

**A STUDY OF DEVELOPMENTALLY APPROPRIATE PRACTICES  
AMONG PRE-PRIMARY, PRIMARY AND  
SECONDARY TEACHERS**

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**A STUDY OF DEVELOPMENTALLY APPROPRIATE PRACTICES  
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SECONDARY TEACHERS**

Dissertation Proposal submitted in partial fulfilment of the M. Ed.  
Degree course of the University of Mumbai.

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2022

## **CERTIFICATE**

This is to certify that the dissertation entitled “A Study of Developmentally Appