and stagnation in poor countries call attention to the critical importance of implementing the policies and approach that enhanced and supported the ability of students to complete primary school. Significant association was not found for free pre-school education alone but significant effects was found only when it was compulsory which indicates that both factors were vital for improvement in the enrolment in primary education and raise primary completion rates. The study was an confirmation that investment in pre-school education resulted in gaining important educational benefits that effected positive long-term economic consequences in the long run.

Rao, et al. (2021), studied *Fostering Equitable Access to Quality Pre-school Education in India: Challenges and Opportunities*. The quality of services in the ECCE center was evaluated and studied by taking into consideration both the dimensions in structure and process. Structure comprised of the teacher's educational and professional qualifications, teacher-child ratios, group size, and the infrastructure and facilities of the centers while process quality included interactions between the teacher and children and educational activities. The Early Childhood Education Quality Assessment Scale (ECEQAS) (Kaul et al., 2017) was utilized to assess the service quality of early childhood centers in three states in India. Infrastructure, educational materials and facilities; organization and management; language and reasoning practices; early literacy and numeracy; creative activities; self-help skills, fine and gross motor activities for physical development; social and emotional development; and teacher disposition, and the results showed that the quality of pre-school was related with the school readiness of children (Kaul, 2019b). It was mentioned that in the Indian Early Childhood Education Impact Study (Kaul et al., 2017; Kaul, 2019b), parents who could afford preferred sending their children to a private pre-school which they believed had better quality and also to prepare their children for formal schools and to learn English (Alcott et al., 2019). The paper also deliberated on the division of responsibilities in which the majority of lies with the Ministry of Women and Child Development (MWCD), and due to the integrated nature of ECCE other ministries such as the Ministry of Health and Family Welfare (MHFW), Ministry of Human Resource Development (MHRD) and Social Justice and Empowerment were also involved. ECCE was under the authority of MWCD but the education component is the purview of MHRD which led to problems in the implementation of pre-school education. There exists a kind of tussle between the two ministries about rules and regulations, quality standards, and decisions on allocating budgets which impacted the implementation of pre-school education. The paper also highlighted the presence of gaps between government policies and their implementation and also highlighted that legal regulation and authorizing of pre-schools and compulsory inspection for monitoring and maintaining quality standards were much in need.

A study on the state of foundational literacy and numeracy in India was conducted by **Kapoor, et.al (2021)** in which it was stated that children who do not acquire the skills to read with understanding during the foundational years were not able to pick up in the following years. If this is permitted to continue and the low learning levels in children are not addressed, then probabilities of these children covering up is almost nil leading to high rates in drop-out which then eventually results in the making of educated but unemployable class of graduates. It mentioned that after the launching of Sarva Shiksha Abhiyan (SSA), rates in access and retention improved but then improvements in the quality of infrastructure and facilities, professional development of teachers, and the overall quality were still needed. Although there was improvement in the primary grades and was even increased by six folds in a span of fifty years, the figure of teachers and primary schools were increased by three times only which had a drastic effect on the quality of teaching and learning process, and the professional development of teacher which burdened the existing infrastructure. The study mentioned that even though NEP 1968 recommended 6 percent of its GDP on education, the Economic Survey (2019-20) showed that 3.1 percent of GDP is spent on education indicating that most of the fund goes to expenditure for the salary of teachers. The remaining smaller funds were spent on supporting infrastructure and facilities, professional training of teachers and monitoring. This led to meagre funding for quality pre-school education which eventually led to poor learning outcomes. The study also mentioned that 42 percent of government elementary schools have only one or two teachers for the elementary grades (NUEPA, 2016) which implied that there exist no designated teachers for early grades where the focus needed to be maximized and there also exists a large number of teacher vacancies. Since the 1980s, the government of India had been employing teachers on contractual basis in large numbers to address the increasing enrolment rate and also at the same time decrease the financial expense. However, these teachers were paid less and were not motivated to perform actively and there was also the existence of a large number of vacancies where teachers were involuntary handling multiple classes and were engaged in other responsibilities to remedy the lack of manpower. There existed a need to recruit qualified teachers urgently and assign specific teachers for early grades. The study revealed that there

was lack of quality and age-appropriate children books accessible for primary grade children in their regional language and the availability of books in the libraries was limited due to present guidelines. The study also stated that school readiness was largely ignored which affected later learning in a formal school setting negatively and with regards to the teacher training, it was evident that the present training pattern was insufficient and needed to be deliberated upon to promote improved learning in the classroom. It was also found that in some states, monitoring and support systems only existed on paper though the teachers need support in improving their classroom practices. There was also the problem of inadequate research on foundational literacy and numeracy (FLN) as research in this field was largely ignored subject in the country. In the study, it was observed that states that scored higher in the index of FLN had a high fraction of students who were enrolled in private pre-schools which signified that their role could not be overlooked.

2.2.2. Literature Reviewed on Infrastructure and Facilities

In a study of the *status of pre-school education*, **Saini and Sudha (1993)** examined the infrastructure and learning environment of pre-schools in Hisar, Haryana, India wherein it was found that the pre-schools did not have necessary facilities like proper buildings, library, and medical and first aid, indoor and outdoor facilities. The classrooms were congested lacking proper lighting and classroom arrangements. The classroom environment was not stimulating as children were not given experiential learning and proper teaching aids were not used. Emphasis was laid on teaching of 3Rs and teachers were untrained. Home visits and meetings with parents were not done and the pre-schools lacked adequate facilities for extracurricular activities.

Nath (2012) studied the *role of pre-school education on learning achievement at the primary level in Bangladesh*. The study revealed that pre-school education is an important part of a child's development, laying the foundation for academic success in the future which is supported by existing researches. However, there could be differences in access to pre-school education in developing countries because of socio-economic conditions, cultural and traditional practices, and

government policies. Regular participation in pre-school programme was impacted by socio-demographic factors in Bangladesh. And children from educated and advantaged families were likely to participate in the programme. This difference in access could prolong cycles of disparity, as early educational experiences were important for future learning. The quality of pre-school education like classroom interactions, content and curriculum, and teacher qualifications, meaningfully influenced the benefits children receive. The study recommended that attendance alone did not predict success at the primary years, stressing the need for emphasis on the provision of quality of pre-school setting and the professional qualifications of educators.

Chandra, et al. (2017) reviewed the *Initiatives, Practices, Challenges, and Enablers in Early Childhood Care and Education (ECCE) in India* in which large and small-scale research studies were conducted to assess the quality of ECCE in different sectors in India were included. The review focused on different areas like interaction of children and a series of environmental, social and cultural experiences and while exploring instances in children's development through meaningful discourses, positive deviance was found to be lacking in states like Andhra Pradesh, Rajasthan and Assam. The next was about health, nutrition, personal care, and routine as these were significant for quality ECCE programmes. But, in states like Jammu & Kashmir, Madhya Pradesh and Tripura, the health facilities were compromised. There were no regular health checkups and routine of immunization was hindered. With regards to protective care and safety, the teacher-pupil ratio particularly in the private ECCE centers were substandard. In terms of infrastructure and physical facilities, most of the crèches in India had two rooms with small space, improper supply of electricity, and insecure playgrounds, many of the creches also lack facilities for cooking and separate kitchens, and the toilet facility were also inadequate. In terms of organization and management, most of the private run pre-schools were focusing on either a dull curriculum or formal teaching of 3Rs, and enough care was not given to teaching-learning materials, hands-on learning, age-appropriate activities, and providing a cognitively and developmentally suitable learning environment. It was also mentioned that private ECCE centers were

following a programme that was grounded on formal education by means of rote memorization. Encouraging interaction, and promoting collaboration and sharing of skills in the area of child experience and learning opportunities were found to be low and there were no planned efforts with regards to these things. In terms of assessment and outcome measures, there was no organized and objective-based consistent pattern of assessing children and in managing to support quality system, the paper emphasized that qualified and properly trained teachers were a key to success in any circumstances (Bhise & Sonawat, 2016). It was also mentioned that the CECED (2010) emphasized the insufficiency of some NCTE norms and specifications, the lack of induction training or orientation of teacher educators, the lack of training centers and involvement of teacher educators in the design of curriculum and the lack of training to impart the curriculum prepared by experts. The NIPCCD (2010d) also highlighted the irregular topographical distribution of teacher training centers, the non-availability of centers for training in the North East, underutilization of the ICDS centers and also a lack of organized monitoring system to assess or evaluate the training programmes. The major issues identified in the review were insufficient teaching and learning amenities, inappropriate teaching-learning methods, and inappropriate assessment and outcome measures and these were major hindrances in improving the quality of ECCE. India was effectively moving towards ensuring the provision and accessibility of ECCE and there was much improvement in the rate of enrolment at pre-school and the primary grades. Retention grades were notable observable consequences in the primary stage, however, the quality of ECCE across the country was very diverse as basic quality standards were compromised.

2.2.3. Literature Reviewed on Quality of Teachers

In a review titled *Transition to School: Reflections on Readiness (2008)*, **Arnold, et al. (2008)** pointed out that the failure of the first or two years of school to lay the foundation for basic literacy skills created inefficiencies that resonates all through the system. It was also mentioned that there was strong evidence that educators were a critical aspect in affirming education and it was of utmost importance to have high standard teaching in the early grades. Training specially meant for primary teachers in the lower classes was strongly suggested so as to equip

their skills in supporting young children and teaching early language and numeracy skills.

The progress towards Education for All namely expanding and improving comprehensive early childhood care and education (ECCE) especially for the most vulnerable and disadvantaged children (UNESCO, 2000) was assessed by **Kim and Umayahara (2010)** in which they highlighted the progress and remaining challenges of ECCE in the Asia and Pacific region. It was emphasized that the involvement of several ministries, community and private run institutions, and NGOs in the running of ECCE increased the probability of service disintegration, overlapping and the dispersion of responsibility. It was also mentioned that without systematic and well-planned policy supported by an organized curriculum and teacher training, the incorporation of ECCE in the crux of education sector might result in improper practices in pedagogy and there is the risk of ECCE unit having to compete for assets with other academic tiers. In terms of the qualifications of ECCE teachers, minimum qualifications to improve the quality of ECCE programmes were introduced and there was a pressing need to improve the monitoring and evaluating mechanism for the current ECCE programmes with bigger exertions for collection of data, analysis, and competency enhancement at the national and state levels. The paper also indicated that the governments of most Asia-Pacific countries need to increase allocation of funds for ECCE.

Sandstrom (2012) studied the *characteristics and quality of pre-school education in Spain*. The study was conducted in southern Spain on 25 four-year-old pre-school classrooms and it was found that the quality of classroom was generally low in terms of space, materials, and developmentally and age-appropriate activities. The Classroom Assessment Scoring System (CLASS) and Observation of Activities in Pre-school (OAP) also showed low general classroom quality. But, high scores were seen in positive environment and efficiency were noticed showing effective teacher and child interactions and management of classroom. A high child-to-teacher ratio was found to be a significant factor in classroom quality, with a negative association between higher ratios and quality measures. Teachers highlighted the critical role of pre-school education in the development of children and readiness for

formal schooling but at the same time they also highlighted problems posed by the new government's pre-school programme. Suggestions included reducing the ratio of teacher and pupil, provision of sufficient resources, and ensuring continuous professional development for teachers. The study highlighted the necessity for targeted interventions and reforms in policy formulation to improve the overall quality of early childhood education programmes.

Arnold, et al. (2008) in their reviews of *the experiences of the Aga Khan Foundation in early child development and school improvement efforts* in different parts of the world emphasized that primary school enrolment had improved in recent years but completion rates were rather unsatisfactory. The highest drop-out rates and repetition happened to occur in Grade I. There was strong indication that the educators were critical in imparting education and it was vital to have a high standard mentoring in the early grades. It was also stated that the teacher's skills and competencies and their use of teaching learning materials played a part in children's learning, and the key factor in their learning was the instructional language. Training for lower primary teachers meant for young children was strongly suggested as the relationship between children and teachers was at the middle as well as the learning environment within which interactions occur. The paper gave stressed on the issues of children's smooth transition and supporting children's holistic development before they enter formal school as this would be the key to the children's future academic success.

Kaul and Sankar (2009) studied *Early childhood care and education in India*, the study observed that India had introduced initiatives like the Integrated Child Development Services (ICDS) programme and the National Policy on Early Childhood Care and Education (2013) in order to promote ECCE. Researches proved that ECCE had a positive affect on the cognitive and social development of a child. This led to better readiness for transition to primary schooling, better academic performance as well as better social skills. But, the quality of ECCE services continued to be a noteworthy concern in India, as many centres lack proper infrastructure and facilities, qualified caregivers, and proper materials for learning. Capacity building of teachers was found to be an important factor that impacts the

quality of ECCE. However, many teachers in India were lacking appropriate trainings and there was limited opportunities for their professional development. Cultural as well as social and economic conditions were also effecting access and participation in ECCE programmes especially for children from disadvantaged and marginalized communities. To solve this problem, the government needed to allot more resources to ECCE programmes, prescribe a holistic curriculum, provide quality teacher training, generate awareness, improve parents and community participation and enforce a robust system of monitoring and supervision.

Yadav (2015) study *Challenges in Teacher Education at the Pre-Primary Level in India*. The study revealed that teacher education for pre-school stage was possibly the most ignored and under developed segment in India. The NCTE developed the syllabus, standards, and rules to be followed for Diploma in Pre-school education after grade 12, but the courses available for pre-service teacher training of pre-school were greatly dissimilar in relation to content and length of the course. In India, schools usually chose teachers as per their needs and expediency and training and professional qualifications for teachers educating children below six years were disregarded. It was quite disappointing to note that demand for qualified teachers to teach in pre-schools were not designed by the state governments. Besides, norms or specifications for professional qualification of pre-school teachers nor guidelines for acknowledgement of pre-school caregivers as teachers. The paper also stated that the Diploma in ECCE courses included the teachers who are teaching in Grade 1 and 2 and that professional qualifications were mandated. However, the teacher education curriculum for this stage of education was not properly synchronized across programmes, besides it was not addressed separately from the other courses like Diploma in Elementary Education and Bachelors in Elementary Education.

India Early Childhood Care and Education Impact (IECEI) study in India was analyzed by **Singh and Chaudhary (2019)** in terms of teacher beliefs as teachers were crucial for defining quality. This area needed to be explored because policies of the state, development of curriculum frameworks, and the notion of teachers regarding what was feasible based on the teacher's expertise, the learning

influence and their decision strategy. It was found in the study that deficiency of proper infrastructure was a one of the biggest challenges faced by the teachers. In terms of academic aspect like lesson planning, only 50% of the teachers were found to be engaged in making lesson plans and they also pointed out the need for teaching-learning materials. There were also challenges in executing the curriculum as desired and acquiring support for teaching that enhanced learning for the children. Observations of the curriculum transaction in the classroom revealed that the proper implementation of the constructivist approach and age and developmentally suitable curriculum meant for pre-school and the early grades highlighted in the National Curriculum Framework 2005 were not found. Without appropriate training and supportive system of supervision and monitoring, transactions in the classroom continue to be limited to textbooks and rote learning. Some teachers also pointed out the need for parental support but only 40% of them reported engagement with the parents.

2.2.4. Literature Reviewed on Practices and Teacher Professional development

An exploratory study of *play preferences of pre-school children* in Delhi was conducted by **Muralidharan and Benerji (1972)**. The sample comprised of 68 children who were entering pre-school programme. Observation was conducted for five days and children were given the same material. During this observation, it was found for outdoor play, the most common or favourite was the slides, sandpit, and nesting frames. Materials like ball, ring, see-saw, and jungle gym were found to be not popular among the children. For indoor activities, children were commonly engaged in drawing with crayons and painting with brush. The younger children were preferring playing with blocks, paper cutting, and making collage. It was found that beads and other play materials like constructive and sorting materials, and puzzles drew little attention among the younger children. Materials like number cards, blocks, and water play were found to draw minimum attention from the children.

Pepler and Ross (1981) study *The Effects of Play on Convergent and Divergent Problem Solving* in Canada, it was found in the study that high creativity

and problem-solving skills in children were affected by constructive and cognitive play. The children showed a difference between convergent and divergent problems. Playing with puzzles and form boards were found to impact better solving skills for convergent puzzle problems. It was also found that divergent play like simply playing with puzzles like a block lean towards interference in solving puzzle tasks. However, the divergent play also led to certain problem-solving tactics and even enabled the solving of divergent problems like building an imaginary village with blocks.

Language Development in Pre-school Years by **Wells and Wells (1985)** was a wide-ranging study on development of language skills in the early years of a child. It examined issues that influenced language acquisition and pedagogical approaches to improve the process. The importance of relationship and communication between children and the teachers for stimulation of linguistic environment was highlighted. The study showed the phases of language acquisition in children starting from babbling to making complex sentences. It also showed how they progressed from sound identification and simple words to constructing sentences and awareness of syntax and semantics. The role of social interaction for meaningful communication with adults was also highlighted and advocated for reading aloud, singing, and using rhymes and songs for enhancing awareness in phonology and vocabulary. It also talked about the effect of social and economic factors highlighting that children from disadvantaged families might not be thoroughly exposed to rich linguistic interactions.

In the Abecedarian Project, **Campbell, et al. (2001)** had a *prospective randomized trial on the effects of early educational intervention on patterns of cognitive and academic development among poor, minority children*. Early treatment was provided for children from 0 till the age of 5 years through full-time and first-class educational child care. Then, analysis of the cognitive test scores for individuals from the ages of 3 and 21 years and academic test scores from ages 8 to 21 years were conducted. On average, individuals who obtained higher scores both in cognitive and academic tests were those of the treated children. It was found that the cognitive improvements children made in pre-school were a big reason why some

children did better than others in reading and math later on. Through their research, it was proven that well planned and quality early childhood education led to a long-lasting impact on the cognitive and academic development.

Chuaungo, (2001) in her *analysis of the pre-school education in Mizoram*, she found that the majority of the pre-schools were not in conformity with the desired standards regarding the physical infrastructure and equipment; all of the schools selected for the research did not have a science corner, dolls corner, books corner, and plants corner and that majority of the pre-schools did not have outdoor space and the pre-school surroundings were not safe for the children due to steep stairs or steps. It was found that majority of the pre-schools also did not realize the requirement for storage space, toilet and sanitary facilities, drinking water, clean walls, display of children's work as well as ready-made pictures. There was also a lack of indoor play materials and audio-visual equipment. She also found that the head of the school and the teachers were also not trained in ECE and exceed the desired teacher-pupil ratio, 94% of the schools did not make short or long-term planning, focus on the teaching of the 3 R's, and neglected activities for different aspects of development for pre-school children, homework was also given and English was used as a medium of instruction which was unfamiliar to the children. Records of developmental history, habits and interests, teachers' assessment, and health of children were also not maintained in the majority of the pre-schools.

Tamblyn, (2002) studied *The Impact of Cartoons on Learning and Motivation in Children* in the United States and found that the use of cartoons had been shown to increase interest and intrinsic motivation and reduce boredom, academic stress, and anxiety. He found that cartoons embraced various activities for early learning that appealed to multiple-learning modalities like visual-spatial, kinesthetic tactile, and auditory-sequential.

Magnuson, (2004) in her study *Does Prekindergarten Improve School Preparation and Performance* showed that attendance in U.S. pre-schools had risen substantially in recent decades, but gaps in enrollment between children from advantaged and disadvantaged families remain. Using data from the Early Childhood

Longitudinal Study, Kindergarten Class of 1998–1999, she analyzed the effect of participation in child care and early education on kindergarten and Grade I children's attainment of school readiness which was assessed through early reading skills and math skills. Children who participated in a center or school-based pre-school programme before entry into school did much better when the reading and math skills were assessed upon beginning kindergarten. This happened after factors like children's family backgrounds and other aspects that could be co-related with entry into pre-school and relatively high academic skills were controlled. This continued after these skills were assessed when classes started in pre-school stage and also in first grade. Children participating actively in early or pre-school education were less likely to repeat in the pre-school stage. Generally, the effects was highest among the underpriveleged groups which raised the probability that the strategies for the promotion of enrolment and access into pre-school education programme for children belonging to underpriveleged groups could aid in narrowing gaps in school readiness.

Sylva, et al. (2004) in a study on the *effective provision of pre-school education (EPPE) project technical paper 12: The final report-effective pre-school education* in the United Kingdom revealed what research consistently shows, that children with pre-school experience generally outperformed those without such experience in various cognitive and social domains at school entry and throughout the early years of primary education. Children who joined pre-school exhibited better cognitive and social/behavioural outcomes compared to children who were at home who did not have any experiences in pre-school or who had only a few pre-schools experience. By the closing of Key Stage 1, the achievement gap continued to be present in reading and mathematics excluding social behaviour, which indicated the lifelong effect of pre-school on academic outcomes. The duration and age of entry at pre-school were important as every single month of the children's experiences in pre-school after they aged two associated to improved cognitive development and independence, attentiveness, and social skills. Good quality pre-school surroundings, accompanied by well-trained educators and a strong emphasis on educational and social development were related to better development in cognitive and social-

emotional domains. There was notable variability in the efficacy of different pre-school settings, with fully integrated centres and nursery schools tending to display better quality and encourage better intellectual development. Effective pre-school practices comprised of organized interactions between educators and the children, the availability of conducive learning environments as well as collaborative intellectual work.

The status of ECCE centers under SSA Mission in Aizawl district, Mizoram was studied by **Lalsangliani (2007)** and it was found that the centers used formal methods of teaching wherein alphabets, numbers, simple arithmetic, and English were taught however lesson planning was not done. It was found that there was a need for capacity development of the functionaries and awareness generation for parents, teachers, and state government officials was recommended.

Burchinal, (2008) examined *the development of academic, language, and social skills among 4-year-olds in publicly supported prekindergarten (pre-K) programmes* using 3 methods of measuring pre-K quality, which were as follows: (a) adherence to standards of quality related to programme infrastructure and design, (b) observations of the overall quality of classroom environments, and (c) observations of teachers' emotional and instructional interactions with children in classrooms. The participants comprised of 2,439 children who were registered in 671 pre-K classrooms across 11 states. In the study, the academic and language skills were predicted by adjusting skills for previous levels, the characteristics of the children and family, the programme features, and the pedagogy of teachers and their emotional interactions with children which projected the children's social skills from the teacher's report. The study's findings recommended that the school readiness of children could be facilitated by the policies implemented, programme development, and efforts for continuing professional development which could enhance teacher and child interactions.

Drob, (2009) in his study *Pre-schools and Inequality in Early Academic Achievement* revealed that experiences of pre-schools lessened disparities in early academic success as it provides children from underprivileged families with good

quality learning opportunities. Longitudinal data was extracted from a sample size of more than 600 twin pairs which were utilized in estimating the effect of genes, the shared and non-shared environment to scores in cognition and achievement in children enrolled in pre-school and children who were did not participate in pre-school programme. These probable effects were mediated by decreases in achievement gaps related with factors like minority and socio-economic status, and also ratings of parental involvement of cognitive development. Lower socio-economic status and lower rates in pre-school enrollment were co-related suggesting that children who would be the most benefitting from pre-school programme were the unlikeliest to be signed up. Optimized educational practices which focussed on features like early language and numeracy skills and socio and emotional development greatly enhanced children's learning. The basis of brain structure and neural network and long-term potential were established in the early foundational stage were greatly impacted by external factors. Early experiences at home environment and other situations and social groups interacted with the genes thereby moulding the brain's structure. Growth as well as the pruning practices of neural network in the initial years reinforced a series of skills which includes cognitive, social, perseverance, attention, self-discipline, and cognitive control. Skills in education and employment were based cumulatively upon the mentioned early skills.

In South Africa, **Excell and Linington, (2011)** explored the *role of play for literacy in early childhood education* in which they claimed that the foundations of literacy in early years of childhood were best attained through quality play-based method which could be accomplished only through a play-way method. They propounded for a blend of play and pedagogy and further suggested an approach through movement and other activities for early literacy. They strongly believed that the integration of perceptual-motor behaviours and sensorimotor, which were naturally present during the early years of a child, were the invisible pathways to literacy. They also stated that the teacher and the teacher's awareness into literacy and the invisible pathways could influence the kind of opportunities that the teacher made available for learning that would pave the way for positive learning.

Roul (2014) in a study on the *Impact of an audio-visual intervention programme on the language development of pre-school children* in Delhi revealed that audio-visual intervention had a positive result on the language skills of children. The intervention enhanced vocabulary acquisition, comprehension of texts and verbal communication, and the ability to express themselves in words. Children who were exposed to audio-visual materials also showed improvement in engagement and participation which indicated improved curiosity in learning language-related content. The study emphasized the importance of culturally and linguistically appropriate materials in early childhood education. The results had pointed to suggestions for early childhood education and intervention programmes which included importance and usefulness of audio-visual aids in enhancing language development, supporting for the presence of multimedia resources in pre-school education policies, stressing on teacher training for enhancing their potential on the use of audio-visual and other aids, and encouraging more research about the long-term effects of audio-visual interventions on language skills and other developmental domains among pre-schoolers.

Chaudhary and Kaul (2019) also analyzed the *IECEI data in India to understand quality in pre-school education*. It was found in the study that the educational practices in both private and government run pre-schools were formal and basically teacher-centered implying that most of the routine in the centers did not allocate enough time for playful learning. Teaching of the 3R's in the pre-school stage could be harmful for the attainment cognitive and language readiness skills even if the children attended the programme on a regular basis. This situation demanded for immediate action for regulation and implementation of a developmentally appropriate curricula across the country. Not only that, a robust teacher training system needed to be in place supported by strengthened institutional capacities so that the curriculum intended for early grades could be implemented as it ought to. The study also revealed that there was a probable advantage of pre-school attached to primary school over a stand-alone pre-school with regards to development of readiness skills. Nonetheless, the main issue was the need for improvement in the Anganwadi centers and pre-school sections of government

schools because of the situation did not improve, it would lead to more children flocking into private run pre-schools.

In **Tal's, (2021)** paper titled *An Ecosystem Perspective of practice and professional development in early childhood education and care (ECEC)* explored children's agency and relationships in the context of an ecosystem from various perspectives like the children, the teachers or the caregivers, and the parents. The paper explored the works of researchers from different countries like Turkey, the U.K., Denmark, Norway, South Korea, Spain, and the United States. The paper highlighted that interactions in human development took place through progressively complex reciprocal interactions between active and evolving biopsychological human organisms and the persons, objects, and symbols in their immediate external environment which was the microsystem (Bronfenbrenner 1979). It also highlighted that the nature of these interactions and their impact on development were influenced by the characteristics of those involved, the context and time in which they occurred (Bronfenbrenner and Morris 2006, 795). According to the paper, four main concepts were integrated in the theoretical perspective of the ecosystems which were children's agency, their interactions and relationships, educational practices, and professional development. It mentioned that the pedagogy and capacity building required to nurture children's skills and reinforce relationships was reliant on favourable relationships among the staff and with parents. Bronfenbrenner and Morris believed interactions as the foundation for relationships and facilitated learning imposing that relationships should be considered as vital competencies in education and care of children in the early year as teacher's relationships with children had a critical impact on children's learning and well-being (Tal 2019). The paper asserted that teachers should be able to have good relationships with children and their parents, and their colleagues. This was of utmost importance as life and learning in the pre-schools were grounded on relationships and connections between child and child, child and teacher, and teachers and parents.

Arya and Josh (2021) endeavored an *ethnographic exploration of teachers' lived experiences in early literacy school settings* in which they attempted to interpret their literacy development experiences as co-constructed in everyday school

activities. They mentioned that teachers' understanding, practices, and opinions about early literacy influenced the experiences of children. The teachers stated that they encountered conflict in their practices and beliefs about early literacy. Few of the things that influenced their practices were the absence of age-appropriate and appropriate materials for language development and the expectations of parents on literacy. Due to this, they appeared to restrain from their opinion and practices about age and developmentally suitable practices. They claimed that professional development programmes for teachers needed to provide support for mitigating these contextual issues. The teachers opined that giving children the opportunity for exploring and self-expression in the pre-school years was continuously opposed and vanishing due to the misinterpretation of literacy in our current education system.

Kumar (2022) stated in his study *Challenges in Early Childhood Education in India: A Critical Analysis* that according to the Unified District Information on School Education (U-DISE) data, India has a 95.1 percent Gross Enrolment Ratio (GER) at the primary level (grades I–V) but in the middle stage (grades VI–VIII) the GER falls to 90.7 percent. A question arised about the situation of these children. Studies revealed that those who intend to drop-out at early stages of schooling lacked readiness skills for formal education. It was also stated that for those children who were separated from their parents and home, it was hard for them to adapt to the practices that were unknown and new for them at school and sadly, the children were considered as repositories to be filled with certain academic qualities. This often led to restriction of natural or intuitive expressions but unfortunately many parents wished for their children to be smart and smart in a sense that they would be able to communicate in English and could count and write up to a hundred or above. The most unfortunate thing was that teachers of pre-school were not professionally trained to teach foundational literacy and numeracy. Another problem emphasized was that book publishers decided about what should be included in the content of study materials with lots of information and activities. These study materials were considered as the syllabus and curriculum for the pre-school stage. In the meantime, the existing policies did not properly regulate about the practices, qualification of teachers and administrative systems in ensuring the basic rights of children. The

opportunity to participate in a joyful and conducive environment is the right of every child and an investment in a sustainable society.

In a study from a *large-scale randomized controlled trial in Norway in which pre-school teachers implemented the Playful Learning Curriculum*, **Storksen, et al. (2023)** vouched that application of a properly-defined and developmentally appropriate curriculum in a play-based ECCE environment was significant for the development of early math skills. The study probed into the effect of implementing a practicable, playful and cost-effective curriculum in which a well-defined age-appropriate curriculum and teacher's knowledge of curriculum content were seen as crucial for high-quality ECEC (Burchinal, 2018; Duncan & Magnuson, 2013; Siraj-Blatchford et al., 2008) and previous research highlighted that vulnerable children (Bachman et al., 2018; Brandlisteun et al., 2015; Tominey & McClelland, 2011) might gain more from such interventions. It was also found that even though the Norwegian ECEC consisted of a lot of free play and outdoor play (Karlsen & Lekhal, 2019; Moser & Martinsen, 2010), theory on playful learning recommended that the kind of play must be supported with guided play in order to stimulate important school readiness skills among young children (Fisher et al., 2011; Hirsh-Pasek et al., 2008). The study also recommended the introduction of a playful learning curriculum and the principles of intentional guided play (Hirsh-Pasek et al., 2008) in pre-school teacher education could be a strategy to improve and equip the teachers with necessary skills as well as a means for low cost intervention.

2.2.5. Literature Reviewed on Parents Role in Pre-school Education

In an attempt to study the *various procedures of expenditure on childcare among working and non-working families* in India, in accordance with their economic status, **Panda (1994)** revealed in the study that the requirements of children were sustained by the urban families as they spent a substantial amount of money compared to the rural families. The study also found that working parents fulfilled the needs and requirements of children in comparison to the rural families.

Mohite and Bhatt (2008) attempted an analysis of the existing policy developments in ECCE and their implementation across various socio-economic

situations with emphasis on the transition from home to pre-school. They used data from an ethnographic study of philosophies on early childhood, policy, and practice implemented in the state of Gujarat which included four semi-rural and tribal areas. The practices in the pre-school programmes followed a daily time table which consisted of arrival and departure time, free play and prayer, indoor activities and meal time activities while the private run pre-schools were like a downward extension of primary school in the context of time table which consisted of arrival and departure time and prayer, classroom activity and meal time but free-play was not included. This implied that children were required to stay put and remain seated also following certain rules which demanded a lot of adjustment. The study also examined opinion of parents about ECCE and it was found that awareness about the importance of care and education for young children and equal opportunities for children of both sexes were increasing. The advantages and significance of play and play-based pedagogy was sensed by parents and increase in awareness about the appropriateness of indigenous materials and culturally compatible curriculum. The study also highlighted that even though use of mother tongue was advocated in the policy documents as the medium of instruction, English was preferred as a medium of instruction in most cases and specific methods for transition to primary school were not properly implemented. With regards to the qualification of teachers, particular qualification was not very important but training was considered important, and the common understanding of and aim of pre-school and education as a whole was usually perceived as acquiring the skills to read and write. The cultured middle class regarded ECCE as the initial stage for readiness to be prepared for the ambitious world they will be facing. Meanwhile, among the economically disadvantaged, it was regarded as a gateway to literacy and training of the child for a white-collar job. The pre-school education practised both in private and government schools was basically a downward extension of the primary school with the teachers having no training on ECCE.

Alcott, et al. (2019) also investigated the IECEI study in India concerning *participation trends in early childhood education programmes*. It was found that the demand for pre-school education was growing in the country including the

economically disadvantaged groups and the rural areas. However, the parents or teachers or the community as a whole misunderstood the age and developmentally appropriate practices which implied that there was a need to make parents and teachers aware about the necessity for developmentally appropriate practices. The study gave clear evidence that all the stakeholders especially the parents were in need of awareness generation about their children's learning and that formal teaching of the 3Rs in the early grades did not have positive outcomes in their learning.

Ghosh and Dey (2020) in their study *on determinants of parents' pre-school choice in India* investigated the determinants of pre-school choice using primary survey data from West Bengal. The study showed that the reason for 90% of parents sending their children in the pre-school education programmes was early education and school readiness. Parents would also prefer pre-schools where such benefits could be guaranteed. The possibility of sending children to private pre-schools became higher with an increase in income of the family. Educated families with higher income also preferred to send their children to private pre-schools and the reason being early education and readiness which they felt matched with the education-centric curriculum. At the same time, enough evidence was not available indicating if any of the pre-schools in the country had provision for additional benefits in child development.

2.2.6. Literature Reviewed on School Readiness

Pianta's (2000) paper *Conceptualizing and Studying School Readiness: Relationships and Contexts in Ecological Perspective* conducted in the United States presented a valuable study on the transition of children to formal schooling. This study acknowledged the importance of smooth transition on the later years of schooling and academic success. It propounded that to fully understand the competence of a child, the influence of home and school environment, community and peer group in relation to the child must be taken into consideration and above all, it was considered important to examine how changes occurred in these relationships. The study suggested for three arguments in which policy formulation, practices in

early education and researches should be based. Firstly, children's transition to formal schooling should be theorized

in terms of the children and their relation to their environment, community, peers, school and home environment. Next, children's school readiness assessment should also take into consideration the direct and indirect relationship between the child and the environmental factors like home, school and community which were influencing their development. And lastly, while investigating the children's transition, the manner of changes in context and relationship over time must be addressed because these factors contained important aspects in their transition. Eventually, research based on these three arguments might turn out useful in formulating policies and practices on school transition especially for population with normative and susceptible cohorts

might advise policy and practice on transition to school in normative and populations.

The paper "School Readiness in India: Perspective, Initiatives, Practice, and Approaches" by **Chandra (2017)** discussed about school readiness in the historical context and its progress in India. The paper emphasized about the gaps in children's school readiness which were effected by lack of access to pre-school education, lack of a uniform nation-wide programme on pre-school education, need-based interventions considering the local contexts, appropriate tools for assessment of children, and awareness generation. To address to these gaps that the paper highlighted were collaborative effort from the central government, improvement of quality in pre-school education, early intervention for susceptible children and appropriate assessment tools. It also mentioned the probability of improvement in pre-school education in India if these gaps were addressed. The paper stressed about the necessity for an all-inclusive and financially robust approach for the enhancement of children's school readiness for ensuring that all children had the essential skills and support to thrive in their early education.

Wadhwas, et al. (2019) analyzed the data from the India Early Childhood Education Impact (IECEI) in terms of whether participation in pre-school helps children's early-grade learning. This paper explored *the relationship between pre-school participation, school readiness and early grade learning in India*. It was found in the study that school readiness was more influenced by the children's family background than their participation in the pre-school. The paper also showed that participating in pre-school education resulted in improved attainment of learning outcomes in the early grades. The variances in the states verified that if the states were taking steps in implementing the policies, it influenced both the government and private sectors who were providing pre-school education. It was evident from these data that the children who were enrolled in private run pre-school programmes, though they were considered to be more advantaged did not lead to improvement in the primary stages. The reason was the way the curriculum was executed and was beneficial for the children. The classroom transactions were more inclined towards formal teaching of textual and theoretical rather than experiential or playful learning. The study also revealed that there was a fall in gap existing between government and private institutions but the gap between participation of parents and the home environment rised.

Bashir and Jan (2023) made a qualitative review of various of several policy documents like NEP 2020 and secondary sources like journals, websites, and newspapers. The paper discussed about different critical skills required for foundational literacy and numeracy. They also described about the deficiency India was facing in acquiring literacy and numeracy skills which were clearly highlighted in surveys like National Achievement Survey (NAS) and Annual Status of Education Report (ASER). These nationwide studies revealed about the children's lack of skills reading, writing and numeracy skills in all the grades and also showed its decline over the years. To address these challenges, certain suggestions were made regarding aligning goals, academic support, supervision and monitoring.

2.3. Relevance of the Present Study in Relation to the Studies Reviewed

The research studies concerning pre-school education that were reviewed which were relevant for the present study showed that there were no other research studies which was identical or closely similar studies had been conducted in the country as well as within the state. Some of the paper reviewed were concerned about the significance of high-quality pre-school education and the role it played in children's transition to primary school and led to success in the later years. Some of the paper reviewed also discussed about how appropriate practices helped children in adapting to the school environment, hone school readiness skills and develop important social and emotional skills. A conclusion could be made from the studies conducted in India that the country was progressing towards attaining the pre-school goals and the fact that India made it the right of every child was quite remarkable. On India's way to implementing quality pre-school education, certain gaps needed to be addressed and complications might arise due to its diverse geographical nature and its large population. Some studies affirmed that investment in early grade education could in turn led to educational benefits and economic consequences in the long run. The studies reviewed also highlighted the importance of recognition or regulation of pre-schools and a robust system of monitoring and supervision for the implementation of quality standards were also seen. Some of the papers reviewed also highlighted the need for a robust supervision and monitoring system and proper regulation and recognition of private run pre-school institutions by the respective state authority. In the primary schools, the rate of access and retention was increasing after the implementation of Sarva Shiksha Abhiyan (SSA) however, there was the existence of certain gaps like infrastructure and facilities and professional development of teachers.

In terms of infrastructure and facilities, the reviewed studies conducted in India emphasized the lack of good buildings, libraries or reading room, medical facilities and first aid, indoor as well as outdoor facilities for play. Beside the lack of developmentally appropriate practices, there existed over-crowded classrooms, improper lightings and unsuitable classroom organisation. Non-systematic

assessment procedures and these mentioned challenges were the leading reasons that hindered the successful implementation of quality pre-school education in India.

With matters concerning the quality of teachers, researchers strongly recommended the improvement of the teachers' skills in enhancing the children's early literacy and numeracy. But without the provision for professional development opportunities and support, the teachers inclined towards rote learning based on the textbooks. Age and developmentally appropriate practices would persist if the policies and curriculum intended for the early grades were not strongly implemented.

The studies related to pedagogical practices and teacher professional development showed that meaningful play activities like constructive and cognitive play led to improvement in creativity and problem-solving in children. With regards to language development, appropriate practice like reading aloud, singing, and using rhymes and songs to enhanced phonological awareness and vocabulary were advocated. The reviews also highlighted that the relationship and interactions between the child and the caregivers were of utmost importance as it helped children acquire school readiness skills. The prevailing problem that exists was the prevalence of the teaching of 3Rs as also seen in some of the studies (Chuaungo, 2001). This formal teaching of the 3Rs could even be harmful for the children's development. Every child has the right to have a joyful and supportive learning environment which is an important investment not only for the child but for the whole country.

Regarding the role of parents in pre-school education, studies have indicated a growing awareness of realizing the significance of quality care and education for young children. The papers reviewed highlighted that play and the benefits of play-way method approach were appreciated and many parents were conscious of the relevance of locally appropriate curriculum and materials. However, English continued to be preferred as the medium of instruction rather than the mother tongue even though all the policies advocated for the use of mother tongue. The studies highlighted that there was a need to educate parents about the importance of providing developmentally appropriate experiences for their children.

In relation to the papers concerning about school readiness, important gaps were highlighted. Among them were low quality pre-school education, lack of a uniformity in the national programmes, age and developmentally appropriate suitable assessment system, and nationwide awareness on the nature of pre-school education. For the improvement of school readiness skills in children across the country, the studies reviewed encouraged for a holistic, inclusive, and well-resourced method. The variance in the implementation of policies and launching of programmes showed that such actions had an impact on both the government as well as private run pre-school institutions. The studies also showed that children who were considered to be more advantaged in the private pre-school setting did not show better school readiness skills nor had a higher rate in achieving academic success.

Considering the fact that pre-school education being the pre-requisite to children's development and learning, it was of utmost importance that research in this area was taken up. There were only a few research studies dedicated to this research area in Mizoram and more researches needed to be conducted especially in the context of the state. To successfully implement pre-school education in its true sense, the existing gaps and prevailing conditions needed to be identified first and these could lead to solutions for achieving high-quality pre-school education in the state. Scaling up research initiatives not only in the government schools but in the private composite schools and standalone pre-schools could provide in depth and valuable insights into the prevailing conditions and help in tailoring interventions and designing strategies for improvement of pre-school education in the state.

CHAPTER III

METHODOLOGY

This chapter provides a comprehensive outline about the approaches used in the present study. It discussed about the methodology used for gathering data, analyzing, and interpreting data. It also highlights the general framework which guided the process of research in the present study. The chapter started with the description of research methods used and the relevance of applying such methods for the study's objective is explained. The detailed procedures like the process of data collection, population and sampling methods, selection of participants and the reason for choosing the sample size are covered in this chapter. The chapter explained about the data analysis techniques used which includes how data were organized, coded, and interpreted to draw meaningful conclusions. Generally, the aim of this chapter is to present a clear and complete explanation of the research design and methodology. Thus, providing a coherent and comprehensible framework for understanding the manner in which the study was conducted and by what means the results were obtained.

3.1. Research Approach and Methods

To achieve the objectives of the study mixed-method research design was used. Mixed methods research is defined as research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches in a single study or a programme of inquiry (Tashakkori & Creswell, 2007b, p.4). This design was used in this study as it presented numerous methods in dealing a research problem. In the words of Creswell and Plano Clark (2018), "...the combination of quantitative and qualitative data provides a more complete understanding of the research problem than either approach itself. Using mixed method design, it is possible to explore information that is not accessible through a single approach alone (Shannon-Baker, 2015).

The present study can also be classified as a form of both Concurrent and Sequential Embedded research design, as described by Creswell and Plano Clark

(2015). At the level of method, it was a kind of evaluative survey (Fox, 1969), as it evaluates the status and implementation of the pre-school education programme in government primary schools in Mizoram. The aim was usually to determine the ‘merit, worth, or value’ of a program (Hepler et al., 2010). Ideal for use in education, survey research is used to gather information about population groups to “learn about their characteristics, opinions, attitudes, or previous experiences” (Leedy & Ormrod, 2015, p. 159). The research design of the present study can be symbolized as QUAL+quan. The notation represents independent simultaneous triangulation (Morse, 1991; Creswell and Plano-Clark, 2018).

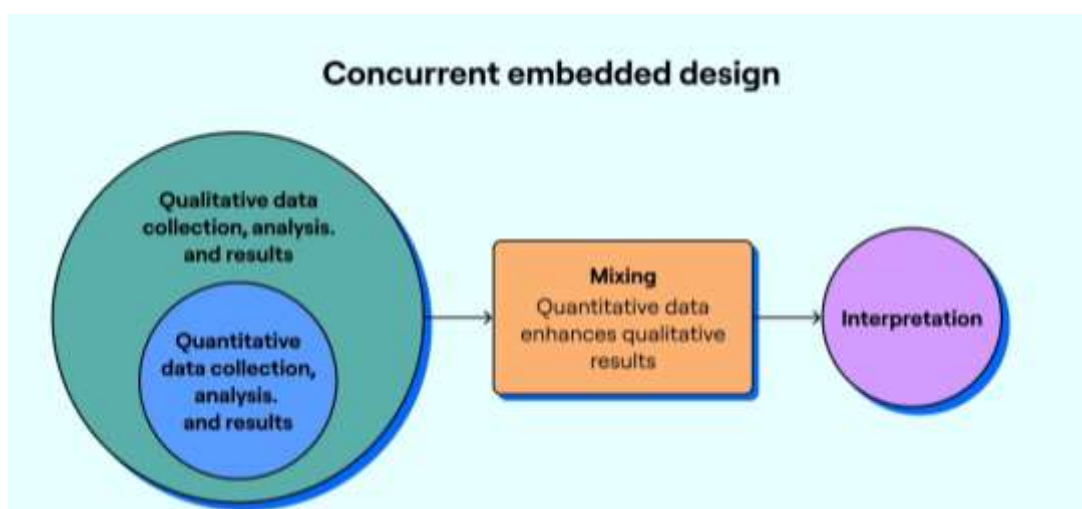


Figure 3.1 - Concurrent Embedded design

The methodological layout for the present study is presented in Table 3.1

Table 3.1. Methodological Layout

Objective No	Objective	Sample/Respondents	Technique
1	To find out the scenario of pre-school education in Mizoram		
1.1	Monitoring system for pre-school education programme	Office records, Educational Officers and Headmasters.	Document analysis and Interview
1.2	Demand of pre-school education programme	Parents	Interview

Objective No	Objective	Sample/Respondents	Technique
1.3	Quality of the pre-school education program	Educational Officers, Headmasters, Parents and Teachers	Interview
2	To analyze the curriculum followed in the pre-school education programme in the Government Primary Schools.		
2.1	Pre-school Curriculum published by SCERT in 2009	Document	Content Analysis
2.2	Books prescribed and used	Document	Content Analysis
2.3	Outdoor activities organized in the pre-school	Schools and Teachers	Observation cum Interview
2.4	Indoor activities organized in the pre-school	Teachers	Observation cum Interview
2.5	Programme Planning by the teachers	Teachers and their plan books	Observation cum Interview
2.6	Role of parents in curriculum implementation	Teachers and Parents	Interview
3	To assess the language development of pre-school children in the Government Primary Schools	Grade I children who completed Pre-school education programme from government primary schools	Assessment framework for Language preparedness developed by NCERT
4	To analyze the profile of the functionaries implementing the pre-school education programme in the Government Primary Schools	Headmasters and Teachers	Interview
5	To observe the appropriateness of infrastructure and facilities available for pre-school children in government primary schools.	Outdoor and indoor facilities, teaching-learning materials & pictures displayed	Observation
6	To find out the evaluation procedure adopted in the	School records Progress report cards	Observation and interview

Objective No	Objective	Sample/Respondents	Technique
	pre-school education programme in the Government Primary Schools in Mizoram	Teachers	
7	To make suggestions for improvement of pre-school education in Mizoram	Parents, Educational officers, Principals of DIETs	Interview

3.2. Population

3.2.1. Population

In research, the population means the entire group of individuals, objects, or events that share a common characteristic (Cooper & Schindler, 2003) and are the focus of the study. It represents the complete set of elements that the researcher aims to study and draw conclusions about (Sileyew, 2020; Garg, 2016). In the present study, population included 66 government primary schools in Mizoram officially authorized by the state government to operate pre-school education programs (KG-I and KG-II). These 66 schools were distributed as in the table 3.2 and all permitted to run pre-school programs within their respective government primary schools. It may be mentioned that during the time of proposal of the research in 2018, there were 8 districts in Mizoram. The districts of Khawzawl, Hnahthial and Saitual were created and started functioning from 2019. The number of primary schools in which the Government of Mizoram gave permission to run pre-schools are presented here district-wise in table 3.2.

Table 3.2. No. of Primary Schools having Government permission to run pre-schools

Sl. No.	District	No. of Primary schools
1.	Aizawl	45
2.	Lunglei	11
3.	Siaha	0
4.	Champhai	2
5.	Serchhip	0
6.	Kolasib	5
7.	Lawngtlai	0
8.	Mamit	1
9.	Saitual	1
10.	Hnahthial	1
11.	Khawzawl	0
TOTAL		66

The population of this study covered all the stakeholders of pre-school education within the state. The administrative officers or SDEOs of the Directorate of School Education, the Principals of DIETs, teachers and headmasters of government primary schools, parents of children attending pre-school education programme, and class I children who recently completed pre-school education. It may be mentioned that curriculum frameworks and books prescribed by the government to be used in the sampled schools were also part of the study. These documents were analyzed systematically to assess the quality of curriculum has a direct or indirect effect on the quality of pre-school education in Mizoram.

3.2.2 Sampling & Sampling Technique

A sample is a specific group of individual units where data would be collected from (McCombes, 2019). By selecting a representative sample, researchers can draw meaningful conclusions about the general population and generalise their findings to a broader context (Meredith, 1998).

In the present study, the Multi-stage sampling technique was used to select an appropriate sample. In the first stage of sampling, to select thirty-three (33) schools from sixty-six (66) schools, the researcher used simple random sampling wherein the

names of the schools were selected using random draws. A simple random sample is a randomly selected subset of a population and each member of the population has an exactly equal chance of being selected (Thomas, 2023). Then, the researcher went to observe the school and conduct interviews with school heads and teachers regarding activities and infrastructure from the selected schools.

In the second stage of the data collection, all principals of eight (8) DIETs in the state and sub-division education officers working under the Directorate of School Education were included purposefully. Purposeful sampling is a technique widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources (Patton, 2002). This involves identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest (Cresswell & Plano Clark, 2011).

In the third stage, convenience sampling was used for selecting the parents of pre-school children. This sampling technique was employed on the basis of the availability of participants as they could not be selected from many various populations and research sites (Koerber & McMichael, 2008). For the assessment of language preparedness of the Grade I children, incidental sampling was used. The number of children who participated was 263 out of 308 enrolled. Not all children were able to participate as some were not fluent in either Mizo or English, a few had autism, some displayed a lack of co-operation, and others were absent. Hence almost all prospective participants were included in this study.

Therefore, 33 government primary schools, 33 school heads and 33 pre-school teachers from the selected schools, 5 sub division educational officers, principals of 8 DIETs, 150 parents and 263 Grade I children were selected as samples for collecting the required data. The sampling design and layout is presented in figure 3.2 and list of selected schools is presented in Table 3.3.

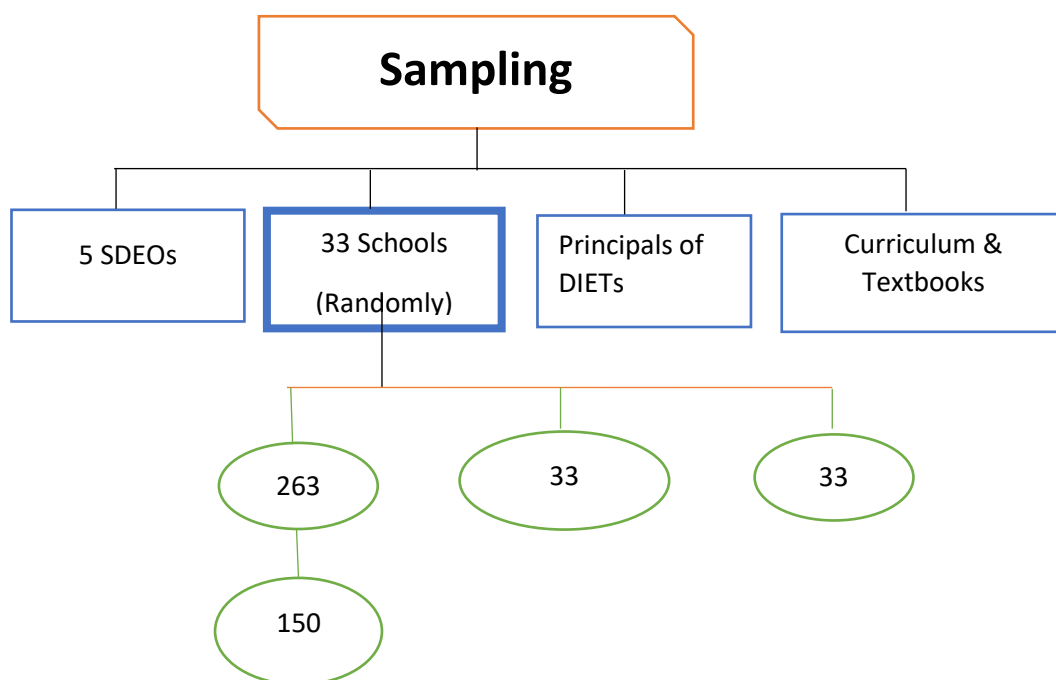


Figure 3.2. - Sampling design and layout

Table 3.3. List of sampled schools

Sl. No	Name of School	Locality	District
1	Government Primary School	Ramhlun South	Aizawl
2	Government Primary School	Kanan Veng	Aizawl
3	Government Primary School II	Salem Veng	Aizawl
4	Government Primary School	Tlangnuam	Aizawl
5	Government Primary School	Dinthar	Aizawl
6	Government Model English School	Nursery Veng	Aizawl
7	Government Primary School III	Durtlang	Aizawl
8	Government Primary School I	Tanhril	Aizawl
9	Government Model Primary School	Chanmari	Aizawl
10	Government Comprehensive Model School	Mission Veng	Aizawl
11	Government Primary School	Kulikawn	Aizawl
12	Government Primary School	Chaltlang	Aizawl
13	Government Primary School	Venghlui	Aizawl
14	Government Primary School	Tuithiang	Aizawl
15	Government Primary School	Chhinga Veng	Aizawl
16	Government Primary School	Armed Veng South	Aizawl
17	Government Primary School II	Bawngkawn	Aizawl
18	Government Primary School	Maubawk	Aizawl
19	Government Primary School I	Durtlang	Aizawl

Sl. No	Name of School	Locality	District
20	Government Primary School	Chawnpui	Aizawl
21	Government Primary School I	Armed Veng	Aizawl
22	Government Primary School I	Tuikual	Aizawl
23	Government Primary School	Republic Veng	Aizawl
24	Government Primary School I	Ramthar	Aizawl
25	Government Model Primary School	Electric Veng	Lunglei
26	Government Primary School I	Pukpui	Lunglei
27	Government Primary School II	Zotlang	Lunglei
28	Government Primary School	Venghlun	Lunglei
29	Government English Primary School	Salem Veng	Lunglei
30	Government Primary School II	Vengthlang	Champhai
31	Government Primary School II	Venglai	Kolasib
32	Government Primary School II	Kawnpui	Kolasib
33	Government Primary School I	Dawr Veng	Saitual

3.3. Tools and Techniques

In any kind of research work, it is essential to utilize a tool which is well-structured and systematic. With the help of research tools, researchers are able to have an organized method for collection of data and enabled them to professionally accumulate both quantitative and qualitative data.

Tools for the study:

The following tools were used by the researcher for collection of the data;

3.3.1 Observation cum Interview Schedule

To observe the infrastructure and activities practiced in the schools, an Observation cum Interview schedule (2001) developed by Dr. Lalhmasai Chuaungo (for studying the existing conditions of pre-schools) was adapted by the researcher for the present study. The tool has 9 parts:

Part I: Information regarding physical structure and facilities of the school

Part II: Information regarding equipment and materials available in the school

Part III: Information regarding teacher profile

Part IV: Information regarding admission procedure

Part V: Information regarding programme planning

Part VI: Information regarding content and methodology

Part VII: Information regarding records and registers

Part VIII: Information regarding techniques of evaluation

Part IX: Information regarding parent contact activities

3.3.2 Interview Schedule

Structured Interview schedule for four type of respondents were developed by the researcher.

- i) Sub-division education officers,
- ii) Principals of DIETs,
- iii) Headmasters of schools
- iv) Parents of pre-school children.

3.3.3 Language Assessment

Language competencies highlighted in the assessment framework for tracking of children's readiness for schools given in Vidya Pravesh Guidelines developed by NCERT were used to assess grade I children.

3.3.4 Content Analysis

Apart from the above tools and techniques content analysis technique (method) was used to analyze the curriculum framework and prescribed textbooks.

3.3.5 Description of tools used for the study:

3.3.5.1 Observation cum Interview Schedule

A questionnaire and checklist cum observation schedule (2001) developed by Prof. Lalhmasai Chuango was adapted by the researcher. It was used to collect information about physical structure and facilities of the school, equipment and materials available in the school, teacher profile, admission procedure, programme planning, content and methodology, records and registers, techniques evaluation, and parent contact activities.

Validity of the tool: Permission was granted by developer of the tool, Prof. Lalhmasai Chuango for the adaptation of the Observation cum Interview schedule (2001) meant to examine the existing situations of pre-schools. The process of adaptation was a commonly recognized approach within the methodology of research. The tool underwent modifications, revisions and enhancements to align with contextual changes in research. It was then handed out to five education experts. The original tool was meant to study the Anganwadis and private pre-schools. Therefore, two experts considered that few items from the original tool were unnecessary in the context of government primary schools, and were excluded. For example, Item no 2 regarding the distance children have to walk to attend pre-school was omitted as government primary schools were located in close proximity to every neighbourhood in per the regulations by the government. Specific activities for nurturing of developmental domains like physical including both fine and gross development, language development, and socio-emotional development were targetted and clearly outlined to facilitate the coding of themes. Besides, activities related to pre-number and number concepts were included as per the recommendation of one expert. The tool contained 51 items in total. For revalidation of the tool, one of the five expert was the developer of the original tool i.e Prof. Chuaungo.

3.3.5.2 Interview Schedule

Interview schedule is a list containing a set of structured questions that have been prepared to serve as guide for the researcher in collecting a required information about a specific topic or issue (Luenendonk, 2019). For the present study, four different structured interviews were used for collecting data from four different types of respondents- Interview schedule for sub-division education officers consisted 14 items, interview schedule for principals of DIETs consisted of 5 items, interview schedule for school heads consisted of 12 items and Interview schedule for parents of pre-school children consisted of 6 items. Structured interviews are the most systematized type of interview. In contrast to semi-structured or unstructured interviews, the researcher used predetermined questions in a set order (George & Merkus, 2023).

Validity of the tool: These tools were presented to five experts in the field of education. Based on the feedback and insights provided by these experts, the items within the tools were adjusted as suggested. The tools were finalized after revising, rephrasing, removal as well as addition of questions as suggested by the experts.

3.3.5.3 Language Assessment

For the present study, language competencies highlighted in the assessment framework for tracking of children's preparedness for schools given in Vidya Pravesh Guidelines developed by NCERT were used to assess the grade I children. The assessment framework was divided into three different categories comprising: - Demonstration of Oral Expression, Demonstration of Emergent Reading Skills, and Demonstration of Emergent Writing Skills. The children were assessed using a three-point rating scale and were assessed against the criteria- rarely, sometimes, and always.

Validity of the tool: The tool was based on criteria set by NCERT for school readiness so the validity of the tool was pre-established and predicted. Moreover, the researcher presented the selected language related items before five experts for content validity. For the administration of the tool and working with the children the

researcher took the help of pre-school teachers, which was as per the philosophy of pre-school education and research ethics.

3.3.5.4 Content Analysis

Content analysis is an analysis of the manifest and latent content of a body of communicated material through classification, tabulation and evaluation of its key symbols and themes to ascertain its meaning and probable effect. (Krippendorff, 2004).

a) Analysis of Pre-school Curriculum: For effective and successful implementation of quality pre-school education, the importance of a profound curriculum is a necessity that cannot be denied. To make sure all children have the ideal development, a planned curriculum framework is of utmost importance to make sure that all the necessary requisites for learning are covered addressing the needs of children holistically. Position Paper on National Focus Group on ECCE (NCERT, 2006) mentioned four criteria which worked as parameters to analyse the Pre-school Curriculum (2009) developed by SCERT, Mizoram:

1. Developmentally appropriate, activity-based, and related to the child's needs, interests, and abilities, according to age,
2. An integrated set of experiences to foster holistic growth and development in all domains, such as health and well-being, and cognitive, physical, social, emotional, and language development through an interlinked approach,
3. Flexible enough to suit the diverse social, cultural, economic, and linguistic contexts of our country, as well as adaptable enough to suit individual differences among children,
4. Able to help the child to adjust to the routines of primary school as well as to the demands of more formal teaching (NCERT, 2006).

b) Analysis of Textbooks: Textbooks are generally known as a an essential requisite for the implementation of curricula. The content and organization of these textbooks play a significant role in realizing the aims and objectives of a curriculum.

Textbook analysis is a means by which these features can be identified and hence the effectiveness of textbooks be established (Okefee, 2012). The SCERT Mizoram developed study materials for the the government primary schools which were granted permission by the Directorate of School Education to run pre-school education programme.

The textbooks analysed in this study for KG-I and KG-II classes were:

- i) First Step I
- ii) Pre-Number I
- iii) First Step II
- iv) Pre-Number II

Parameters used for textbook analysis:

For the analysis of the prescribed textbooks, four (4) parameters were developed for assessing the textbooks. The parameters were namely (i) Physical Aspect (PA), (ii) Teacher's Note given in the book (TN) and (iii) Exercises and Activities (EA). These parameters function as standards for ensuring that the textbooks successfully address the educational requirement of children.

Table 3.4. Parameters used for assessing textbooks

SN	Parameters	Descriptions	Code
1.	Physical Aspect	Physical aspects of the textbook such as fonts, illustrations, print quality were analysed.	PA
2.	Teacher's Note given in the book	Appropriateness of instructional guidance for teachers	TN
3.	Exercises and Activities	Appropriateness of the design of activities to foster different developmental domains	EA

Validity of parameters: The parameters for content analysis were finalized by following the recommendations of four experts in the field of education. All the experts accepted the three parameters proposed by the researcher. The parameters presented were revised and improved based on the feedback and suggestions of the experts. After that, the validity of the evaluation tool was established in line with the observations and guidance provided by them.

3.4. Collection of data

After procurement of permission from the headmaster of the government primary schools, the researcher conducted data collection over the course of two years from 2021 to 2023, making personal visits to most of the schools to collect the required information for the observation cum interview schedule. The participatory observation technique was also employed for data collection which was possible through intermittent visits to schools and being in touch with stakeholders. During this period, collection of data was challenging due to the restrictions imposed by the Covid-19 pandemic. The sub-division education officers and principals of DIET were contacted through phone for the structured interviews. Structured interviews with parents were carried out with the support of school teachers through phone calls. In the language assessment of Grade I children, teachers serve as the primary field investigators, working in collaboration with the researcher. This is necessary because direct interaction with children was essential and familiarity with children was quite helpful. In this kind of assessment, the children need to feel comfortable. The assessor also needed to be well acquainted with children and have thorough understanding of the children in terms of their characteristics, abilities, home and community environment. The data collection for the language assessment took place from May to August 2023. In the process of data collection, obtaining consent, ensuring confidentiality, and avoiding any possible harm was prioritized.

3.5. Data Analysis

Data analysis comprises of processing and interpreting the data to draw conclusions. The data collected through various tools was properly classified before tabulation. Counting and frequency tallies for different items were done after

classifying the materials. The data obtained using the research tools were then presented in columns and rows and these were exhibited in frequency and percentages. The researcher also employed content analysis to draw conclusions on the acceptability of the curriculum framework and textbooks.

3.6. Qualitative Techniques

3.5.1. Triangulation

To ensure the validity and reliability of the findings in evaluating the implementation of pre-school education in the government primary schools, triangulation was used by collecting data from various sources. The source included interviews with stakeholders like teachers, school heads, education officers from School Education Department, parents of pre-school children and principals of all DIETs, observations of physical aspects of the schools and assessment of children's language readiness. Cross-checking the data from these sources helps in ensuring a more comprehensive understanding of the issues that influenced the implementation of pre-school education. Methodological triangulation was also used by combining qualitative methods (interviews and observations) with quantitative methods (language readiness assessments) thereby allowing for a stronger evaluation by capturing both the experiences of educators and the measurements of children's readiness for primary schooling.

3.5.2. Member Check

For enhancing the trustworthiness and validity of the findings, the researcher used member checking technique. After the analysis of data, the initial results was shared with the participants of the study to validate that the interpretations correctly reflected their viewpoints. A summary of the interviews and the language assessment of Grade I children were sent to five participants. The researcher was able to make sure that the findings were precise and represents the experiences of the participants. This process helped in ensuring the reliability of the study as it permits the participants to authenticate the interpretations and offer insights into the data.

3.5.3. Peer debriefing

For ensuring the trustworthiness of the process of data analysis, the technique of peer debriefing was used. After completing the initial analysis of the data, findings and interpretations were shared with two colleagues who were experts in educational research and were familiar with the context of the study. They reviewed the themes which were identified, provided critical feedback, and asked questions that helped in refining the analysis.

3.5.4. Reflectivity (self-disclosure)

As a teacher educator who has worked in the field of school education including pre-school education for more than 15 years, the researcher recognized that her professional experiences and personal values might influence how she interpret the experiences of participants in this study. To lessen this probable bias, she had used member checking, peer debriefing and triangulated the findings to make sure that the results reflect a variety of perspectives. It was important to acknowledge this bias, as it shapes the approach to the research and how she interpret the data. This study was important for her as a person working in the SCERT which was the academic authoirty in the state. As an officer who is responsible for education in the foundational stage, it was important to meticulously understand various aspects of pre-school education within the state. Besides familiarizing with the policies, frameworks, and curriculum related to early childhood education, gaining deeper insights into the issues and challenges, prospects, and vital factors influencing the quality of pre-school programs is of utmost importance. With this familiarity, the researcher will be able to help in ensuring implementation of appropriate measures so that the developmental needs of children in early stages of learning were met.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

This chapter is concerned about the analysis and interpretation of data gathered throughout the research study which were arranged on the basis of the defined research objectives. In the discussion, the term "schools" refers specifically to the sampled schools. This chapter is divided into seven distinct parts and each part representing a specific research objective that directs the analysis and interpretation process.

The first objective which discussed the scenario of pre-school education in Mizoram comprised of assessing the monitoring systems in place, determining if the headmasters supervised teachers, to understand the demand for pre-school education, identification of the reasons why parents enroll their children into pre-school programmes, determining their beliefs about their child's readiness for Class I without pre-school, and assessing the quality of pre-school education based on the opinions of different stakeholder.

The second research objective focused on a comprehensive analysis of the pre-school education curriculum and the study materials developed by the SCERT Mizoram. This objective also comprises of the analysis of both indoor and outdoor activities, the methods used in making program planning, and parental involvement in curriculum implementation.

The third objective is about the assessment of language skills in Grade I which focusses on oral expression, emergent reading, and writing skills. Assessments in oral expression assessed the children's ability to articulate ideas and use vocabulary effectively. The assessment of emergent reading and writing skills is about understanding the phonological awareness, concept of print, knowledge about letters, and ability to convey messages by means of drawing and basic letter formation.

The fourth objective deals with the analysis of profiles of functionaries involved in the implementation of pre-school programmes, with emphasis on the educational and professional qualifications of the school headmasters. This analysis incorporated several dimensions which includes the headmasters' experience in years and the extent to which they had adopted innovative practices or initiatives as outcome of their training. It also observed their viewpoints on whether teachers should receive training in pre-school education, while also evaluating their educational and professional qualifications, the training programmes they attended, and the availability of helpers who assisted in the implementation of pre-school education.

The fifth objective involved assessing the infrastructure and facilities in government primary schools to determine their suitability for pre-school children. It focussed on finding out if the infrastructure and facilities are adequate to meet the needs of young children.

The sixth objective is dedicated to exploring the evaluation procedures used in government primary schools to assess various aspects of child development. This included scrutinizing the assessment tools the teachers used, the frequency of tests (weekly or monthly tests), the preparation of progress reports, assessment of a child's engagement in activities, whether children were continuously assessed and the types of records maintained.

The seventh objective is about gathering suggestions for the improvement of pre-school education programmes in the state. In this objective, various viewpoints and perceptions were combined drawn from the contributions from the parents of pre-school children, sub-divisional education officers, and principals of all DIETs.

Objective 1. To find out the scenario of pre-school education in Mizoram

4.1.0 Analysis and Interpretation of the Scenario of Pre-school Education in Mizoram

Objective 1.1. Monitoring system for pre-school education programme

4.1.1. Monitoring system for pre-school education programme

To understand the scenario of pre-school education in Mizoram, the Sub-division Education Officers (SDEOs) under the Directorate of School Education were approached as they played an important role in the education system in Mizoram. The main functions of the SDEOs were monitoring the infrastructural development and improvement of school buildings and compounds, the holistic and all-round development of children, reinforcing and strengthening of the capacity of teachers, looking after the service matters of elementary teachers and staff and the overall administration of elementary schools. Besides all these, they were also responsible for the implementation and monitoring of information and orders received from both the state and central government and monitoring and supervision of project works under Samagra Shiksha.

4.1.1.1. Supervision and monitoring in the implementation of pre-school education in the government primary schools.

Table 4.1. Supervision and monitoring in the implementation of pre-school education in the government primary schools.

Sl. No.	Items	No. of SDEOs	Percentage
1.	Yes	2	40.00%
2.	No	3	60.00%
Total		5	100%

A glance at Table 4.1. showed that 60 percent of the officers could not perform the task of supervision and monitoring in the implementation of pre-school education in the primary schools under their jurisdiction and 40 percent of them did visit the schools but not on a regular basis. Only one of the officers was able to have meetings with the teachers, guided them and gave them suggestions in their work and

also mentioned that the teachers were observed during their interaction with the children.

4.1.1.2. Supervision and guidance of the teacher in pre-schools by headmasters of government primary schools

Table 4.2. Supervision and guidance of the teacher in pre-schools by headmasters of government primary schools (if not teaching directly)

Sl. No.	Items	No. of Headmasters	Percentage
1.	Yes	32	96.97%
2.	No	1	3.03%

A glance at Table 4.2 showed that most of the headmasters i.e., 96.97 percent supervised and guided the teachers in the pre-school sections while only one headmaster did not involve in the pre-school sections. Through the interviews, the headmasters mentioned that they worked together with the pre-school teachers by having discussion with them and making lesson plans, supervised the classroom transaction and closely monitored how children were taken care of.

Discussion: An analysis of Table 4.1, showed that the task of visiting schools and giving them on-site support was not possible for the SDEOs considering their work load and being under-staffed. There were 10 SDEOs in position as all the posts of SDEO could not be filled up. In some divisions, the District Education Officers (DEO) were executing dual functions of both DEO and SDEO while some SDEOs were given the responsibility of shouldering education divisions other than their own. But the importance of school visits and on-site support could not be set aside. Regularly demonstrating the pedagogy helped teachers understand better and imbibed in them new ideas and new ways of thinking. The issue of monitoring schools extended beyond Mizoram, as highlighted in Kapoor et al.'s 2021 study on foundational literacy and numeracy in India wherein it was found that monitoring and support systems only existed on paper in some states. Rao, et al. (2021) also highlighted the existence of gaps between government policies and their implementation and suggested for statutory regulation and licensing of pre-schools

and mandatory inspection. The importance of monitoring for pre-school education was seen in the reviewed research studies like Kim & Umayahara (2010), Care & Rao (2012) and Bashir & Jan (2023).

The tasks of supervision and monitoring of pre-school could be done by the DIETs, Block Resource Centers (BRCs) and the Cluster Resource Centers (CRCs). Regular meetings for discussion on topics like classroom processes and experiences could be held and parents as well as community leaders and village heads should participate as well. DIETs could also design a teacher support plan and as a nodal office for in-service training in the districts, they could also form an assemblage of academic resource persons to support teachers in the foundational stage.

It was quite satisfactory to learn from Table 4.2 that the headmasters in the sampled schools were supportive of the teachers' activities through monitoring the classroom transactions and closely working with the teachers. Creating a supportive and empowering environment in the school was an important trait for the headmaster. This could be accomplished through various techniques like lesson planning with the teacher, providing opportunities for the teachers for innovative ideas and preparing of teaching learning materials, making available appropriate resources, classroom observation and giving constructive feedback and meetings where teachers could contribute their ideas and talk about the children. It was also important for the headmaster to closely interact with the pre-school children and build a relationship with them. Another important role of the headmaster was to maintain close contact and partnership with the parents and community so that the importance and cruciality of early childhood would not be missed.

Objective 1.2. Demand of pre-school education programme

4.1.2 Demand of pre-school education programme

In Mizoram, most parents wanted their children to enter school whether they were girls or boys. To understand the demand for pre-school education in Mizoram

and the reasons why parents were compelled to admit their children in the pre-schools, a structured interview was administered with 150 parents.

4.1.2.1. Reason for enrolling the child to pre-school by parents

Table 4.3. Reason for enrolling the child to pre-school by parents

Sl. No.	Types of responses	No of parents	Percentage
1.	To learn and study	30	20.00%
2.	To impart quality education to their child	30	20.00%
3.	To be ready for challenges in later education	30	20.00%
4.	To socialize	27	18.00%
5.	To improve mentally and physically	18	12.00%
6.	To receive appropriate education and development	4	2.67%
7.	No response	4	2.67%
8.	Proper education from trained personnel	3	2.00%
9.	Social and emotional development	3	2.00%
10.	For proficiency in English	1	0.67%
Total		150	100%

A cursory glance at Table 4.3 revealed that 20.00 percent of the parents enrolled their children to pre-school merely to study, to be ready for challenges in later education and also to impart quality education to their child was another response from 30 percent of the parents. Also, 18.00 percent of the parents admitted their child to socialize with other children and 12.00 percent of them wanted their child to improve mentally and physically and admitted their child for this reason. Also, 2.67 percent of the parents said that they wanted their child to receive appropriate education and development and 2.00 percent of them wanted their children to have proper education from trained personnel and to have proper social and emotional development. And 0.67 percent admitted their child to solely have proficiency in English and 2.67 percent of the parents did not respond as they felt it was only a trend to admit their child as a parent.

4.1.2.2. Opinion of parents on ability of a child to do well in class I without pre-school education

Table 4.4. Opinion of parents on ability of a child to do well in class I without pre-school education

Sl. No.	Types of responses	No of parents	Percentage
1.	They will not be able to do well in Class I	117	78.00%
2.	They will be able to do well	25	16.67%
3.	Depends on the child	2	1.33%
4.	No idea	6	4.00%
Total		150	100%

An analysis of Table 4.4 revealed that 78.00 percent of the parents felt their children would not be able to do well in Class I. 16.67 percent of the parents said that their children would not be able to do well without pre-school education while 1.33 percent believed it depended on the child. Among the parents, 4.00 percent did not have an idea whether their children would be able to do well in class I without pre-school education.

Discussion: The study revealed that a significant percentage of parents prioritized their child's early education for learning, preparation for future success, quality education, socialization, and mental and physical improvement. Academic readiness and quality educational content were major concerns for parents. A study conducted by Mohite and Bhatt (2008) in Gujarat also revealed that there was an increasing awareness of the importance of early childhood education and that parents of middle-class family perceive ECCE as the first step for preparedness for the global competitive world. The financially backward parents considered ECCE as a pathway to literacy for preparing children for a white-collar job. Another study by Alcott et.al. (2019) in India also highlighted that pre-school education was increasingly in great demand even among poorer communities and rural areas but the developmental needs of young children were poorly understood, whether by parents, teachers, or communities. Therefore, implying that there was a need to make parents aware of the need for developmentally appropriate experiences. It was clear from the study that

parents needed to understand that letting their children have formal learning of the 3Rs did not have significant benefits.

Socialization was also a significant concern, with 18 percent of parents valuing pre-school for helping their children socialize. Mental and physical improvement was another important concern, with 12 percent focusing on cognitive and physical growth. However, only 2.67 percent of parents were concerned about their child receiving appropriate education and development, and 0.67 percent were concerned about English proficiency at the pre-school level which was also the case in Mohite and Bhatt's (2008) findings in Gujarat wherein English was the desired medium of instruction. The data suggested a need for increased awareness about the broader benefits of pre-school education. The study underscored the importance of making the parents understand about the nature and aim of early childhood education that addressed all aspects of a child's development.

An analysis of Table 4.4 depicted that many of the parents did understand that early education was important thereby admitting their children in the pre-school education programmes but missed to understand that pre-school education programme was a significant foundation to lay the qualities for the child's later learning and also that it was a preparation for life. Most parents did not see the underlying factors which determined their child's later success both in academic and in life. They missed to understand the importance of play way approach and tended to give attention to formal learning of reading, writing and arithmetic. This showed that awareness generation for the parents was need of the hour. This was the reason why Blackstone (1970) suggested support for parental partnership as they played a crucial role in the upbringing of the pre-school children. It was important that the parents have a healthy attitude towards the right kind of early education because, as proven in analysis of the IECEI study by Wadhwas (2019), the impact of parents' participation on the children's school readiness and subsequent early-grade learning was attributable more to their family background than to the institutions that they attended.

Objective 1.3. Quality of the pre-school education programme

4.1.3. Quality of the pre-school education programme

To understand the quality of the pre-school education programme in Mizoram, both the SDEOs, headmasters and the parents were approached through interview. The SDEOs responded the questions on whether the state government was taking enough steps for the quality of pre-school education and whether they themselves had taken steps for the quality improvement of pre-school education in the state. The parents were asked about their opinion on the current system of pre-school education in terms of quality.

4.1.3.1. Opinion of SDEOs on steps taken by the state government for quality pre-school.

Table 4.5. Opinion of SDEOs on steps taken by the state government for quality pre-school.

Sl. No.	Items	No. of SDEOs	Percentage
1.	Yes	0	0.00%
2.	No	5	100.00%

A glance at Table 4.5 shows that 100 percent of the officers stated that the steps taken by the state government for the improvement of pre-school education programme in the primary schools was not enough.

4.1.3.2. Steps taken by the SDEOs for quality improvement of pre-school.

Table 4.6. Steps taken by the SDEOs for quality improvement of pre-school.

Sl. No.	Items	No. of SDEOs	Percentage
1.	Yes	2	40.00%
2.	No	3	60.00%

As shown in Table 4.6, only 40 percent of the officers could say that steps were taken by them. The remaining 60 percent did not make specific initiatives to promote pre-school education in primary schools. However, this did not mean that they were not aware of the importance of pre-school education. During the

interactions with the officers, they proposed for remediation of the pre-schools which included informing higher authorities about the teacher shortage, a lack of teacher training, and inadequate infrastructure. One officer emphasised the importance of pre-school education and the critical responsibilities that teachers and parents played during these formative years. All the officers emphasised the need of laying a solid educational foundation in the early years so that children could realise their maximum potential.

In the interviews, the officers were requested to provide suggestions for the improvement of pre-school education programme in the state and the following suggestions were made by them:

1. The government must take steps so that all the primary schools have a pre-school or nursery class and funds for infrastructure and facilities should also be provided.
2. Recruitment of separate qualified teachers specially trained in pre-schools and continuing professional development be made mandatory. Not only examinations and interview should be used as a means for selection of candidates for recruitment of teachers but practice teaching should be included and those who have a passion for teaching should be identified.
3. Educating and spreading awareness for the public on pre-school education.
4. Besides mid-day meal for the children, provision for food supplements and vitamins should be made.

4.1.3.3. Opinion of parents on the quality of pre-school education programme

Table 4.7. Opinion of parents on the quality of pre-school education programme

Sl. No.	Types of responses	No of parents	Percentage
1.	Good	72	48.00%
2.	Somewhat good/moderate	50	33.33%
3.	Not good	28	18.67%

An analysis of Table 4.7 showed that 48.00 percent of the parents felt the quality of the pre-school program was good, 33.33 percent of them thought that it was somewhat good and 18.67 percent said that the pre-school education provided in the schools were not good. Reasons for not good responses included the need for trained teachers at the pre-school stage, schools being too competitive and work load being burdensome for children, favouritism on the part of the teachers, too much home assignments and lack of teaching learning materials.

4.1.3.4. Opinion of headmasters on quality of pre-school education

Table 4.8. Opinion of headmasters on quality of pre-school education

Sl. No.	Items	No. of Headmasters	Percentage
1.	Low	0	0.00%
2.	Medium	27	81.82%
3.	High	6	18.18%
	Total	33	100%

A cursory glance at Table 4.8 showed that the majority of the headmasters i.e., 81.82 percent felt the quality of the pre-school education in their schools was medium and only 18.18 percent of the headmasters considered the pre-school education programme in their school was of high quality. The reasons behind medium quality were given as follows:

- i) Unavailability of proper study materials like textbooks and no prescribed curriculum for the pre-school section.
- ii) Due to dearth of teachers, it was difficult for the school to manage the different activities that was required for pre-school children.
- iii) Lack of proper infrastructure and play materials and enough outdoor play space and renovation of the playground.
- iv) More dedication and commitment on the part of the teachers was required.
- v) Lack of proper training of the teachers on early childhood education.
- vi) Lack of parental support and learning environment at home.
- vii) Lack of spacious classroom for indoor activities.
- viii) Irregular attendance on the part of the children.

- ix) Separate cadre for pre-school teachers was not in place and recruitment of teachers particularly for the pre-school sections was not present which caused difficulty in the management of the school.

Discussion: The SDEOs expressed in the interview that enough funds were not allocated for the improvement of pre-schools in terms of training of teachers, infrastructure facilities and teaching learning materials. There was a feeling that the state government did not lay profound emphasis on the pre-school and elementary education as a whole and that its significance and importance was not recognised and acknowledged which was reflected in the recruitment of teachers and the system of transfer and posting. Some also expressed that those in the higher authority, were not giving education a priority. They also mentioned that pre-school education was neglected due to lack of awareness of its nature and aims and objectives; teachers with the lowest educational qualification or the most inexperienced were often entrusted to take care of the pre-school section. Wadhwas, et.al. (2019) in their analysis of the India Early Childhood Education Impact (IECEI) data revealed the differences across states and suggested implementation of policies and programmes in the state had the probability to impact both government and private sectors of early childhood care and education. Therefore, if the state government took significant and effective measures, substantial improvements were likely to be observed.

From the table 4.6, it could be seen that efforts on the part of the SDEOs for the improvement of pre-school education programmes were quite low. However, the suggestions made by them needed attention. With the implementation of NIPUN BHARAT which was an initiative born under the NEP 2020, there were steps taken for government primary schools so that pre-school programmes called Balvatika could be in place. As on March 2025, the number of government primary schools having pre-school sections was 597 according to the Samagra Shiksha Mizoram data. These schools were supported with a sum of Rs. 30,000.00 for management of Balvatika. The mid-day meal scheme had also been expanded to the pre-school sections solving the problems the primary schools used to face before the

implementation of NEP 2020. However, awareness generation for parents and the general public was an area that needs to be addressed.

Looking at the opinions of the parents who felt that the pre-school education programme was not good, their statements deserved attention. The same problem was found in the study conducted by Mohite and Bhatt (2008) in Gujarat wherein they found that the pre-school education in private and public nursery schools was largely a downward extension of the primary education curriculum with teachers having no training in ECCE. The need for professional development of teachers was also advocated by Care and Rao (2012) in their study on the scenario of ECCE in India. A similar issue in Mizoram was also found in the study conducted by Chuango (2001) and Lalsangliani (2007) in Aizawl wherein both mentioned that focus on the teaching of 3Rs was prevalent.

The issues and challenges pointed out by the headmasters were inavailability of proper study materials, dearth of teachers, lack of proper infrastructure and play materials, lack of proper training and lack of dedication of the teachers, lack of parental support and learning environment at home and others. These factors needed to be addressed for quality improvement in the pre-school education programme. Funds needed to be allocated to solve these problems and required immediate attention. To address such problems, research findings of Rhee (2007) also mentioned that the Korean government had increased the budget allocation twenty-fold to improve the physical environment of childcare facilities. Barnett and Frede (2010) also advocated for universal access, quality standards and continuous improvement suggesting for various funding mechanisms to ensure accessibility and high-quality programmes including support for families.

Conclusion: The pre-school education in Mizoram faced various challenges in areas like allocation of funds and resources, awareness about the nature of pre-school education among parents, and quality improvements in pedagogy and professional development of teachers. The government initiatives like NIPUN Bharat and Balvatika aided in making step by step improvements, however, to achieve quality pre-school education, funding, training of teachers, and community awareness needed to be in place. By promoting a system which included stakeholders like

teachers, parents, and policymakers, Mizoram could move forward in achieving better learning outcomes for young children in the system. Attaining access cannot be enough, but the state should take steps towards achieving a genuine and high standard pre-school education that effectively prepared young children for life. Awareness generation about the critical role of pre-school and promoting parental participation was only beneficial but essential for the overall educational landscape of Mizoram.

Objective 2. Analysis of Curriculum followed in the Pre-school Education Programme in the Government Primary Schools

Objective 2.1. Pre-school curriculum published by SCERT

4.2.0 Analysis and Interpretation of the Curriculum followed in the Pre-school Education Programme in the Government Primary Schools

4.2.1 Pre-school Curriculum published by the SCERT in 2009

For effective and successful implementation of quality ECCE, the importance of a profound curriculum is a necessity that cannot be denied. To make sure all children develop optimally, a well-planned curriculum design is needed for ensuring that core areas of learning are covered catering to the developmental needs of young children. Position Paper on National Focus Group on ECCE mentioned that to achieve the aims and objectives of ECCE, the curriculum should be (NCERT, 2006) as mentioned below:

1. Developmentally appropriate, activity-based, and related to the child's needs, interests, and abilities,
2. An integrated set of experiences to foster holistic growth and development in all domains, such as health and well-being, and cognitive, physical, social, emotional, and language development through an interlinked approach,
3. Flexible enough to suit the diverse social, cultural, economic, and linguistic contexts of our country, as well as adaptable enough to suit individual differences among children,

4. Able to help the child to adjust to the routines of primary school as well as to the demands of more formal teaching (NCERT, 2006).

The above-mentioned criteria from NCERT, New Delhi (2006) worked as parameters to analyze the curriculum. Certain government bodies have been assigned the responsibility of designing and formulating curriculum frameworks to guide educational institutions with regard to content, pedagogy and outcomes of the curriculum for a particular grade and area of study (IGNOU, 2021). On the national level, exemplar curriculum frameworks had been developed by certain agencies like Ministry of Women and Child Development (MWCD, 2013) and the NCERT, 2005. NCERT prepared the National Curriculum Framework 2005 (NCF, 2005) which provided the framework for curriculum development and teaching practices for school education programmes in India. Regarding ECCE, the framework emphasized that provision of care, opportunities and experiences should be available for young children so that they would develop holistically in all domains like physical, cognitive, social and emotional. It regarded ECCE as a programme for the preparation of young children for formal education. It also supported the pedagogy of play and age-appropriate curriculum suitable for young learners. National Early Childhood Care and Education Curriculum Framework (2013) was a remarkable document aiming for the promotion of quality early education in the whole of India. The document envisioned for providing children from birth to pre-school years with early stimulation and quality experiential learning and emphasized on the holistic development of children. It also advocated for the creation of a cohesive learning environment and provide need-based efforts as per the child's situational and circumstantial requirements. The document strongly recommended the participation of parents, family and the community in assuring a standard and quality ECCE.

In Mizoram, the Government had taken the initiative of forming an Inter-Departmental Co-ordination Committee for the implementation of ECCE in 2009 (Government of Mizoram, 2009). To promote quality and uniformity in the education of children under 6 years of age, the committee decided that a common curriculum be followed by all the different agencies taking care of such children in the state. Such agencies were the Social Welfare Department, State Council Welfare Board,

State Council of Child Welfare, SSA, Private English Medium Schools, and stand-alone pre-schools. Hence, a pre-school curriculum was developed in 2009 to be followed by all these agencies.

4.2.1.1. Chapter wise analysis of Pre-school Curriculum developed by Government of Mizoram

The first chapter of the pre-school curriculum, “Pre-School Naupangte Mizia” (characteristics of pre-school children) started with a description of the different age groups of children starting with the 3-year-olds, followed by 4-year-olds and 5-year-olds. In this chapter, a clear and brief nature of the child was presented with step-by-step developmental stages, what to be expected of them, their characteristics, the kind of traits they possess, and their mental and physical abilities. This chapter was an important aspect especially for those who were untrained in ECCE since it was mandatory to know the children they were dealing with and understand their developmental stage and psychology.

The second chapter “Pre-school Pawimawhna” (Importance of pre-school) stressed on the importance of pre-school and how a properly planned programme could help the children in the development of the physical, cognitive, and socio-emotional aspects and school readiness and the smooth transition from pre-school to formal schooling. In the past before, Mizo society sometimes viewed children as challenging, and there were instances where their needs were overlooked, a perspective that was eventually recognized as something to move away from. It also emphasized that formal schooling during these years was a waste of time and that we were creating a burden for them which could have a negative impact on the child in the later stages of life and schooling. It also stressed that the programme should be play-oriented and that it should not be geared towards examination. Home works, textbooks and class tests should also be out of the picture.

The third chapter “Method Hman Tur” (Methods to be used), reflected on the importance of play way method and activity-based learning. It also highlighted the kinds of activities to be undertaken like discussion, story-telling, role-play, singing, dancing, activities using blocks, clay, flash cards, puzzles and beads, outdoor play,

sand, and water play, nature walks, coloring, and constructing play using different materials. It also highlighted the indoor teaching-learning materials and outdoor play materials that were required which would be easily available in the local context.

The fourth chapter “Evaluation” dealt with a brief explanation of the principles and aims of evaluation. It also mentioned about individual difference and the dangers of quantitative assessment, tests, and ranking at this stage. An exemplar assessment card was also given in the appendix to guide the teachers on how and what was to be assessed in the development of the child.

The fifth chapter “Curriculum” gave a broad objective of pre-school. It dealt with the psycho motor development - gross and fine muscle development and its importance. It gave a detailed explanation and the kinds of activities to be conducted in a table form also highlighting the outcomes of the activities. It highlighted the concept and importance of socio-emotional development and the kinds of activities to be conducted including the expected outcomes of the activities. A short description of personal development dealing with self-discipline, confidence, and taking care of oneself was stressed. Activities for such development were given in a tabular form with the objectives and expected outcomes of the activities. Cognitive development gave the importance for school readiness as a whole and gave separate description for reading readiness and pre-number concepts with the kinds of activities to be conducted for the development of such areas with the expected learning outcomes. The topic, environmental concept and creative expression dealt with the importance of using the five senses in learning, appreciation of beauty and aesthetic development and the kinds of activities to be undertaken.

The areas included in the exemplar assessment card were quite holistic and comprehensive addressing gross and small muscle development, socio-emotional development, cognitive and language development, pre-number and environmental concept and creative expression. It was in the form of a rating scale and was quite convenient for the teacher. However, space for giving a detailed report or teacher’s comments was not given.

Pre-number Concept		Stack	Pre first	Zero and	One to	Two to	Three and	Four to
1	Taking one thing from a group e.g. chips, flowers, many buttons, apples, etc. many, less than etc. a little							
2	Using more than taking from one-to, two-less, four-taking, adding more, taking more etc. a little							
3	Subtraction, two-less, three-one, etc. etc. less and a little							
4	That numbers less a lot, enough or less to a lot more							
5	Number more to a lot, one, all, three							
6	Number more, all, a lot, all, three							
7	Number more, all, a lot, a little							
8	Number 1, 2, 3, a number, a lot, three							
9	Number 1, 2, 3, a lot, three, three							
Environmental Concept and Creative Expression		Sketch	Pre first	Zero and	One to	Two to	Three and	Four to
1	That a child is like a							
2	Some more children and etc.							
3	Children and a							
4	Child and a							
5	Child and a							
6	Child and a							
7	Child and a							
8	Child and a							
9	Child and a							

	True	Yes, often	Socially acceptable	Think to	Others	Themselves	Others
1. I think I am not very smart or very funny							
2. I often feel like I am a stranger in a strange land							
3. I feel like I am not really myself							
4. I feel like I am not really myself							
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The Pre-school Curriculum developed by the SCERT was published in 2009.

Though the curriculum was meant to maintain uniformity in the pre-schools, it did not seem to have much impact in the areas where it was intended. Maintenance of quality control, standards and monitoring was an urgent need in Mizoram. Considering the importance of ECCE, the government had much work to do and must take initiative in filling up the loop holes through research findings, maintain standards and teacher trainings. It was desirable that a new curriculum or guidelines for pre-schools be developed. Some of the aspects that were not covered were principles of programme planning and practices including theme-based approach, creating an early learning environment like setting up of classrooms, displays on the walls, furniture and mats, essential learning and play materials for outdoor and indoor and partnership with the parents and the community which were included in National Early Childhood Care and Education Curriculum Framework (MWCD, 2013) and Pre-school Curriculum (NCERT, 2019) .

In evaluating the curriculum's effectiveness, it was noteworthy that it aligned with principles of developmentally appropriate practice. The focus on activity-based learning methods further enhanced its suitability by ensuring that educational experiences were engaging and relevant to the children's unique needs, interests, and abilities, as dictated by their developmental stages.

With respect to the second parameter, a cohesive and interconnected set of experiences for fostering and ensuring all-inclusive growth and development in developmental domains like health and well-being, cognitive and language development, physical development and socio- emotional development through an intertwined method, the curriculum addressed all these aspects but the number of activities incorporated into the programme was somewhat limited. While the curriculum in question successfully encompassed these critical domains, it fell short in terms of the quantity of activities provided, which could significantly impact the overall effectiveness of holistic education.

In terms of the third parameter, enough flexibility to meet the needs of varied social and economic, cultural, traditions and linguistic contexts of our country and

the flexibility to suit individual differences among children, the curriculum might lack in the linguistic context. It demonstrated significant limitations in its linguistic accessibility, as it was available only in the Mizo language. This might led to challenges for stakeholders from various regions where several distinct dialects were spoken, particularly in the Siaha and Lawngtlai districts, as well as in areas predominantly occupied by the Hmar, Chakma and Bru tribes. Therefore, it can be said that there existed a communication barrier and might not accommodate effectively to the linguistic needs of other communities.

On the fourth parameter, enabling children to adjust and meet the requirements of formal teaching, it was important to emphasize that the number of activities included in the programme was somewhat limited. While this limitation could undermine the programme's potential impact, the approach itself was strategically designed to prepare children for the essential competencies required for successful school readiness prior to their entry into primary education.

To provide quality pre-school education, the curriculum had to address the interconnected domains of development, which includes physical and motor skills, language, cognitive abilities, socio-emotional development, and creative and aesthetic appreciation (Government of India, 2013). This would be achieved through an integrated, play-based, experiential, and child-friendly approach that supported all-round development. The plan for implementation would highlight key principles for programme planning, roles of parents, and teachers. Necessary outdoor and indoor play materials and assessment procedures may also be included. An enabling and nurturing environment, free from corporal punishment, would also be ensured to foster growth and well-being (Government of India, 2013).

Objective 2.2. Books prescribed and used

4.2.2. Analysis of Pre-school study materials

Books prescribed and used: To achieve learning outcomes and curricular goals, the most important item were the study materials. This was the reason why analysis of pre-school textbooks prescribed by the state government was required. Identifying the strengths and weaknesses and its effectiveness were imperative.

SCERT had developed textbooks like First Step I, for KG-I, Pre-Number I for KG-I, First Step II for KG-II, and Pre-number II for KG-II to support pre-school sections in government primary schools. Analysis of these documents could provide information about its alignment with the curricular goals and help in the improvement of teaching and children's achievement. The SCERT also developed the *Pre-school Sourcebook* which included various activities designed to foster different developmental domains. Some of these activities were referenced in the teacher's notes within the textbooks. However, this was not made compulsory, hence was not analyzed. The textbooks developed by SCERT, Mizoram were analyzed on 3 parameters.

4.2.2.1. Result and Analysis of First Step 1

The main aim of First Step I was to develop the gross and fine motor skills, language, and socio-emotional domains of children. Therefore, the analysis of these textbooks focused on how well they addressed these developmental areas.

Basic details about the book:

- i) The textbook titled 'First Step I' was prescribed for Kg-I by the SCERT, Mizoram
- ii) The book analyzed was published by SCERT, Mizoram in the year 2016 (2nd edition).
- iii) The book had 83 pages and contained 12 lessons.
- iv) A total of nineteen Teacher's Note was given to guide teachers in executing the lessons efficiently and also for the integration of activities with the Pre-school Sourcebook designed to complement and strengthen classroom activities.
- v) Lesson 1, titled "Let's find out," focussed on helping children to introduce themselves and share basic personal information with their friends. The lesson intended to facilitate simple communication skills.
- vi) Lesson 2 and 3, entitled "Let's Talk," and 'Who am I?' were planned to assist children in identification and naming objects in pictures and discuss what

they knew about those objects. This lesson would develop their vocabulary and communication skills by encouraging them to talk about familiar things.

- vi) Lesson 4, called 'Odd One Out,' aimed to improve the ability to visually distinguish differences.
- v) Lesson 5, entitled 'Beautiful Colours,' was created to enhance both visual discrimination and the identification of colours.
- vi) Lesson 6, named 'Riddles', was designed to develop children's cognitive abilities and also included tracing activities.
- vii) Lesson 7, entitled 'What am I doing?', were on action words for expanding vocabulary through active participation. Tracing activities were also incorporated.
- vii) Lesson 8, named 'Directions,' focussed on inculcating a sense of direction and the ability to follow instructions and tracing activities were also included.
- viii) Lesson 9 and 10, 'Let us Read' and 'Picture with words', was designed to enrich vocabulary and introduce words at the same time nurturing the concept of relationship between pictures and words. The lesson focussed on connections between vocabulary and picture-word.
- ix) Lesson 11, 'Let us Write', combined pictures with words through alphabet tracing at the same time reinforcing previously learned words.
- x) Lesson 12, 'Trace and Tell,' focussed on tracing capital letters accompanied by images. In this lesson, the name of the image started with the corresponding traced alphabet.

4.2.2.2. Parameter based Analysis:

Table 4.9. Parameter based Analysis for Kg I textbook First Step 1

SN	Parameters	Descriptions
1.	Physical Aspect	- The text was formatted in a 24-point Times New Roman font, with variations in font size used for instructions and activities. For the activities Calibri font with size 100 was used. - The images were visually appealing, being clear, large, and attractive, effectively capturing attention. - The print quality was satisfactory - The paper quality was unsuitable as it was too thin for children to write and colour.
2.	Teacher's Note given in the book	Teacher's note (19 times) was present to guide the teachers in effective transaction of the lessons. Activities to be conducted from the Pre-school Sourcebook were also given, which was designed to complement and reinforce classroom activities.
3.	Activities	The activities consisted of the following: i) Conversations ii) Action songs iii) Picture reading iv) Discussion v) Visual discrimination vi) Colouring vii) Naming colours viii) Matching ix) Riddles x) Tracing dotted lines xi) Pictures with actions xii) Sense of directions xiii) Pictures with words for familiarity with alphabets xiv) Identifying words xv) Tracing alphabets (Upper case letters) xvi) Matching pictures and words xvii) Identification of alphabets (Upper case letters)

Discussion for Kg I textbook First Step 1: First Step 1 was developed for children in KG-I classes. Overall, the book aimed to introduce children to print, the convention of print, fine motor skill development and expression through speaking. The layout of the textbook was quite satisfactory and attractive. The fonts were also large and

comfortable for children to focus. The illustrations were also attractive for children and seemed like a picture book and, the pictures given were also carefully selected so that the child would be able to relate to them. To enhance visual appeal, it would be beneficial to use illustrations from a single artist, ensuring a consistent style, rather than collecting images from various sources.

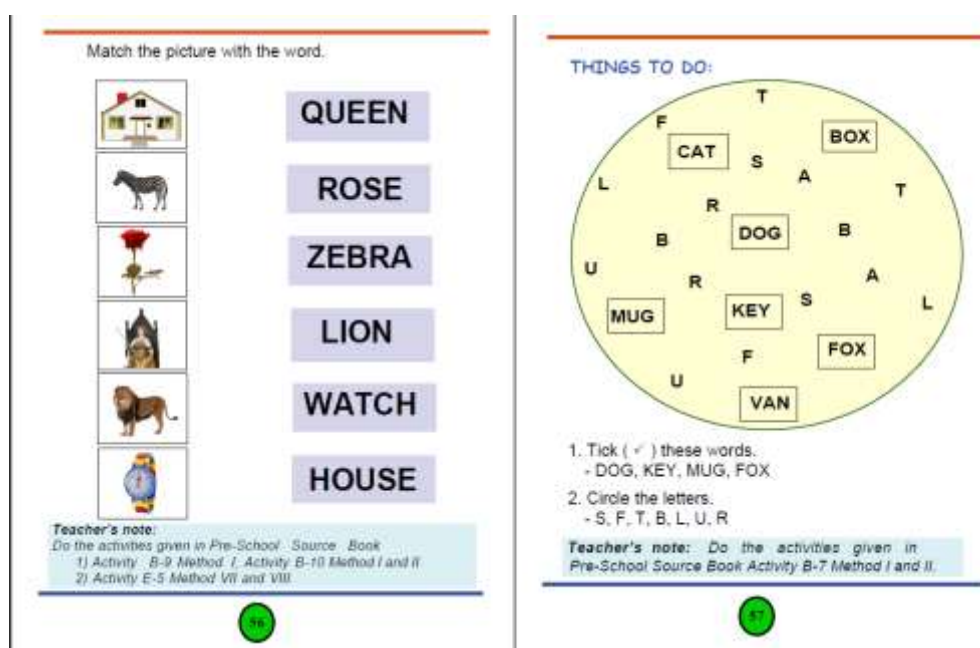


Figure 4.2. Matching pictures and words and identification of words

The exercises given were designed in such a way that the child would have hands on experiences, in other words activity-based learning was used as far as possible. The physical activities given in the study materials were also designed to promote both gross motor and social development by engaging children in group work, conversations and guided play. There were also plenty of activities for fine motor development like tracing dotted lines, curves and pictures, colouring and tracing alphabets.

The study materials also addressed cognitive development through activities like matching, riddles, odd one out, and sense of directions. Language development was also addressed through print awareness such as convention of print, sound-letter

combination and reading and writing readiness to promote effective communication. Activities like action words with pictures, identifying words and associating it with pictures, matching pictures with words, circling given words from a cluster of alphabets, pointing at letters from alphabet tree and trace and tell. These activities came before actually introducing the child to writing alphabets so that the child would be able to identify each letters first.

THINGS TO DO :

1. Sing with me:
Clap your hands
Clap your hands
Listen to the music
And clap your hands.
2. Let's do some exercise:
 - 1) Stamp your feet.
 - 2) Jump up high.
 - 3) Stand on tiptoe.



3. Can you do like them?








Teacher's note

- 1) This lesson is to help develop their large muscle. The activities may be repeated as often as possible.
- 2) Let them hold their friend's shoulder and make them walk to the headmaster's room; toilet, kitchen etc.

Figure 4.3. Action words and pictures for gross motor development and following instructions

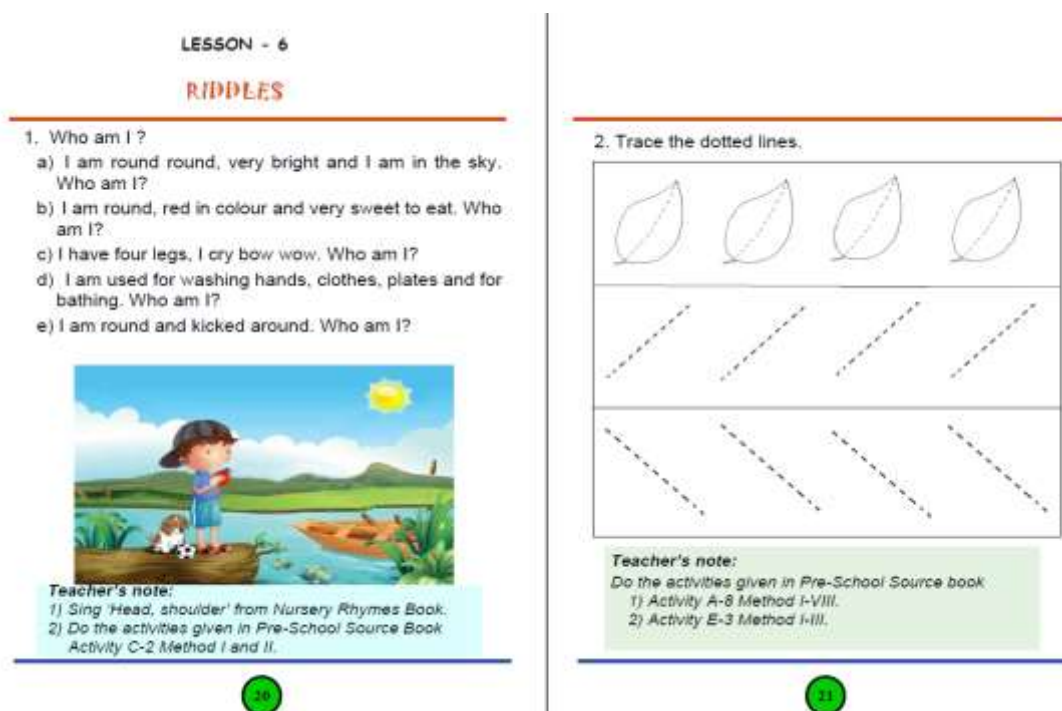


Figure 4.4. Riddles and tracing activities for fine motor development

The textbook was analyzed to know the extent to which the books addressed developmental areas, including gross and fine motor skills, language development, and social-emotional development. Though the activities actively engaged these developmental domains, incorporating additional activities was suggested to improve the quality. Uniform picture design solely for the book could be more helpful for the children. Reviewing the book within these contexts could make it more comprehensive and beneficial for children.

4.2.2.2. Result and Analysis of First Step 2

The primary goal of First Step 2 was to enhance children's physical, cognitive, and socio-emotional development. Consequently, the textbook analysis assessed how effectively it addressed these developmental areas. The structure of each lesson, which was organized around particular themes, suggested that a theme-based approach was used to develop the book. The book increased complexity compared to 'First Step 1' which suggested a targeted effort to better prepare

children for the demands of primary school and improve their overall school readiness.

Basic details about the book:

- i) The textbook entitled 'First Step 2' was prescribed for Kg-II by SCERT, Mizoram
- ii) The book analyzed was published by SCERT, Mizoram in the year 2016 (2nd edition).
- iii) The book had 103 pages and consisted of 15 lessons.
- iv) Twelve Teacher's Note was given to guide teachers in executing the lessons efficiently. Integration of activities with the Pre-school Sourcebook was suggested to complement and support classroom activities.
- v) Lesson 1 called 'My Body,' tried to help children identify body parts, and inculcate the importance of cleanliness and included hands on activities and group singing about maintaining hygiene.
- vi) Lesson 2, titled 'Our Family,' was about the concept of family and included discussion activities on family members. It aimed in enhancing communication skills and enrich vocabulary.
- vii) Lesson 3, named 'Our domestic animals,' is about identification of domestic animals and associating them with words and identification of lowercase letters.
- viii) Lesson 4, "What We Eat and Drink," was about the kinds of food we eat at the same time enhancing picture and word association, development of fine motor skills and communication skills.
- ix) Lesson 5, "Vegetables," dealt about identification of the different kinds of vegetables and associating them with given words. Activities for visual discrimination was also included.
- x) Lesson 6, "Colours," was concerned about improving visual discrimination skills for reading readiness. Activities for development of identifying words and development of fine motor skills were also part of the lesson.
- xi) Lesson 7, "Our Village," tried to help children be familiar with their immediate environment and community. Using this theme, it also aimed to

improve children's communication skills, fine motor skills and expressing feelings through drawing and colouring.

- xii) Lesson 8, 'In the Kitchen,' aimed to enrich children's vocabulary by using action words. It also enhanced development of fine motor skills and promoted awareness about the home environment especially with terms related with kitchen activities.
- xiii) Lesson 9, 'Fruits,' introduced children to different kinds of local fruits and associate the pictures with words. It also included tracing activities.
- xiv) Lesson 10, 'Birds,' dealt with the different types of birds and associate the pictures with words. The lesson also included tracing activities.
- xv) Lesson 11, 'Wild animals,' was about associating pictures and words using wild animals and tracing activities were also included.
- xvi) Lesson 12, 'Flowers,' was about identifying different local flowers and tracing words for alphabet identification. It also included colouring activity for fine motor development and activities for visual discrimination.
- xvii) Lesson 13 "Things I Wear," was about the kinds of clothes we wear depending on the seasons. The lesson combined activities for listening skills like following instructions. Tracing and colouring activities for fine motor development and picture and word association activities were also included.
- xviii) Lesson 14, 'Transport' intended to instill awareness about different kinds of transport. It included engaging activities like conversation, gross motor development, socio emotional development, classification, tracing and writing activities.
- xix) Lesson 15, 'Water,' was a thematic approach inculcating few aspects of water like uses of water, sources of water and awareness about water pollution. Colouring activities and tracing words were also included for development of fine motor skills.

Table 4.10. Parameter based Analysis for Kg II textbook First Step 2

SN	Parameters	Descriptions
1.	Physical Aspect	- The text was formatted in a 24-point Times New Roman font, with variations in font size used for instructions and activities. For the activities Calibri font with size 100 was used. - The images were visually appealing, being clear, large, and attractive, effectively capturing attention. - The print quality was satisfactory. - The paper quality was unsuitable as it was too thin for children to write and colour.
2	Teacher's Note	Teacher's note (12 times) was present to guide the teachers in effective transaction of the lessons. Activities to be conducted from the Pre-school Sourcebook were also given, which was designed to complement and reinforce classroom activities.
3.	Activities	The activities consisted of the following: i) Conversations ii) Action songs iii) Picture reading iv) Discussion v) Visual discrimination vi) Colouring vii) Singing together viii) Matching ix) Completing simple words with the missing letters x) Tracing dotted lines xi) Circling given words xii) Classification activity xiii) Pictures with words for familiarity with alphabets xiv) Identifying words xv) Tracing alphabets (lowercase letters) xvi) Matching pictures and words xvii) Identification of alphabets (lowercase letters)

Discussion for Kg II textbook First Step 2: First Step 2 was an age and culturally appropriate material designed for children reading in KG-II. Its objective was to familiarize children to print and understand print conventions, enhance pre-reading skills by practising lower-case alphabets by reading and writing. It also aimed to improve writing skills through fine motor activities and also giving opportunities for speaking skills. The layout was satisfactory and visually appealing at the same time. The fonts used were large and easy for children to read, contributing to their focus and comprehension and the illustrations included were captivating for children. The selected images were thoughtfully chosen to ensure that children could easily connect with them. The visuals included pictures and name of things covering various themes which were related to the children's immediate environment like domestic and wild animals, vegetables, food, houses and buildings, utensils used in the kitchen, fruits, birds, flowers, clothes we wear, and modes of transport. However, there were also few images like pictures of panda and a zebra, a ship and train which were unfamiliar in the context of Mizoram. It would be more appealing and consistent if the pictures were drawn by a single artist.

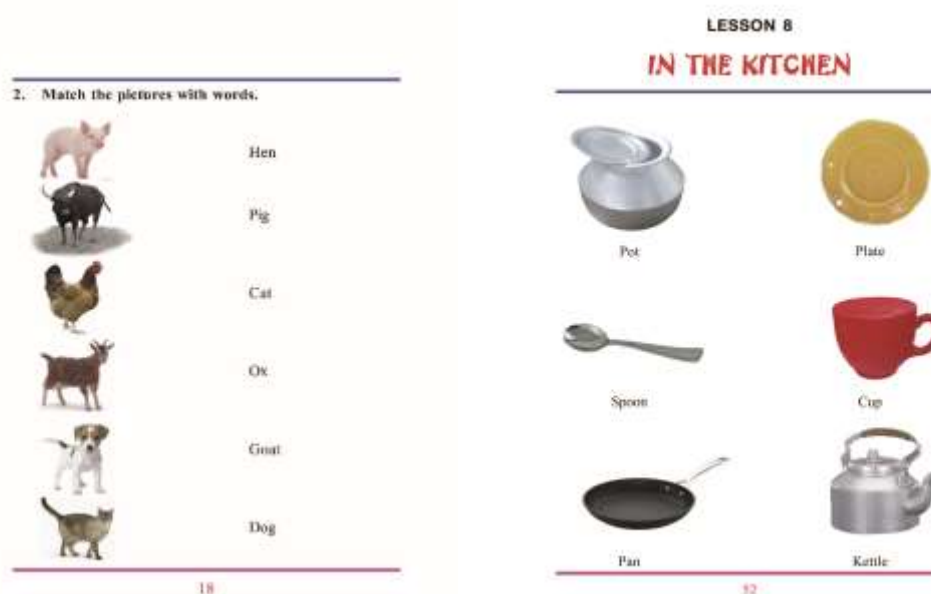


Figure 4.5. Activities for associating pictures with words

The exercises given were designed in such a way that the child would have hands on experiences, in other words activity-based learning was used as far as possible. When associating pictures with the words, the child would be familiar with the letters before actually writing the alphabets which would help them in alphabet-sound association.

The physical activities given in the study materials were also designed to promote both gross motor and social development by engaging children in group work, conversations and guided play. There were also plenty of activities for fine motor development like tracing dotted lines, curves and pictures, colouring and tracing alphabets.

Language development was also addressed to promote effective communication, print awareness such as sound-letter combination and reading and writing readiness. Activities like action words with pictures, identifying words and associating it with pictures, matching pictures with words, circling given words from a cluster of alphabets, filling in missing letters in given words, and trace and tell. Tracing letters (lower case) were given from the first lesson as children were expected to have grasped the formation of letters in the previous class.

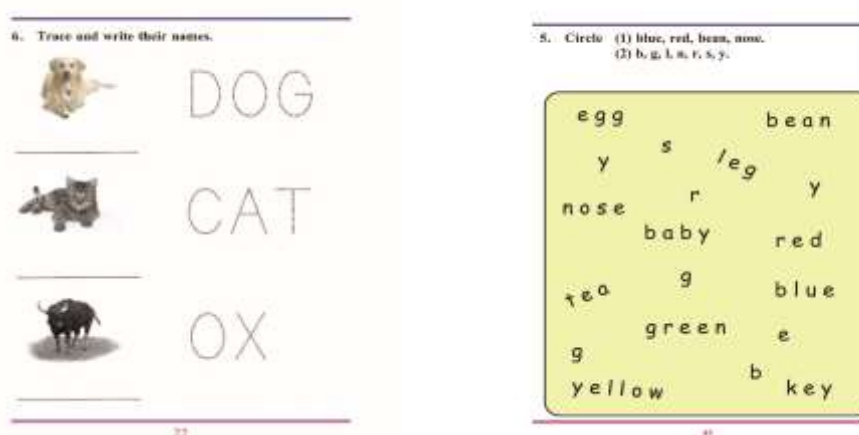


Figure 4.6. Activities for Tracing alphabets and circling given words from a cluster of alphabets.

To conclude, it can be said that both "First Step 1" and "First Step 2" contained culture and age-appropriate content with developmentally appropriate activities for young children. The activities are joyful and useful at the same time. Using play way method, the study materials would nurture the different developmental domains effectively.

4.2.2.3. Result and Analysis of Pre- Number 1

The primary goal of Pre-Number 1 was to inculcate prenumber concepts for children. The structure of each lesson contained different activities to help children understand the concept of numbers and how it works. This needed to be done before introducing the children to writing and reading of numbers. The book was intended to prepare children for number work and mathematical thinking.

Basic details about the book:

- i) The textbook titled 'Pre-Number 1' was prescribed for Kg-I by the SCERT, Mizoram
- ii) The book analyzed was published by SCERT, Mizoram in the year 2016 (2nd edition).
- iii) There were 96 pages in the book and consisted of 15 lessons.
- iv) Eight Teacher's Note were also included for the purpose of guiding teachers for effective delivery of lessons. The note highlighted ways in which the lesson could be integrated with the activities from Pre-school Sourcebook which was developed to complement the play-based activities.
- v) Lesson 1 'Big and Small,' was designed for inculcating the concept of comparison of big and small. Activities like colouring and tracing were included to make it easier for children to grasp such concepts which also at the same time foster fine motor development.
- vi) Lesson 2, titled 'Long and short,' was created to help children understand about the concept of long and short and measurement. The lesson also included matching and choosing that was shorter and longer.
- vii) Lesson 3, entitled 'Tall and short,' sought to inculcate awareness of the concept of length, and measurement. The lesson also included tracing dotted

lines and colouring for fine motor skills. At the same time the colouring activities follow a certain rule which required colouring from biggest to smallest. This also inculcated concept of ascending and descending order.

- viii) Lesson 4, titled 'Thick and thin' was designed to instill knowledge concept of comparison and differentiating thick and thin.
- ix) Lesson 5 'Front and back' was a prenumber concept activity aiming to inculcate the concept of front, middle and back side, it also included concept of seriation and sequencing.
- x) Lesson 6 'Top and Bottom' was a prenumber concept activity aiming to inculcate the concept of spatial understanding through concepts like top middle and bottom. Colouring activities like colouring boxes as per the instructions given in the book was also included.
- xi) Lesson 7 'More or less' was a concept about quantity and comparing things which were less and more. The activities given was to circle which items were less or more as per instructions.
- xii) Lesson 8 'Equal' was a prenumber concept about equivalence and the activities included choosing equal numbers and associating pictures and numbers.
- xiii) Lesson 9 'Shapes' was to acquaint children with different kinds of shapes so that children would have awareness of things around them. Activities like tracing dotted lines, matching shapes and colouring shapes with prescribed colours. It also included activity for visual discrimination.
- xiv) Lesson 10 'Pattern' was an important concept of early math skills and nurtures reasoning skills. It also included tracing and writing activities for fine motor development. This would help children in writing numbers.
- xv) Lesson 11 'Dominos' was about fostering reasoning and mathematical thinking in children and included arranging different kinds of dominos.
- xvi) Lesson 12 'Number 1-3' was about reading and writing of numbers. It also included counting activities with pictures for inculcating the knowledge of number value. Children were required to trace the numbers with their fingers and pencils for number identification. Activities included matching numbers with pictures having the same quantity.

- xvii) Lesson 13, "Numbers 4-6," dealt with reading and writing numbers. The lesson also incorporated counting activities with pictures for inculcating the knowledge of number value. Children were required to trace the numbers with their fingers and pencils for number identification. Activities comprised of matching numbers with pictures which were of the same quantity, arranging number dominos and colouring.
- xviii) Lesson 14, 'Numbers 7-9' centered on reading and writing numbers in figures. It also included activities for counting using pictures and tracing numbers with fingers and associating the number of pencils with number figures. Activities like matching numbers with pictures which were of the same quantity, counting and writing the number of pictures counted were also included.
- xix) Lesson 15, titled 'Number 10,' focused on reading and writing numbers. The lesson also incorporated counting activities with pictures for inculcating the knowledge of number value. Activities like matching pictures with numbers, counting and writing the number of items, circling specified numbers, and arranging dominoes.

Table 4.11. Parameter based Analysis for Kg I textbook Pre-Number 1

SN	Parameters	Descriptions
1.	Physical Aspect	- The text was formatted in a 20-point Comic Sans font. - The images were visually appealing, being clear, large, and attractive, effectively capturing attention. - The print quality was satisfactory - The paper quality was unsuitable as it was too thin for children to write and colour.
2	Teacher's Note	Teacher's note (8 times) was present to guide the teachers in effective transaction of the lessons. Activities to be conducted from the Pre-school Sourcebook were also given, which was designed to complement and reinforce classroom activities.
3.	Activities	The activities consisted of the following: i) Tracing dotted lines ii) Colouring iii) Choosing which picture is big and small iv) Choosing which picture is longer and shorter v) Matching

SN	Parameters	Descriptions
		vi Choosing which picture is taller and shorter vii) Colouring from smaller to bigger viii) Tracing ix) Choosing which picture is thicker and thinner x) Identifying front, middle, back from pictures xi) Identifying top, middle and bottom from pictures xii) Look and tell xiii) Choosing which picture is less or more xiv) Identifying which is equal using pictures xv) Tracing dotted shapes xvi) Matching shapes xvii) Colouring shapes xviii) Visual discrimination xix) Identifying patterns xx) Arranging dominos xxi) Number identification xxii) Counting

Discussion for textbook Pre-Number 1 for KG I: Pre-number concept activities focussed on classification, categorizing, seriation, sequencing, and spatial understanding and knowing the difference in shapes, small and big, large and heavy, short and long, wide and narrow, thick and thin, tall or short, in and out and likewise. This way, children learn to observe the attributes of quality, quantity, and finally numbers. These concepts needed to be understood before they began learning to write and read numbers.

Pre-Number 1 textbook addressed pre-number concepts in a child-friendly and play-based approach. The textbook included concepts like big and small, long and short, tall and short, thick and thin, front and back, in and out, heavy and light, wide and narrow, empty and full, first and last, top and bottom, more or less, equal, shapes, patterns, dominoes, and learning numbers till 10. From understanding these concepts children would be able to understand mathematical skills like seriation, classification, categorization and sequencing. The activities were designed in a fun and interactive way.

The book's visuals were appealing to pre-school children, but the varying illustration styles impacted the consistency of the pictures. Employing a single artist

could create a more cohesive and visually appealing experience for children. Besides, the paper quality was insufficient for young children to comfortably engage in writing and coloring activities.

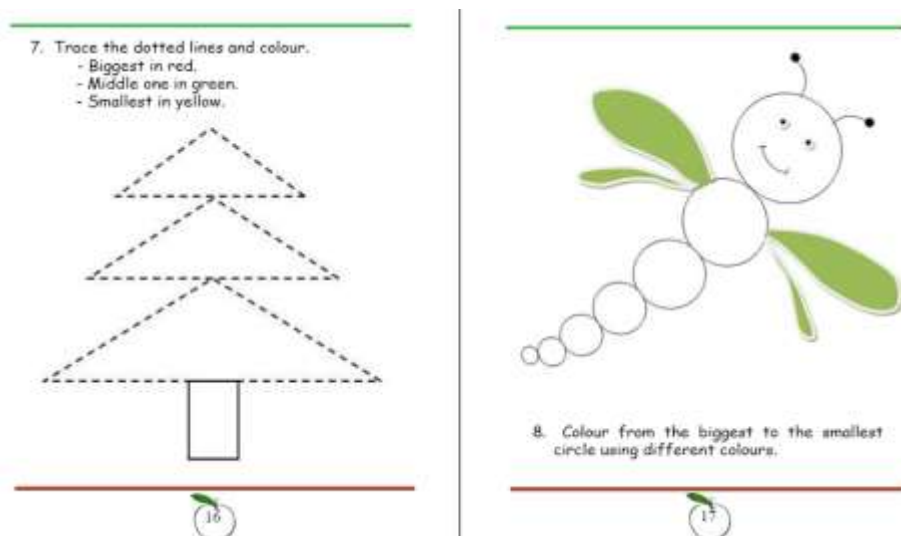


Figure 4.7. Concept of big and small and seriation.

For example, the child was asked to colour a caterpillar formed using circles from the smallest circle to the biggest circle, giving numbers according to the size of an apple and Christmas tree, counting and adding using pictures, matching objects with pictures, matching number of objects with number figures, circling smaller and bigger numbers, arranging in ascending orders, identification of numbers by circling given number, tracing the numbers and finally to writing numbers. There was a room for improvement in the writing and preparation of the book in terms of paper quality and consistency of the pictures used.

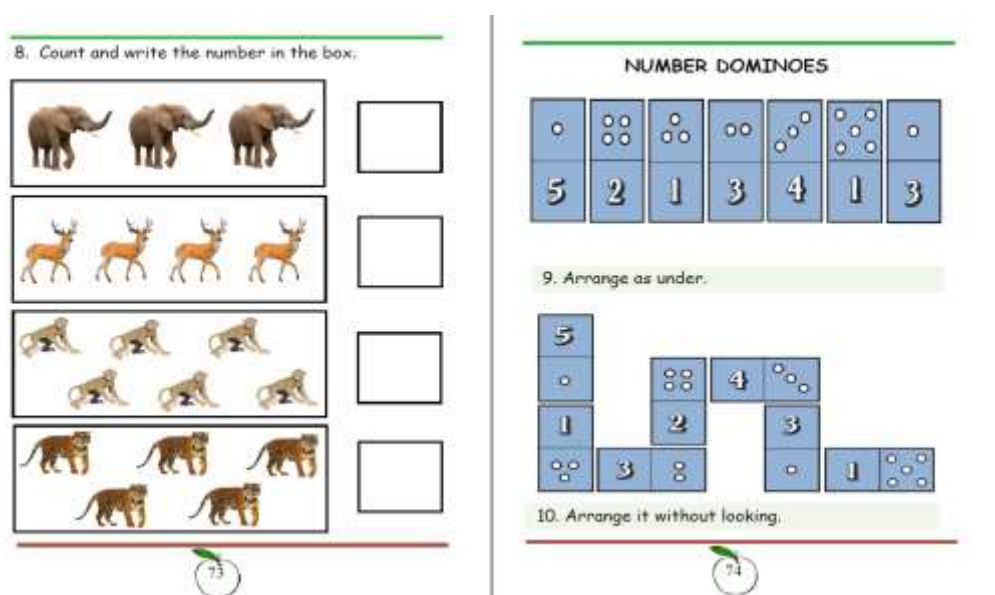


Figure 4.8. Counting and writing numbers and arranging dominos

Yet, the teachers might need proper training and guidebook on how to use the study materials and make use of the content resourcefully. A guidebook with structured guidance on using the textbook, pedagogical support, activity design, assessment and progress tracking may be required. The teachers might need insights into the cognitive abilities of young children and how to provide methods to support their learning effectively. Teachers needed to be aware about the individual differences and learning styles of children as this awareness impacted the process of assessment methods and monitoring of children's progress.

4.2.2.4. Result and Analysis of Pre- Number 2

The main aim of Pre-Number 2 was to inculcate children with pre-number and number concepts in young learners. The lessons were designed to blend in different activities to foster the understanding of numbers and related concepts. This would help children in tasks related to numbers in real life situations and develop mathematical thinking.

Basic details about the book:

- i) The textbook 'Pre-Number 2' was prescribed for Kg-II by SCERT, Mizoram
- ii) The book was published by SCERT, Mizoram in the year 2016 (2nd edition).
- iii) The book contained 108 pages and consisted of 17 lessons.

- iv) Two chapters had Teacher's Note for guidance of teachers in effective delivery of lessons.
- v) Lesson 1, 'In and out,' aimed to inculcate concept of inside and outside. The lesson also included activity on choosing inside and outside using pictures.
- vi) Lesson 2, titled 'Heavy and light,' was created to help children understand about the concept of heavy and light. This would help children understand the concept of measurement. The lesson also included activity on choosing heavy and light using pictures.
- vii) Lesson 3, titled 'Wide and narrow,' was designed to inculcate awareness of the concept of wide and narrow for spatial understanding. The lesson also included choosing between wide and narrow using pictures.
- viii) Lesson 4, titled 'Empty and full' was designed to instill knowledge about concept of comparison and differentiating empty and full.
- ix) Lesson 5, titled 'First and Last', was intended to familiarize children with the concept of first, middle and last. This lesson aimed to inculcate in children seriation and sequencing.
- x) Lesson 6 'Seriation' introduced children to arranging things in a specific order which would hone their skills for solving problems like ascending and descending order. The activities included arranging things from long to short, numbering from tall to short and thin to thick.
- xi) Lesson 7 'Number 1-4' was about writing numbers in figures and number value in which activities like tracing dotted numbers and counting numbers and matching with pictures of the same quantity were included.
- xii) Lesson 8 'Number 5-7,' was about writing numbers in figures and number value in which activities like tracing dotted numbers and counting numbers and matching with pictures of the same quantity were included.
- xiii) Lesson 9 '8-10,' was about writing numbers in figures and number value. Counting and writing numbers related to the given pictures and tracing of numbers with dots were also given.
- xiv) Lesson 10, 'How many?', centered on the concept of counting and writing numbers in figures. Activities like drawing pictures related to the given numbers and writing numbers 1 -10 in figures were also given.

- xv) Lesson 11, 'Matching,' included competency-based activities like matching pictures with the numbers given.
- xvi) Lesson 12, 'Counting,' mainly concentrated on counting of numbers. The activities included adding single digit numbers with 10 so that the pattern of numbers after 10 could be followed.
- xvii) Lesson 13, 'Write numbers 11-15' was about reading and writing numbers in figures. The lesson also incorporated counting activities with pictures for inculcating the knowledge of number value. Activities included adding numbers with the number 10 using both pictures and figures, matching objects with the corresponding numbers, and matching objects with corresponding number of objects.
- xviii) Lesson 14 'Write numbers 16-20' was about reading and writing numbers in figures. The lesson also incorporated counting activities with pictures for inculcating the knowledge of number value. Activities included adding numbers bigger than the number 10 using both pictures and figures, matching objects with the corresponding numbers, and matching objects with corresponding number of objects.
- xix) Lesson 15 'Learning numbers' aimed to inculcate number concept. Activities included seriation, identification of bigger and smaller numbers, ascending and descending order and writing numbers in between.
- xx) Lesson 16 'What comes before and after' was an activity for filling up blanks using numbers that came before or after a certain number.
- xxi) Lesson 17 'Number in words' was about writing numbers in words up to ten.. It was presented in a way that would be easier for children to understand and connect the words with figures. It included activities like spelling and writing figures against the number given in words. A short story where children were required to fill in the numbers related to the story with pictures was also given.

Table 4.12. Parameter based Analysis for Kg II textbook Pre-Number 2

SN	Parameters	Descriptions
1.	Physical Aspect	- The text was formatted in a 20-point Comic Sans font. - The images were visually appealing, being clear, large, and attractive, effectively capturing attention. - The print quality was satisfactory - The paper quality was unsuitable as it was too thin for children to write and colour.
2	Teacher's Note	Teacher's note (2 times) was present to guide the teachers in effective transaction of the lessons.
3.	Activities	The activities consisted of the following: i) Choosing pictures which was inside and outside ii) Choosing pictures which was heavy and light iii) Choosing which was wider and narrower iv) Choosing which picture which was empty and full v) Pointing who comes first and last vi) Giving numbers in accordance with height, length and thickness vii) Tracing number figures viii) Counting the number of pictures ix) Writing numbers from 1 -10 x) Matching numbers with pictures xi) Counting together number 10 and numbers not greater than 10 xii) Writing numbers from 11-20 xiii) Counting together number 10 and numbers greater than 10 xiv) Circling smaller numbers xv) Circling bigger numbers xvi) Arranging numbers in ascending order xvii) Arranging numbers in descending order - xviii) Writing numbers in between xix) Writing numbers that comes after a certain number not greater than 20 xx) Writing numbers that comes before a certain number not greater than 20 xxi) Writing numbers that comes before and after a certain number not greater than 20 xxii) Reading numbers in words - xxiii) Spelling numbers and writing numbers against the words xxiv) Writing numbers in words xxv) Writing numbers from 1 -20 in figures

Discussion for textbook Pre-Number 2 for KG II: The study material, Pre-Number 2 contained culturally and developmentally appropriate approaches to teaching of numbers. Important concepts like in and out, heavy and light, wide and narrow, empty and full, first and last, sorting and arranging were incorporated. It also introduced children to simple tasks like counting, seriation, identification of numbers from 1 to 20 and associating numbers with quantity using pictures. The activities were engaging and attractive so that children will be able to learn effortlessly. However, the style of illustrations was not consistent, to make the images more consistent in style and uniformity, letting a single artist handle the images would make it more appealing. Moreover, the quality of the paper was inadequate, making it difficult for young children to comfortably participate in writing and coloring activities.

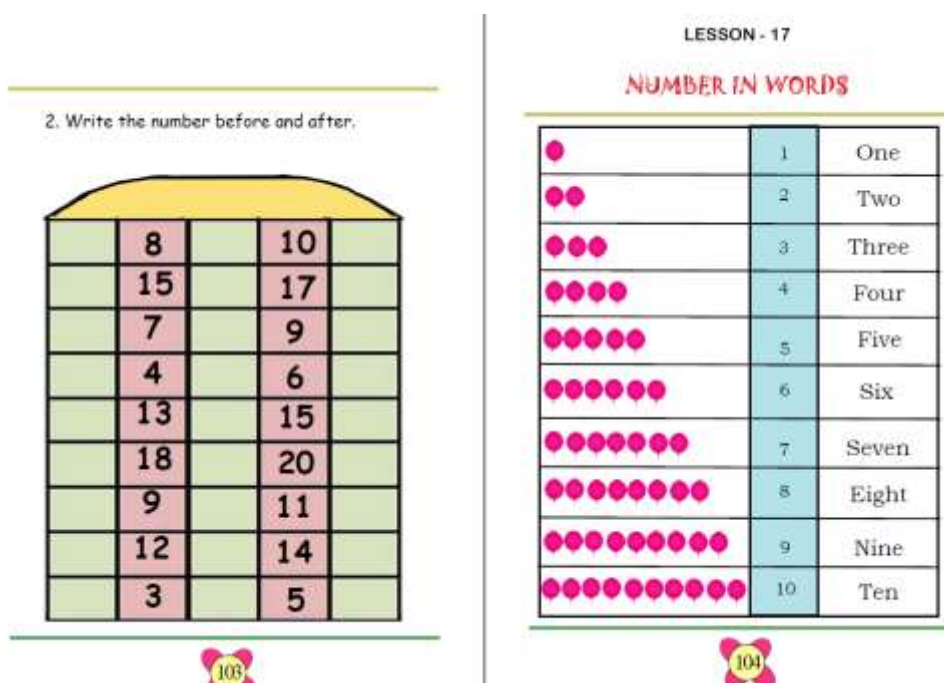


Figure 4.9. Activities for before and after and numbers in words

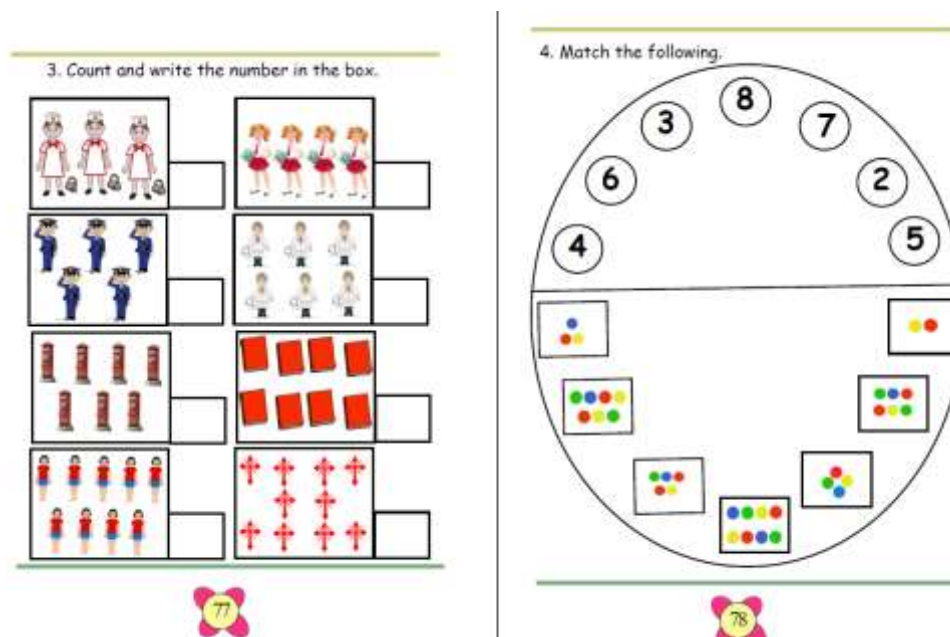


Figure 4.10. Activities for counting and matching numbers with corresponding number of dots

To use the textbooks and address the learning outcomes effectively, it would be important for the teachers to undergo training on the use of textbooks. A teacher's manual or guidebook on the use of textbooks would be useful to fully utilize the materials. The guidebook may also incorporate activities beyond the textbook, pedagogy and methods of daily assessment. Moreover, teachers would benefit from insights into the cognitive capabilities of young children, which would enable them to effectively support their learning. It would be important for the teachers to understand individual differences and different learning styles of children in classroom interactions and assessing children. And to realize this, capacity building and support materials would play a very important role.

Conclusion on objective 2.1 and 2.2:

The curriculum published by SCERT, Mizoram, while commendable in many respects, may not fully align with certain key parameters of an ideal curriculum. Through this study, it was realized and recommended to the authorities at SCERT, Mizoram. As a result of researcher's affiliation with SCERT, a new curriculum for pre-school education was prepared in alignment with the Pre-school Curriculum developed by NCERT in 2019. This proactive step has been taken in response to the

state government's adoption and implementation of NEP 2020. Regarding the four textbooks—First Step I & II and Pre-Number I & II—developed by SCERT, they were comparatively updated and met most of the parameters for quality educational materials. However, the primary concern was that these textbooks were solely available in English. Constructivist approach to learning was used for developing the study materials making it appealing and engaging for young learners. But to utilize the study materials and assess children accordingly, teachers needed to be equipped with certain competencies and support materials.

Objective 2.3. Outdoor activities organized in the pre-schools

4.2.3. Outdoor Activities Organized in The Pre-schools

Playful learning research and theory (Fisher et al., 2011; Hirsh Pasek et al., 2008; Hirsh Pasek, 2022; Zosh et al., 2018) indicated that how we learn is just as important as what we learn therefore making it clear that children should be engaged in meaningful discovery to enhance their possibilities to become creative, lifelong learners (Zosh et al., 2017). The best context for learning during the early years is play which is both free play and guided play. All the policy documents like NEP2020 suggested that the methodology for pre-school program should be play and activity oriented, and there should be no teaching of the 3R's. The programme should be child-centered and development and process-oriented. Play activities should be planned in ways that would expose children to a variety of experiences. The activities conducted in the pre-school stage needs to be meaningful and may be designed to enhance developmental domains especially the physical development. In this perspective, activities conducted in the pre-schools run by the Government of Mizoram were checked and listed in table no 4.13.

4.2.3.1. Outdoor Activities conducted for large muscle development

Table 4.13. Outdoor Activities conducted for large muscle development

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Jumping	33	100.00%
2.	Running	31	93.94%
3.	Exercises	31	93.94%
4.	Stretching	30	90.91%
5.	Running Race	29	87.88%
6.	Catching	26	78.79%
7.	Skiping	21	63.64%
8.	Pulling	20	60.61%
9.	Sliding	16	48.48%
10.	Swinging	15	45.45%
11.	Balancing	15	45.45%
12.	Climbing	13	39.39%
13.	Kicking	12	36.36%
14.	Walking/Nature Walk	11	33.33%
15.	Rolling	5	15.15%
16.	Cycling	1	3.03%
17.	Dancing	1	3.03%

An analysis of Table 4.13 showed that for development of large muscles all the schools did jumping activity, 93.94 percent of them had running activities and 87.88 percent claimed that they practice running race. It was found that 63.64 percent of the schools did skipping exercises and 39.39 percent used to engage their children in climbing activities. In the sampled schools, 93.94 percent of the them claimed that they had regular exercises and 90.91 percent did stretching activities. 60.61 percent said that they conducted pulling activities and 48.48 percent seemed to let the

children play slides. Swinging and balancing activities were conducted in 45.45 percent of the schools and 78.79 percent said that catching was also done. Kicking was practiced in 36.36 percent of the schools and 33.33 percent of the schools took the children for nature walk. 15.15 percent of the children conducted rolling activities for the children and cycling and dancing were done in one (3.03 percent) school only.

Discussion: The analysis from Table 4.13 revealed a diverse range of physical activities in schools for the development of large muscles among children. Jumping activities were universally practiced for large muscle development. Running activities were also common among the sampled schools. The rate of running races organized were slightly lower but majority of the schools practiced it. Activities for skipping were done in majority of the schools while climbing activities was also practised but less common. Physical activities like exercises, stretching and pulling were also done in some of the sampled schools. Catching activities were prevalent in majority of schools nurturing hand-eye coordination. Kicking activities, rolling activities, and nature walks were less frequently practiced. According to the Guidelines for Pre-school, the suggested play materials to be available in the pre-schools were large size blocks, wheel toys, climbers, tyres, balls of different sizes, balance beams, ladders, jungle gyms, tyre structures, tunnels, slides, swings, sea-saw, hanging bars, pushing and pulling toys, tri-cycles, toy cars, trucks, airplanes, bean bags, hula hoops, ropes and balance planks (NCERT, 2019). In the sampled schools, slides were found in 48.48 percent of the schools, balls for kicking activity was found in 36.36 percent of the schools, swings were found in 45.45 percent of the schools and cycle was found in 3.03 percent of the sampled schools. Other materials mentioned in the guidelines were not found in the sampled schools.

It was desirable that the pre-school programme be planned in ways that would promote the children's large muscles by conducting various activities. In the selected schools, teachers were engaging in a variety of activities aimed at fostering the overall development of children to the best of their abilities and knowledge. However, this analysis concluded that such activities were not systematically practiced as desired. In the National Curriculum Framework for the Foundational

Stage 2022 (NCFFS 2022), physical development was the first domain of the curricular goals in which it is mentioned that children should develop sharpness in sensorial perceptions and develop a fit and flexible body. The child should show coordination between sensorial perceptions and body movement in various activities and show strength and endurance in carrying, walking and running. This domain of development should not be neglected and activities must be conducted meaningfully because all developmental domains are inter dependent. This goal needs to be achieved for holistic development of the child. The impressions gained through the senses give rise to meaning and subsequent action (Arnheim & Pestolesi, 1978, as cited in Excell & Linington, 2011) and the child's ability to interpret input from the senses and respond through movement is intimately linked to the child's ability to understand and control their environment effectively (Lundsteen & Tarrow, 1981, as cited in Excell & Linington, 2011). This assertion exemplifies the inseparable nature of relationship between cognitive and motor development and therefore the line 'as the child learns to moves he moves to learn' (Galluhue, Werner, Luedke 1975, as cited in Excell & Linington, 2011) came into existence.

Objective 2.4. Indoor activities organized in the pre-schools.

4.2.4. Indoor Activities Organized in The Pre-school

Several activities need to be organized to enhance the different developmental domains. As such these activities needed to be done in a systematic way. The indoor activities conducted may be categorized as activities for small/fine muscle development, activities for socio-emotional development, activities for language development and activities for formation of pre-number concepts.

4.2.4.1. Indoor Activities conducted for small/fine muscle development

Table 4.14. Indoor Activities conducted for small/fine muscle development

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Action Songs	33	100.00%
2.	Drawing	33	100.00%
3.	Colouring	33	100.00%
4.	Clapping	32	96.97%
5.	Catching	30	90.91%
6.	Tracing	30	90.91%
7.	Tearing	22	66.67%
8.	Arranging puzzles, blocks, pictures, etc.	21	63.64%
9.	Tearing and pasting	20	60.61%
10.	Cutting	20	60.61%
11.	Painting	16	48.48%
12.	Finger Play	18	54.55%
13.	Pattern making	14	42.42%
14.	Treading	13	39.39%
15.	Clay	1	3.03%

For development of fine motor skills, table 4.14 showed that 100.00 percent of the schools did drawing and colouring activities and action songs. Clapping hands was done in 96.97 percent of the schools and catching and tracing activities were done in 90.91percent of the schools. Tearing activities were done in 66.67 percent and both tearing and pasting and cutting were done in 60.61 percent of the schools. Arranging puzzles and blocks were done in 63.64 percent of the schools and 54.55 percent of the schools engaged children in finger play. Pattern making was done in only 42.42 percent of the schools and 39.39 percent practiced threading and playing with clay was done only in 1 school i.e., 3.03 percent.

4.2.4.2. Indoor activities conducted for socio-emotional development.

Table 4.15. Indoor activities conducted for socio-emotional development.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Singing Together	33	100.00%
2.	Sports	31	93.94%
3.	Group Play	29	87.88%
4.	Celebrating Festivals/Birthdays	28	84.85%
5.	Group Work	25	75.76%
6.	Stories	25	75.76%
7.	Playing with Toys	20	60.61%
8.	Meal Time Activities	18	54.55%
9.	Role Play	17	51.52%
10.	Drama	10	30.30%
11.	Puppet Activities	2	6.06%

Table 4.15 showed the different kinds of activities done for socio-emotional development wherein 100 percent of the schools practiced singing together. Sports were held a few times in 93.94 percent of the schools and 87.88 percent of them organized group play under the guidance of the teacher. Birthdays of the children and festivals were celebrated in 84.85 percent of the schools and while it was expected that all the schools should have story time, only 75.76 percent of them actually tell stories to children, and engaged them in group work which was a necessary repository of socio-emotional development. It was found that 60.61 percent of the schools let the children play with toys and mostly these toys were brought by the children from their homes. 51.52 percent of the schools practised role play and 30.30 percent of the schools did dramas. Puppet activities were done in 6.06 percent of the schools and meal time activities were done by 54.55 percent of the schools.

The indoor activities for language development were categorized into three sections. Language Activities I focused on basic language exercises aimed at fostering simple self-expression and pre-reading skills. Language Activities II addressed more structured practices related to writing letters and words, as well as reading them. Lastly, Language Activities III pertained to enhancing children's interactions and communication with their peers and school staff.

4.2.4.3. Indoor Activities conducted for language development.

Table 4.16. Indoor Activities conducted for language development.

Sl. No.	Items		No. of schools (33 in total)	Percentage
1.	Language activities I	Free Conversation	30	90.91%
2.		Storytelling	30	90.91%
3.		Riddles	19	57.58%
4.		Picture games	18	54.55%
5.		Picture reading	22	66.67%
6.		Songs and rhymes	30	90.91%
7.		Chart reading	24	72.73%
8.		Dramatic play	12	36.36%
9.		Vocabulary/command games	16	48.48%
10.		Sound games	11	33.33%
11.		Show and tell- recall story	15	45.45%
12.		Draw and talk	17	51.52%
13.		Doll play	10	30.30%
14.		Sound discrimination	10	30.30%
15.		Visual discrimination	15	45.45%
16.		Audio-visual discrimination	6	18.18%
1.	Language activities II	Vocabulary building	25	75.76%
2.		Identification of alphabets	29	87.88%

Sl. No.	Items	No. of schools (33 in total)	Percentage
3.	Identification of alphabetical sounds	28	84.85%
4.		27	81.82%
5.		21	63.64%
6.		17	51.52%
7.		19	57.58%
8.		17	51.52%
9.		25	75.76%
1.	Language activities III	28	84.85%
2.		30	90.91%
3.		24	72.73%
4.		29	87.88%
5.		29	87.88%
6.		27	81.82%
7.		22	66.67%

An analysis of Table 4.16 with regards to Language activities I revealed that 90.91 percent of the schools practiced free conversations, storytelling and songs and rhymes. 72.73 percent mentioned that they did chart reading and 66.67 percent practise picture reading. Riddle games were done in 57.58 percent schools and 54.55 percent of them performed picture games. Drawing and talking about the pictures

drawn was done in 51.52 percent of the schools which was an important activity for language development. Vocabulary and command games were done in 48.48 percent of the schools and 45.45 percent practiced visual discrimination which was quite a small number regarding the importance of its role in identification of alphabet and number symbols. It was found that 36.36 percent did drama activities and 33.33 percent of them practiced sound games which was an effective activity for listening skills. Doll play and sound discrimination activities were done in 30.30 percent of the schools. Only 18.18 percent of the schools practised audio-visual discrimination though it was considered a necessary requisite in pre-school education programme.

A cursory glance at the table for Language activities II, showed that 87.88 percent of the schools perform a separate activity for alphabet identification and 84.85 percent claimed they did activities for sound identification of alphabets. Writing of both uppercase and lowercase alphabets were done in 81.82 percent of the schools and 75.76 percent of the schools let the children memorize rhymes. Writing down words was done in 63.64 percent of the schools which might be a little difficult for younger children below 6-7 years whose motor skills had not yet developed properly. In the sampled schools, 57.58 percent even practiced reading words and 51.52 percent of the schools made the children read full sentences which might be a little complicated for the children considering their age.

With reference to Language activities III, it was seen that 90.91 percent of the teachers responded to the children talking which was a positive activity. It was also seen that 87.88 percent of the schools had staff to child and child-to-child conversations during free play routines. Also, 84.85 percent of the teachers let the children talk and explain their reasoning. Children's talk was encouraged in 72.73 percent of the schools and 66.67 percent allowed long pauses so children had time to think and respond. It was expected that the pre-school programme be planned in ways that would promote the children's language development through orientation of play and activity, however, this analysis concluded that such activities were not practiced as desired. The data showed that there was a pressing need for more systematic practices and strategies for language teaching to equip children to acquire critical thinking and effective communication.

4.2.4.4. Activities conducted for formulation of pre-number concepts.

Table 4.17. Activities conducted for formulation of pre-number concepts.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Identification of Big and Small	30	90.91%
2.	Identification of shapes	30	90.91%
3.	Identification of tall/long and short	29	87.88%
4.	Identification or less and more	28	84.85%
5.	Arranging objects from small to big and from big to small	25	75.76%
6.	Sense of direction	24	72.73%
7.	Classifying	23	69.70%
8.	Matching	23	69.70%
9.	Naming	22	66.67%
10.	Sorting	21	63.64%
11.	Sequencing	20	60.61%
12.	Puzzles	19	57.58%
13.	Manipulating constructional materials	19	57.58%

An analysis of Table 4.17 showed that 99.91 percent of the schools did activities for identification of big and small and identification of shapes. Identification of tall/long and short was done in 87.88 percent of the schools and less and more activity was done in 84.85 percent of the schools. Arranging objects from small to big and from big to small or seriation activity was done in 75.76 percent of the schools. Activities for sense of direction was done in 72.73 percent and activities for matching and classifying are done in 69.70. Sorting activities was done in 63.64 percent of the schools and sequencing in 60.61 percent of the schools. Arranging puzzles was done in 57.58 percent of the schools. Before the teaching of actual numbers, children should acquire pre-number concept first which would lay a strong

foundation for learning mathematics later and would help in acquiring problem solving skills.

4.2.4.5. Reading numbers

Table 4.18. Reading numbers

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	From 1-100	20	60.60%
2.	From 1-200	6	18.18%
3.	From 1-50	4	12.12%
4.	From 1-500	2	6.06%
5.	From 1-20	1	3.03%
6.	From 1-300	0	0.00%

An analysis of Table 4.18 showed that there were a lot of differences in the teaching of reading numbers amongst the schools. Majority which was 60.60 percent taught numbers from 1-100. Also, 18.18 percent of the schools taught numbers from 1-200 and 12.12 percent of them taught numbers ranging from 1-50. Only 1 school which was 3.03 percent of them taught the desired reading numbers from 1-20 which was prescribed in the textbooks developed for pre-schools by SCERT.

4.2.4.6. Writing numbers in figures taught

Table 4.19. Writing numbers in figures taught

Sl. No.	Items	No. of schools	Percentage
1.	From 1-10	1	3.03%
2.	From 1-20	3	9.09%
3.	From 1-50	2	6.06%
4.	From 1-100	23	69.69%
5.	From 1-200	2	6.06%

6.	From 1-300	0	0.00%
7.	From 1-500	2	6.06%

A cursory glance at Table 4.19 revealed that 69.69 percent taught writing numbers from 1-100. Writing numbers from 1-20 was practised in 9.09 percent of the schools and 6.06 percent of the schools taught writing numbers from 1-50 and also from 1-500. It was also learnt that 6.06 percent of the schools taught writing numbers from 1-200.

4.2.4.7. Writing numbers in words

Table 4.20. Writing numbers in words

Sl. No.	Items	No. of schools	Percentage
1.	From 1-10	1	3.03%
2.	From 1-20	11	33.33%
3.	From 1-50	8	24.24%
4.	From 1-100	5	15.15%

An analysis of Table 4.20 showed that writing numbers in words was not taught in 24 percent of the schools. Among the schools that taught writing numbers in words, 33.33 percent of them taught numbers within the range of 1-20. A range from 1-50 was taught in 24.24 percent of the schools and 3.03 percent of the schools taught writing numbers in words from 1-10. It was quite distracting to find that 15.15 percent of the schools taught 1-100 in words which was definitely burdensome and unnecessary for the children of this age.

4.2.4.8. Operations

Table 4.21. Operations

Sl. No.	Items	No. of schools	Percentage
1.	Addition	18	54.55%
2.	Subtraction	16	48.48%
3.	Times	7	21.21%
4.	Multiplication	2	6.06%
5.	Lesser & Greater	2	6.06%
6.	What Comes Between	1	3.03%
7.	What Comes After	1	3.03%
8.	Count & write	1	3.03%

A cursory glance at Table 4.21 showed that 54.55 percent of the schools taught addition and 48.48 percent of them taught subtraction. 21.21 percent of the schools taught times and 6.06 percent taught multiplication and the same number taught lesser and greater numbers. 3.03 percent of the schools taught what comes between, what comes after and counting and writing activities.

Discussion: Research evidence (Gallahue & Donnelly, 2003; Ayers, 2005; Isbell & Isbell, 2007, as cited in Excell & Linington, 2011) showed that children's success in academic learning is enhanced when they are given sufficient and appropriate opportunities to move and it is through movement that the essential perceptual-motor skills and concepts and sensorimotor integration are best developed and this provide the foundations upon which formal literacy instruction is based. Although various activities were conducted in the sampled schools to promote fine motor development, it was clear that more purposeful and effective practices were needed to truly enhance and nurture the children's fine motor skills. This analysis concluded that such activities were not practiced as desired as evident in the kind of fine motor skill activities that were conducted.

The Guidelines for Pre-school Education suggested materials like button frames, shoes for lacing, beads for stringing, building blocks, puzzles, fastening frames, locking devices, interlocking blocks, sieves, blunt scissors, zipping frames, sewing cards, geoboard, foam blocks, Lego, weaving cards, hammering toys, sand tools, hollow blocks, sewing cards, spools to string, eye dropper and funnel (NCERT, 2019). However, in the sampled schools puzzles and building blocks were the only materials available. Still, the teachers were able to conduct a few fine motor activities even without the specific materials, utilizing those that were readily available in the surrounding environment. Activities like action songs, drawing, colouring, clapping, catching, tracing, tearing, arranging puzzles and blocks, tearing and pasting, cutting, painting, finger play, pattern making, threading and playing with clay were done in the sampled schools.

As Gabbard (2008), Robinson and Goodway (2009) noted, mastery of fundamental movement skills in early childhood were the building blocks for more complex movement and play an important role in the overall development of school readiness. Through gross motor skills children improve their posture, sense of balance and co-ordination which in turn enables them to develop fine motor skills that were essential for success during the subsequent school years (Gallahue & Ozmun, 1998; Gallahue & Goodway, 2003, as cited in Excell & Linington, 2011). It was through the successful acquisition of gross and fine motor skills that the different perceptual motor behaviours become refined. Singh and Chaudhary (2019) in their observations of the curriculum transaction in the classroom in India revealed that the entire constructivist approach and developmental appropriateness of the curriculum emphasized for pre-primary and early grades in the National Curriculum Framework 2005 did not get implemented which was also prevalent in Mizoram as well.

According to the Collaborative for Academic, Social, and Emotional Learning (CASEL) researchers, social and emotional learning is the process through which individuals learn to integrate thinking, feeling, and behaviour to effectively accomplish key life tasks (Zins et al., 2007, p. 194, as cited in Mondy et al., 2021). Social and emotional learning involves children's developing ability to form secure relationships, regulate and express emotions in socially and culturally appropriate

ways, and engage with their environment and learning—all within the context of family, community, and culture (Yates et al., 2008, p. 2, as cited in Mondí et al., 2021). The CASEL framework for social and emotional learning is based on research into both typical and atypical socio-emotional development and identifies five core competencies: (a) self-awareness, (b) self-management, (c) social awareness, (d) relationship skills, and (e) responsible decision-making (CASEL, 2012; "Core SEL Competencies," 2019; Weissberg et al., 2016, as cited in Mondí et al., 2021).

Activities conducted for socio-emotional development by the sampled schools included singing together, sports, group play, celebrating birthdays/festivals, storytelling, group work, playing with toys, role play, drama, puppet activities, and meal time activities. Singing together is deeply rooted in Mizo culture and an important requisite to socializing. Sports and group play brought about opportunities for connection, respecting others, knowing boundaries, teamwork and fostering healthy competition. Celebrating birthdays, storytelling and festivals held great significance in Mizo society, providing opportunities to share joyful moments, uphold cultural traditions, and practice societal etiquettes. Puppet activities were found to be rarely practised. Sharing food being an important aspect of Mizo culture, meal time activities was found to be practised in half of the sampled schools. Bronfenbrenner and Morris (2006) perceived interactions as the building blocks of relationships and mediated learning which imposed that relationships should be regarded as core competencies in early childhood education and care as teacher's relationships with children had a critical impact on children's learning and well-being (as cited in Tal, 2019). They insisted that teachers must be able to form and maintain relationships with children, parents, and their co-workers. This is of core importance as life and learning in the pre-schools and daycare centres are based on relationships and connections between teachers and children, teachers and parents, among children, and staff.

Language can be considered as the most important aspect of children's learning because it helped the child to translate her experiences into meaningful symbols that could be used for communicating. It is through language that children are able to express and share their thoughts and maintain social contacts. Language

involves listening, speaking, reading and writing so these skills must all be developed using different activities in the children so that they will be able to develop their language abilities. Looking at Language activities I, the most common activities were free conversation, storytelling, songs and rhymes which majority of them were practising. There were many play way approaches for language activities but only a few schools engaged the children in effective language activities like riddles, picture games, picture reading, dramatic play, command games, sound games, show and tell-recall story, draw and talk, doll play, sound discrimination, visual discrimination and audio-visual discrimination. To enhance language skills, activities for listening must be conducted and materials like story telling aids like picture books, puppets, flannelgraph, story cards, sound boxes, etc. should be available and made use of in the classroom. For vocabulary building and verbal expression, conversation charts, pictures, flash cards, picture dominoes, picture books, collection of rhymes and stories could also help. For enhancing and nurturing reading readiness, picture cards/strips/charts for auditory and visual discrimination and association were important, and for writing readiness, materials like slates, chalks, crayons, blackboard, drawing paper, stencils needed to be made available for the children. Various educational practices such as language-rich environment, reading aloud, singing and using rhymes and songs to enhance phonological awareness and vocabulary was advocated by Wells (1985). Roul (2014) also found that audio-visual intervention also had positive effect on the language skills as the intervention improved vocabulary acquisition, comprehension and expressive language abilities.

With regards to Language activities II which was mostly concerned with the serious business of teaching alphabets, identification of alphabets, identification of alphabetical sounds, writing upper and lower cases alphabets were practiced in majority of the schools. Other formal teaching of writing like vocabulary building, writing words, writing full sentences, reading words and sentences and memorizing full rhymes were also practiced by more than half of the schools. Children have a natural desire to learn to read and write because when we observe children, we can see that they observe the written materials around them and they scribble and draw

and very much like to give meanings of what they draw and scribble (NAEYC, n.d.). By exploring the world around them, they begin to make sense of the sounds, symbols, and structures of language (NAEYC, n.d.). Often, due to a lack of awareness among teachers and parents, children were taught to read and write in a monotonous and unengaging way that was not child-friendly. This approach made children feel bored and fearful of going to school. Therefore, it was crucial to take immediate steps to ensure that children can learn in the most natural way possible, without taking away the joy of their childhood.

With reference to the kind of activities conducted for Language III, it was quite satisfactory to see that majority of the schools gave opportunity for the children to talk or explain their reasoning, and the staff responding to children's talk was very important as also pointed out by Wells (1985) in which he highlighted the role of social interaction on language development and advocated for meaningful communication with adults and peers in his study. It was also quite pleasing to find that staff-child and child-child conversations during free play routines, encouraging children to talk and listen to each other and allowing long pauses so that children would have time to think and respond were practised in majority of the schools. This was quite unlike the findings of Arya and Joshi (2021) wherein they reported the view of teachers that providing young children with opportunities for self-expression was constantly opposed and disappearing. Chandra (2017) stated in her reviews that interaction between children and the range of environmental as well as cultural experiences along with meaningful dialogues associated with positive deviance in the children's overall development which was found to be lacking in states like Andhra Pradesh, Rajasthan and Assam which did not seem to be the case in Mizoram.

Looking at the performance of the schools in conducting prenumber concepts, several activities were done by the sampled schools. However, pre-number concept activities were not practiced as desired. Children bring various mathematical skills from their surroundings and culture into the classroom which must be the basis of learning mathematics (Government of India, 2022). Simple activities like seriation, identifying shapes, counting objects, sorting, classifying played a crucial role in developing prenumber concepts. Learning mathematical skills must follow the

simple to complex path which means that after understanding the prenumber concepts, the skills needed to move gradually to more complex skills like quantity, shape and space, measurement etc. (Government of India, 2022). To foster these skills, various materials were required. The suggested materials to foster cognitive development mentioned in the Guidelines for Pre-school developed by NCERT (2019) included sensory materials, dominoes, different shapes, colour cards, matching games, building props, manipulative materials, peg boards, nuts and screws, inset boards, geoboard, stacking and nesting toys, counting books, set of objects for ordering, pan balance, texture numerals, leaves, stones, pebbles, twigs, flowers, picture cards, water play toys, mirrors, collection of objects for counting, sound jars, prenumber concept books, smelling jars, magnets, funnels, locks and keys, seeds, small containers, potting soil, sequential thinking cards and reasoning cards (NCERT, 2019).

Teaching numbers from 1-500 by 6.06 percent was a concerning matter as the range of numbers would not be relevant for children of their age. In schools where they taught numbers beyond 100, it would mean that instead of grasping the significance of larger numbers, they might merely be memorizing and writing symbols without any real understanding of what those symbols represent. A varied approach among the schools regarding the range of numbers taught was highlighted in writing numbers. A few schools extend the range to higher numbers, with 6.06 percent covering numbers up to 50, 200, and even 500. It was also revealed that 15.15 percent of the schools were teaching writing of numbers from 1 to 100 in words. The efforts showed that teachers were doing their best, but due to lack of awareness, their efforts could be harmful for the children. This was truly burdensome and was not suitable for children at this stage. Writing numbers in words requires memorizing the symbols and identifying them with the words which the numbers represent. For pre-school-aged children, this held no real meaning and was instead burdensome, lacking any connection to their daily lives. It could also hinder the development of their conceptual and problem-solving skills. (Government of India, 2022).

Considering the mathematical operations taught in the pre-schools, addition of small numbers using pictures were to be taught. Activities like what comes between, what comes after and counting and writing were important activities for cognitive development but these activities were practiced only in one school. Operations like multiplication and division were found to be practiced in some schools which might be complicated for children of this age and was not age-appropriate. Children might face problems understanding mathematical concepts if complicated operations were forced upon them without grasping the prenumber concepts first. Looking at activities conducted for formulation of pre-number concepts, several activities were done which was quite impressive but there were many rooms for improvement such as sorting and classifying objects, matching identical or similar objects, comparing objects, arranging objects and match one object to one another.

Conclusion: The sampled schools showed some efforts for the promotion of fine motor skills, socio-emotional development, language activities, and pre-number concepts. But certain gaps were observed in its implementation. Looking at the kind of activities conducted for fine motor activities, it was found that necessary materials and purposeful planning was lacking. Likewise, in the activities conducted for language and socio-emotional development, they were not implemented in ways that fully supported children's natural learning processes. Besides, the teaching of pre-number concepts and mathematical operations sometimes exceeded age-appropriate expectations, with a focus on more complex tasks like writing numbers in words up to 100 and introducing higher number ranges up to 500, which could hinder conceptual understanding. There was a clear need for more targeted and developmentally appropriate practices, materials, and teacher awareness to better support children's holistic development in these key areas.

Objective 2.5. Programme planning by the teachers

4.2.5. Programme Planning by the teachers

4.2.5.1. Timing and duration of the pre-school.

Table 4.22. Timing and duration of the pre-school.

Sl. No.	Items	No. of schools	Percentage
1.	School Starts before 9:00 am	3	9.09%
2.	School Starts at 9:00 am	22	66.67%
3.	School Starts after 9:00 am	2	6.06%
4.	School End before 12:00 noon	5	15.15%
5.	School End at 12:00 noon	18	54.55%
6.	School End after 12:00 noon	4	12.12%
7.	More than 3 hours of school	4	12.12%
8.	3 hours of school timing	15	45.45%
9.	Less than 3 hours of school	3	9.09%

An analysis of Table 4.22 showed that majority of the schools i.e., 66.67 percent started at 9 a.m., 9.09 percent of them started before 9 a.m. and 6.06 percent of the schools started after 9 a.m. Majority of the schools i.e., 54.55 percent ended the classes at 12 p.m. while 15.15 percent of them ended before 12 p.m. With regards to duration of the classes, 45.45 percent of the schools had 3 hours of schooling while 12.12 percent had less than 3 hours of schooling. A few of them i.e., 9.09 percent of the schools used 3 and a half hours for schooling.

4.2.5.2. Provision of rest/sleep period.

Table 4.23. Provision of rest/sleep period.

Sl. No.	Items	No. of schools	Percentage
1.	Yes	19	57.58%
2.	No	14	42.42%

A glance at Table 4.23 showed that 57.58 percent of the schools provided sleep or rest period and 42.42 percent of the schools did not provide such period.

4.2.5.3. Preparation of lesson plan

Table 4.24. Preparation of lesson plan

Sl. No.	Items	No. of schools	Percentage
1.	Yes	21	63.64%
2.	No	12	36.36%

A cursory glance at Table 4.24 revealed that majority of the teachers i.e 63.64 percent prepared lesson plans while 36.36 percent of them did not prepare such plans though it was an important aspect of implementing pre-school education programme. Schools that prepared lesson plans had a set schedule for when they would teach the students, but they did not provide any information about the formal lesson plans.

4.2.5.4. Preparation of Programme Planning

Table 4.25. Preparation of Programme Planning

Sl. No.	Items		No. of schools	Percentage
1.	Pre-school with Programme Planning		18	54.55%
2.	<i>Types of Programme Planning</i>	Short Term	16	48.48%
3.		Long Term	2	6.06%
4.	No programme planning		15	45.45%

In Table 4.25 it could be seen that 54.55 percent of the sampled schools claimed they prepared programme planning in which 48.48 percent were short term planning while 6.06 percent were long term planning. However, there were 45.45 percent schools who did not prepare both long term and short-term programme planning.

4.2.5.5. Utilization of departure time.

Table 4.26. Utilization of departure time.

Sl. No.	Items	No. of schools	Percentage
1.	Departure well organized	23	69.70%
2.	Children greeted warmly by Teachers	27	81.82%
3.	Each child greeted individually	24	72.73%
4.	Teachers greeted parents warmly	23	69.70%
5.	Departure as information sharing time with parents	24	72.73%

Table 4.26 showed that 81.82 percent of the teachers greeted the children warmly when they came to school and 72.73 percent teachers greeted the children individually and also used departure time as information sharing with the parents. It was found that in 69.70 percent of the sampled schools, departure time was well organised and also greeted the parents warmly.

4.2.5.6. Principles considered while planning the programme.

Table 4.27. Principles considered while planning the programme.

Sl. No.	Items	No. of schools	Percentage
1.	Age and developmental level of the children	21	63.64%
2.	Balance of activities for all aspects of development to be covered	18	54.55%
3.	Balance between individual and group activities	20	60.61%
4.	Balance between outdoor and indoor activities	18	54.55%
5.	Balance between vigorous and quiet activities	16	48.48%
6.	Balance between guided and free activities	18	54.55%

A cursory glance at Table 4.27 showed that 63.64 percent of the schools considered the age and developmental level of children, 60.61 percent of the school's designed activities with balance between individual and group work. In 54.55 percent of the sampled schools, teacher claimed that balances of activities for all aspects of

development were covered, a balance between outdoor and indoor activities were maintained and that there was a balance between guided and free activities. In 48.48 percent of the schools, teachers reported that balances between vigorous and quiet activities were maintained. Programme for pre-school were not geared to the clock but needed to be planned according to the needs and levels of the children.

4.2.5.7. Teaching and Pedagogy for Pre-schools

Table 4.28. Teaching and Pedagogy for Pre-schools

Sl. No.	Items	No. of schools	Percentage
1.	Formal Teaching of the 3R's	23	69.70%
2.	Is the programme carried out like a formal school?	20	60.61%
3.	Is play and activity the main method of teaching?	16	48.48%
4.	Are Textbooks compulsory for Children?	14	42.42%
	Is the whole content of textbooks taught?	3	9.09%

From analysis of Table 4.28, it was revealed that majority of the schools i.e., 69.70 percent used formal teaching of the 3Rs for conducting the programme and that 60.61 percent of the schools ran the programme like a formal school. Though this was the case, 48.48 percent of the schools believed that play and activity were the main method of teaching the pre-school children. It was also found that 42.42 percent of the sampled schools made the textbooks compulsory for the children and among them, 9.09 percent taught the whole textbook.

4.2.5.8. Medium of instruction used in the classroom

Table 4.29. Medium of instruction used in the classroom

Sl. No.	Medium of instruction	No. of schools (33 in total)	Percentage
1.	Mizo	5	15.15 %
2.	English	2	6.06 %
3.	Mizo & English	26	78.78%

With regards to medium of instructions used, 78.78 percent used both Mizo and English, 15.15 percent used Mizo only and 6.06 percent used only English.

4.2.5.9. Age of children for admission to pre-school

Table 4.30. Age of children for admission to pre-school

Sl. No.	Age	No. of schools (33 in total)	Percentage
1.	4 years	15	45.45%
2.	5 years	16	48.48%
3.	6 years	2	6.06%

Table 4.30 showed that in 45.45 percent of the sampled schools, children were admitted at the age of 4, while 48.48 percent admitted children at the age of 5 years and there were 6.06 percent of schools who admitted children at the age of 6 years.

4.2.5.10. Admission procedure

Table 4.31. Admission procedure

Sl. No.	Type	No. of schools (33 in total)	Percentage
1.	Test	0	0.00%
2.	Interview	4	12.12 %
3.	First come first serve	29	87.87%

Analysis of table 4.31 showed that 87.87 percent of the pre-schools admitted children by first come first serve process while 12.12 percent conducted tests for admission into the pre-school programme.

4.2.5.11. Homework given to the children

Table 4.32. Homework given to the children

Sl. No.	Home work	No. of schools (33 in total)	Percentage
1.	Yes	31	93.93%
2.	No	2	6.06 %

A cursory glance at table 4.32 revealed that 93.93 percent of the sampled schools practised giving home works to the children and only 6.06 percent of the sampled schools did not practice giving home works.

Discussion: With respect to duration of the pre-school education programme, the Pre-school Guidelines developed by NCERT (2019) proposed for four hours daily schedule to ensure that children would have enough time to engage in activities and have a balanced learning experience. The mentioned guidelines advocated the importance of arriving early before children came to school to ensure that they had a time for preparation for classes and welcome children warmly. Overall, adhering to these guidelines helped create a supportive and well-organized environment that benefits both children and educators. But it was found that none of the schools had four-hour schooling as desired by the guidelines. The guidelines also suggested that some rest period should be provided for the children during the day and also suggested that a programme of longer duration should provide facilities for nap time.

It was mentioned in the Pre-school Curriculum developed by NCERT (2019) that planning was crucial for effective curriculum implementation as well-structured and thoughtful planning ensures the curriculum is carried out effectively. Teachers needed to be aware of the curricular goals accompanied with age-appropriate developmental practices and should include both long-term and short-term objectives and activities. Although the teachers stated that they took into account factors such as the children's age and developmental level, a balance of activities across different developmental domains, and a mix of individual and group play, as well as indoor and outdoor, vigorous and quiet, and guided and free activities when preparing their

plans, these considerations did not align with the actual activities carried out in the sampled schools for both outdoor and indoor play as evident in the analysis of Objective 4.2.3 and 4.2.4. Greater emphasis was placed on indoor activities, particularly the teaching of the 3Rs. According to the Pre-school guidelines developed by the NCERT (2019), a daily time table for different activities should be carefully planned to address the different developmental domains in a balanced and appropriate way. Activities should be designed in line with the learning levels and individual needs of the children and awareness about how children learn and their developmental milestones with reference to acquisition of language, cognitive skills, social and emotional well being and physical development would pay much dividends. The present study revealed that more time was spent in the classroom comparing to time spent outside in the playground. However, a balance between indoor and outdoor activities should be maintained. Vigorous and quiet activities should be both organised and time should also be allocated for free play so that children could choose their own activities and explore their interests in their own way. It was quite fitting to see that majority of the schools conducted greetings and departure in a suitable way. Proper greetings play a crucial role in developing positive relationships with children and helps in creating a nurturing environment.

It was evident that the prevalent form of teaching the pre-school stages was the 3Rs. This was also reflected in the studies conducted by Saini and Sudha (1993) in Hisar, Chuango (2001) in her study of prevailing conditions of pre-schools in Mizoram, Chandra (2017) in her review of the initiatives, practices, challenges and enablers in ECCE in India, and Wadhwas et.al (2019) in their analysis of data from the India Early Childhood Impact (IECEI) study. Government policies and policy documents advocated for play way pedagogy in the early years of children's education as it played a critical role in fostering physical, cognitive, language and social and emotional development forming a foundation for lifelong learning and well being (Li, 2024). Besides these, play also helped with language, math and social skills, and helped children in releasing their pent-up feelings and stress. The foundations of sensory and perceptual systems that are critical to language, social behaviour, and emotion are formed in the early years and are strongly influenced by

experiences during this time and experiences in the early years of childhood affect the development of brain architecture in a way that later experiences do not (Tierney & Nelson, 2009).

The analysis also highlighted that bilingual instruction in Mizo and English was the leading approach in the sampled schools. It was stated in the Guidelines for Pre-schools that the most appropriate way of working with children was through the mother tongue (NCERT, 2019). Admission procedures revealed that children age between 4 and 5 were mostly admitted and children below 4 years were not admitted and all the sampled schools followed first come first serve policy. However, a few schools were practising interview which was against the Guidelines for Pre-schools which stated that the admission procedure should not involve any evaluation of children and parents in any form- written or oral (NCERT, 2019). It was also observed that nearly all the sampled schools assigned homework to the children, typically consisting of 1 to 2 pages of reading or writing tasks, given almost daily. This practice was found to be unsatisfactory.

Play way approach should be adopted for fostering optimal child development because the changes that took place during the early years were particularly important as they are the bedrock of what comes after. It was intimidating to see that formal teaching of the 3Rs was the main approach that were used in the pre-school stages though play way method benefitted children the most. Studies conducted by Muralidharan and Benerji (1972), Pepler and Ross (1981), Excell and Linington (2011), and Storksens et.al. (2023) all showed the benefits of play way approach for children. The occurrence of the 3Rs in the pre-schools was also showed in other research studies conducted by Saini and Sudha (1993) in Hisar, Mohite and Bhatt (2008) in Gujarat, Chandra (2017) in her analysis of initiatives, practices, challenges and enablers in ECCE in India, Wadhwas, et.al (2019) in their analysis of data from IECEI in India, and Kumar (2022) in qualitative review of several policy documents, NEP 2020 and secondary sources like journals, websites, and newspapers in India.

Conclusion: Though the NCERT Pre-school Guidelines (2019) recommended a four-hour daily routine, the sampled schools did not fulfil the recommended time frame and the indoor and outdoor activities were not balanced, play way method was also not implemented holistically and did not properly align with the guidelines. Since most of the schools taught the 3Rs, there were limited time for play activities. But there were also positive practices as the schools made use of the greetings and departure time well. The findings revealed that there was a great need for professional development of teachers in order to implement quality pre-school education.

Objective 2.6. Role of parents in curriculum implementation

4.2.6 Role of parents in curriculum implementation:

Parents' perception of education is an important factor in educating a young child. Parent involvement in a child's early education is consistently found to be positively associated with a child's academic performance (Hara & Burke, 1998; Hill & Craft, 2003; Marcon, 1999; Stevenson & Baker, 1987 as cited in Topor, et al. 2010). Parental involvement not only contributes to cognitive growth and development, but also to behaviours associated with positive academic outcomes (Roy and Garcia, 2018). It was necessary to find out the parent's perception about pre-school education as the parents were an important stakeholder in the education system. Without the parents, such government policies and frameworks for quality education could not be a success. As the family, school and community were equally responsible for creating school readiness in a child.

4.2.6.1. Parents' view of pre-school education

Table: 4.33. Parents' view of pre-school education

Sl. No.	Types of responses	No of parents	Percentage
1.	Preparation of children for formal education	72	48.00%
2.	A place where children are taught a few things about reading and writing	54	36.00%
3.	It is an early childhood programme in which children combine learning with play guided by professionally trained adults	10	6.67%

Sl. No.	Types of responses	No of parents	Percentage
4.	It develops the child's emotional, social and personal growth, and continual exposure to other children helps the child to enhance communication skills	9	6.00%
5.	No response	5	03.03%
Total		150	100.00 %

Looking at Table 4.33, it showed that 48.00 percent of the parents felt pre-school was a place for preparation of children for formal education and 36.00 percent of them felt that it was solely a place where children were taught a few things about reading and writing. Among the parents, 6.67 percent felt that it was an early childhood programme in which children combined learning with play guided by professionally trained adults and 6.00 percent of the parents felt pre-school education programme developed the child's emotional, social and personal growth, and continual exposure to other children helped the child to enhance communication skills. But 03.03 percent of the parents however did not seem to have proper ideas about pre-school education programme.

4.2.6.2. Importance of pre-school in the opinion of parents

Table 4.34. Importance of pre-school in the opinion of parents

Sl. No.	Types of responses	No of parents	Percentage
1.	A place where they learn to socialize, learn how to read and write for formal schooling	100	66.67%
2.	Preparing children mentally to face challenging situations in their studies	15	10.00%
3.	To teach skills, values and socialization	7	4.67%
4.	Public funded school save money and time for parents	6	4.00%
5.	A place where children receive education from trained teacher	4	2.67%
6.	No idea	18	12.00%

A review of Table 4.34 revealed the following insights into parents' perceptions of pre-school education: It was found that 66.67 percent of parents view

pre-school as crucial because they believed it helped children socialize and develop early literacy skills for formal schooling. Moreover, 10.00 percent considered it important for preparing children mentally to handle academic challenges. Another 4.67 percent appreciated pre-school for teaching skills, values, and socialization. Furthermore, 4.00 percent found pre-school beneficial primarily due to its convenience, as government-funded schools saved them money and time, which benefitted their own schedules. Lastly, 12.00 percent of parents were unsure about the significance of pre-school education for their children.

4.2.6.3. Child-related sharing between parents and staff

Table 4.35. Child-related sharing between parents and staff

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Yes	26	78.79%
2.	No	7	21.21%

Table 4.35 showed that majority of the schools which were 78.79 percent used to have child related sharing with the parents but 21.21 percent of them did not do so though this was an important and essential aspect of the pre-school education programme.

4.2.6.4. Whether parents are made aware of pre-school education

Table 4.36. Whether parents are made aware of pre-school education

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Yes	22	66.67%
2.	No	11	33.33%

A cursory glance at Table 4.36 showed that majority of the schools i.e., 66.67 percent made the parents aware about pre-school education programme, however 33.33 percent of them did not organize such awareness programmes for the parents.

4.2.6.5. Whether parents are involved in decision making roles

Table 4.37. Whether parents are involved in decision making roles

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Yes	21	63.64%
2.	No	12	36.36%

Table 4.37 showed that 63.64 percent of the schools involved the parents in decision making and 36.36 percent of the schools did not involve the parents in decision making about the school.

4.2.6.6. Organization of parent-teacher meetings.

Table 4.38. Organization of parent-teacher meetings.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Once a year	10	30.30%
2.	Twice a year	15	45.45%
3.	Thrice or more times a year	6	18.18%
4.	Meetings not organised	2	6.06%

With regards to parents and teachers meeting, Table 4.38 showed that 45.45 percent of the schools organised parent-teacher meeting and 30.30 percent of them organised such meetings once a year. There were 18.18 percent of schools that organised the meetings thrice or more times in one academic year. There were 6.06 percent of schools that did not held such meetings.

4.2.6.7. Whether children are visited at home by the school teachers.

Table 4.39. Whether children are visited at home by the school teachers.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Once a year	8	24.24%
2.	Twice a year	8	24.24%
3.	Once in a month	2	6.06%
4.	As per the child needs/performance	3	9.09%
5.	Children are not visited	12	36.36%

A cursory glance at Table 4.39 revealed that 24.24 percent of the schools visited their students once in a year and the same also visited the children at home twice a year. Also, 9.09 percent visited their children as per the need or performance of the child and 6.06 percent of the schools claimed that they visited the children once in a month. However, there were 36.36 percent schools who reported that such visits were not made.

4.2.6.8. Whether parents are given administrative information about pre-school programme

Table 4.40. Parents given administrative information about pre-school programme

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Yes	23	69.69%
2.	No	10	30.30%

An analysis of the table showed that in 69.69 percent of the sampled schools, administrative information about the pre-school programme was given to the parents while 30.30 percent of the sampled schools did give any administrative information to the parents.

Discussion: Though majority of the parents (72 percent) felt pre-school was a place for preparation of children for formal education, they seemed to miss out the concept of the deeper purpose of pre-school education. Parents often missed to understand the concept of school readiness in its true sense like preparing their fine motor development, their eye and hand coordination, sound discrimination, visual discrimination, pre-number concepts, and socio-emotional development. The concept that pre-school education was the foundation of all future learning was often missed out. They conceptualized pre-school as a place only where they begin to learn alphabet and numbers. Arya and Joshi (2021) attempted an ethnographic exploration of teachers' lived experiences in early literacy school settings in which they tried to interpret their literacy development experiences as co-constructed in everyday school activities. They mentioned that teachers' understanding, experiences, and views about early literacy get translated into early literacy experiences of children in school and the teachers expressed that they experienced conflict in their actions and beliefs regarding early literacy in school and some of the factors affecting their actions were the unavailability of age-appropriate and relevant literacy materials and parental expectations of literacy (Arya and Joshi, 2021). In a study by Alcott, et.al (2019) in India also highlighted that pre-school education was increasingly in great demand even among poorer communities and rural areas but the developmental needs of young children were poorly understood, whether by parents, teachers, or communities therefore implying that there was a need to make parents aware of the need for developmentally appropriate experiences. It was clear from the study that parents needed to realize that having their children study the 3Rs before Grade I does not lead to meaningful outcomes.

It was reassuring to observe that many parents' regard pre-school education important for their children but tend to prefer teaching of the 3Rs. All the parents interviewed felt pre-school was a place where children learn to socialize and prepare for formal schooling. A few of them also felt that pre-school was beneficial primarily due to its convenience, as government-funded schools saved them money and time, which benefitted their own schedules. Even if parents were found to miss the deeper tenets that underlie pre-school education, they felt it was important for their child

which was a positive trend. Wadhwas, et.al (2019) in their analysis of the data from the India Early Childhood Education Impact (IECEI) showed that the learning gap between public and private schools fell, and the contribution of parents and the home environment rised (Wadhwas et al., 2019). The NCF-FS (2022) also emphasized much on the importance of building relationship with the parents and families as they were equal partners in the learning process.

It was encouraging to find that majority of the schools i.e 78.79 percent had child related sharing between parents and teachers. Most of the sampled schools had maintained close connection with the parents as also evident in how the departure time was utilized. Among the sampled schools, 21.21 percent of them did not have child related sharing with the parents. It must be made mandatory for the schools by the government to organise such meetings. In the sampled schools, 66.67 percent said that they parents were made aware of pre-school education through such meetings and 63.64 percent of the schools involved the parents in decision making. It was encouraging to observe that most schools were taking proactive measures to educate parents about the significance of pre-school education. But the number of parent teacher meetings organized in a year was somewhat less as only 18.18 percent of the sampled schools conducted thrice or more times in a year. It was quite reassuring to note that most of the schools visited the children at home because home visits by teachers during the pre-school stage were highly valuable for several reasons. There were only 36.36 percent of sampled schools who did not visited their children at home. Fostering good relationship with the parents was essential for creating a consistent learning environment that extended beyond the classroom. Regular updates on the child's learning and overall wellbeing allowed parents to understand what their child was learning and how they could support them. When teachers understood the family's background, values, and home environment, they could tailor their approach to better meet the child's needs. Further, engaging parents through regular meetings could help them stay informed and motivated to participate actively in their child's education. By keeping parents well-informed and involved, a more cohesive and supportive learning experience could be offered to the children.

In an analysis of the current policy documents in ECCE and their implementation in India, Mohite and Bhatt (2008) included an examination of parental beliefs about ECCE in which it was revealed that there was an increasing awareness of issues such as the importance of care for young children, play and advantages of play based strategies by the parents (Mohite and Bhatt, 2008) which could also be seen in the context of Mizoram. In the study there was also an increased awareness of the use of indigenous materials and culturally relevant curricula (Mohite and Bhatt, 2008) but this notion was missing in Mizoram. Awareness for parents was an important factor for successful implementation of pre-school education in Mizoram because we needed to avoid what Arya and Joshi (2021) mentioned in their study that providing young children with opportunities for exploration and self-expression in the early years of schooling was constantly opposed and disappearing because of the misunderstanding of literacy in our current education system.

It was mentioned in the Pre-school Guidelines developed by NCERT (2019) that when collaboration exists between teachers, parents and community, children perform better in academics, improve behaviour and social skills. In order to make parents involved more, schools should create opportunities for their engagement like seminars and meetings. This was important because as evident in the study conducted by Wadhwas, et al. (2019) on the relationship between pre-school participation, school readiness and early grade learning in India, it was found that the impact of participation on children's school readiness and subsequent early-grade learning was attributable more to their family background than the institutions that the children attended. When participation and involvement of parents were in place, a cohesive environment or ecosystem could be made where children could thrive at schools as well as at home.

Conclusion: Though parents were aware about the importance of quality pre-school education, a deeper understanding of the developmental goals for fine motor skills, socio-emotional growth, and school readiness was missing. Majority of the parent's thought pre-school was a mini primary school and they tend to think that 3Rs were important for the children's learning. At the same time, it was encouraging to see that

the schools were making efforts to the extent of making home visits and collaborating with parents. Despite these efforts, more regular and meaningful parent-teacher interactions, as well as increased awareness of the broader developmental role of pre-school, were required. For pre-school education to be truly effective, it was essential to align parental expectations with developmentally appropriate practices and involve parents more actively in the educational process.

Objective 3. Assessment of language development of the pre-school children in Grade I who completed pre-school education programme

4.3 Analysis of Language Development of Pre-school Children in Government Primary Schools

Literacy does not only mean the skill of reading and writing. Literacy involved skills of making meaning about what is being said and read and it also involved critical thinking skills and effective communication and expression through writing, speaking and drawing. It is critical for children to possess awareness about print, readiness in reading and writing and sound-letter associations, convention of print etc. It was highlighted in the National Curriculum Framework for the Foundational Stage (NCF-FS) 2022 that children acquired oral language most rapidly during the first eight years of life, highlighting the importance of not missing sensitive periods for language development during this time (NSCNCF, 2022). Delaying language learning during these formative years can hinder children's ability to acquire new languages later on (NSCNCF, 2022). While first spoken language typically develops naturally for children, but written language is less instinctive (NSCNCF, 2022). Therefore, reading and writing must be explicitly taught through targeted instruction and practice, as they involve mastering various symbols and early literacy skills develop best and most quickly on a foundation of strong oral language skills (NSCNCF, 2022).

Language is the means through which learning and communication takes place and is of central importance for schooling and development of the child. As language is the mode in which the children communicate what they need, to make themselves understood, follow and respond to instructions, we can say that language

is the foundation for most learning and education of a child. Research conducted in the recent past has also revealed that use of familiar language instructions improves overall school performance, cognitive development, problem solving, and creativity (Francis, Matafwali & Banda, 2019). Despite the acknowledgement that children learn and comprehend non-trivial concepts most swiftly and thoroughly in their home language, the mother tongue was found to be neglected in the sampled pre-schools.

The development of oral language skills through instruction combined with frequent exposure to rich oral language opportunities throughout the school day lays the foundation for learning to read and write. Effective literacy instruction must include teaching that fosters oral language development, especially for students who enter kindergarten with weak spoken skills and English language learners (Calderon, 2011). Children learn language by listening and speaking before they learn to read and write. It is important to expose children to the language through listening and speaking (NCERT, 2022). To find out the oral expression skills of the children in the sampled schools, the children were assessed against the oral language skills (Mizo and English were used) outlined in the Vidya Pravesh Guidelines developed by NCERT, and the result is tabulated as shown in percentage below:

4.3.1 Assessment of Demonstration of oral expression

The development of oral language skills through instruction combined with frequent exposure to rich oral language opportunities throughout the school day lays the foundation for learning to read and write. Effective literacy instruction must include teaching that fosters oral language development, especially for students who enter kindergarten with weak speaking skills and English language learners (Calderon, 2011). Children learn language by listening and speaking before they learn to read and write. It is important to expose children to the language through listening and speaking (NCERT, 2022). To find out the oral expression skills of the children in the sampled schools, the children were assessed against the oral language skills outlined in the Vidya Pravesh Guidelines developed by NCERT, and the result is tabulated as shown in percentage below:

4.3.1.1. Demonstration of Oral Expression.

Table 4.41. Demonstration of Oral Expression.

Sl. No.	Demonstration of Oral Expression.	Rarely		Sometimes		Always	
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1.	Talks freely with adults and children	31	11.79%	107	40.68%	125	47.53%
2.	Expresses feelings, needs and shows interest (through verbal and non-verbal gestures)	35	13.31%	126	47.91%	102	38.78%
3.	Speaks clearly in complete sentences	31	11.79%	103	39.16%	129	49.05%
4.	Comprehends short texts by listening	13	4.94%	75	28.52%	175	66.54%
5.	Describes and retells any event or visual in short sentences	29	11.03%	121	46.01%	113	42.97%
6.	Identifies, blends and segments syllables	102	38.78%	104	39.54%	57	21.67%
7.	Identifies beginning and end sounds of common words	93	35.36%	104	39.54%	66	25.10%
8.	Expresses/ answers creatively	52	19.77%	119	45.25%	92	34.98%
9.	Comprehends and answers after listening	19	7.22%	91	34.60%	153	58.17%
10.	Describes and retells using rich details in complete sentences	85	32.32%	108	41.06%	70	26.62%
11.	Engages in meaningful conversations	47	17.87%	113	42.97%	103	39.16%
12.	Identifies the beginning, middle and end sounds of words	116	44.11%	94	35.74%	53	20.15%
13.	Makes new words by adding or substituting syllables	149	56.65%	89	33.84%	25	9.51%

A cursory glance at Table 4.41 showed that 47.53 percent of the children were able to interact and talk freely with adults and other children while 40.68 percent were able to do so sometimes and 11.79 percent rarely talked freely. When looking at whether children were able to express feelings, needs and shows interest (through verbal and non-verbal gestures), 47.91 percent of the children fell under sometimes and 38.78 percent were able to do so as they fell under always but 13.31 percent of the children rarely show that skill. 49.05 percent of the children could speak clearly in full sentence while 39.16 percent falls under sometimes and 11.79 percent could hardly do this skill. It is good to note that 66.54 percent of the children were able to comprehend short texts by listening. Also, 28.52 percent of them were able to comprehend it sometimes while 4.94 percent were rarely able to do so. It was seen that 46.01 percent of the children were sometimes able to describe and retell events or visual in short sentences while 42.97 percent were able to do so always but 11.03 percent were hardly able to do this skill. With regards to identification, blending and segmenting syllables, majority of the children i.e., 39.54 percent were sometimes able to do it and almost the same number i.e., 38.78 percent were hardly able to do so and only 21.67 percent were able to do this skill always. Also, 39.54 percent of the children were able to identify beginning and end sounds of common words sometimes, and 35.36 percent of them were hardly able to do so, only a small number of them i.e., 25.10 percent were able to identify the sounds always. When children were tested whether they were able to express themselves creatively, 45.25 percent of them were able to do so sometimes while 34.98 percent of them were able to do so always but 19.77 percent were hardly able to express themselves. Majority of them i.e., 58.17 percent were able to comprehend and answer questions after listening while 34.60 percent can do this skill sometimes while 7.22 percent of them can execute this skill rarely. With regards to the skill of describing and retelling using rich details in complete sentences, 41.06 percent of the children were able to do it sometimes and 32.32 percent were not able to do this often and only a few of the children i.e., 26.62 percent were able to do so always. 42.97 percent of the children were able to engage in meaningful conversations sometimes while 17.87 percent of them rarely show such skills and 39.16% percent of the children were able to do so always. 44.11 percent of the children were rarely able to identify the

beginning, middle and end sounds of words while 35.74 percent were able to do so sometimes and only 20.15 percent of them were able to identify the sounds always. With respect to making new words by adding or substituting syllables, majority of the children i.e., 56.65 percent were rarely showing this skill, 33.84 percent fall under sometimes and only 9.51 percent were able to do this skill always.

4.3.2. Assessment of Demonstration of Emergent Reading Skills

As children become ready to read, they must be familiarized with what print looks like, how print is connected to sounds, and how print has meaning (NCERT, 2022). To find out whether the children in Mizoram demonstrate emergent reading skills, they were assessed against the reading skills outlined in the Vidya Pravesh Guidelines developed by NCERT, and the result is tabulated as shown in percentage below:

4.3.2.1. Demonstration of Emergent Reading Skills

Table 4. 42. Demonstration of Emergent Reading Skills

Sl. No.	Demonstration of Emergent Reading Skills	Rarely		Sometimes		Always	
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1.	Explores and engages with pictures, books and other print materials	48	18.25%	141	53.61%	74	28.14%
2.	Listens attentively to stories and rhymes	11	4.18%	101	38.40%	151	57.41%
3.	Names objects in the picture	21	7.98%	120	45.63%	122	46.39%
4.	Identifies words in a sentence	67	25.48%	107	40.68%	89	33.84%
5.	Identifies rhyming words	142	53.99%	87	33.08%	34	12.93%
6.	Recognizes sound symbol association	121	46.01%	84	31.94%	58	22.05%
7.	Attempts to read words	80	30.42%	105	39.92%	78	29.66%
8.	Identifies convention	24	9.13%	91	34.60%	148	56.27%

Sl. No.	Demonstration of Emergent Reading Skills	Rarely		Sometimes		Always	
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
	of print such as left to right writing, reading from top to bottom						
9.	Identifies punctuation marks like full stop and commas in the print	129	49.05%	75	28.52%	59	22.43%
10.	Independently reads simple text in full sentences	129	49.05%	74	28.14%	60	22.81%
11.	Retells a familiar story with the beginning, middle and end events in a sequence	98	37.26%	117	44.49%	48	18.25%
12.	Comprehends pictures	29	11.03%	100	38.02%	134	50.95%
13.	Comprehends words	97	36.88%	107	40.68%	59	22.43%

An analysis of Table 4.42 showed that majority of the children i.e., 53.61 percent explored and engaged with pictures, books and other print materials sometimes while 28.14 percent of them always showed interest in exploring and engaging with pictures, books and other print materials. But 18.25 percent of the children however rarely showed interest in this area. While the majority of them i.e., (57.41 percent) listened attentively to stories and rhymes, 4.18 percent of the children rarely engaged in this activity, however, 38.40 percent of fell under sometimes. Also, 46.39 percent of the children were able to name objects in the pictures while 45.63 percent of them were able to name the objects sometimes but a few of them i.e., 7.98 percent were hardly able to do so. With respect to identifying words in a sentence, 40.68 percent were able to do so sometimes, 33.84 percent of the children could do so always and 25.48 percent of them rarely do so. The majority of the children i.e., (53.99 percent) rarely identified rhyming words while 12.93 percent of them could do so, and 33.08 percent of them were able to identify rhyming words sometimes. Majority of the children i.e., 46.01 percent rarely recognizes sound symbol

association, 31.94 percent of them sometimes recognizes the task and only a few i.e., 22.05 percent were able to do this task every time. Regarding an attempt to read words, 39.92 percent of them attempted to read sometimes while 30.42 percent of them rarely attempted to do so and 29.66 percent of them were attempting to read words. 56.27 percent of the students were able to identify the convention of print and 34.60 percent of the children were able to identify sometimes and a handful of them i.e., 9.13 percent could rarely identify the convention of print. Regarding identification of punctuation marks like full stop and commas in the print, majority of the children i.e., 49.05 percent rarely performed this skill while 28.52 percent were able to do so sometimes, however 22.43 percent of the children were able to identify the punctuation marks always. Majority of the children i.e., 49.05 percent could not read simple text in full sentences but 28.14 percent of them could perform the task sometimes and 22.81 percent of them were able to execute the skills always. Also, 44.49 percent of the children were able to retell a familiar story with the beginning, middle and end events in a sequence sometimes while 37.26 percent of them rarely were able to do this task but 18.25 percent of them were able to retell stories in sequence. With regards to the skill of comprehending pictures, majority of them i.e., 50.95 percent were able to do so, 38.02 percent of the children could sometimes comprehend such pictures while 11.03 percent of them could not perform the task. Also, 40.68 percent of the children could comprehend words sometimes while 36.88 percent fall on rarely and only 22.43 percent of the children were able to comprehend words.

4.3.3. Assessment of Demonstration of Emergent Writing Skills

Writing begins when children scribble, draw and invent spellings to represent the physical and social world around them. This developmental aspect of children learning to write is emergent writing (Nixon & Topping, 2001). Expressing oneself in written forms is an important milestone for children to become effective communicators. An emergent writer talks about their writing by making connections and communicating their experiences with others (NCERT, 2022). To find out whether the children demonstrate emergent writing skills, the children were assessed

against the language skills outlined in the Vidya Pravesh Guidelines developed by NCERT, and the result is tabulated as shown in percentages below:

4.3.3.1. Demonstration of Emergent Writing Skills

Table 4.43. Demonstration of Emergent Writing Skills

Sl. No.	Demonstration of Emergent Writing Skills	Rarely		Sometimes		Always	
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1.	Holds pencil properly	18	6.84%	24	9.13%	221	84.03%
2.	Does tracing on sand/ air etc.	92	34.98%	91	34.60%	80	30.42%
3.	Scribbles or draws to represent thoughts, situations, events etc.	129	49.05%	103	39.16%	31	11.79%
4.	Holds writing or coloring tool with better grip	8	3.04%	23	8.75%	232	88.21%
5.	Uses writing tool appropriately	5	1.90%	27	10.27%	231	87.83%
6.	Reads one's drawing and explains it using simple words	40	15.21%	100	38.02%	123	46.77%
7.	Tries to express ideas in words and drawings	148	56.27%	74	28.14%	41	15.59%
8.	Attempts to write alphabets and numbers	31	11.79%	107	40.68%	125	47.53%
9.	Uses tools with ease to convey meaning through drawing	112	42.58%	106	40.30%	45	17.11%

An analysis of Table 4.43 showed that 84.03 percent of the children were able to hold their pencil properly but a few of them i.e., 6.84 percent could not do so, and 9.13 percent of them were able to do so sometimes. Tracing on sand/ air was rarely done by 34.98 percent of the children; while 34.60 percent of them did this activity sometimes and 30.42 percent of the children often engaged in this activity. 49.05 percent of the children rarely scribbled or draws to represent thoughts, situations, events etc. while 39.16 percent of them do this activity sometimes and only a few of

them i.e., 11.79 percent engaged in this activity and were able to express themselves. With regards to the ability to hold writing or coloring tool, 88.21 percent of the children were able to hold the tool with better grip and 8.75 percent of them could do so sometimes but there were a few i.e., (3.04 percent) who rarely showed this skill. 87.83 percent of the children were able to use writing tool appropriately, 10.27 percent of them fall under sometimes and only 1.90 percent did not acquire this skill. With regards to reading one's drawing and explains it using simple words, 46.77 percent of the children were able to do so while 15.21 percent rarely showed this skill, and 38.02 percent fell under sometimes. 56.27 percent of the children rarely tried to express ideas in words and drawings, 28.14 percent attempted to do so sometimes and 15.59 percent were able to express every time. 47.53 percent of the children attempts to write alphabets and numbers while 40.68 percent of them were attempting it sometimes but 11.79 percent of the children rarely performed this skill. Also, 42.58 percent of them rarely use tools with ease to convey meaning through drawing while 17.11 percent of them perform these tasks every time, and 40.30 percent of them were able to perform this task sometimes.

Discussion: Table 4.41 indicated varied levels of proficiency among children in demonstrating oral skills. Many children demonstrated proficiency in oral expression skills, such as engaging in open conversations with both adults and peers. Children showed effective expression of feelings and needs, they also displayed curiosity and speak in simple complete sentences. They also responded creatively and were able to answer questions showing comprehension of what was being said to them. But only 21.67 percent of the children were able to identify, blend and segment syllables. Skills like recognizing the beginning, middle and end sounds of words were also found to be difficult for majority of the children. The skill of describing and retelling a familiar story with rich details in complete sentences were also found to be difficult and many of the children struggled with engaging in meaningful conversations and creating new words by adding or substituting syllables. These skills were required for curricular preparedness and the matter might not be taken lightly as these skills were necessary prerequisites for developing competencies associated with language and foundational literacy. This data suggested that there

remained a need for increased effort and variety in the types of activities implemented.

Activities for language development as seen in Table 4.16 such as free conversations, storytelling, riddles, picture reading, songs and rhymes, and chart reading had enhanced students' oral skills. Most primary schools foster child-to-child and staff-child interactions, encouraging children to express themselves with ample thinking time. Table 4.15 showed that socio-emotional activities like singing together, sports, group play, birthday and festival celebrations, group work, and mealtime activities were practised. The number of schools that practiced these activities varied and needed to be implemented more.

When children engaged in various activities, it could foster language development positively. Through dramatic play children have the opportunity to learn expression and understand people's perspectives and it could also build crucial social skills like cooperation, sharing, and problem-solving (Ambrosio, 2023). Likewise, language skill development activities like command games have the capacity to develop and enhance communication skills and develop listening skills. Show and tell nurtures confidence in public speaking Huzefa (2024), while story telling enhanced imagination to help visualize spoken words, improved vocabulary, and more refined communication skills (Yabe et al., 2018).

An analysis of table 4.42 indicated varied levels of proficiency among children in reading skills. Some children performed quite well in skills like listening attentively to stories and rhymes (57.41 percent), naming objects in the pictures (46.39 percent) and identification of the convention of print (56.27percent). However, majority of the children did not perform well in other skills like identifying words in a sentence, identification of rhyming words (57.99 percent), recognizing sound and symbol association, attempting to read words, reading simple text in full sentences, identification of punctuation marks, reading simple texts independently, retelling a familiar story with beginning, middle and end and comprehension of words. In terms of the skill required for exploring and interacting with pictures, books, and other print materials, attempting to read words, identification of

punctuation marks, reading of simple texts and comprehension of words, children were not performing very well. Triangulation with the school observation revealed that none of the sampled schools possessed a sufficient collection of children's books and picture books or a designated reading corner where children could engage in such activities. It was also found that the schools in the sample implemented an insufficient number of visual discrimination activities, thereby omitting a vital component crucial to developing early reading proficiency. Lack of relevant resources in the classroom affected children in different ways, such as making it difficult for them to learn to their fullest potential (Maffea, 2020). The effect of print richness in terms of developing literacy skills was further supported by Behera (2024), who established that a print-rich environment has a strong impact on enhancing reading skills and fostering the skill of literacy by encouraging learners to work autonomously in different learning activities.

Despite these efforts to incorporate reading activities into the curriculum, the outcomes appeared to fall short of expectations, as evidenced by children's performance in reading skills. A significant number of children struggled with the identification of rhyming words, which was a crucial component of phonological awareness. It is important for children to have this skill as it develops reading skill by laying the foundation for advanced phonemic awareness skills crucial for literacy development, including reading and spelling (Ahrndt, 2023). The children showed difficulty in activities like recognition and association of sounds with letters or words. Some of the children were not able to read simple texts in complete sentences which might lead to children struggling with reading with comprehension.

In this study, the different problems faced by the children were identified. These skills were identification of rhyming words, sound and letter association, and reading full sentences and to inculcate these necessary skills in children, planned interventions would be required. Chaudhary and Kaul (2019) in their study also revealed that the dominant curricular practice across both private and government pre-school centers in Andhra Pradesh, Assam and Rajasthan was formal and teacher-controlled teaching of reading, writing, and number work with maximum time devoted to it in the daily routine thus tending to push out developmentally

appropriate practices. This practice was also prevalent in the pre-school scenario of Mizoram. Teacher-centered teaching of the three R's in pre-school years could at best add limited value and at worst be detrimental to children's cognitive and language readiness for school despite children's regular attendance in a pre-school programme.

The data from Table 4.14 revealed that fine motor development activities like action songs, drawing, colouring, clapping, catching, and tracing were widely practiced in schools, with participation rates from 90.91 percent to 100 percent. Activities such as arranging puzzles, tearing, and finger play were also common, while creative activities like tearing and pasting, cutting, painting, pattern making, and clay moulding had lower participation. This suggested a need for schools to emphasize these activities to promote writing skills. The analysis of table 4.38 indicated that children performed quite well in holding a pencil properly which was an important feature in early writing skills. They also did quite well in holding a writing or colouring tool, using writing tool appropriately and in reading or explaining their own drawings using simple words. Majority of them showed interest in writing alphabets and numbers as they were found attempting to write the alphabets and numbers. It was surprising to note that essential skills such as scribbling or drawing to represent their thoughts (11.79 percent), as well as the ability to express their ideas through words or illustrations and utilize writing or colouring tools to convey meaning through drawing (17.11 percent), were observed in only a small number of children. These skills were foundational for creative expression, as they enabled children to communicate their ideas and emotions before they fully developed verbal language.

Artistic expression through drawing or scribbling nurtures imagination and critical thinking. When children draw or scribble, they represent their thought processes in a meaningful way. If children are deficient in this skill, interventions need to be made to equip children through age and developmentally appropriate learning experiences. Scribbling is an instinct, hard-wired and crucial to human brain development (Roches, 2024). Drawing and scribbling play important roles in laying

the foundation for literacy as it requires cognitive skills, creativity, curiosity and solving problems, visualizing outcomes, taking risks and organizing (Roches, 2024).

Conclusion:

The language assessment of children showed both strengths and weaknesses in children's language skills. The present study showed that simple competencies like oral expression, pre-reading skills and pre-writing skills were possessed by the children. The children were able to engage in simple conversations and listening to stories attentively, however, more complex skills were found to be missing. Children had challenges in expressing their feelings creatively and storytelling. This required planned interventions and strategies. With respect to writing skills, simple pre-writing skills like holding pens, pencils or colouring tools, but expressing thoughts creatively through drawing and writing were found to be difficult for majority of the children.

The findings revealed the importance and need for various activities which were engaging and developmentally appropriate on the context of Mizoram. Because the natural way of learning reading and writing could be hampered by continuous drills of letters which might make no sense to the children, and this was an ongoing practice in the majority of schools in Mizoram. Learning in the schools had been taken far away from the life of the child and it was high time that the school system takes steps to stimulate children's natural way of learning, especially in language acquisition. Singh and Chaudhary (2019) in their observations of the curriculum transaction in the classroom in India revealed that learning in the schools had been taken far away from the life of the child. They emphasized that it was high time that the school system took steps to stimulate children's natural way of learning. They also highlighted that the entire constructivist approach and developmental appropriateness of the curriculum emphasized for pre-primary and early grades in the National Curriculum Framework 2005 did not get implemented which was also a prevalent scenario in Mizoram.

Objective 4. Analysis of the profile of functionaries implementing the pre-school education programme in the schools.

4.4. Profile of Functionaries Implementing the Pre-school Education Programme in the Government Primary Schools:

Educators who received specialized training were better equipped to respond to the needs of children which made training for pre-school teachers crucial for promoting ongoing professional growth and development. Teacher–child relationships play a crucial role in the development of competencies during early school years (Pianta, Steinberg, & Rollins, 1995; Pianta & Walsh, 1996, as cited in Koca, 2016) and throughout the transition to middle school (Davis, 2003; Pianta, 1999 as cited in Koca, 2016). Hence, it was deemed necessary to examine the profiles of the functionaries responsible for implementing pre-school education at the grassroot level.

4.4.1. Educational and Professional Qualifications of Headmasters

Table 4.44. Educational and Professional Qualifications of Headmasters

Sl. No.	Items	Total No. of Headmasters	No. of Headmasters	Percentage
1.	HSLC	33	7	21.21%
2.	HSSLC	33	4	12.12%
3.	Graduate without M.Ed./B.Ed./D.El.Ed.	33	12	36.36%
4.	Post Graduate without M.Ed./B.Ed./D.El.Ed.	33	1	3.03%
5.	Graduate with M.Ed./B.Ed./D.El.Ed.	33	6	18.18%
6.	Post Graduate with M.Ed./B.Ed./D.El.Ed.	33	3	9.09%

Looking at Table 4.39, it showed that the majority of the headmasters i.e., 36.36 percent were graduates without any teacher education degree like M.Ed., B.Ed., or D.El.Ed. and 21.21 percent were HSLC (2010) and there were 12.12 percent of headmasters who were HSSLC (2012). A few of them i.e., (18.18 percent) were graduate with degree in teacher education and 9.09 percent were post

graduate with degree in teacher education. There was also 1 headmaster i.e., 3.03 percent who was a postgraduate without a degree in teacher education.

4.4.2. Experience wise of headmasters in Pre-schools

Table 4.45. Experience wise of headmasters in Pre-schools

Sl. No.	Items	No. of Headmasters	Percentage
1.	1-5 years	0	0.00%
2.	6-10 years	7	21.21%
3.	11-15 years	2	6.06%
4.	16-20 years	1	3.03%
5.	21-25 years	4	12.12%
6.	More than 25 years	19	57.58%

A cursory glance at Table 4.40 revealed that majority of the headmasters i.e., 57.58 percent had more than 25 years of service which meant that they were promoted to the post headmaster due to seniority. Also, 21.21 percent of the headmasters fell in the range of 6-10 years of service and a few of them i.e., (12.12 percent) had 21-25 years of service. And 6.06 percent of them had a service of 11-15 years. With regards to school experience, the head teachers were in the system for quite some time.

4.4.3. Specialization in Pre-school/ Early Childhood Education (e.g. degree/ diploma/ research work/ in-service course/ refresher) among headmasters.

Table 4.46. Specialization in Pre-school/ Early Childhood Education (e.g. degree/ diploma/ research work/ in-service course/ refresher) among headmasters.

Sl. No.	Items	No. of Headmasters (total 33)	Percentage
1.	Short term In-service Training at SCERT & DIET	6	18.18%
2.	Specialization in pre-school education	0	0.00%

4.4.4. Implementation of new practices/ initiatives from the training.

Table 4.47. Implementation of new practices/ initiatives from the training.

Sl. No.	Items	No. of Headmasters	Percentage
1.	Yes	6	18.18%
2.	No	27	81.18%
Total		33	100.00%

From Table 4.46, it could be seen that 18.18 percent of headmasters who had attended short-term training on early childhood education had taken some initiatives. Their initiatives were shared through the interviews of the headmasters which were highlighted as follows:

- i) After understanding stages of child development and the importance of child-centered approach in the pre-school stage, teaching-learning materials were prepared by the teachers and different activities to address the developmental domains.
- ii) Teaching methods were changed and child centered approach was given importance.

- iii) Coordination between parents had been given importance and parents were involved in their child's learning.
- iv) The importance of pre-school education had been discussed with the leaders of the locality.
- v) Child psychology and individual differences had now been considered and this had a lot of impact on the teaching-learning process.

4.4.5. Opinion of headmasters whether teachers should be trained in pre-school education.

Table 4.48. Opinion of headmasters whether teachers should be trained in pre-school education.

Sl. No.	Items	No. of Headmasters	Percentage
1.	Yes	33	100.00%
2.	No	0	0.00%

Looking at Table 4.48, it showed that all the headmasters felt that it was necessary for the teachers to have training in pre-school education. The following were their reasons as to why they felt training in pre-school education was necessary:

- i) to understand child psychology and how to deal with young children.
- ii) for proper and systematic guidance of young children
- iii) to have the ability to properly execute the syllabus.
- iv) to be able to draw out the inner potential and capacity of the child to its fullest.
- v) it is important for teachers to have training so that children will be able to learn in a joyful way.
- vi) to be able to lay proper foundation for basic literary and numeracy.
- vii) it is important so that children will be able to grow to the maximum mentally and physically.

- viii) to be able to understand the needs of the young children and take care of them and cater to their needs.

4.4.6. Educational and Professional Qualification of the teachers.

Table 4.49. Educational and Professional Qualification of the teachers.

Sl. No.	Items	No. of teachers	Percentage
1	HSSLC/PUC and Below	8	24.24%
2	Graduate	14	42.42%
3	Post Graduate and above	11	33.33%
Total		33	100.00%

4.4.7. Professional Qualification of the teachers.

Table 4.50. Professional Qualification of the teachers.

Sl. No.	Items	No. of teachers	Percentage
1	HSSLC and Below with DTED/D.El.Ed.	2	6.06%
2	Graduate with DTED/ D.El.Ed.	13	39.39%
3	Graduate with B.Ed	1	3.03%
4	Post Graduate and above with D.El.Ed.	6	18.18%
5	Post Graduate and above with B.Ed	5	15.15%
6	Without professional degree	6	18.18 %
Total		33	100.00%

Table 4.49 and table 4.50 showed the educational qualifications of the teachers in which 33.33 percent of them possessed post graduate degree and 42.42 percent of them were graduates. The remaining i.e 24.24 percent was HSSLC and below and among them, there were 2 teachers who possessed D.El.Ed and 6 teachers were not trained. Also, 39.39 percent of the teachers were graduates with

D.El.Ed/ D.Ted and 3.03 percent i.e 1 teacher was a graduate with B.Ed degree. And 18.18 percent of the teachers were post graduate with D.El.Ed and 15.15 percent of them were post graduates having B. Ed degree. There were 18.18 percent of teachers who did not possess any professional degree as they were hired to address the teacher shortage in the school and were funded by the regular teachers themselves.

4.4.8. Training Undergone and Duration

Table 4.51. Training Undergone and Duration

Sl. No.	Items	No. of schools (33 in total)	Percentage
1	No. of Trained Teachers (pre-service)	27	81.81%
2	No. of Untrained Teachers (pre-service)	6	18.18%
3	No. of teachers with more than 1 short term training in ECCE	7	21.21%
4	No. of teachers training in 6 months certificate course in ECCE (on-going)	18	54.54%

Table 4.51 showed that amongst the 33 pre-school teachers, 81.81 percent of them were trained teachers with either D.El.Ed or B.Ed and 18.18 percent of them were not trained. These untrained teachers were part-time teachers engaged by the school due to shortage of teachers for the pre-school section and were paid with the contribution of the monthly salary of the regular teachers. But it may also be mentioned that none of the regular teachers have a Diploma or Certificate in ECCE during the time of data collection, however, 21.21 percent of the teachers had undergone short term training in Early Childhood Care and Education. During the time of data collection, 54.54 percent of the teachers were deputed to undergo a training on 6 months Certificate Course in ECCE and were undergoing this training under SCERT. As spelled out in the NEP2020, all teachers of pre-school should undergo a training of 6 months in Early Childhood Care and Education (ECCE) or 1 year Diploma in ECCE. This reflects that government system in Mizoram was taking steps to improve the situation of pre-schools.

4.4.9. Availability of helpers for the teachers

Table 4.52. Availability of helpers for the teachers

Sl. No	Items	No. of schools (33 in total)	Percentage
1	Pre-school Teachers with Helpers	10	30.30%
2	Pre-school Teachers without Helper	23	69.70%
3	Pre-school Teachers having 1 Helper	9	27.27%
4	Pre-school Teachers having more than 1 Helper	1	3.03%

Table 4.52 showed that majority of the teachers i.e 69.70 percent were teaching without helpers and only 30.30 percent of them were having helpers. Amongst the teachers, 27.27 percent of them were having 1 helper and there was 1 teacher i.e 3.03 percent who had more than 1 helper.

Discussion: Teachers become interactive agents as they influenced children's academic and social and emotional development by nurturing classroom setting that stimulates and supports learning. Moreover, these relationships help regulate the development of social, emotional, and academic skills (Davis, 2006, as cited in Koca, 2016). This made it clear that teacher professional training must be implemented. At the time of data collection, it was unfortunate that there was no demand for trained pre-school teachers by the state government or regulation of norms for teacher qualifications or salary nor any guidelines for the recognition of pre-school staff as teachers. For primary teachers teaching in grades 1 and 2 which were also included as part of ECCE in the diploma course in ECCE, professional qualifications were prescribed but the teacher education curriculum for this sub-stage was not harmonized across programmes, and not addressed distinctly from the rest of the elementary education stage such as in the Diploma in Elementary Education and Bachelors in Elementary Education (Yadav, 2015).

The percentage of headmasters who did not acquire professional degree in teacher education and headmasters with only HSLC and HSSLC was a concern. This

suggested a potential gap in the overall administration of the school. This called for intervention in the professional development of the headmasters to ensure that they were competent in leading the school efficiently. The extensive number of years of service the headmasters had experienced showed that throughout their service, the practices they had gathered would equip them in many ways. But this did not guarantee efficiency and productivity. Skills required for headmasters on educational planning and management and school leadership might not be thoroughly cultivated. Often, senior headmasters and teachers with a long service found it difficult to change their practices and beliefs as encountered by the researcher. Since the state adopted seniority-based promotions, there existed a critical demand for the continuous professional development for the headmasters.

It was found that 18.18 percent of headmasters had undergone short term training in pre-school education and that they had tried their best in implementing what they had gained from the training. This reflected a positive trend indicating that short term trainings could impact the planning and administration of a school. The initiatives of the headmasters demonstrated a noteworthy shift towards child centred and age-appropriate learning and engaging the parents and community which were significant for nurturing quality pre-school education. The headmasters in all the sampled schools agreed that training in pre-school was important and essential for the teachers highlighting a solid recognition of the importance of pre-school education. And based on the reasons provided by the headmasters, there was a need to focus on child psychology and development, implementation of curriculum, methodology of play way approach, inclusive education and classroom management. Due to the multifaceted nature of pre-school education, continuous professional development, refresher courses, workshops and seminars needed to be encouraged.

It was found that many of the teachers possessed high academic and professional qualifications. The trained teachers with postgraduate degrees could contribute to innovations in teaching practices and could provide valuable guide to their peers in various areas. The untrained teachers and teachers with lower academic qualifications could pose a risk in realizing quality education. Also, the teachers who were funded by the regular teachers revealed the need for intervention by the state

government as it indicated human resource limitation and financial constraints. Due to significant shortage of teachers, the regular teachers go beyond their routine responsibilities and were compelled to take matters in their own hands driven by a strong commitment and dedication to improve education. To improve the situation, peer mentoring was suggested by pairing of untrained or less qualified teachers with trained teacher with higher qualifications functioning as mentor. The educational and professional qualifications of the headmasters and teachers highlighted the need for a separate recruitment process for trained pre-school education teachers.

During 2017-2020, it was found that SCERT and DIETs except DIET, Lunglei did not organize any trainings on pre-school education. No institution among SCERT and eight DIETs possessed a dedicated space adequately equipped with teaching and learning materials to serve as a model pre-school classroom. However, after the implementation of NEP2020, in-person short term trainings relating to pre-school education were conducted by the SCERT and DIETs though it may not be adequate. The data reflected positive progresses in pre-school teacher training with the implementation of 6-month certificate course in ECCE as suggested by NEP 2020. By the year 2024, 135 teachers had completed the 6-month certificate course in ECCE and another 50 teachers were undergoing the training in 2025. Therefore, more professional development programmes, addressing dearth of teachers, allocation of funds and resources, and a strong monitoring system for tracking the progress of pre-school teacher training and the outcome of such trainings were suggested.

It was found that 69.70 percent of the teachers in the sampled schools did not have a helper though it was a requirement suggested in the Guidelines for Pre-school by NCERT (2019). Even in the schools having helpers for pre-school teachers, a helper required skills and knowledge so that pre-school curriculum could be implemented successfully. This implied that helpers for teachers had to undergo trainings as they interacted with children every day. As on February 2025, Samagra Shiksha had established 597 pre-school sections within the government primary schools starting from the year 2021-22 till date. Among these, 386 government primary schools had been provided with one helper each to assist in pre-school

classes as reported by Samagra Shiksha, Mizoram. And among the 386 helpers, only 96 helpers in Aizawl district had been trained recently.

In the face of increased attention to pre-school education since the onset of the NEP 2020, an important requisite that cannot be missed out was the professional development of the teachers. The rate of success of quality pre-school education depends on their knowledge, skills and practices which determines how much a young child learns and how ready that child is to enter primary school. The unpreparedness for school and its continuation to work was recognized much earlier in the Yashpal committee report, which state “Our national commitment to the development of human resource is daily challenged in our nurseries and primary schools” (MHRD, 1993). Therefore, professional development opportunities for teachers of pre-schools from both government and private sectors must be introduced in Mizoram. As the quality of children's experiences is directly linked to the professional development of their teachers (Sheridan et al., 2009).

Though there existed an NCTE approved programme, Diploma in Pre-school Education, for the preparation of pre-school teachers since 2014, the programme was not offered in any of the Teacher Education Institutions within the state like SCERT, IASE, DIETs and the Mizoram University. Diploma in Early Childhood Care and Education offered through distance mode by IGNOU was the only professional course available at one center in Mizoram. And six months certificate course in ECCE for in-service primary school teachers only was offered by SCERT. Besides, pre-school education training sessions of fewer than 5 days were conducted by SCERT and DIETs after the implementation of NEP2020.

Conclusion: The quality of pedagogical input from teacher educators is significantly dependent on their professional competence. They must possess expertise in specialized and efficient methods of exposing trainees to diverse teaching approaches and empower them to discover their potential (NCTE, 1998). As such in NEP 2020, Continuing Professional Development (CPD) has been an important focus and SCERTs and DIETs were expected to implement 50 hours of CPD for the teachers. Therefore, in Mizoram, the state government had issued a notification vide no

F.23015/1/2015/EDN dated 7th September 2023 so that all teachers complete the prescribed hours of CPD. The state government also informed the Directorate of School Education and SCERT to submit a consolidated report to the government each academic year. As directed by the NEP2020, the Government of Mizoram designated the Mizoram Board of School Education as the Mizoram School Standards Authority (MSSA) of the state as a regulatory body so that certain regulations could be implemented. The MSSA issued an order on 24th July 2024 vide no J.501/1/2022-MBSE(Acad)/37 and directed all government and private pre-schools to employ at least two teachers with Diploma in ECCE highlighting a commitment towards quality pre-school education. At this point of time, the government did not announce any plans for opening courses in the existing teacher training institutes yet. However, the notification issued could be a significant step in employment of qualified teachers and impact the professional qualifications of existing pre-school teachers as well.

Immediate attention was required to address the insufficient number of experts and inadequate resources for pre-school education within the SCERT and DIETs. With regards to managing to support quality system, qualified and properly trained teachers are a key to success in any circumstances (Bhise & Sonawat, 2016). Improving pre-school education in primary schools requires a multifaceted approach involving parents, educators, government officials, and educational institutions. By addressing infrastructure gaps, enhancing teacher training, fostering community engagement, and prioritizing child-centred learning approaches, pre-school education can be effectively enhanced, providing a firm basis for children's forthcoming academic and socio-emotional success.

Objective 5. Availability of Infrastructure and Facilities available for Pre-school Children in the Government Primary Schools.

The nature of pre-school being a play and activity-based programme, it required a number of play materials and safe environment. The indoor and outdoor spaces needed to be equipped with proper facilities to enhance the all-round development of young children. A pre-school is like a second home for children

because it is a place they could feel accepted and included. As they spend a significant part of their day there, the development of this sector directly affects the education and upbringing of future generations (Kholiyorova, 2024), the importance of infrastructure and facilities available cannot be overlooked, as it plays a crucial role in the education and requires careful analysis.

4.5. Observation of Infrastructure and Facilities available for Pre-school Children in the Government Primary Schools

4.5.1. Availability of Outdoor play space

Table 4.53. Availability of Outdoor play space

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	With fencing and safe	16	48.48%
2.	Without fencing but safe	13	39.39%
3.	Without fencing and not safe	4	12.12%
4.	Space is adequate	13	39.39%
5.	Space well maintained	16	48.48%
6.	Space is easily accessible	13	39.39%
7.	Protection from elements i.e., sun and rain	10	30.30%

An analysis of Table 4.53 revealed that all the schools had outdoor spaces for play and other activities. However, probing (observation) into the conditions of the available play spaces, it was found that only 48.48 percent of schools were with fencing and safe and 39.39 percent were without fencing but were safe. This implied that most of the schools had safe play spaces. The Guidelines for Pre-school (NCERT, 2019) also mentioned that the pre-school should be surrounded with a boundary wall or a fence with a gate to mark the safe area. However, 12.12 percent of the schools were without fencing and not safe for small children. With regards to maintenance of the outdoor space 48.48 percent of the schools were properly

maintained. Also 39.39 percent of the outdoor spaces were easily accessible and 30.30 percent of the play spaces have trees and shades for protection against the sun.

4.5.2. Safety of school from hazards

Table 4.54. Safety of school from hazards

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Safe from noisy and heavy traffic	22	66.66%
2.	Safe from steep stairs/ steps	18	54.54%
3.	Safe from open ditches	19	57.57%
4.	Safe from open drains	20	60.60%
5.	Safe from unbarred windows	14	42.42%

A cursory glance at Table 4.54 reflected that 66.66 percent of the sampled schools were free from noisy and heavy traffic, and 54.54 percent were safe from steep stairs or steps. Also, 57.57 percent of the sampled schools were safe from ditches and 60.60 percent were safe from open drains. It was surprising to note that only 42.42 percent were safe from unbarred windows.

4.5.3. Conditions of the classroom

Table 4.55. Conditions of the classroom

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Well ventilated	29	87.88%
2.	Adequate light	24	72.73%
3.	Painted walls	19	57.58%
4.	Painted walls with pictures	17	51.52%
5.	Separate storage space	12	36.36%
6.	Veranda	25	75.76%
7.	Room well maintained	28	84.85%

Sl. No.	Items	No. of schools (33 in total)	Percentage
8.	Sufficient space for activities	8	24.24%

An analysis of Table 4.55 showed that majority of the schools i.e., (87.88 percent) had well-ventilated classrooms which was an important feature because ventilated rooms were necessary for sufficient fresh air and is healthy for the children. 72.73 percent had provision for adequate light and electricity which was an important recommendation of the Guidelines for Pre-schools (NCERT, 2019). Other than that provision for proper roofing, windows, doors and flooring should be available. With regards to painted walls in the classrooms, 57.58 percent of the schools had their walls painted however 51.52 percent of the schools had pictures painted on the walls. Painted walls with child friendly pictures were attractive for children and helped to make them feel at home. In terms of availability of storage space, 36.36 percent schools had space for storing things. And 75.76 percent had veranda which could be utilized for some activities. Majority of the schools i.e., 84.85 percent had well maintained classrooms in terms of cleanliness, however only 24.24 percent of the schools had sufficient space for activities, those who claimed they have enough space were also not up to the criteria.

4.5.4. Pictures displayed on the walls

Table 4.56. Pictures displayed on the walls

Sl. No.	Items		No. of schools (33 in total)	Percentage
1.	Displayed at eye level of children		17	51.52%
2.	Children's work		14	42.42%
3.	<i>Ready-made pictures</i>	Pictures of animals	23	69.70%
4.		Pictures of birds	20	60.61%
5.		Pictures of vegetables	20	60.61%
6.		Pictures of fruits	23	69.70%
7.		Pictures of flowers	22	66.67%

Sl. No.	Items	No. of schools (33 in total)	Percentage
8.	Pictures of different modes of transport	20	60.61%
9.	Pictorial alphabetical charts	20	60.61%
10	Pictorial numerical charts	21	63.64%
11.	Pictures are age-appropriate	16	48.48%

A glance at Table 4.56 showed that 51.52 percent of the schools displayed the pictures at the eye-level of the children, as recommended in the Guidelines of Pre-school (NCERT, 2019). It was important to display the work of the children so that they would be able to revisit their works in the previous classes and might also boost their self-confidence as they would be able to appreciate each other's works. It might also help the children to have new ideas as well; however, the children's work should not be displayed by force and their consent must be taken. But we could see that only 42.42 percent of the schools displayed the children's work in the classroom while all of the schools were expected to do so. With regards to the kinds of pictures displayed, 69.61 percent of the schools had pictures of animals, 60.61 percent of the schools had pictures of vegetables and birds displayed on the walls. 69.70 percent of the schools displayed pictures of fruits and 60.61 percent of them displayed pictures of different means of transport and pictorial alphabetical charts with pictures. Pictorial numerical charts were displayed by 63.64 percent of the schools. Though the schools had pictures displayed on the walls of the classroom only 48.48 percent of the pictures were considered to be age appropriate.

4.5.5. Furniture for children

Table 4.57. Furniture for children

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Benches	31	93.94%
2.	Desks	31	93.94%
3.	Tables	19	57.58%
4.	Chairs	19	57.58%
5.	Mats	8	24.24%
6.	Racks and Shelves	15	45.45%
7.	Big table for group and art work	3	9.09%
8.	Child sized Furniture	21	63.64%
9.	Furniture Painted	21	63.64%
10.	Furniture safe for children	27	81.82%

A cursory glance at Table 4.57 showed that 93.94 percent of the schools were using desks and benches, 57.58 percent had tables and chairs which were used sometimes for activities. A mat or carpet was an essential item recommended in the Guidelines for Pre-school (2019), but only 24.24 percent had mats for circle time and other activities. Racks and shelves were present in 45.45 percent of the school classrooms which were adult sized though low open shelves were recommended as essential in the Guidelines for Pre-school (2019) for storing play and learning materials. Only 9.09 percent of the schools had a big table for group work. Child sized furniture was used by 63.64 percent of the schools and these were painted with different colours as recommended. Majority of the schools i.e., (81.82 percent) had safe furniture for the children while the remaining schools used old furniture that were unsteady.

4.5.6. Drinking water for children

Table 4.58. Drinking water for children

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Tap Water	17	51.52%
2.	Water stored in buckets/tins	9	27.27%
3.	Filters	22	66.67%
4.	Not Available	0	0.00%
5.	Cooler	1	3.03%
6.	Boiled Water	1	3.03%
7.	Own Water Bottle	1	3.03%

An analysis of Table 4.58 showed that most of the schools i.e. 51.52 percent used tap water for drinking, however, there was a doubt whether the tap water was clean enough for direct consumption. Drinking water was stored in buckets in 27.27 percent of the schools and 66.67 percent of the schools used water filters. Also, 3.03 percent of the schools used cooler and boiled water for drinking and there was also one school who asked the children to bring their own water bottles. It was recommended in the Guidelines for Pre-school that safe drinking water and place for washing hands, washing of glasses and cups/ tumblers should be made available.

Discussion: The Guidelines for Pre-school (2019) developed by NCERT in 2019 gave much importance to outdoor play space. It indicated that the outdoor play space should be large enough and recommended 300/400 square meters per 25 children play space for children to play and run around safely (NCERT, 2019). The document also recommended a sand pit under a shaded tree and water play area which could both be placed outdoor or indoor (NCERT, 2019). However, these two components were not found in all the sampled schools. An outlier case was identified where one school had a playground which was constructed by the local civil society called the Young Mizo Association (YMA). This distinctive feature set the school apart, as it facilitated a wide range of outdoor activities that were not available in

other schools within the sample. The Guidelines for Pre-school mentioned that the immediate surroundings of the pre-school may have plenty of natural resources that could be utilized as educative materials (NCERT, 2019), and it may be mentioned that many of the sampled schools were having trees, plants, stones and pebbles in the school compound. Playgrounds are an important requisite for the physical development of children. While the data in Table 4.54 showed low traffic noises and safety from hazards like open drains and ditches, the existence of unbarred windows and steep stairs in some of the schools was a concern. These results suggested a need for targeted interventions to enhance safety for children in the remaining schools.

The Pre-school Guidelines (2019) recommended that the floor area of the pre-school should be of minimum 35 square meters for accommodation of 25 children which was not fulfilled by any of the sampled pre-schools which is not new to the pre-school scenario in India. As also mentioned in a review by Chandra et.al (2017), the infrastructure and physical environment of most of the creches in India had two rooms with small space, no electricity and unsafe playgrounds. Likewise, Saini, N and Sudha, C., (1993) examined the infrastructure and learning environment of pre-schools in Hisar, Haryana wherein it was found that the pre-schools did not have necessary facilities like proper buildings, library, and medical and first aid, indoor and outdoor facilities. The classrooms were found to be overcrowded without any proper lighting and sitting arrangements. Chuaungo (2001) also found that the majority of the pre-schools in the English medium private schools were not in conformity with the desired standards regarding the physical infrastructure and equipment. It may be noted that all of the sampled schools selected for the study did not have a book area, doll's area and dramatic play area, discovery area, block building area, manipulative area, art area, music and movement area though it was suggested by the Guidelines for Pre-school (NCERT, 2019). The Guidelines for Pre-school emphasized the importance of creating a safe, clean, and engaging classroom environment for pre-school children. Classrooms should be designed to be properly ventilated, sanitary, and well-organized to facilitate various activities suitable for young learners.

With regards to the pictures displayed on the walls, one of the schools changed the pictures displayed from time to time and there was also one school that did not have any pictures displayed as the classroom was renovated at the time of data collection. Displaying pictures with words could help children to be familiarized with words and understand picture and word association which supported language development. The availability of pictures related to animals, fruits, vegetables, and transportation could nurture vocabulary and connection of pictures with words and also supported environmental awareness. But some pictures might not be culturally relevant and might not be related to the immediate environment of the children. However, the presence of pictures and charts was a positive sign though the data highlighted some gaps like lack of children's work displays and use of pictures which were not culturally appropriate.

The type of furniture recommended in the Guidelines for Pre-school was stackable child-friendly furniture that could be easily moved according to the play activities for ensuring flexible classroom organization. However, this type of furniture was not available in all the sampled schools. Despite being an essential item recommended in the Guidelines for Pre-school, only 24.24 percent of the sampled schools had mats for circle time and other activities though it was important for activities like group discussions, storytelling, or indoor games. This reflected a lack of resources and awareness of its importance. Child-sized racks and shelves were not available in 45.45 percent of the sampled schools though the Guidelines for Pre-school (2019) recommended for low open shelves for storing play and learning materials. Only 9.09 percent of the sampled schools had large tables and this was quite a concern as group work is vital for developing social, communication, and cooperative skills. Some schools were found to be using old furniture which were unsteady, majority of schools which was 81.82 percent had safe furniture and child safety was not at risk. Pre-school classrooms should be equipped with furniture designed for young children. The size and height of tables and chairs should be age appropriate and they should be able to rest their feet on the floor while sitting on benches or chairs and engage in activities comfortably.

With matters relating to availability of safe drinking water, majority of the sampled schools possessed water filters, however tap water was used by 51.52 percent posing a risk for health issues. Access to safe drinking water was recommended by the Guidelines for Pre-school as it was critical for preventing waterborne diseases. The presence of health risks such as tap water, water stored in buckets and limited availability of boiled water were concerning. For the safety of children, interventions for the improvement of the quality of water was needed.

Conclusion: The analysis of the sampled pre-schools highlighted various gaps in the availability of infrastructure which were not in compliance with the standards outlined in the Guidelines for Pre-school. The observation of infrastructure and facilities revealed that there were many positive aspects like the availability of water filters, availability of play space for outdoor activities and suitable furniture in majority of the schools, however, there were also areas where immediate interventions were required like drinking water from tap, steep stairs and unbarred windows. There was a need to address the gaps which were identified and this required the intervention of stakeholders like policymakers, educators, communities, and the parents. Alignment with the Guidelines for Pre-school would enable to generate a safe, joyful and suitable environments for pre-school children laying a solid foundation for their well-being and learning.

4.5.6. Availability of outdoor play equipment and materials in the school.

Table 4.59. Availability of outdoor play equipment and materials in the school.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Football/Futsal	24	72.73%
2.	Volleyball	8	24.24%
3.	Basketball	5	15.15%
4.	Cricket	1	3.03%
5.	Rope (Skipping rope, tug of war)	21	63.64%
6.	Seesaw	10	30.30%
7.	Swing	11	33.33%
8.	Slide	9	27.27%
10.	Shot Put/Discus Throw/Throw Ball	4	12.12%
11.	Dart	2	6.06%
12.	Marble, <i>Kawi</i>	5	15.15%
13.	Motor Tyre	1	3.03%
14.	High Jump Equipment	1	3.03%

A cursory glance at Table 4.59 showed that the schools procured different types of outdoor equipment and football was the most owned as 72.73 percent of the schools used it. Second came skipping rope as 63.64 percent of the schools used it. Also, 24.24 percent of the schools owned a volleyball, and 15.15 percent of the schools used basketball. Among the sampled schools, 63.64 percent of them owned a rope for skipping and tug of war and 30.30 percent of the schools owned a seesaw. A swing was owned by 33.33 percent of the schools and 27.27 percent of them had a slide for the children to play with. Shot put, discus throw or throw ball was owned by 12.12 percent of the schools but these were not used by the pre-school children. Throwing dart was practiced by 6.06 percent of the schools and marble and kawi were owned by 15.15 percent of the schools. Cricket, motor tyre for swing and high jump equipment each was owned only by 3.03 percent of the schools. However, it

may be mentioned that this equipment was owned by the school and was not confined for the pre-school children but the whole school.

4.5.7. Availability of ready-made equipment/materials for indoor play and activities

Table 4.60. Availability of ready-made equipment/materials for indoor play and activities

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Boxing Equipment	17	51.52%
2.	Ring	3	9.09%
3.	Puzzles	3	9.09%
4.	Toys (Animal Models, Animal Dolls)	7	21.21%
5.	Chinese Checkers/Draught Board/Chess Board	7	21.21%
6.	Snake and Ladders	3	9.09%
7.	Dart	4	12.12%
8.	Carom Board	3	9.09%
9.	Colouring	4	12.12%
10.	Blocks	8	24.24%
11.	Flash Card	1	3.03%
12.	Bluetooth Speaker	2	6.06%
13.	Slime/Clay	1	3.03%
14.	Art Craft Books	1	3.03%
15.	Finger Play (Pasting/Cutting)	1	3.03%
16.	Chart	1	3.03%
17.	Pre School without readymade equipment/materials for indoor play	2	6.06%

An analysis of Table 4.60 showed that the schools were not equipped with proper indoor play materials which were appropriate for pre-school children. Boxing gloves were possessed by 51.52 percent of the schools and this item was the most owned equipment. In 24.24 percent of the schools, manipulative blocks were available. Toys and Chinese checker cum draught boards were owned by 21.21 percent of the sampled schools and dart and colouring materials were owned by 12.12 percent. Rings, puzzle, carom board and snake and ladder games were owned by 9.09 percent of the schools. For music and dance activities only 6.06 percent of the schools owned Bluetooth speakers. Materials like art and craft books, finger play, charts, and slime/clay were owned by 3.03 percent of the schools. There were 6.06 percent of schools who did not own any indoor play materials.

4.5.8. Availability of ready-made teaching learning materials

Table 4.61. Availability of ready-made teaching learning materials

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Pictorial Chart/Board	14	42.42%
2.	Pictorial Books/Story Books/Conversation Books	10	30.30%
3.	Models/Figures	6	18.18%
4.	Abacus	7	21.21%
5.	Maps/Posters	5	15.15%
6.	Shapes (Alphabet & Numbers)	2	6.06%
7.	Encyclopedia/Dictionary	1	3.03%
8.	Flash Card/Picture Card/Reading Card	7	21.21%
9.	Sentence Maker	2	6.06%
10.	Films/Videos	1	3.03%
11.	Slate	1	3.03%
12.	Pre School without readymade teaching learning materials	5	15.15%

With regards to ready-made teaching learning materials, Table 4.61 showed that the schools did not have these materials as they should. The most owned material was pictorial charts which 42.42 percent of the schools procured. Pictorial books were owned by 30.30 percent of the schools. Abacus and flash cards were owned by 21.21 percent of the schools and model figures were owned by 18.18 percent of the schools. Maps were owned by 15.15 percent of schools however this might not be useful for the pre-school children. Shapes and sentence makers were owned by 6.06 percent of the schools. Encyclopedia, slates and films were owned by 3.03 percent of the schools. There were 5 schools (15.15 percent) which did not own any ready-made teaching learning materials.

4.5.9. Availability of teacher made teaching learning materials.

Table 4.62. Availability of teacher made teaching learning materials.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Charts (Pictorial, alphabet, numerical)	16	48.48%
2.	Flash Card/Picture Card	11	33.33%
3.	Seriation Card/Variation Card/Story Card	2	6.06%
4.	Puzzle	2	6.06%
5.	Wooden Toy/ Object made of Clay	2	6.06%
6.	Shapes	5	15.15%
7.	Picture games/Picture Reading	1	3.03%
8.	Sorting	1	3.03%
9.	Paper Flowers/Paper Toys	2	6.06%
10.	Drawing/Colouring	2	6.06%
11.	Clock with Words	1	3.03%
12.	Sound games	1	3.03%
13.	Odd One	1	3.03%
14.	Pre-school without teacher made teaching learning materials	4	12.12%

Table 4.62 highlighted the dedication of teachers in making their own teaching-learning materials. It was observed that 48.48 percent of the schools had teachers who developed pictorial, alphabet, and numerical charts on their own. Also, 33.33 percent of the schools had teacher-made flashcards and picture cards, which were effective tools for visual learning, vocabulary development, and concept reinforcement. And 5.15 percent of the schools utilized teacher-made shape learning aids. In 6.06 percent of the schools, it was reported that they had teacher-made seriation cards, story cards, puzzles, wooden toys, clay and paper-based toys, and drawings. Moreover, 3.03 percent of the schools had teachers who created additional learning aids, such as picture cards, sorting materials, clocks with words, sound games, and odd-one-out activity sheets. It was found that 12.12 percent of the schools did not develop teaching aids or learning materials. This could certainly impact the teaching-learning process and children could not be exposed to a good learning environment without such aids. Even in the schools where teaching-learning materials were available, it was not sufficient in terms of quantity and quality.

4.5.10. Availability of audio-visual equipment in the school.

Table 4.63. Availability of audio-visual equipment in the school.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Television	1	3.03%
2.	Black Board	23	69.70%
3.	White Board	12	36.36%
4.	Laptop	6	18.18%
5.	Desktop Computer	5	15.15%
6.	Bulletin/Flannel Boards	3	9.09%
7.	Greenboard	3	9.09%

A cursory glance at Table 4.63 showed that 69.70 percent of the schools owned blackboards and 36.36 percent of them used white boards. In 18.18 percent of the schools, laptops were purchased and 15.15 percent had desktop computers,

however, these equipment were meant for office use and were not used in the classroom for interaction with the children and only 1 school which is 3.03 percent had a television which was sometimes used for the pre-school children. In 9.09 percent of the schools, flannel boards or bulletin boards and green boards were owned.

Discussion: The analysis of outdoor play equipment in the sampled schools showed that the more popular outdoor play equipment were football, rope for tug of war and skipping rope. Play equipment like see-saw, swing and slides were also fairly common. The less common play equipment were basketball, volleyball, shot put, discus throw and throw ball and it may be noted that they were intended for older children and were not utilized for the pre-school children. The least play equipment available were cricket set, motor tyre for swing and high jump equipment. It was worth noting that Kawi, which was available in only 15.15 percent of the sampled schools, was the sole traditional play material present. The analysis highlighted that the availability of outdoor equipment in the sampled schools was insufficient, and there was a noticeable gap in the inclusion of traditional games and sports. Targeted intervention on the procurement of safe and age-appropriate outdoor equipment that supports physical activity and social interaction was required.

Observation of the ready-made teaching learning materials and how they were utilized showed that significant challenges were faced by teachers in addressing fine motor skills, number concepts and language skills. The Guidelines for Pre-school (2019) recommended that coloured chinks, crayons, sketch pens, and various types of paper should be supplied and dedicated activity areas such as book corners, doll or dramatic play areas, discovery areas, block building areas, manipulative areas, art spaces, and music and movement areas should be in place for exposure to diverse learning experiences. Singh and Chaudhary (2019) in their study also highlighted that the unavailability of adequate infrastructure and facilities a significant challenge for teachers.

The sampled schools exhibited a significant shortage of ready-made teaching-learning materials. The Guidelines for Pre-school (2019) recommended the

availability of a variety of manipulative materials in the classroom, including puzzles, matching cards, lacing cards, seeds, seriated shapes, inset boards, sorting materials, strings and beads, small toys, number rods, abacuses, and other natural objects such as leaves, pebbles, stones, twigs, and flowers (NCERT, 2019). These materials were essential for creating an engaging learning environment that supports holistic development. With regards to teaching learning materials for different learning areas the guidelines recommended that there should be a number of age-appropriate materials like children's magazine, picture and story books, large books, local folk tales, thematic books, comics, slates, chalks and other such materials in the book area. In the doll or dramatic area, there should be materials like dolls, doll sized utensils, pretend foods like vegetables and fruits, doll sized furniture and clothes, scarf, caps, stole, jacket, long pieces of cloth, combs, mirrors, old or unused spectacles, walking sticks, old telephones, old cameras, lunch boxes, brief cases and materials that the children could play with (NCERT, 2019).

According to the Guidelines for Pre-school (2019), there should be a discovery area in which materials like magnifying glass, shells, plants, seeds, magnets, iron objects, weighing scales and weights, measuring tapes and other locally available materials should be present. There should also be an art area in which different types of papers, crayons, pencils, markers, slates, coloured chalks, pieces of fabrics, slates, paints, brushes, play dough or clay, rolling pins, boards, stencils, newspapers, magazines, ice cream sticks and other locally available materials (NCERT, 2019). The guidelines also suggested for music and movement area in which bells, bowls, flutes, tambourines, string instruments, rattles, utensils of different types, local musical instruments, music system, DVDs of songs, poems and rhymes and it also stated that ribbons and scarves to be used as props should also be made available for promotion of creative movement (NCERT, 2019).

Upon examining the availability of audio-visual and ICT aids in the pre-schools, it was unsatisfactory, with ICT resources largely inaccessible to pre-school children. While the use of audio-visual aids had been shown to improve vocabulary acquisition, comprehension, and expressive language abilities—along with increasing children's engagement and participation in language-related activities, as

highlighted in Roul's (2014) study there was a noticeable gap in their application. Teachers largely did not utilize educational apps, digital storytelling tools, or educational video platforms that were easily accessible via smartphones. Only a few teachers incorporated YouTube into classroom interactions, suggesting a lack of awareness or readiness to integrate ICT effectively into early childhood education.

Conclusion: The analysis of the availability of infrastructure and facilities showed the existence of certain gaps. Regarding the outdoor play equipment, all the schools were lacking in play materials and traditional play items was found only in a handful of schools. There was also shortage of both teacher made and ready-made teaching learning materials in all the schools which could lead to significant challenges in addressing fine motor skills, number concepts and language skills. Restrictions were also found in indoor space due to the absence of dedicated activity areas recommended in the Guidelines for Pre-school such as book corners, dramatic play areas, discovery zones, and art areas (NCERT, 2019). These shortcomings were partly due to the lack of awareness among teachers and headmasters, lack of funds and lack space and infrastructure. There were also gaps in the use of ICT as most teachers did not have access to digital tools. The schools needed to be equipped with proper digital tools like smart board, internet access, computer and tools like bluetooth speakers. Overall, targeted interventions were necessary for indoor and outdoor play materials and digital tools for a cohesive and stimulating learning experience in the school.

Objective 6. Evaluation Procedure Adopted in the Pre-school Education Programme in the Government Primary Schools in Mizoram

4.6 Analysis of the Evaluation Procedure Adopted in the Pre-school Education Programme in the Government Primary Schools in Mizoram

Assessment can be understood as the procedure or process of systematic observation, collecting evidence concerning children's knowledge and patterns of behaviour. It includes documentation of evidences related to the activities of children and the manner in which they carry out the activities and drawing conclusions from the gathered evidence in order to support various aspects of learning. The Position

Paper prepared by the National Focus Group on Early Childhood Education, NCERT (2005) strongly denied the use of quantitative assessment or standardized test. Children should not be subjected to oral interviews in order to pass or move to higher settings of learning in early years (NCERT, 2019). Careful monitoring of children's progress must be done through continuous and consistent observation (NCERT, 2019). Assessment should be an ongoing, strategic, and purposeful process throughout the pre-school year. Assessed areas should include social and emotional skills, physical well-being and motor development, pre-literacy and pre-writing skills, speaking and listening abilities, as well as basic math skills (NCERT, 2017).

4.6.1. Tools used for assessment and evaluation of the children's development

Table 4.64. Kinds of tools used for assessment and evaluation of the children's development

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Formal Test/Examinations	29	87.88%
2.	Observation of the child's behaviour	31	93.94%
3.	Observation of the child's responses during the activities	29	87.88%
4.	Oral Test	32	96.97%
5.	Written Test	29	87.88%
6.	Portfolio maintained	18	54.55%

From the table, it could be seen that the kinds of information collected to assess the child were quite few. To assess and evaluate the children's development, 96.97% uses oral tests and 87.88 percent of the schools claimed that they used written tests and observation of children's responses while engaging in the activities though the records of such were not maintained systematically in a diary or register and the same number claimed that formal tests and examinations were mainly used to make judgements of the development. Also, 93.94 percent of the schools said that the

child's behaviour was observed to evaluate the child's progress and development. With regards to portfolio, only 54.55 percent mentioned that it was being used which was a good trait and it would be of immense improvement if all the schools used portfolios as it would be useful evidence in tracing the development of a child over time.

4.6.2. Weekly/ monthly tests conducted.

Table 4.65. Weekly/ monthly tests conducted.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Yes	22	66.67%
2.	No	11	33.33%
	Total	33	100%

Table 4.65 showed that 66.67 percent of the schools conducted weekly or monthly tests to track the progress of the children and to learn to what extend they follow the things beings taught, however, amongst the sampled schools, 33.33 percent did not conduct weekly or monthly tests. However, this kind of formal tests should not be used for children in the pre-school years.

4.6.3. Preparation of progress report/ record of children.

Table 4.66. Whether progress report/ record of children prepared.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Yes	30	90.91%
2.	No	3	9.09%
	Total	33	100%

With regards to preparation of progress report cards, Table 4.66 showed that majority of the schools i.e., 90.91 percent prepared report cards for each individual children while 9.09 percent did not prepare the report cards. The report of every child

should be shared with the parents and it should be stored in the pre-school until the time when the children are moving to primary class or school. It is very important that the school provide written reports of their child and also discuss the child's progress verbally.

4.6.4. Aspects included in the report card.

Table 4.67. Whether the following aspects were included in the report card.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Mark scored in each subject in the examinations	25	75.76%
2.	Grades scored in each subject in the examinations	30	90.91%
3.	Division	22	66.67%
4.	Position Rank	19	57.58%
5.	Comments of the child's performance in details	17	51.52%

An analysis of Table 4.67 showed that 90.91 percent of the schools used grading subject wise and 66.67 percent of the schools reflected the division of the children's performance as distinction, first, second and third. Also, 57.58 percent of the schools used ranking system which was not a constructive practice. And 51.52 percent of the school reported they had included the child's performance in detail but this was not practiced in its true spirit.

4.6.5. Assessment of children's activities.

Table 4.68. Whether the children's activities were accessed.

Sl. No.	Items	Total No. of Pre-schools	No. of schools (33 in total)	Percentage
1.	Yes	33	23	69.70%
2.	No	33	10	30.30%

Table 4.68 revealed that the majority of the schools i.e., 69.70% claims that they assessed the children's activities; however, these were not reflected in the progress report cards. They did not use assessment tools like rating scale, check lists and observations so the assessment could not be comprehensive. The activities they assessed were mostly academic. 30.30% of the schools said they did not assess the children's activities other than the test or exam papers. Teachers must document each child's learning in a variety of ways (NCERT, 2019). The documentation would provide administrators and the teaching staff with valid information on how to improve the programme, incorporate changes that were necessary, plan, organize on what to do next, what questions to ask and resources to provide for (NCERT, 2019).

4.6.6. Continuous assessment of children.

Table 4.69. Whether children were assessed continuously.

Sl. No.	Items	Total No. of Pre-schools	No. of schools (33 in total)	Percentage
1.	Yes	33	24	72.73%
2.	No	33	9	27.27%

From Table 4.69, it could be seen that 72.73 percent of the schools claimed they assessed the children continuously but this assessment was not continuous in its true spirit as it did not reflect in the progress report cards or teacher's diary. However, 27.27 percent of the schools reported that they did not assess the children continuously.

4.6.7. Maintenance of records.

Table 4.70. Whether the school maintained records of the following.

Sl. No.	Items	No. of schools (33 in total)	Percentage
1.	Developmental History	12	36.36%
2.	Habits and Interest	5	15.15%

3.	Health, Weight & Height	29	87.88%
4.	Teacher's assessment	24	72.73%
5.	Attendance	26	78.79%

An analysis of Table 4.70 showed that majority of the schools i.e., (87.88 percent) recorded the children's health, weight and height which was an important aspect to be recorded to make sure the child was healthy and was important evidence of the child's physical development. Also, 78.79 percent of the schools maintained the children's attendance and 72.73 percent of the schools recorded teachers' assessment of the children however, this was only a brief note from the progress report card of the children and details of the observation of the child were not included. It was found that 36.36 percent of the schools maintained the developmental history of the children and only 15.15 percent of the schools recorded the children's interests and habits though this was an important aspect to be recorded in pre-schools.

Discussion: Though formal tests and examinations should not be the kind of assessment and evaluation to be used in the pre-school stage, written tests and examinations were commonly used in the sampled schools. It was recommended in the guidelines that assessment in pre-school should be continuous and comprehensive and that it should be non-competitive (NCERT, 2019). Assessment and evaluation are a part of the teaching-learning process and requires the systematic gathering of information from different sources like observation of the child, anecdotal records, checklists, teacher's diary, event sampling and other sources like art works, health and nutritional status, participation in day-to-day experiences and other products and their behavior (NCERT, 2019). Though it was a good sign that majority of the schools prepared progress report cards of the children, a descriptive note on the child's overall development were not included.

Assessment must be based on qualitative judgments of children's activities, status of their health, nutrition, physical and social well-being and each child should be assessed individually through informal and systematic observations of children's

play and other activities (NCERT, 2019). On no account should children be made to take any form of test or examination (NCERT, 2022). The purpose of evaluation at the pre-school stage was not to label a child as pass or fail (NCERT, 2019). But from the study, it was evident that the schools were using formal tests and examinations to evaluate the child's progress which was nowhere near to a comprehensive and continuous kind of assessment. It was desirable that the assessment in the pre-school stage should be non-competitive, which means that ranking, which was found in a significant number of the sampled schools, was not a required feature. The documented teacher assessments in the progress report cards lacked detailed observations and there was also a noticeable gap in tracking developmental progress and individual interests. Only a few portions of the sampled schools were found to record children's interests and habits.

In terms of assessment and outcome measures, there was no systematic, objective-based uniform pattern of assessment (Bhise and Sonawat, 2016). Assessment in pre-school should be formative, continuous and flow from the experiences planned in the curriculum (NCERT, 2006). Formative and continuous assessment implies observing and documenting the development of the child, by interpreting the evidence from day-to-day experiences of the child with the purpose of recognizing and encouraging strengths and addressing learning gaps (NCERT, 2019). Each child's progress needs to be assessed on a continuous and comprehensive basis, through observations of their behavior, their art work and other products, anecdotal records, checklists, portfolios and interactions with other children (NCERT, 2022).

Conclusion: The procedures in assessing children's development in the sampled schools showed significant gaps as formal tests and examinations were the main form of tools used. There was lack of observation of children engaging in everyday activities, teacher diaries, use of check lists and ratings scales were also not found. However, few schools documented the interests and habits and records height and weight. This major issue of assessment could be improved through capacity building of teachers in assessment so that close observations of children and detailed documentation of children could take place. Detailed information about the child

could show the child's progress in time thereby providing evidences and also provide parents with information about their child. Since proper assessment led to the holistic development of children and indirectly controlled the classroom interaction, immediate attention is required. The Holistic Progress Report Card (HPC), introduced by NCERT represented a transformative approach to student assessment that focused on comprehensive evaluation rather than solely academic performance as highlighted in reforms in assessment in the NEP2020. HPC is a 360-degree report card in which feedback from parents, peers, and educators were required. This framework consisted of cognitive abilities, socio-emotional skills, creativity, and interpersonal relationships.

4.7. Analysis of Suggestions from different Stakeholders for Improvement of the Pre-school Education Programme in Mizoram

4.7.1. Suggestions for improvement of pre-school education programme by the parents

Table 4.71. Suggestions for improvement of pre-school education programme by the parents

Sl. No.	Types of responses	No of parents (150 in total)	Percentage
1.	Age-appropriate learning and play activities should be used	23	15.33%
2.	Proper Teaching learning materials, child safety and proper infrastructure is required	34	22.67%
3.	Every primary school should have a pre-school	4	2.67%
4.	Pre-school should be more child centered and joyful	6	4.00%
5.	Anganwadis should be more structured or upgraded and needs to be closely linked to primary schools	2	1.33%
6.	Pre-school teachers need to be trained	26	17.33%
7.	Awareness for parents	9	6.00%
8.	Competition needs to be reduced	2	1.33%
9.	Play way as the means for teaching and learning	8	5.33%
10.	Life skills education needs to be introduced	3	2.00%

Sl. No.	Types of responses	No of parents (150 in total)	Percentage
11.	Fair and proper recruitment of only trained pre-school teachers	7	4.67%
12.	Better coordination of parents and teachers	7	4.67%
13.	Younger teachers should replace senior teachers in pre-school sections	5	3.33%
14.	Use of mother tongue in the classroom	6	4.00%
15.	Reduction of curriculum	3	2.00%
16.	Government should pay more attention for improvement of pre-school education	3	2.00%
17.	No suggestions	13	8.67%

A cursory glance at Table 4.71 showed that the parents had different suggestions for the improvement of pre-school education programme in the primary schools. It was found that 22.67 percent of the parents expressed that proper teaching-learning materials, proper infrastructure and taking more precautions for child safety would improve the quality of the pre-school programme. Also, 17.33 percent expressed that pre-school teachers needed to have professional trainings for quality improvement and 15.33 percent also felt that age-appropriate learning and play activities should be used for improvement of the programme. Among the parents' 6.00 percent of them believed that the quality of the pre-school education could be improved if awareness generation programmes were held for the parents. It was quite intimidating to see that only 5.33 percent of the parents felt the programme would improve if play way method was used for the teaching and learning. Also, 4.67 percent of the parents felt that better coordination between the parents and teachers will improve the system and also that fair and proper recruitment of only trained pre-school teachers would benefit the children. Use of mother tongue as a means of communication and classroom transaction for improvement of the quality of education in the pre-school was believed by 4.00 percent of the parents and the same number of parents felt the pre-school should be more child-centered and joyful. Replacement of senior teachers with younger ones was suggested by 3.33 percent of the parents and 2.67 percent felt all the primary schools need to have pre-school sections. And 2.00 percent of the parents suggested that life skills education need to be introduced in the pre-school and the same number suggested that the curriculum

for pre-school sections needed to be reduced and also that the government should pay more attention for improvement of pre-school education. Among the parents, 1.33 percent suggested that academic competitions needed to be reduced at this stage and that Anganwadis should be more structured or upgraded and needed to be closely linked to primary schools. Suggestions were not given by 8.67 percent of the interviewed parents.

4.7.2. Whether steps were taken for quality improvement of pre-school.

Table 4.72. Whether steps were taken for quality improvement of pre-school.

Sl. No.	Items	Total No. of Headmasters	No. of Headmasters
1.	Yes	2	40.00%
2.	No	3	60.00%

As we can see from Table 4.72 showed that not all the officers had taken steps for the improvement of the pre-school education implemented in the primary schools. The steps taken by the SDEOs were informing the higher authority about the shortage of teachers, lack of training by the teachers and lack of proper infrastructure. One of the officers highlighted that the importance of pre-school education and the role of teachers and parents for the children of pre-school years had been stressed whenever there was a chance as it was important to build the foundation of learning in the early years.

The officers were asked to provide suggestions or recommendations for improving pre-school education programme in the state and the following suggestions were made by them:

1. The government must take steps so that all the primary schools had a pre-school or nursery class and funds for infrastructure and facilities should also be provided.
2. Recruitment of separate qualified teachers specially trained in pre-schools and continuing professional development be made mandatory. Not only

examinations and interview should be used as a means for selection of candidates for recruitment of teachers but practice teaching should be included and those who have a passion for teaching should be identified.

3. Educating and spreading awareness for the public on pre-school education.
4. Besides mid-day meal for the children, provision for food supplements and vitamins should be made.

4.7.3. Plans for uplifting pre-school education.

Table 4.73. Plans for uplifting pre-school education.

Sl. No.	Items	No. of DIETs (8 in total)	Percentage
1.	Training of Anganwadi workers and pre-school teachers	6	75.00%
2.	Include pre-school topic in Pre-service Training	1	12.50%
3.	Awareness of ECCE to the Community, teacher trainees and elementary teachers.	2	25.00%
4.	Workshop on TLM for pre-school teachers	1	12.50%
5.	Professional development on ECCE for DIET faculty	1	12.50%

A cursory glance at Table 4.73 showed that the DIETs were planning to conduct some programmes in pre-school education. As we can see, 6 DIETs were planning to conduct a training programme for Anganwadi workers and pre-school teachers of both government and private sector in their respective districts. One of the DIETs mentioned that though early childhood education was not included in the D.El.Ed course, the institution set aside some periods in 3rd and 4th Semesters. Two of the DIETs were planning to conduct awareness generation programmes for the community, D.El.Ed and B.Ed teacher trainees and also for the elementary school teachers. One DIET was also planning to conduct workshop on teaching learning materials for pre-school teachers. One of the DIET proposed for professional development on ECCE for the faculty so that they would be able to conduct effective trainings in their district.

Answering to the questions about the suggestions for the improvement of pre-school education, the principals of DIETs furnished the following points:

1. At least 10 days training on pre-school education for primary school teachers should be included in the next annual work plan.
2. Budget for pre-school teacher education should be included in the next annual work plan.
3. Recruitment of separate teachers for pre-school sections in the government primary schools.
4. Implementation of compulsory training of the pre-school teachers.
5. Research in the area of pre-school to have an in depth understanding in different areas and issues concerning pre-school education.
6. Recognition of private pre-schools by the state government and the training of teachers in the private sector.
7. Improvement in human resources in the present Anganwadi centers.
8. Collaborative work amongst different agencies viz: education department, child development and other agencies concerning children.
9. Organizing awareness programmes on pre-school education for the community and the general public.
10. Establishment of ECCE Cell in the DIETs to monitor and supervise the ECCE centers, conducts systematic training for ECCE workers and pre-school teachers.
11. Revision and review of the present pre-school curriculum, assessment process and activities of pre-schools.
12. Setting up pre-school sections in all the government primary schools.

Discussion: Parents play a crucial role in shaping pre-school education in primary schools. They suggested improvements in teaching-learning materials, infrastructure, and child safety measures. Professional training for teachers was also emphasized and age-appropriate learning activities were also emphasized. Awareness programmes for parents were also suggested. Administrators concerned revealed the hurdles and existing gaps in implementation of quality pre-school education. They

offered various suggestions like expansion of pre-school sections in the primary schools, recruitment of qualified teachers, awareness generation and inclusion of the care component like nutrition and food supplements in the pre-school sections. DIETs planned various initiatives to improve pre-school education, including training programmes for Anganwadi workers and pre-school teachers, awareness programmes for communities, teacher trainees, and elementary school teachers, workshops on teaching-learning materials, and integration into teacher training courses. They also recommended teacher training, allocation of sufficient funds, parental and community participation, curriculum revision, nutritional support and research and evaluation to address specific challenges.

Conclusion: Improving pre-school education in primary schools requires a multifaceted approach involving parents, educators, government officials, and educational institutions. By addressing infrastructure gaps, enhancing teacher training, fostering community engagement, and prioritizing child-centred learning approaches, pre-school education could be effectively enhanced, providing a firm foundation for the academic and socio-emotional wellbeing of children in the years to come. The suggestions contributed by the parents, education officers, and the principals of DIETs were all highly relevant and deserving of careful consideration. Insights from the viewpoints of stakeholders involved in the education of young learners provided knowledge about the existing issues and challenges and recommended meaningful solutions to address these problems. They proved that in order to successfully implement pre-school education, collective efforts and collaboration is a necessity.

CHAPTER V

MAJOR FINDINGS AND CONCLUSION, EDUCATIONAL IMPLICATIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

5.1. Major Findings and Conclusions

5.1.1. Objective 1: Major Findings and Conclusion in relation to the Scenario of Pre-school Education in Mizoram

The findings regarding the scenario of pre-school education were given in terms of monitoring system for pre-school education programme, demand of pre-school education programme and quality of preschool education programme

5.1.1.1. The status of supervision and monitoring by the education officers was quite unsatisfactory as only 40 percent of the SDEOs visited the schools and that also not on a regular basis. Only one of the officers had meetings with the teachers, guided them and given them suggestions in their work and observed the teachers during their interaction with the children.

In the primary schools, however, 96.97 per cent of the headmasters supervised and guided the teachers in classroom transaction and preparation of lesson plans. They also had discussions with the teachers and closely monitored how the teachers took care of the children.

5.1.1.2. With respect to demand for pre-school education, parents talked about several reasons why they sent their child whether they were male or female to the pre-school. The reasons why parents were compelled to admit their child to pre-school were simply to learn and study, to impart quality education to their child, to improve mentally and physically, to be ready for challenges for later education, to socialize, to get education from trained personnel, for proficiency in English, to receive proper education and development, and for social and emotional development. When asked about whether the children would not do well in Class I, 78 percent of the parents felt that their child would not be able to do well in Class I

without enrolling in the pre-school programme. However, 16.67 percent felt their child would do well in Class I even without preschool education and 1.33 percent felt that whether the child would do well or not depends on the child.

5.1.1.3. Regarding the quality of pre-school education programme in the state, the response given by the SDEOs were quite startling as all of them felt that the state government was not taking enough steps for the quality of pre-school education programme in the state. They felt that enough funds were not allocated for the improvement of pre-schools in terms of training of teachers, infrastructure facilities and teaching learning materials.

There was a feeling that the state government did not lay profound emphasis on the preschool and elementary education as a whole and that its significance and importance was not recognized and acknowledged which was reflected in the recruitment of teachers and the system of transfer and posting. Some also felt that those in the higher authority were not giving education a priority. They also said that pre-school education was neglected due to lack of awareness of its nature and aims and objectives; teachers with the lowest educational qualification or the most inexperienced were often entrusted to take care of the pre-school section and as long as this was practised, it would be difficult to improve the quality of education in the pre-school stage. With the many tasks that the SDEOs had to perform, 60 percent of them took steps for the improvement of pre-school education whenever they had the chance informing the higher authority about the shortage of teachers, lack of training by the teachers and lack of proper infrastructure and also by interacting with the teachers.

On the issue of quality pre-school education programme, 48 percent of the parents felt it was good, 33.33 percent felt it was somewhat good and 18.87 percent felt that it was not good.

None of the headmasters agreed that the pre-school education programme in their school was low; however, 81.82 percent felt that it was of medium quality and 18.18 percent felt the preschool education programme in their school was high.

5.1.2. Objective 2: Major Findings and Conclusion in Relation to the Curriculum followed in the Pre-school Education Programme in the Government Primary Schools

5.1.2.1. Preschool Curriculum published by SCERT in 2009

In evaluating the curriculum's effectiveness, it was noteworthy that it aligned with principles of developmentally appropriate practices. The curriculum addressed the various developmental domains in an integrated manner covering the physical, socio-emotional, language and cognitive domains of development which were interwoven through play-way approach. The curriculum addressed all these aspects but the number of activities incorporated into the programme was somewhat limited.

It demonstrated significant limitations in its linguistic accessibility, as it was available only in Mizo language. Stakeholders might face linguistic problems in some areas in Siahla and Lawngtlai districts, as well as in areas mostly occupied by Hmar, Bru, and Chakma tribes where they have their own distinct dialect. The curriculum, therefore, risked undermining its objectives of inclusivity and comprehensive development, as it might not cater adequately to the unique linguistic needs of diverse communities.

When it comes to facilitating a child's adjustment to the routines of primary school and meeting the demands of more formal teaching, it is important to highlight that the number of activities integrated into the programme was relatively limited. Though this limitation could be challenging, the approach was purposefully designed for the preparation of children for important skills and competencies school readiness and transition to a more formal primary education.

5.1.2.2. Books prescribed and used

The study materials designed for the pre-school section were First Step I and Pre-Number I for Kindergarten I and First Step II and Pre-Number II for Kindergarten II. The main aim of pre-school education is to develop the physical, cognitive, and socio

emotional domains as such, the analysis of these textbooks was made in the light of these developmental domains.

With respect to First Step I there were 12 chapters with 83 pages and First Step 2 had 15 chapters or themes with 103 pages which were play and activity based. Theme based approach is suggested by the policy documents in the pre-school sections. The layout of the textbook including fonts and illustrations were child friendly and attractive and the pictures used were connected to the child's immediate environment. The physical activities given in the study materials were also designed to promote both gross motor and social development by engaging children in group work, conversations and guided play and there were also plenty of activities for fine motor development. Various activities for enhancement of cognitive development were also in place.

Pre-number concept activities focus on classification, categorizing, seriation, sequencing, and spatial understanding and knowing the different shapes and comparing their differences, comparing big and small, knowing the differences between few and many, light and heavy, long, tall and short, wide and narrow, thick and thin, inside and outside and likewise. The study materials also addressed this aim in a child friendly and play based approach. Pre-Number 1 was divided into 15 chapters with 96 pages and Pre-Number 2 was divided into 17 chapters with 108 pages.

With respect to the study materials used in pre-schools, only 19 out of the 33 schools used study materials which they termed as textbooks. Study materials like First Step and Pre-Number were used only in 6 schools though it was meant to be used in all the 66 schools that were given permission to run pre-school education. It was learnt through an interview with one of the staff from Directorate of School Education that the mentioned study materials were developed by the SCERT and printing was the responsibility of Directorate of School Education and that the books were printed only for two years i.e 2014-15 academic session and 2015-16 academic session. Therefore, the schools were in dearth of proper study materials and printing was discontinued due to lack of funds.

5.1.2.3. Outdoor activities organized in the preschools

Development of large muscles is important for coordination between sensorial perceptions and body movement. To enhance the development of large motor skills various activities, need to be conducted meaningfully. In the sampled schools, jumping activity was done in all the schools and other activities like running, climbing, daily exercise, and stretching activities were practised by more than 90 per cent of the schools, and catching activity was done by 78.79 percent of the schools. In more than 60 percent of the schools, activities like skipping and pulling were practiced. More than 40 percent of the schools let the children play with slides, swings and did balancing activities. More than 30 per cent of the schools engaged the children in climbing activities, kicking and nature walk. Only a few schools i.e 15.15 percent conducted rolling activities and cycling. Though dancing is an effective activity for the development of gross muscles, it was practiced only in 3.03 percent of the schools.

5.1.2.4. Indoor activities organized in the pre-school

The indoor activities conducted may be categorized as activities for small/fine muscle development, activities for socio-emotional development, activities for language development, and activities for formation of pre-number concepts.

- a) For development of fine motor skills, 100 percent of the schools practiced drawing, colouring and action songs. In more than 90 percent of the schools, activities like clapping, catching and tracing were done. Activities like tearing and pasting, cutting, arranging puzzles and blocks were done in more than 60 percent of the schools and 54.55 percent of the schools engaged children in finger play. Pattern making was practiced in only 42.42 percent of the schools and 39.39 percent of the schools practised threading. Playing with clay was done only in 1 school.
- b) For enhancement of socio-emotional development singing was practiced in 100 percent of the schools. Guided group play and celebration of birthdays and festivals were done in more than 80 percent of the schools. Story time was held only in 75.76 percent of the schools and playing with toys which the

children brought from their homes was practiced by 60.61 percent of the schools. More than 50- percent of the schools practiced meal time activities and role play. Also, 30.30 percent of the schools practiced dramas and puppet activities were done only in 6.06 percent of the schools.

- c) In this study, language activities were categorized into three groups. 'Language activities I' were related to pre-language skills; Language activities II comprised of alphabet and sounds; and 'Language activities III' were includes conversational competencies.
- i) With respect to Language activities I which is concerned with the main and most common activities employed by the teachers, more than 90 percent of the schools practiced free conversations, storytelling and songs and rhymes. Chart reading and picture reading were practiced by 72.73 percent and 66.67 percent of the schools respectively. Activities like riddle games, picture games, drawing and talking about the pictures drawn was done in more than 50 percent of the schools. Vocabulary, command games and visual discrimination were practiced in more than 40 percent of the schools. More than 30 percent of the schools engaged the children in drama, sound games, doll play and sound discrimination. Only 18.18 percent of the schools practice audio visual discrimination.
 - ii) Regarding Language activities II, which was concerned with activities that were a little technical or complicated compared to activities in Language I, more than 80 percent of the schools perform a separate activity for alphabet identification, sound identification of alphabets and writing of both uppercase and lowercase alphabets. More than 70 per cent of the schools let the children memorize rhymes and activities like writing down words was practiced by 60 percent of the schools. More than 50 percent of the schools practised reading words and they also made the children read full sentences.
 - iii) In Language activities III which addressed mostly verbal communication, 90.91 percent of the teachers listened and responded to the children talking. More than 80 percent of the schools had staff to child and child to child conversations during free play routines and let the children talk

and explain their reasoning. Also, 72.73 percent of the schools encouraged children's talk and 66.67 percent allowed long pauses when interacting with children so that children would have time to think and respond.

- d) For laying the foundation of numeracy, activities for pre-number concept were conducted by the schools. Among the sampled schools, 99.91 percent of the schools did activities for identification of big and small and identification of shapes. Identification of tall/long and short, less and more were done in more than 80 percent of the schools. Seriation activity and sense of direction were practised in more than 70 percent of the schools. Activities for matching and classifying, sorting and sequencing were done in more than 60 percent of the schools and arranging puzzles were also done in more than 50 percent of the schools.

With matters concerning reading numbers, there was a lot of difference in the range of numbers taught. More than 60.60 percent of the schools taught reading numbers from 1-100. Numbers from 1-200 was taught in 18.18 percent of the schools and 12.12 percent of them taught numbers ranging from 1-50. Only 1 school taught numbers from 1-20, which was prescribed in the textbook. On the other side 6.06 per cent of the schools taught reading numbers from 1-500 which would be burdensome and unnecessary for the children.

In 69.69 percent of the schools, writing of numbers in figures from 1- 100 was taught, 6.06 percent of the schools taught writing numbers 1-50, 1-200 and 1-500. Writing numbers from 1-20 was practiced in 9.09 percent of the schools as prescribed in the textbooks. Numbers from 1-10 was taught in 3.03 percent.

With regards to teaching of writing numbers in words, 24 percent of the schools did not teach writing of numbers in words. Among the schools that taught writing numbers in words, 33.33 percent of them taught numbers within the range of 1-20. A range from 1-50 was taught in 24.24 percent of the schools. Only 3.03 percent of the schools taught writing numbers in words from 1-10; and 15.15 percent of the schools taught 1-100 in words. This was definitely burdensome and

unnecessary for the children of this age as the recommended activity was writing numbers in words 1 to 10 only.

It was found that mathematical operations were also taught in the schools. Addition was taught in 54.55 percent of the schools and subtraction was taught in 48.48 percent of the schools. It was found that 21.21 percent of the schools taught Times. Multiplication was taught in 6.06 percent of the schools and another 6.06 percent taught lesser and greater activity. Activities like what comes between, what comes after and count and write were taught in 3.03 percent of the schools.

5.1.2.5. Programme Planning by the teachers

- With respect to timing and duration of the pre-school, it was found that 45.45 percent of the schools had 3 hours of school duration, and 12.12 percent of the schools had more than 3 hours of school duration. A few schools comprising of 9.09 percent had school duration less than three hours. The remaining 33.34 percent schools did not have school hours. Most of the schools were not up to the mark as the recommended time was four hours.
- It was found that 57.58 percent of the schools provided rest/ sleep period during school hours while 42.42 percent of the schools did not make time for such period.
- In the lesson planning process, it was found that 63.64 percent of the school prepared lesson plans beforehand, however, 36.36 percent of the schools did not prepare lesson plans.
- It was found that 54.55 percent of the schools prepared programme planning, out of which 48.48 per cent were short term plans and 6.06 percent were long term plans. None of the schools prepared both long- and short-term plans.
- It was found that departure time was well organized in 69.70 percent of the schools and 81.82 percent of the schools greeted the children warmly. Individual greetings were practised in 72.73 percent of the schools and departure time was utilized for sharing of information about the children with their parents. Total 69.70 percent of the schools greeted the parents warmly.

- With respect to the kind of approaches used while preparing program planning, it was found that more than 60 percent of the schools considered the age and developmental level of children and design activities with balance between individual and group work. Also, 54.55 percent of the schools considered balancing of activities for all aspects of developmental domains, a balance between outdoor and indoor activities was maintained and they also balance activities between guided and free activities. Total 48.48 percent of the schools maintained the balances between vigorous and quiet activities.
- It was found that 69.70 percent of the schools used formal teaching of the 3Rs for conducting the programme and 60.61 percent claimed that the schools run the program like a formal school which was against the very philosophy of the pre-school education. Total 48.48 percent of the schools believed that play and activity were the main method of teaching the pre-school children. It was also learnt that 42.42 percent of the schools made the textbooks compulsory for the children and among them, 9.09 percent taught the whole content of the textbooks they used.
- Regarding the medium of instructions, 78.78 percent used both Mizo and English, 15.15 percent used Mizo only and 6.06 percent used only English.
- It was found that in 45.45 percent of the sampled schools, children were admitted at the age of 4, while 48.48 percent admitted children at the age of 5 years and there were 6.06 percent of schools who admitted children at the age of 6 years.
- Among the sampled schools, 87.87 percent of the pre-schools admitted children by first come first serve process while 12.12 percent conducted tests for admission into the pre-school programme.
- It was found that 93.93 percent of the sampled schools practised giving home work to the children and only 6.06 percent of the sampled schools did not practice giving home work.

5.1.2.6. Role of parents in curriculum implementation:

- It was found that 72 percent of the parents felt pre-school education was a programme for preparation of children for formal schooling and 54 per cent of the parents felt it was a programme where children were taught things about formal reading and writing. Besides these concepts about pre-school education, some of the parents also felt that the programme developed the child's emotional, social and personal growth, and continual exposure to other children helped the child to enhance communication skills. They also felt that pre-school was a place where children learn and play at the same time while being guided by trained educators.
- With respect to parents' understanding of the importance of preschool education, 66.67 per cent of them felt it was a place where they learn to socialize, learn how to read and write for formal schooling. Besides this, some parents also felt that it was a programme for preparing children mentally to face challenging situations in their studies, a place where they learn skills, values and socialization, a place where children receive education from trained teacher, a programme implemented by the government wherein parents could save money and time and 18 percent of parents did not have an idea about the importance of pre-school education.
- With respect to child related sharing between parents and staff, 78.79 percent of the schools practised sharing with parents while 21.21 percent of the schools did not practice child related sharing. This negligence by some schools (21.21%) reflects the lack of clear guidelines, supervision and monitoring.
- It was found that 66.67 percent of the primary schools generated awareness for parents on pre-school education while 33.33. percent of the schools did not organize such programmes for parents.
- On matters regarding decision making, 63.64 percent of the primary schools let the parents involve while 36.36 percent of the primary schools did not involve the parents.

- It was found that only 6.06 percent of the primary schools did not organize parent teacher meetings. Other primary schools organized such meetings though the number of meetings held vary as some primary schools held the meetings once a year, twice a year while some three or more times a year.
- It was found that majority of the primary schools practiced visiting children at home though the number of visits vary. The teachers had interactions with the parents in their home setting. However, 36.36 percent of the schools did not pay visits to their children at home.
- Among the sampled schools, 69.69 percent of them gave administrative information about the pre-school programme to the parents while 30.30 percent of the sampled schools did give any administrative information to the parents.

5.1.3. Objective 3. Major Findings and Conclusion in relation to assessment of Language Development of Pre-school Children in Government Primary Schools

The findings concerning language development of 263 Grade I children are given below in terms of Demonstration of Oral Expression, Demonstration of Emergent Reading Skills and Demonstration of Emergent Writing Skills.

- a) With reference to demonstration of oral expression, majority of the children were able to demonstrate simple language skills like talking freely with adults and other children, speaking clearly in complete sentences, comprehension of short texts by listening, describing and retelling events or visuals in short sentences, and comprehension and answering after listening as the percentage of children who fall under ‘Always’ ranges from 42.97 – 66.54 percent. The findings implied that the children were weak in the more complicated oral skills like expression of feelings, needs and showing interest through verbal or non-verbal gestures, expressing or answering creatively and engaging in meaningful conversations as the percentage of children who could be categorized as ‘Always’ ranges from 34.98 – 39.16 percent. More complicated skills like identification, blending and segmenting syllables,

identifying beginning and end sounds of common words, describing and retelling using rich details in complete sentences and identifying beginning, middle and end sounds of words and making new words by adding or substituting syllables were found to be difficult for the children as the percentage of children who can be categorized under 'Always' ranges from 9.51 – 26.62 percent only.

- b) In demonstration of emergent reading skills, majority of the children were able to display simple skills of reading like listening attentively to stories and rhymes, naming objects in pictures, comprehension of pictures and identifying convention of print such as left to right writing and reading from top to bottom though a few were not able to do these skills properly and the percentage of children that can be categorized under 'Always' ranges from 46.39 to 57.41 percent. A more complicated reading skill like exploring and engaging with pictures, books and other print materials, identify words in a sentence, identifying rhyming words, recognizing sound symbol association, attempting to read words, identifying punctuation marks like commas and full stops, read simple texts in full sentences independently and comprehension of words were found to be difficult for the children as the percentage of 'Always' ranges from 22.5 to 28.14 percent. The skill which children found the most difficult was retelling familiar story with the beginning, middle and end events in a sequence.
- c) In demonstration of emergent writing skills, simple writing skills like holding pencil properly, holding writing or colouring tool with better grip and using writing tool appropriately were displayed by majority of the children. Tracing on sand/air was displayed by 30.42 percent and the percentage of children who were always displaying skills of reading or explaining their drawing in simple words and attempting to write alphabets and numbers ranges from 46.77 percent to 47.53 percent. However, the percentage of children who displayed skill of scribbling or drawing to represent thoughts, situations, events etc., children who tried to express ideas in words and drawings and who used tools with ease to convey meaning through drawing ranges from 11.79 percent to 17.11 percent.

5.1.4. Objective 4. Major Findings and Conclusion in relation to the profile of functionaries implementing the pre-school education programme in the Government Primary Schools

- a) In terms of educational and professional qualifications of the headmasters who were looking after the Government Primary Schools, it was found that 21.21 per cent were having HSLC and 12.12 percent were having HSSLC. Among the graduates, 18.18 percent and among the post- graduates, 9.09 per cent were having professional degree required for a primary school teacher.
- b) It was found that 57.58 per cent of the headmasters were having more than 25 years of service and there were no headmasters who had teaching experience of less than 5 years.
- c) None of the headmasters had any specialization in pre-school education and 18.18 percent of the headmasters attended short term training on pre-school education at SCERT/DIET and they had implemented new practices or initiatives they had gained from the training.
- d) All the headmasters of the Government Primary Schools opined that teachers should be trained in pre-school education.
- e) Out of 33 teachers dealing with preschool sections in primary schools 88.81% were having preservice professional qualification and six (6) were untrained teachers. The six teachers who were reported without professional qualification were recruited by the regular teachers personally for their assistance. Moreover, trained teachers were not trained in pre-school education but they possessed qualification for primary schools like B.Ed. or D. El. Ed.
- f) Only 21.21percent teachers have attended the short-term training programmes organized by the SCERT or the DIETs in Mizoram. Whereas 54.54 percent teachers had done recently the six months certificate course organized by SCERT, Mizoram.

5.1.5. Objective 5. Major Findings and Conclusion in relation to Infrastructure and Facilities available for Pre-school Children in the Government Primary Schools.

- a) Majority of the primary schools had a safe playground, however there were 12.12 percent schools whose playground were not safe for children. 48.48 per cent of the schools were properly maintained and 30.30 percent of the play spaces have trees and shades for protection against the sun. A total of 39.39 percent of the outdoor spaces in schools were easily accessible and were having adequate space.
- b) Most of the sampled schools i.e 66.66 percent were free from noisy and heavy traffic, and 54.54 percent were safe from steep stairs or steps. Also, 57.57 percent of the sampled schools were safe from ditches and 60.60 percent were safe from open drains. It was surprising to note that only 42.42 percent were safe from unbarred windows.
- i) c) It was found that majority of the pre-school classrooms in the primary schools were well ventilated, had verandah and were well maintained. They also had adequate light in the classroom. Total 51.52 percent of the primary schools had painted walls with pictures. Only 36.36 percent had space for storage and only 24.24 percent had sufficient space for activities in the classroom.
- c) With respect to pictures displayed on the wall, 51.42 per cent of the schools displayed the pictures on the eye-level of the children and 42.42 percent displayed the children's work in the classroom. Age-appropriate pictures were displayed only by 48.48 percent of the schools. Pictures of animals, birds, vegetables, fruits, flowers, modes of transport, alphabetical charts and pictorial charts were displayed by 60.61 to 69.70 per cent of the primary schools.
- d) With respect to furniture for children 93.94 percent of the primary schools used benches and desks and 57.58 percent also had tables and chairs. 63.64 percent had child sized furniture and were also painted. 81.82 percent of the primary schools had furniture which were safe for children. Racks and

shelves to be used by children existed in 45.45 percent of the primary schools. 24.24 percent had mats for children to sit or roll and only 9.09 percent had big table for group work and art work.

- e) It was found that 51.52 percent of the primary schools used tap water for drinking and 66.67 percent used water filters while 27.27 percent stored water in buckets/ tins. Water cooler was used in one school, which was donated by community. One of the schools provide boiled water for the children and one school let the children bring their own water bottle from home.
- f) With respect to outdoor play equipment 72.73 percent had football/ futsal ball and 63.64 percent of the primary schools had skipping rope and rope for tug of war. The percentage of primary schools who were having volleyball, see-saw, swing and slides ranges from 24.24. to 33.33 per cent. Equipment like shot put/discus throw/throw ball, marble, kawi and basketball ranged from 12.12 to 15.15 per cent. The range of percentage of primary schools that owned cricket equipment, motor tire, high jump equipment and dart was 3.03 to 6.06 per cent.
- g) It was found that there was one primary school in which there were no ready-made equipment/ materials for indoor play and there was shortage of these ready-made equipment/ materials in all the schools. Boxing equipment was owned by 51.52 per cent of the schools. 21.21 percent of the primary schools had toys and Chinese checkers/ draught board and chess board and 24.24 percent had blocks. Colouring materials and dart were owned by 12.12 percent of the primary schools and 9.09 percent had rings, puzzles and carrom board. The percentage of primary schools that had equipment like flash card, Bluetooth speaker, slime or clay, art craft books, pasting and cutting materials and chart ranged from 3.03 to 6.06 percent. These items were purchased through the contribution of the teachers in the government primary schools.
- h) It was found that all the schools were not well equipped with ready-made teaching learning materials and 15.15 percent of the schools did not have any ready-made teaching learning materials. Pictorial charts were owned by 42.42 percent of the primary schools and pictorial books/ story books/ conversation

books were owned by 30.30 per cent. Abacus, flash card/ picture card/ reading card were owned by 21.21 percent and the percentage of primary schools who had models/ figures and maps/ posters were 18.18 and 15.15 per cent respectively. The percentage of primary schools having shapes of alphabet and numbers, sentence maker, film/videos and slates ranged from 6.06 to 3.03 per cent.

- i) With reference to availability of teacher-made teaching learning materials, it was found that all the schools were lacking in this area. There were 12.12 percent primary schools who did not have any of these materials. Total 48.48 percent of the primary schools had teacher made pictorial, alphabet and numerical charts and 33.33 percent had flash card/ picture cards. Shapes were prepared by 15.15 percent only. The percentage of primary schools that prepared seriation cards/ story card, puzzle, wooden and clay objects, picture games, sorting, paper toys, drawing/ coloring sheets, clock with words, sound games, and odd one out sheet ranged from 3.03 to 6.06 percent.
- j) It was found that all the schools were lacking in audio-visual equipment as the percentage of primary schools that owned television, bulletin/ flannel boards and greenboard ranged from 3.03 to 6.06 per cent. Laptop and desktop computers were owned by 18.18 and 15.15 per cent. Majority i.e 69.70 per cent of the primary schools used black boards and 36.36 per cent owned white boards.

5.1.6. Objective 6. Major Findings and Conclusion in relation to the Evaluation Procedure Adopted in the Pre-school Education Programme in the Government Primary Schools in Mizoram

- a) In relation to the kinds of tools used for assessing and evaluating the children's development, it was found that 87.88 percent of the primary schools employed formal tests or examinations, observation of child's responses during activities and written tests. Also, 93.94 percent of the schools observed the child's behavior and 96.97 percent used oral tests but were not reflected in the report cards. Portfolio was maintained by only 54.55 percent of the primary schools.

- b) It was found that 66.67 percent of the primary schools conducted weekly/ monthly tests.
- c) It was found that 90.91 percent of the primary schools prepared progress report/ record of the children.
- d) Majority of the sampled schools, i.e. 90.91 percent of the primary schools used grades to record the scores in each subject and 75.76 percent gives marks also. Division and ranks were given in majority of the schools while comment of the child's performance was given by 51.52 percent of the primary schools.
- e) With respect to assessing of children's activities, 69.70 percent of the primary schools claimed that it was done so, however this does not reflect in the progress report cards
- f) 72.73 percent of the primary schools claimed that they assessed the children continuously however, the evidence for such documents like check list, rating scale and teacher diaries were not available.
- g) With respect to maintenance of records of the children, the percentage of primary schools that recorded the child's health, weight and height, teacher's assessment and attendance ranged from 72.73 to 87.88 percent. The developmental history of children was recorded by 36.36 percent teachers and habits and interests of the children were recorded by only 15.15 percent of the teachers.

5.1.7. Objective 7. Major Findings and Conclusion in relation to Suggestions from different Stakeholders for Improvement of the Pre-school Education Program in Mizoram.

- a) Parents of the pre-school children contributed meaningful suggestions for improvement of pre-school education programme. They suggested that age-appropriate learning and play activities should be used and felt that every primary schools should have a pre-school programme. They also felt that pre-school should be more child centered and joyful. They suggested that Anganwadis should be more structured or upgraded and needs to be closely linked to primary schools. Proper teaching learning materials, child safety and

proper infrastructure were areas where the parents felt the need for improvement. Training of teacher in pre-school education and fair and proper recruitment of only trained teachers and awareness generation for parents was also considered necessary. They also felt that unhealthy competition needs to be done away with and that play way as the means for teaching and learning should be adopted. They also suggested that activities related to life skills development needed to be introduced. They also felt that better coordination of parents and teachers was necessary and that government should pay more attention for improvement of pre-school education. They also suggested that mother tongue be used in classroom transaction and felt that there was a need to reduce the curriculum. They also felt that senior teachers needed to be replaced by younger teachers in the pre-school sections.

- b) It was found that only 40 percent of the educational administrators like the SDEOs have taken steps for the improvement of pre-school education programme in their jurisdiction. The SDEOs suggested that the government must take steps so that all the primary schools had a pre-school or nursery class and funds for infrastructure and facilities should also be allocated. It was felt necessary that recruitment of separate qualified teachers specially trained in pre-schools and continuing professional development be made mandatory and that practice teaching should be included and those who had a passion for teaching should be identified in the recruitment process. They also suggested that educating and spreading awareness for the public on preschool education was essential. It was considered important that mid-day meal (MDM), provision for food supplements and vitamins should be made for children in the pre-school programme.

It is to be noted here that there was no provision of MDM for pre-school children. Which reflect a big lack of planning and policy flaw. But the children were provided meal by some kind of unofficial adjustment by the schools. From the year 2021-22 the state government started phase wise establishment of 'Bal Vatika' where MDM was insured. As reported by the Directorate of School of Education there were

597 Bal Vatika within premises of primary schools in the state by the writing of this report in March 2025.

c) The Principals of DIETs suggested for the upliftment of pre-school education through training of Anganwadi workers and pre-school teachers, inclusion of pre-school topic in pre-service training, awareness of ECCE to the community, teacher trainees and elementary teachers, workshop on TLM for pre-school teachers and professional development on pre-school education for DIET faculty. The Principals also made valid suggestions for the improvement of pre-school education like including training on pre-school education for primary school teachers in the next annual work plan and budget for teacher education, recruitment of separate teachers for pre-school sections in the government primary schools and the compulsory training of these teachers, research in the area of pre-school education, recognition of private pre-schools by the state government and the training of teachers in the private sector, improvement in human resources in the present Anganwadi centers, collaborative work amongst different agencies viz: education department, child development and other agencies concerning children, organizing awareness programmes on pre-school education for the community, establishment of ECCE Cell in the DIETs, revision and review of the present pre-school curriculum, assessment process and activities of pre-schools, and setting up pre-school sections in all the government primary schools.

5.2. Educational Implications of the Study

- i. The present study informs to the policy makers for revision of the policy for better pre-school education in the state.
- ii. The study highlighted the gaps in the proper implementation of the pre-school education programme which may bring the qualitative improvement at the ground level.
- iii. The study highlight the need of proper monitoring, supervision and support system for pre-school education.
- iv. The present study implies that the pre-school curriculum published by the SCERT in 2009 was not comprehensive enough, however, a new pre-school

curriculum was published in 2022 and development of state specific curriculum for the foundational stage is in process which is based on the philosophical tenets of NEP 2020.

- v. The study revealed the rare incidences of community participation in pre-school education which may help local authorities to harness at larger scale.
- vi. The study highlights the urgent need of pre-service and in-service pre-school teacher education programme in the state.
- vii. In addition to the development of the Preschool Curriculum in 2022, the researcher's affiliation with SCERT contributed to the development of Thiamna Thul, Minimum Specifications for Preschools in Mizoram, School Readiness Scale and Guidebook on Low Cost No Cost TLMs and the development of a learning app for preschoolers called Zirna Kailawn, designed for Android devices. Plans are underway to upgrade the app and make it available for iOS devices as well.

5.3. Recommendations for Improvement of Pre-school Education Programme in Mizoram.

- i. All government primary schools need to have a pre-school section so that children will have smooth transition from home to pre-school and then to primary school and children will be equipped with school readiness skills.
- ii. A consistent supervision and monitoring system for the pre-school education programme in the government primary schools need to be implemented by the state government.
- iii. Pre-service teacher education programme for the pre-school stage approved by the NCTE needs to be implemented in the state so that a degree in pre-school education could be made mandatory for those who inspire to become preschool teachers both in the government and private sector. Preschool education may also be included in pre-service teacher education programmes like D.El.Ed. In-service teachers also need to have continuous professional development so that they could be equipped with the latest trends in pre-school education.

- iv. A teacher training management system also needs to be implemented to track the teachers' professional development and also to make data available for demand and supply of teachers in the state.
- v. Resource materials on pre-school education for both teachers and parents need to be developed and disseminated in a larger scale. Awareness generation for the parents and community through different kinds of media is a must so that pre-school education in its true spirit could be implemented.
- vi. The prescribed study materials for the pre-school stage needs to be available both in English and Mizo as there are both English and Mizo medium primary schools in the state. The English version of the study materials which is now out of print need to be made available so that it could also be used in the Private English Medium Schools as well.
- vii. Teachers need to give attention to the different developmental domains like physical development which caters to both fine and gross motor skills, socio-emotional, cognitive, language development and cultural and aesthetic development and plan activities in a play way method systematically based on the domains so that children could develop in a more holistic way. Qualified and dedicated teachers are needed for quality pre-school education.
- viii. Early literacy being an important aspect of educating children, it would be beneficial for the teachers and children if they have a training in English language teaching.
- ix. Educational administrators, teacher educators and other important stakeholders in education need to be oriented in the aims, concept and objectives of pre-school education.
- x. The government primary schools need construction of rooms with enough space for indoor play activities. The school needs to be equipped with proper play materials, teaching learning materials, child friendly furniture and age-appropriate books. The primary schools also need to be equipped with outdoor play space and different play equipment. The school needs to be safe and nurturing environment conducive for children's development.
- xi. The evaluation of children's needs to be done in a more systematic way. A continuous assessment of children's needs to be practiced and assessment

tools like observation of children, rating scale, check list, teacher records and maintenance of portfolios need to be maintained. A school readiness assessment should be imposed for children before moving to primary school to ensure that all children acquire school readiness skills. Children who have low performance may be identified so that they could be remedied.

- xii. A more collaborative work among the different agencies catering to early childhood like education department, child development and health department needs to be in place.

5.4. Suggestions for further Research.

The present study assessed the pre-school education programme in the government primary schools in Mizoram. As it was delimited to population and design, a few more researches may be conducted in this area:

- i. To study the performance of 5- and 6-year-old children in terms of the different developmental domains so that the state of children's progress could be identified and would disclose whether children acquire school readiness skills holistically.
- ii. To study the impact of teacher trainings in the classroom practice of pre-school sections in the primary schools.
- iii. A study on the effects of home environment in the performance of children in the pre-school stage.
- iv. A study on the impact of technology on the development of children in the pre-school stage.
- v. A comparative study of pre-school children's development in the rural and urban areas.
- vi. Various interventions consequent upon the implementation of NEP 2020 by Government of Mizoram may be assessed for their impact on pre-school education.

APPENDIX

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OBSERVATION CUM INTERVIEW SCHEDULE
(for studying the existing conditions of preschools)

Name & Address of the school:

Name & Contact No of teacher: _____

Class: Nursery() / KG () /KG-I ()/KG-II ()

PHYSICAL STRUCTURE AND FACILITIES

1. Location of the pre-school building

a) Adjacent to the main road	()
b) Near the main road	()
c) Down-hill below the main road	()
d) Up-hill above the main road	()

Observation remarks:

2. Is the school safe from the following hazards?

a) Noisy and heavy traffic	()
b) Steep stairs/steps	()
c) Open ditches	()
d) Open drains	()
e) Unbarred windows	()

Observation remarks:

3. Is Outdoor play space available ()
- a) With fencing and safe ()
- b) Without fencing but safe ()
- c) With fencing but unsafe ()
- d) Without fencing and not safe ()
- e) Space is adequate ()
- f) Space well maintained ()
- g) Space is easily accessible ()
- h) Protection from elements ()

Observation remarks:

4. Conditions of the classroom
- a) Well ventilated ()
- b) Adequate light ()
- c) Painted walls ()
- d) Painted walls with pictures ()
- e) Separate storage space ()
- f) Verandah ()
- g) Room well maintained ()
- h) Sufficient space for activities ()

Observation remarks:

5. Pictures displayed on the walls

a) Displayed at Eye level of children	()
b) Children's work	()
c) Ready made pictures	
i) Pictures of animals	()
ii) Pictures of birds	()
iii) Pictures of vegetables	()
iv) Pictures of fruits	()
v) Pictures of flowers	()
vi) Pictures of different modes of transport	()
vii) Pictorial alphabetical charts	()
viii) Pictorial numerical charts	()
d) Pictures are age appropriate	

Others

Observation remarks:

6. Furnitures for children

a) Benches	()
b) Desks	()
c) Tables	()
d) Chairs	()
e) Mats	()
f) Racks and shelves	()

- g) Big table for group and art work ()
- h) Child sized furniture ()
- i) Furniture painted ()
- j) Furniture safe for children ()

Observation remarks:

7. Drinking water for children

- a) Tap water ()
- b) Water stored in buckets/ tins ()
- c) Filters ()
- d) Not available ()

Observation remarks:

EQUIPMENT AND MATERIALS

8. Are outdoor play equipments and materials available in your school? (Yes)

(No)

If Yes, please specify

a) _____

a) _____

b) _____

c) _____

d) _____

e) _____

Observation remarks:

9. Does your school have any ready-made equipment/ materials for indoor play and activities? (Yes) (No)

If yes, what are they?

a) _____

b) _____

c) _____

d) _____

e) _____

f) _____

Observation remarks:

10. Does your school have any ready- made teaching learning materials? (Yes)

(No)

If Yes, what are they?

g) _____

h) _____

i) _____

j) _____

k) _____

l) _____

Observation remarks:

11. Does your school have any teacher made teaching learning materials? (Yes)

(No)

If Yes, what are they?

m) _____

n) _____

o) _____

p) _____

q) _____

r) _____

Observation remarks:

12. What types of audiovisual equipments does the school provide?

a) Television ()

b) Slide Projector ()

c) Black Board ()

d) White Board ()

e) Laptop ()

f) Desktop Computer ()

g) Bulletin/ Flannel boards ()

Any Other: _____

Observation remarks:

TEACHER PROFILE

13. Educational Qualification:

14. Training undergone & duration:

15. Do the teacher have a helper: _____

If yes, how many: _____

ADMISSION PROCEDURE

16. What is the minimum age for admission to Nursery/Kg-I

a) 3 years ()
)

b) 4 years ()
)

17. What admission procedure is used ?

a) Test ()

b) Interview ()
)

c) First Come First Serve ()
)

Any Other:

PROGRAM AND PLANNING

18. What is the timing and duration of your pre-school

a) Nursery/KG-I: From _____ to _____

(_____hrs)

b) KG/KG-II: From _____ to _____ (_____

hrs)

c) Is daily routine/ time table prepared (Yes)

(No)

19. Is rest/sleep period provided? (Yes)

(No)

20. Is lesson plan prepared? (Yes) (No)

21. Is program planning done? (Yes)

(No)

If Yes, what type of planning is done?

a) Short term planning (Yes)

(No)

b) Long term planning (Yes)

(No)

22. Greeting/ Departing

a) Departure well organized (Yes) (No)

b) Children greeted warmly by teachers (Yes)

(No)

c) Each child greeted individually (Yes)

(No)

d) Teachers greeted parents warmly (Yes) (No)

e) Departure as information sharing time with parents (Yes)

(No)

23. Are the following principles kept in mind while planning the program?

a) Age and developmental level of the children (Yes)

(No)

b) Balance of activities for all aspects of development to be covered (Yes)

(No)

c) Balance between individual and group activities (Yes) (No)

d) Balance between indoor and outdoor activities (Yes) (No)

e) Balance between vigorous and quiet activities (Yes)

(No)

f) Balance between guided and free activities (Yes)

(No)

g) Any other:

CONTENT AND METHODOLOGY

24. What among the following is employed for conducting the program?

a) Formal teaching of the 3R's	(Yes) (No)
b) Is the program carried out like a formal school?	(Yes) (No)
c) Is play and activity the main method of teaching?	(Yes) (No)
d) Are textbooks compulsory for children	(Yes) (No)
If yes, is the whole content taught?	(Yes) (No)

25) What are the activities conducted for large muscle development? Please put a tick mark beside the activities done.

i) Jumping	(Yes) (No)
ii) Running	(Yes) (No)
iii) Climbing	(Yes) (No)
iv) Skipping	(Yes) (No)
v) Running race	(Yes) (No)
vi) Exercises	(Yes) (No)
vii) Stretching	(Yes) (No)
viii) Pulling	(Yes) (No)
ix) Sliding	(Yes) (No)
x) Kicking	(Yes) (No)
xi) Rolling	(Yes) (No)
xii) Swinging	(Yes) (No)
xiii) Catching	(Yes) (No)
xiv) Cycling	(Yes) (No)
xv) Walking/nature walk	(Yes) (No)
xvi) Balancing	(Yes) (No)

Any Other:

26) What are the activities conducted for small/fine muscle development?

i) Clapping	(Yes) (No)
ii) Threading	(Yes) (No)
iii) Catching	(Yes) (No)
iv) Tearing	(Yes) (No)
v) Tracing	(Yes) (No)
vi) Coloring	(Yes) (No)
vii) Arranging puzzles, blocks, pictures etc	(Yes) (No)
viii) Pasting	(Yes) (No)
ix) Cutting	(Yes) (No)
x) Drawing	(Yes) (No)
xi) Painting	(Yes) (No)
xii) Finger play	(Yes) (No)
xiii) Pattern making	(Yes) (No)
xiv) Action songs	(Yes) (No)

Any other:

27) What are the activities conducted for socio-emotional development?

i) Group play	(Yes) (No)
ii) Singing together	(Yes) (No)
iii) Role play	(Yes) (No)
iv) Drama	(Yes) (No)
v) Group work	(Yes) (No)
vi) Stories	(Yes) (No)
vii) Rhymes	(Yes) (No)
viii) Puppet activities	(Yes) (No)
ix) Doll play	(Yes) (No)

x) Playing with toys	(Yes) (No)
xi) Sports	(Yes) (No)
xii) Celebrating festivals/birthdays	(Yes) (No)
xiii) Meal time activities	(Yes) (No)

Any other:

28) What kind of activities are conducted for language development?

Language activities I

i) Free Conversations	(Yes) (No)
ii) Storytelling	(Yes) (No)
iii) Riddles	(Yes) (No)
iv) Picture games	(Yes) (No)
v) Picture reading	(Yes) (No)
vi) Songs and rhymes	(Yes) (No)
vii) Chart reading	(Yes) (No)
viii) Dramatic play	(Yes) (No)
ix) Vocabulary/command games	(Yes) (No)
x) Sound games	(Yes) (No)
xi) Show and tell- recall story	(Yes) (No)
xii) Draw and talk	(Yes) (No)
xiii) Doll play	(Yes) (No)
xiv) Sound discrimination	(Yes) (No)
xv) Visual discrimination	(Yes) (No)
xvi) Audio-visual discrimination	(Yes) (No)

Language activities II

i) Vocabulary building	(Yes) (No)
ii) Identification of alphabets	(Yes) (No)
iii) Identification of alphabetical sounds	(Yes) (No)

iv) Writing of upper and lower case alphabets	(Yes)	(No)
v) Writing words	(Yes)	(No)
vi) Writing full sentences	(Yes)	(No)
vii) Reading words	(Yes)	(No)
viii) Reading sentences	(Yes)	(No)
ix) Memorizing full rhymes	(Yes)	(No)

Language activities III

i) Children talk or explain their reasoning	(Yes)	(No)
ii) Staff respond to children's talk	(Yes)	(No)
iii) Children's talk is encouraged most of the day	(Yes)	(No)
iv) Staff-child conversations during free play and routines	(Yes)	(No)
v) Child-child conversations during free play and routines	(Yes)	(No)
vi) Staff encourages children to talk and listen to each other	(Yes)	(No)
vii) Long pauses are allowed so children have time to think and respond	(Yes)	(No)

Any other:

29) What kind of activities are conducted for formulation of pre-number concepts?

i) Identification of big and small	(Yes)	(No)
ii) Identification of tall/long and short	(Yes)	(No)
iii) Identification of less and more	(Yes)	(No)

iv) Identification of shapes	(Yes)	
(No)		
v) Arranging things in series	(Yes)	(No)
vi) Arranging objects from small to big and from big to small	(Yes)	
(No)		
vii) Matching	(Yes)	
(No)		
viii) Sequencing	(Yes)	
(No)		
ix) Sorting	(Yes)	
(No)		
x) Puzzles	(Yes)	
(No)		
xi) Seriating	(Yes)	
(No)		
x) Naming	(Yes)	
(No)		
xi) Classifying	(Yes)	(No)
xii) Identifying	(Yes)	
(No)		
xiii) Manipulating constructional materials	(Yes)	(No)
xiv) Sense of direction	(Yes)	
(No)		

Any other:

Teaching of Arithmetic

30) Reading numbers

From 1-100 () From 1-200 () From 1-300 ()
 From 1-500 () Above ()

31) Writing numbers in figures

From 1-100 () From 1-200 () From 1-300 ()
 From 1-500 () Above ()

32) Writing numbers in words

From 1-20 () From 1-50 () From 1-100 ()
 From 1-200 () Above ()

33) Operations

Addition () Substraction () Times () Multiplication ()
 Others

34. What is the medium of instruction in the class-room?

Mizo () English () Both ()

35. Are Home Works given to the children (Yes) (No)

s) If yes, is the home work given

i) Daily ii) Once/ Twice/ Thrice/ Four times a week iii) Never

36) How many reading tasks are usually given in a day?

37) How many writing tasks are usually given in a day?

EVALUATION

38. What are the tools used for evaluation?

a) Formal tests/examinations	(Yes)	(No)
b) Observation of the child's behavior		(Yes)
(No)		
c) Observation of the child's responses during the activities	(Yes)	(No)
d) Is oral test used		(Yes)
(No)		
e) Is written test used	(Yes)	(No)
f) Is Portfolio maintained		(Yes)
(No)		

39. Are weekly/ monthly tests conducted ?	(Yes)	(No)

MAINTENANCE OF RECORDS

40. If progress report/ record of children prepared?	(Yes)	(No)

41. Is formal examination conducted? If Yes, are the following included?

a) Marks scored in each subject in the examination	(Yes)	(No)
b) Grades scored in each subject in the examination	(Yes)	(No)
c) Division		(Yes)
(No)		
d) Position/Rank		(Yes)
(No)		
e) Comments of the child's performance in detail	(Yes)	(No)

Others _____

42) Are children's activities assessed	(Yes)	(No)

43) Are children assessed continuously	(Yes)	

(No)

44. Does the pre-school maintain records of the following?

a) Developmental history ()

b) Habits and interests ()

c) Health, weight & height ()

d) Teacher's assessment ()

e) Attendance ()

Others

PARENT CONTACT ACTIVITIES

45. Does the pre-school organize parent-teacher meeting? (Yes) (No)

If yes, how many times in a year?

b) _____

46. Are children visited at home? (Yes)

(No)

If yes, how many times in a year?

c) _____

47. Parents given administrative information about program (Yes) (No)

48. Child related sharing between parents and staff (Yes) (No)

49. Parents made aware of preschool education (Yes)

(No)

50. Parents involved in decision making roles (Yes)

(No)

51. Please mention the list of text books used in pre-school program

S/No	Text Books	Publisher

APPENDIX B

Assessment Framework for Language (Children's Preparedness for Schools)

Demonstration of Oral Expression		Rarely	Sometimes	Always
1	Talks freely with adults and children			
2	Expresses feelings, needs and shows interest (through verbal and non-verbal gestures)			
3	Speaks clearly in complete sentences			
4	Comprehends short text by listening			
5	Describes and retells any event or visual in short sentences			
6	Identifies, blends and segments syllables			
7	Identifies beginning and end sounds of common words			
8	Expresses creatively			
9	Comprehends and answers after listening			
10	Describe and retells using rich details in complete sentences			
11	Engages in meaningful conversations			
12	Identifies the beginning, middle, and end sounds of words			
13	Makes new words by adding or substituting syllables			

Demonstration of Emergent Reading Skills		Rarely	Sometimes	Always
1	Explores and engages with pictures, books and other printed material			
2	Listens attentively to stories and rhymes			
3	Names objects in the pictures			
4	Identifies words in a sentence			
5	Identifies rhyming words			
6	Recognizes sound symbol association			
7	Attempts to read words			
8	Identifies conventions of print such as left-to-right writing, reading from top-to-bottom			
9	Identifies punctuation marks like full stop and commas in the print			
10	Independently reads simple text in full sentences			
11	Retells a familiar story with beginning, middle and end events in a sequence			
12	Chooses books from the book or reading area			
13	Comprehends pictures and meaningful words			

Demonstration of Emergent Writing Skills		Rarely	Sometimes	Always
1	Holds pencil properly			
2	Does tracing on sand and air etc			
3	Scribbles or draws to represent thoughts, situations, events etc.			
4	Holds writing or coloring tools with better grip			
5	Uses writing tool appropriately			
6	Reads one's drawing and explains it using simple words			
7	Tries to express ideas in words and drawings			
8	Attempts to write alphabets and numbers			
9	Uses tools with ease to convey meaning through drawing.			

APPENDIX – C

STRUCTURED INTERVIEW FOR PRINCIPALS OF DIETS

NAME:

INSTITUTION:

EDUCATIONAL QUALIFICATIONS:

YEARS OF SERVICE:

1. How many lecturers have undergone trainings in early childhood education in the past years and the name of the institution where they receive training?

SN	Name of lecturer	Name of the programme	Duration of the training	institution& place of training	Year of training

2. How many times have DIETs conducted training of preschool teachers?

SN	Year	No of trainings	Remarks
	2017-18		
	2018-19		
	2019-20		
	2020-21		

3. Have the institution conducted any research in early childhood education? If any, please provide the year and title of the research.

SN	Title of the research	Year of publishing	Remarks

4. Do you have any plans/ proposals for uplifting early childhood/ preschool education in your district?

5. What suggestions do you have for the improvement of early childhood/ preschool education in your district?

APPENDIX - D

STRUCTURED INTERVIEW FOR SUB-DIVISION EDUCATION OFFICERS

1. Name:
2. Sub-Division:
3. Education Qualification:
4. Years of Service:
5. Do you have any training on Pre-school/ Early Childhood Education (e.g. degree/diploma/research work/in-service course/refresher)? If yes kindly mention the trainings undergone.

Training/Programme	Date & Year	Place of Training	Duration

6. Are you able to implement the knowledge you have gained from such trainings?
7. Do you think it is compulsory for children to attend preschool (Kg-I and II) classes? Why?
8. Do you think it is necessary for the preschool teachers to have a training on preschool education? Why?
9. What do you think is the quality of preschool education under your division?
Low/Medium/High
10. If it is Low or medium, what are the things that you would suggest for the improvement of the preschool education quality in your division?
11. Do you believe the state government is taking sufficient action to ensure the implementation of high-quality preschool education? Why?

12. Do you conduct supervision and monitoring for the implementation of preschool education in your area? If yes, could you describe how you carry out these activities?
13. Could you outline the steps you have taken to enhance the quality of preschool education?
14. What recommendations would you make for improving preschool education in Mizoram?

APPENDIX - E

STRUCTURED INTERVIEW FOR HEADMASTERS OF PRIMARY SCHOOLS

1. Name:
2. Name of School:
3. Education Qualification:
4. Years of Service:
5. Number of teachers in schools dedicated to Pre-school/ Early Childhood Education
6. Do you think it is necessary for children to attend preschool (Kg I & II)?
(Yes/No) Give reasons
7. Your specialization in Pre-school/ Early Childhood Education (e.g. degree/diploma/research work/in-service course/refresher). If yes provide the details
 Name of the Programme.....
 Year
 (date).....
 Place where you attended:

8. Have you implemented new practices/ initiatives from the training? If yes, mention it.
9. Do you supervise/ guide the teacher in Kg I & II(if not teaching directly)?
(Yes/No)
10. Do you think the teachers should be trained in preschool education?
(Yes/No). kindly state your opinion:
11. In your opinion what is the quality of preschool education in your school?
Low/Medium/High
12. If quality of preschool education in your school is low or medium, what are your suggestions for improving the quality of preschool education in your school?

APPENDIX - F**STRUCTURED INTERVIEW FOR PARENTS OF PRESCHOOL CHILDREN**

- 1) What do you understand about the concept of preschool education?
- 2) Do you think preschool education is important?
- 3) Why do you admit your children to KGI?
- 4) Do you believe your child will succeed in Class I without having attended preschool education?
- 5) What is your evaluation of the quality of education in KGI and KG II?
- 6) What are your suggestions for the improvement of preschool education in our state.

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ABSTRACT

AN EVALUATION OF THE PRE-SCHOOL EDUCATION PROGRAMME IN THE GOVERNMENT PRIMARY SCHOOLS IN MIZORAM

**AN ABSTRACT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
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DECEMBER, 2025**

**AN EVALUATION OF THE PRE-SCHOOL EDUCATION PROGRAMME IN
THE GOVERNMENT PRIMARY SCHOOLS IN MIZORAM**

By

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**In partial fulfillment of the requirement of the Degree of Doctor of Philosophy
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1.0. Introduction

Pre-school education is a child-centered program focused on the holistic development of children. It offers a stimulating play-based environment that promotes intellectual, linguistic, emotional, physical, and social growth through play and activity. Early childhood serves as the foundation upon which children build their future (Aggarwal, 2007). It prepares children for primary school and aims to lay the groundwork for basic skills like reading, writing, and arithmetic. Since over 85% of a child's brain development occurs before the age of six, it underscores the importance of proper care and stimulation in the early years to foster healthy brain development (Govt. of India, 2020). Researches also highlights that during early childhood, there are critical periods for the development of various cognitive, linguistic, social, and motor skills (Govt. of India, 2012). Children develop at different rates and ways emotionally, intellectually, morally, socially, physically and spiritually and each dimension is interwoven with others.

All children have abilities which should be identified and promoted. The preschool stage is a juncture for preparing children to go to formal school and what is important is the fact that the education of even a very small child does not aim at preparing him only for school but for life. The program should be based on an understanding of the patterns of development and learning that define the essential nature of childhood (Government of India, 2012). Young children learn from everything that happens in their environment in which play and conversation are the main ways which young children learn about themselves and the world around them. Interaction with adults and peers is of central importance to a child's development and children who are encouraged to think for themselves are more likely to seek knowledge and to be eager to learn (Aggarwal, 2007).

1.1. Need of the Study

Following the cessation of pre-school programs in primary schools due to the implementation of the Integrated Child Development Services (ICDS) program in the 1980s, primary schools in Mizoram have faced challenges due to children entering Grade I without sufficient school readiness. Growing public demand for preschool education led to declining enrollment in government schools as they were not having

pre-school section in their premises. Consequently, parents preferred private primary schools often equipped with preschool sections. Over time, the teachers have recognized the critical need for preschool education and have taken initiative to establish preschool sections in their schools. In some instances, where teacher shortages exist, teachers have even contributed personal funds to hire additional teachers specifically for these preschool classes. In 2015-16, the government officially authorized preschool programs in 66 government primary schools. By the year 2018, total 115 government primary schools had been recorded as having introduced preschool programs, but the actual number may be higher as many schools did not seek permission before starting these programs. Therefore, making a precise estimation was impossible. The present study targeted 66 schools as those were the only government primary schools known to have received official permission to operate preschools prior to the implementation of the National Education Policy 2020. But as per the best of the knowledge of the research at the time of proposal as well as till the drafting of the research work no teacher was recruited by the state government for such preschools. In such a unique establishment of preschools and demand in Mizoram it became imperative to evaluate the functioning of such schools. Some basic questions came in the mind of the researcher such as who were the teachers in those schools, what books were followed by the teachers and what activities were conducted.

By systematically analyzing how preschool education programme was being implemented, the present study would help to identify the strengths and weaknesses and where improvements could be made.

Therefore, the curriculum followed and its transaction in the pre-schools in the government primary school in terms of its developmental appropriateness needed to be understood and explored. An observation of the infrastructure and facilities of the government primary schools was also imperative as students' performance was reported to be enhanced in schools with better physical learning environments (Barrett et al., 2019).

Though few studies have already been conducted in Early Childhood Care and Education in the context of Mizoram (Chuaungo, 2001; Nunhlimi, 2017), research on the pre-school education programme run by the government primary

schools had not been the part of those studies. Therefore, the present study had been taken up with the anticipation that the following questions would be answered:

1. What is the scenario of pre-school education programme under the Government Primary Schools in Mizoram in terms of monitoring system, demand for preschool and quality of the programme ?
2. What curriculum framework and curriculum are followed in the pre-school education programme under the government primary schools?
3. What is the language competency of children who completed preschool education from the government primary schools?
4. What is the profile of functionaries implementing the pre-school education programme in the government primary schools?
5. Are the infrastructure facilities available in the government primary schools appropriate for pre-school children?
6. What are the tools employed for evaluating children development in the pre-school education programme under the government primary schools?

1.3. Statement of the problem

In order to address the previously raised questions and to bridge the existing research gap, this study has been formulated and executed with the title as below:

An Evaluation of the Pre-school education programme in the Government Primary Schools in Mizoram

1.4. Objectives of the study

1. To find out the scenario of pre-school education in Mizoram
 - 1.1. Monitoring system for pre-school education programme;
 - 1.2. Demand of pre-school education programme;
 - 1.3. Quality of the pre-school education program.
2. To analyze the curriculum followed in the pre-school education programme in the Government Primary Schools.
 - 2.1. Pre-school Curriculum published by SCERT in 2009;
 - 2.2. Books prescribed and used;
 - 2.3. Outdoor activities organized in the pre-school;
 - 2.4. Indoor activities organized in the pre-school;
 - 2.5. Programme Planning by the teachers;

2.6. Role of parents in curriculum implementation.

3. To assess the language development of the pre-school children in the government primary schools.
4. To analyze the profile of the functionaries implementing the pre-school education programme in the government primary schools.
5. To observe the appropriateness of infrastructure and facilities available for preschool children in government primary schools.
6. To find out the evaluation procedure adopted in the pre-school education programme in the government primary schools in Mizoram.
7. To make suggestions for improvement of the preschool education program in Mizoram.

1.5. Methodology of the Study

1.5.1 Design of the Study

To achieve the objectives of the study mixed-method research design was used. Mixed methods research is defined as research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches in a single study or a programme of inquiry (Tashakkori & Creswell, 2007b, p.4). This design was used in this study as it presented numerous methods in dealing a research problem. In the words of Creswell and Plano Clark (2018), "...the combination of quantitative and qualitative data provides a more complete understanding of the research problem than either approach itself. Using mixed method design, it is possible to explore information that is not accessible through a single approach alone (Shannon-Baker, 2015).

The present study can also be classified as a form of both Concurrent and Sequential Embedded research design, as described by Creswell and Plano Clark (2015). At the level of method, it was a kind of evaluative survey (Fox, 1969), as it evaluates the status and implementation of the pre-school education programme in government primary schools in Mizoram. The aim was usually to determine the 'merit, worth, or value' of a program (Hepler et al., 2010). Ideal for use in education, survey research is used to gather information about population groups to "learn about their characteristics, opinions, attitudes, or previous experiences" (Leedy & Ormrod,

2015, p. 159). The research design of the present study can be symbolized as QUAL+quan. The notation represents independent simultaneous triangulation (Morse, 1991; Creswell and Plano-Clark, 2018).

1.5.2 Population:

The study population included 66 government primary schools in Mizoram officially authorized by the state government to operate preschool education programs (KG-I and KG-II). At the next level the population of this study comprised of all the stakeholders of preschool education. The administrative officers or SDEOs of the Department of School Education and Principals of DIETs, teachers and headmasters of schools, parents of children attending preschool education program, and class I children who have just completed preschool education. More to the point, curriculum frameworks and books prescribed in these schools were also part of the study. These documents were analyzed systematically to assess the quality of curriculum as it directly or indirectly impacted the quality of preschool education in Mizoram. Hence the study was having diverse groups to be studied and counted as population of the study.

1.5.3 Sample

The multi-stage mixed sampling techniques were used to select an appropriate representative sample. To select thirty-three (33) schools from sixty-six (66) schools, simple random sampling was used wherein the names of the schools were selected using random draws. A simple random sample is a randomly selected subset of a population and each member of the population has an exactly equal chance of being selected (Thomas, 2023). Structured interviews were carried out with a sample of 150 parents selected through convenience sampling technique (Koerber & McMichael, 2008). A language assessment was administered on 263 children selected incidentally who were admitted Class I, and completed their preschool education from those government primary schools. Further, all principals of eight (8) DIETs were selected and SDEOs were selected purposively (Patton, 2002; Creswell & Plano Clark, 2011). Interviews were conducted for the principals of all eight District Institute of Education and Training (DIET) centers via telephone.

Additionally, out of the ten Sub-Divisional Education Officers (SDEOs) in the state, telephonic interviews were successfully conducted with five of them.

1.5.4 Tools and Techniques:

The following tools were employed by the researcher to collect the data;

i. Observation cum Interview Schedule: To observe the infrastructure and activities practiced in the schools, an Observation cum Interview schedule (2001) developed by Dr. Lalhmasai Chuaungo (for studying the existing conditions of preschools) was adapted by the researcher for the present study.

ii. Interview Schedule: Structured Interview schedule for four types of respondents were developed by the researcher.

- i) Sub-division education officers,
- ii) Principals of DIETs,
- iii) Headmasters of schools
- iv) Parents of preschool children.

The content validity of the schedules was established with help of five experts in the field of education.

iii. Language Assessment: Language competencies highlighted in the assessment framework for tracking of children's preparedness for schools given in Vidya Pravesh Guidelines developed by NCERT (2022b) were used to assess the grade I children.

iv. Content Analysis: Apart from the above tools and techniques content analysis technique (method) was used to analyze the curriculum framework and prescribed textbooks. Four parameters as prescribed by NCERT (2006) were used for analysis of the curriculum developed by SCERT, Mizoram (2009). For the analysis of the prescribed textbooks, three (3) parameters were developed for assessing the textbooks. The parameters were namely (i) Physical Aspect (PA), (ii) Teacher's Note given in the book (TN) and (iii) Exercises and Activities (EA). These parameters serve as benchmarks to ensure that the textbook effectively address the learning needs of students.

1.5.5. Collection of Data

After obtaining permission from the school heads of the selected schools, the researcher conducted data collection during the years 2021, 2022 and 2023. The participatory observation technique was also employed for data collection. This was realized by intermittent visits to schools and being in touch with stakeholders. In the language assessment of Grade I children, teachers serve as the primary field investigators, working in collaboration with the researcher. In the process of data collection, obtaining informed consent, ensuring confidentiality, and avoiding any potential harm was prioritized.

1.6. Major Findings and Conclusions

Objective 1. Major Findings and Conclusion in relation to the Scenario of Pre-school Education in Mizoram.

The findings with regards to the scenario of pre-school education were given in terms of monitoring system for pre-school education programme, demand of pre-school education programme, reason for enrolling the child to pre-school, whether the child would be able to do well in Class I without pre-school education, whether the government was taking steps for improvement of the quality of preschool education programme, whether the SDEOs took steps were taken for quality improvement of preschool, opinion of parents about the quality of the present preschool education programme and opinion about the quality of preschool education by the headmasters.

- a) The status of supervision and monitoring was quite unsatisfactory as only 40 percent of the SDEOs visit the schools and that also not on a regular basis. Only one of the officers had meetings with the teachers, guided them and given them suggestions in their work and observe the teachers during their interaction with the children.
- b) In the primary schools however, 96.97 per cent of the headmasters supervised and guide the teachers in classroom transaction and preparation of lesson plans. They also had discussions with the teachers and closely monitored how the teachers took care of the children.

c) With respect to demand for pre-school education, parents talked about several reasons why they sent their child whether they were male or female to the pre-school. The reasons why parents were compelled to admit their child to pre-school were simply to learn and study, to impart quality education to their child, to improve mentally and physically, to be ready for challenges for later education, to socialize, to get education from trained personnel, for proficiency in English, to receive proper education and development, and for social and emotional development. When asked about whether the children would be able to do well in Class I, 78 percent of the parents felt that their child would not be able to do well in Class I without enrolling in the pre-school programme. However, 16.67 percent felt their child would do well in Class I even without preschool education and 1.33 percent felt that whether the child would be able to do well or not depend on the child.

d) With regards to the quality of the pre-school education programme in the state, the response given by the SDEOs were quite startling as all of them felt that the state government was not taking enough steps for the quality of pre-school education programme in the state. They felt that enough funds were not allocated for the improvement of pre-schools in terms of training of teachers, infrastructure facilities and teaching learning materials.

There was a feeling that the state government did not lay profound emphasis on the preschool and elementary education as a whole and that its significance and importance was not recognized and acknowledged which was reflected in the recruitment of teachers and the system of transfer and posting. Some also felt that those in the higher authority were not giving education a priority. They also said that pre-school education was neglected due to lack of awareness of its nature and aims and objectives; teachers with the lowest educational qualification or the most inexperienced were often entrusted to take care of the preschool section and as long as this was practiced, it would be difficult to improve the quality of education in the pre-school stage. With the many tasks that the SDEOs had to perform, 60 percent of them took steps for the improvement of pre-school education whenever they had the chance informing the higher authority about the shortage of teachers, lack of training by the teachers and lack of proper infrastructure and also by interacting with the teachers.

e) On the issue of quality pre-school education programme, 48 percent of the parents felt it was good, 33.33 percent felt it was somewhat good and 18.87 percent felt that it was not good.

f) None of the headmasters agreed that the pre-school education programme in their school was low; however, 81.82 percent felt that it was of medium quality and 18.18 percent felt the preschool education programme in their school was high.

Objective 2. Major Findings and Conclusion in Relation to the Curriculum followed in the Pre-school Education Programme in the Government Primary Schools

1. Preschool Curriculum published by the SCERT in 2009

In evaluating the curriculum's effectiveness, it was noteworthy that it aligned with principles of developmentally appropriate practices. With respect to integrated set of experiences to foster holistic growth and development in all domains, such as health and well-being, and cognitive, physical, social, emotional, and language development through an interlinked approach, the curriculum addressed all these aspects but the number of activities incorporated into the programme was somewhat limited.

It demonstrated significant limitations in its linguistic accessibility, as it was available only in the Mizo language. This might pose challenges for stakeholders from various regions where several distinct dialects are spoken, particularly in the Siaha and Lawngtlai districts, as well as in areas predominantly occupied by the Hmar, Bru, Nepalese and Chakma tribes. The curriculum, therefore, risked undermining its objectives of inclusivity and comprehensive development, as it might not cater adequately to the unique linguistic needs of diverse communities.

When it comes to facilitating a child's adjustment to the routines of primary school and meeting the demands of more formal teaching, it is important to highlight that the number of activities integrated into the program was relatively limited. While this limitation could undermine the program's potential impact, the approach itself was strategically designed to prepare children for the essential competencies required for successful school readiness prior to their entry into primary education.

2. Books prescribed and used

The study materials designed for the preschool section were First Step I and Pre-number I for Kindergarten I and First Step II and Pre-number II for Kindergarten II. The main aim of preschool education is to develop the physical, cognitive, and socio emotional domains as such, the analysis of these textbooks was made in the light of these developmental domains.

a) With respect to First Step I there were 12 chapters with 83 pages and First Step 2 had 15 chapters or themes with 103 pages which were play and activity based. Theme based approach is suggested by the policy documents in the preschool sections. The layout of the textbook including fonts and illustrations were child friendly and attractive and the pictures used were connected to the child's immediate environment. The physical activities given in the study materials were also designed to promote both gross motor and social development by engaging children in group work, conversations and guided play and there were also plenty of activities for fine motor development. Various activities for enhancement of cognitive development were also in place.

b) Pre number concept activities focus on classification, categorizing, seriation, sequencing, and spatial understanding and knowing the difference in shapes, small and big, large and heavy, short and long, wide and narrow, thick and thin, tall or short, in and out and likewise. The study materials also addressed this aim in a child friendly and play based approach. Pre number I is divided into 15 chapters with 96 pages and pre-number 2 was divided in 17 chapters with 108 pages.

c) With respect to the study materials used in the preschools, only 19 out of the 33 schools used study materials which they termed as textbooks. Study materials like First Step and Pre-number were used only in 6 schools though it was meant to be used in all the 66 schools that were given permission to run preschool education. It was learnt through an interview with one of the staff from Directorate of School Education that the mentioned study materials were developed by the SCERT and printing was the responsibility of Directorate of School Education and that the books were printed only for two years i.e 2015-16 academic session and 2016-17 academic session. Therefore, the schools were in dearth of proper study materials and printing was not continued due to lack of funds.

3. Outdoor activities organized in the preschools

Development of large muscles is important for coordination between sensorial perceptions and body movement. To enhance the development of large motor skills various activities need to be conducted meaningfully. In the sampled schools jumping was done in all the schools and other activities like running, climbing, daily exercise, and stretching were practiced by more than 90 per cent of the schools and catching was done by 78.79 per cent of the schools. In more than 60 per cent of the schools, activities like skipping and pulling were practiced. More than 40 per cent of the schools let the children play with slides, swings and did balancing activities. More than 30 per cent of the schools engaged the children in climbing activities, kicking and nature walk. Only a few schools i.e 15.15 per cent conducted rolling activities and cycling. Though dancing is an effective activity for the development of gross muscles, it was practiced only in 3.03 per cent of the schools.

4. Indoor activities organized in the pre-school

The indoor activities conducted may be categorized as activities for small/fine muscle development, activities for socio-emotional development, activities for language development, and activities for formation of pre-number concepts.

a) For development of fine motor skills, 100 percent of the schools practiced drawing, coloring and action songs. In more than 90 per cent of the schools, activities like clapping, catching and tracing were done. Activities like tearing and pasting, cutting, arranging puzzles and blocks were done in more than 60 per cent of the schools and 54.55 per cent of the schools engaged children in finger play. Pattern making was practiced in only 42.42 per cent of the schools and 39.39 percent of the schools practiced threading. Playing with clay was done only in 1 school.

b) For enhancement of socio-emotional development singing was practiced in 100 per cent of the schools. Guided group play and celebration of birthdays and festivals were done in more than 80 per cent of the schools. Story time was held only in 75.76 per cent of the schools and playing with toys which the children brought from their homes was practiced by 60.61 per cent of the schools. More than 50- per cent of the schools practiced meal time activities and role play. Also, 30.30 per cent of the schools practiced dramas and puppet activities were done only in 6.06 percent of the schools.

c) In this study language activities were categorized into three groups. 'Language activities I' were related to pre-language skills; Language activities II were comprising learning of alphabet and sounds; and 'Language activities III' were including conversational competencies.

With respect to Language activities I which is concerning the main and most common activities employed by the teachers, more than 90 per cent of the schools practiced free conversations, storytelling and songs and rhymes. Chart reading and picture reading were practiced by 72.73 per cent and 66.67 per cent of the schools respectively. Activities like riddle games, picture games, drawing and talking about the pictures drawn was done in more than 50 per cent of the schools. Vocabulary, command games and visual discrimination were practiced in more than 40 per cent of the schools. More than 30 per cent of the schools engaged the children in drama, sound games, doll play and sound discrimination. Only 18.18 percent of the schools practice audio visual discrimination.

Regarding Language activities II, which was concerned with activities that were a little technical or complicated compared to activities in Language I, more than 80 per cent of the schools perform a separate activity for alphabet identification, sound identification of alphabets and writing of both uppercase and lowercase alphabets. More than 70 per cent of the schools let the children memorize rhymes and activities like writing down words was practiced by 60 per cent of the schools. More than 50 per cent of the schools practiced reading words and they also made the children read full sentences.

In Language activities III which addressed mostly verbal communication, 90.91 per cent of the teachers listened and respond to the children talking. More than 80 per cent of the schools had staff to child and child to child conversations during free play routines and let the children talk and explain their reasoning. Also, 72.73 per cent of the schools encouraged children's talk and 66.67 per cent allowed long pauses when interacting with children so that children would have time to think and respond.

d) For laying the foundation of numeracy, activities for pre-number concept were conducted by the schools. Among the sampled schools, 99.91 per cent of the schools did activities for identification of big and small and identification of shapes.

Identification of tall/long and short, and less and more were done in more than 80 per cent of the schools. Seriation activity and sense of direction were practiced in more than 70 per cent of the schools. Activities for matching and classifying, sorting and sequencing were done in more than 60 per cent of the schools and arranging puzzles were also done in more than 50 per cent of the schools.

e) With matters concerning reading numbers, there was a lot of difference in the range of numbers taught. More than 60.60 per cent of the schools taught reading numbers from 1-100. Numbers from 1-200 was taught in 18.18 per cent of the schools and 12.12 percent of them taught numbers ranging from 1-50. Only 1 school taught numbers from 1-20, which was prescribed in the textbook. On the other side 6.06 per cent of the schools taught reading numbers from 1-500 which would be burdensome and unnecessary for the children.

f) In 69.69 per cent of the schools, writing of numbers in figures from 1- 100 was taught, 6.06 per cent of the schools taught writing numbers 1-50, 1-200 and 1-500. Writing numbers from 1-20 was practiced in 9.09 per cent of the schools as prescribed in the textbooks. Numbers from 1-10 was taught in 3.03 percent.

g) With regards to teaching of writing numbers in words, 24 per cent of the schools did not teach writing of numbers in words. Among the schools that taught writing numbers in words, 33.33 per cent of them taught numbers within the range of 1-20. A range from 1-50 was taught in 24.24 per cent of the schools. Only 3.03 per cent of the schools taught writing numbers in words from 1-10; and 15.15 per cent of the schools taught 1-100 in words. This was definitely burdensome and unnecessary for the children of this age as the recommended activity was writing numbers in words 1 to 10 only.

h) It was found that mathematical operations were also taught in the schools. Addition was taught in 54.55 per cent of the schools and subtraction was taught in 48.48 per cent of the schools. It was found that 21.21 per cent of the schools taught Times. Multiplication was taught in 6.06 per cent of the schools and another 6.06 per cent taught lesser and greater activity. Activities like what comes between, what comes after and count and write were taught in 3.03 per cent of the schools.

5. Programme Planning by the teachers

a) With respect to timing and duration of the pre-school, it was found that 45.45 per cent of the schools had 3 hours of school duration, and 12.12 per cent of the schools had more than 3 hours of school duration. A few schools comprising of 9.09 per cent had school duration less than three hours. The remaining 33.34 percent schools did not have school hours. Most of the schools were not up to the mark as the recommended time was four hours.

b) It was found that 57.58 per cent of the schools provided rest/ sleep period during school hours while 42.42 per cent of the schools did not make time for such period.

c) With regards to lesson planning, it was found that 63.64 per cent of the school prepared lesson plans beforehand, however, 36.36 per cent of the schools did not prepare lesson plans.

d) It was found that 54.55 per cent of the schools prepared program planning out of which 48.48 per cent were short term plans and 6.06 per cent were long term plans. None of the schools prepared both long- and short-term plans.

e) It was found that departure time was well organized in 69.70 per cent of the schools and 81.82 per cent of the schools greeted the children warmly. Individual greetings were practiced in 72.73 per cent of the schools and departure time was utilized for sharing of information about the children with their parents. Total 69.70 per cent of the schools greeted the parents warmly.

f) With respect to the kind of approaches used while preparing program planning, it was found that more than 60 per cent of the schools considered the age and developmental level of children and design activities with balance between individual and group work. Also, 54.55 per cent of the school considered balancing of activities for all aspects of developmental domains, a balance between outdoor and indoor activities was maintained and they also balance activities between guided and free activities. Total 48.48 per cent of the schools maintained the balances between vigorous and quiet activities.

g) It was found that 69.70 percent of the schools used formal teaching of the 3Rs for conducting the program and 60.61 per cent claimed that the schools run the program like a formal school which was against the very philosophy of the preschool education. Total 48.48 per cent of the schools believed that play and activity were the

main method of teaching the preschool children. It was also learnt that 42.42 per cent of the schools made the textbooks compulsory for the children and among them, 9.09 per cent taught the whole content of the textbooks they used.

h) With regards to medium of instructions used, 78.78 percent used both Mizo and English, 15.15 percent used Mizo only and 6.06 percent used only English

i) It was found that in 45.45 percent of the sampled schools, children were admitted at the age of 4, while 48.48 percent admitted children at the age of 5 years and there were 6.06 percent of schools who admitted children at the age of 6 years.

j) Among the sampled schools, 87.87 percent of the preschools admitted children by first come first serve process while 12.12 percent conducted tests for admission into the preschool programme.

k) It was found that 93.93 percent of the sampled schools practised giving home works to the children and only 6.06 percent of the sampled schools did not practice giving home works.

7. Role of parents in curriculum implementation:

a) It was found that 72 per cent of the parents felt preschool education was a programme for preparation of children for formal schooling and 54 per cent of the parents felt it was a programme where children were taught things about formal reading and writing. Besides these concepts about preschool education, some of the parents also felt that the programme developed the child's emotional, social and personal growth, and continual exposure to other children helped the child to enhance communication skills and a place where children combine learning with play guided by professionally trained adults.

b) With respect to parent's understanding of the importance of preschool education, 66.67 per cent of them felt it was a place where they learn to socialize, learn how to read and write for formal schooling. Besides this, some parents also felt that it was a programme for preparing children mentally to face challenging situations in their studies, a place where they learn skills, values and socialization, a place where children receive education from trained teacher, a programme implemented by the government wherein parents could save money and time and 18 per cent of parents did not have an idea about the importance of preschool education.

c) With respect to child related sharing between parents and staff, 78.79 per cent of the schools practiced sharing with parents while 21.21 per cent of the schools did not practice child related sharing. This negligence by some schools (21.21%) reflects the lack of clear guidelines, supervision and monitoring.

d) It was found that 66.67 per cent of the primary schools generated awareness for parents on preschool education while 33.33. per cent of the did not organize such programmes for parents.

e) On matters regarding decision making, 63.64 per cent of the primary schools let the parents involve while 36.36 per cent of the primary schools did not involve the parents.

f) It was found that only 6.06 per cent of the primary schools did not organize parent teacher meetings. Other primary schools organized such meetings though the number of meetings held vary as some primary schools held the meetings once a year, twice a year while some three or more times a year.

g) It was found that majority of the primary schools practiced visiting children at home though the number of visits vary. The teachers have interactions with the parents in their home setting. However, 36.36 per cent of the schools did not pay visits to their children at home.

h) Among the sampled schools, 69.69 percent of them gave administrative information about the preschool programme to the parents while 30.30 percent of the sampled schools did give any administrative information to the parents.

Objective 3. Major Findings and Conclusion in relation to assessment of Language Development of Pre-school Children in Government Primary Schools

The findings concerning language development of 263 Grade I children are given below in terms of Demonstration of Oral Expression, Demonstration of Emergent Reading Skills and Demonstration of Emergent Writing Skills.

a) With reference to demonstration of oral expression, majority of the children were able to demonstrate simple language skills like talking freely with adults and other children, speaking clearly in complete sentences, comprehension of short texts by listening, describing and retelling events or visuals in short sentences, and comprehension and answering after listening as the percentage of children who fall

under 'Always' ranges from 42.97 – 66.54 per cent. The findings implied that the children were weak in the more complicated oral skills like expression of feelings, needs and showing interest through verbal or non-verbal gestures, expressing or answering creatively and engaging in meaningful conversations as the percentage of children who could be categorized as 'Always' ranges from 34.98 – 39.16 per cent. More complicated skills like identification, blending and segmenting syllables, identifying beginning and end sounds of common words, describing and retelling using rich details in complete sentences and identifying beginning, middle and end sounds of words and making new words by adding or substituting syllables were found to be difficult for the children as the percentage of children who can be categorized under 'Always' ranges from 9.51 – 26.62 per cent only.

b) In demonstration of emergent reading skills, majority of the children were able to display simple skills of reading like listening attentively to stories and rhymes, naming objects in pictures, comprehension of pictures and identifying convention of print such as left to right writing and reading from top to bottom though a few were not able to do these skills properly and the percentage of children that can be categorized under 'Always' ranges from 46.39 to 57.41 per cent. A more complicated reading skill like exploring and engaging with pictures, books and other print materials, identify words in a sentence, identifying rhyming words, recognizing sound symbol association, attempting to read words, identifying punctuation marks like commas and full stops, read simple texts in full sentences independently and comprehension of words were found to be difficult for the children as the percentage of 'Always' ranges from 22.5 to 28.14 per cent. The skill which children found the most difficult was retelling familiar story with the beginning, middle and end events in a sequence.

c) In demonstration of emergent writing skills, simple writing skills like holding pencil properly, holding writing or coloring tool with better grip and using writing tool appropriately were displayed by majority of the children. Tracing on sand/air was displayed by 30.42 per cent and the percentage of children who were always displaying skills of reading or explaining their drawing in simple words and attempting to write alphabets and numbers ranges from 46.77 per cent to 47.53 per cent. However, the percentage of children who displayed skill of scribbling or

drawing to represent thoughts, situations, events etc., children who tried to express ideas in words and drawings and who used tools with ease to convey meaning through drawing ranges from 11.79 per cent to 17.11 per cent.

Objective 4. Major Findings and Conclusion in relation to the profile of functionaries implementing the pre-school education programme in the Government Primary Schools

- a) In terms of educational and professional qualifications of the headmasters who were looking after the Government Primary Schools, it was found that 21.21 per cent were having HSLC and 12.12 per cent were having HSSLC. Among the graduates, 18.18 per cent and among the post- graduates, 9.09 per cent were having professional degree required for a primary school teacher.
- b) It was found that 57.58 per cent of the headmasters were having more than 25 years of service and there were no headmasters who have teaching experience of less than 5 years.
- c) None of the headmasters had any specialization in preschool education and 18.18 per cent of the headmasters attended short term training on preschool education at SCERT/DIET and they had implemented new practices or initiatives they had gained from the training.
- d) All the headmasters of the Government Primary Schools opined that teachers should be trained in preschool education.
- e) Out of 33 teachers dealing with preschool sections in primary schools 88.81% were having preservice professional qualification and six (6) were untrained teachers. The six teachers who were reported without professional qualification were recruited by the regular teachers personally for their assistance. Moreover, trained teachers were not trained in preschool education but they possessed qualification for primary schools like B.Ed. or D. El. Ed.
- f) Only 21.21percent teachers have attended the short-term training programmes organized by the SCERT or the DIETs in Mizoram. Whereas 54.54 percent teachers had done recently the six months certificate course organized by SCERT, Mizoram.

Objective 5. Major Findings and Conclusion in relation to Infrastructure and Facilities available for Pre-school Children in the Government Primary Schools.

a) Majority of the primary schools had a safe playground, however there were 12.12 per cent schools whose playground were not safe for children. 48.48 per cent of the schools were properly maintained and 30.30 per cent of the play spaces have trees and shades for protection against the sun. Total 39.39 per cent of the outdoor spaces in schools were easily accessible and were with adequate space.

b) It was found that majority of the preschool classrooms in the primary schools were well ventilated, had verandah and were well maintained. They also had adequate light in the classroom. Total 51.52 per cent of the primary schools had painted walls with pictures. Only 36.36 per cent had space for storage and only 24.24 per cent had sufficient space for activities in the classroom.

c) With respect to pictures displayed on the wall, 51.42 per cent of the schools displayed the pictures on the eye-level of the children and 42.42 per cent displayed the children's work in the classroom. Age-appropriate pictures were displayed only by 48.48 per cent of the schools. Pictures of animals, birds, vegetables, fruits, flowers, modes of transport, alphabetical charts and pictorial charts were displayed by 60.61 to 69.70 per cent of the primary schools.

d) With respect to furniture for children 93.94 per cent of the primary schools used benches and desks and 57.58 per cent also had tables and chairs. 63.64 per cent had child sized furniture and were also painted. 81.82 per cent of the primary schools had furniture which were safe for children. Racks and shelves to be used by children existed in 45.45 per cent of the primary schools. Also, 24.24 per cent had mats for children to sit or roll and only 9.09 per cent had big table for group work and art work.

e) It was found that 51.52 per cent of the primary schools used tap water for drinking and 66.67 per cent used water filters while 27.27 per cent stored water in buckets/ tins. Water cooler was used in one school, which was donated by community. One of the schools provide boiled water for the children and one school let the children bring their own water bottle from home.

f) With respect to outdoor play equipment 72.73 per cent had football/ futsal ball and 63.64 per cent of the primary schools had skipping rope and rope for tug of war. The percentage of primary schools who were having volleyball, see-saw, swing and slides ranges from 24.24. to 33.33 per cent. Equipment like shot put/discus throw/throw ball, marble, kawi and basketball ranged from 12.12 to 15.15 per cent. The range of percentage of primary schools that owned cricket equipment, motor tire, high jump equipment and dart was 3.03 to 6.06 per cent.

g) It was found that there was one primary school in which there were no ready-made equipment/ materials for indoor play and there was shortage of these ready-made equipment/ materials in all the schools. Boxing equipment was owned by 51.52 per cent of the schools. In 21.21 percent of the primary schools, toys and Chinese checkers/ draught board and chess board were possessed and 24.24 per cent had blocks. Coloring materials and dart were owned by 12.12 per cent of the primary schools and 9.09 per cent had rings, puzzles and carrom board. The percentage of primary schools that had equipment like flash card, Bluetooth speaker, slime or clay, art craft books, pasting and cutting materials and chart ranged from 3.03 to 6.06 per cent. These items were purchased through the contribution of the teachers in the government primary schools.

f) It was found that all the schools were not well equipped with ready-made teaching learning materials and 15.15 per cent of the schools did not have any ready-made teaching learning materials. Pictorial charts were owned by 42.42 per cent of the primary schools and pictorial books/ story books/ conversation books were owned by 30.30 per cent. Abacus, flash card/ picture card/ reading card were owned by 21.21 per cent and the percentage of primary schools who had models/ figures and maps/ posters were 18.18 and 15.15 per cent respectively. The percentage of primary schools having shapes of alphabet and numbers, sentence maker, film/videos and slates ranged from 6.06 to 3.03 per cent.

g) With reference to availability of teacher-made teaching learning materials, it was found that all the schools were lacking in this area. There were 12.12 per cent primary schools who did not have any of these materials. Total 48.48 per cent of the primary schools had teacher made pictorial, alphabet and numerical charts and 33.33 per cent had flash card/ picture cards. Shapes were prepared by 15.15 per cent only.

The percentage of primary schools that prepared seriation cards/ story card, puzzle, wooden and clay objects, picture games, sorting, paper toys, drawing/ coloring sheets, clock with words, sound games, and odd one out sheet ranged from 3.03 to 6.06 per cent.

h) It was found that all the schools were lacking in audio-visual equipment as the percentage of primary schools that owned television, bulletin/ flannel boards and greenboard ranged from 3.03 to 6.06 per cent. Laptop and desktop computers were owned by 18.18 and 15.15 per cent. Majority i.e 69.70 per cent of the primary schools used black boards and 36.36 per cent owned white boards.

Objective 6. Major Findings and Conclusion in relation to the Evaluation Procedure Adopted in the Pre-school Education Programme in the Government Primary Schools in Mizoram

a) In relation to the kinds of tools used for assessing and evaluating the children's development, it was found that 87.88 per cent of the primary schools employed formal tests or examinations, observation of child's responses during activities and written tests. Also, 93.94 per cent of the schools observed the child's behavior and 96.97 per cent used oral tests but were not reflected in the report cards. Portfolio was maintained by only 54. 55 per cent of the primary schools.

b) It was found that 66.67 per cent of the primary schools conducted weekly/ monthly tests.

c) It was found that 90.91 per cent of the primary schools prepared progress report/ record of the children.

d) It was found that 90.91 per cent of the primary schools used grades to record the scores in each subject and 75.76 per cent gives marks also. Division and ranks were given in majority of the schools while comment of the child's performance was given by 51.52 per cent of the primary schools.

e) With respect to assessing of children's activities, 69.70 per cent of the primary schools claimed that it was done so, however this does not reflect in the progress report cards

f) It was found that 72.73 per cent of the primary schools claimed that they assessed the children continuously however, the evidence for such documents like check list, rating scale and teacher diaries were not available.

g) With respect to maintenance of records of the children, the percentage of primary schools that recorded the child's health, weight and height, teacher's assessment and attendance ranged from 72.73 to 87.88 per cent. The developmental history of children was recorded by 36.36 per cent teachers and habits and interests of the children were recorded by only 15.15 per cent of the teachers.

Objective 7. Major Findings and Conclusion in relation to Suggestions from different Stakeholders for Improvement of the Pre-school Education Program in Mizoram.

a) Parents of the preschool children contributed meaningful suggestions for improvement of preschool education programme. They suggested that age-appropriate learning and play activities should be used and felt that every primary schools should have a preschool programme. They also felt that preschool should be more child centered and joyful. They suggested that Anganwadis should be more structured or upgraded and needs to be closely linked to primary schools. Proper teaching learning materials, child safety and proper infrastructure were areas where the parents felt the need for improvement. Training of teacher in preschool education and fair and proper recruitment of only trained teachers and awareness generation for parents was also considered necessary. They also felt that unhealthy competition needs to be done away with and that play way as the means for teaching and learning should be adopted. They also suggested that activities related to life skills development needed to be introduced. They also felt that better coordination of parents and teachers was necessary and that government should pay more attention for improvement of preschool education. They also suggested that mother tongue be used in classroom transaction and felt that there was a need to reduce the curriculum. They also felt that senior teachers needed to be replaced by younger teachers in the preschool sections.

b) It was found that only 40 per cent of the educational administrators like the SDEOs have taken steps for the improvement of preschool education programme in their jurisdiction. The SDEOs suggested that the government must take steps so that all the primary schools had a preschool or nursery class and funds for infrastructure and facilities should also be allocated. It was felt necessary that recruitment of separate qualified teachers specially trained in preschools and continuing

professional development be made mandatory and that practice teaching should be included and those who had a passion for teaching should be identified in the recruitment process. They also suggested that educating and spreading awareness for the public on preschool education was essential. It was considered important that mid-day meal (MDM), provision for food supplements and vitamins should be made for children in the preschool programme.

It is to be noted here that there was no provision of MDM for preschool children. Which reflect a big lack of planning and policy flaw. But the children were provided meal by some kind of unofficial adjustment by the schools. From the year 2021-22 the state government started phase wise establishment of 'Bal Vatika' where MDM was insured. As reported by the Directorate of School of Education there were 597 Bal Vatika within premises of primary schools in the state by the writing of this report in March 2025.

c) The Principals of DIETs suggested for the upliftment of preschool education through training of Anganwadi workers and preschool teachers, inclusion of preschool topic in pre-service training, awareness of ECCE to the community, teacher trainees and elementary teachers, workshop on TLM for preschool teachers and professional development on preschool education for DIET faculty. The Principals also made valid suggestions for the improvement of preschool education like including training on preschool education for primary school teachers in the next annual work plan and budget for teacher education, recruitment of separate teachers for preschool sections in the government primary schools and the compulsory training of these teachers, research in the area of preschool education, recognition of private preschools by the state government and the training of teachers in the private sector, improvement in human resources in the present Anganwadi centers, collaborative work amongst different agencies viz: education department, child development and other agencies concerning children, organizing awareness programmes on preschool education for the community, establishment of ECCE Cell in the DIETs, revision and review of the present preschool curriculum, assessment process and activities of preschools, and setting up preschool sections in all the government primary schools.

Recommendations for Improvement of Preschool Education Programme in Mizoram.

1. All government primary schools need to have a preschool section so that children will have smooth transition from home to preschool and then to primary school and children will be equipped with school readiness skills.
2. A consistent supervision and monitoring system for the preschool education programme in the government primary schools need to be implemented by the state government.
3. Pre-service teacher education programme for the preschool stage approved by the NCTE needs to be started in the state so that a degree in preschool education could be made mandatory for those who aspire to become preschool teachers both in the government and private sector. Preschool education may also be included in pre-service teacher education programmes like D. El. Ed. In-service primary school teachers also need to have continuous professional development on preschool education so that they could be equipped with the latest trends in preschool education.
4. A teacher training management system also needs to be implemented to track the teachers' professional development and also to make data available for demand and supply of teachers in the state.
5. Resource materials on preschool education for both teachers and parents need to be developed and disseminated in a larger scale. Awareness generation for the parents and community through different kinds of media is a must so that preschool education in its true spirit could be implemented.
6. The prescribed study materials for the preschool stage needs to be available both in English, Mizo and other regional languages. Since the parents demand was for English medium pre-schooling or better fluency in English language, the English version of the study materials which is now out of print need to be made.
7. Teachers need to give attention to the different developmental domains like physical development, social and emotional development, cognitive development, language development, cultural and aesthetic development and plan activities in a play way method systematically based on the domains so

that children could develop in a more holistic way. Qualified and dedicated teachers are needed for quality preschool education.

8. Early literacy being an important aspect of educating children, it would be beneficial for the teachers if they have a training in language teaching.
9. Educational administrators, teacher educators and other important stakeholders in education need to be oriented in the aims, concept and objectives of preschool education.
10. The government primary schools need construction of rooms with enough space for indoor play activities. The school needs to be equipped with proper play materials, teaching learning materials, child friendly furniture and age-appropriate books. The primary schools also need to be equipped with outdoor play space and different play equipment.
11. The evaluation of children needs to be done in a more systematic way. A continuous assessment of children needs to be practiced and assessment tools like observation of children, rating scale, check list, teacher records and maintenance of portfolios need to be maintained. A school readiness assessment should be imposed for children before moving to primary school to ensure that all children acquire school readiness skills. Children who have low performance may be identified so that they could be remedied.
12. A more collaborative work among the different agencies catering to early childhood like education department, child development under social welfare department and health department needs to be in place.

1.7 Implications of the Study:

1. The present study informs to the policy makers for revision of the policy for better preschool education in the State.
2. The study highlighted the gaps in the proper implementation of the preschool education programme which may bring the qualitative improvement at the ground level.
3. The study highlight the need of proper monitoring, supervision and support system for preschool education.
4. The present study implies that the preschool curriculum published by the SCERT in 2009 was not comprehensive enough, however, a new preschool

curriculum was published in 2022 and development of state specific curriculum for the foundational stage is in process which is based on the philosophical tenets of NEP 2020.

5. The study revealed the rare incidences of community participation in preschool education which may help local authorities to harness at larger scale.
6. The study highlights the urgent need of pre-service and in-service preschool teacher education programme in the state.
7. In addition to the development of the Preschool Curriculum in 2022, the researcher's affiliation with SCERT contributed to the development of Minimum Specifications for Preschools in Mizoram available both in English and Mizo and the development of a learning app for preschoolers called Zirna Kailawn, designed for Android devices. Plans are underway to upgrade the app and make it available for iOS devices as well.

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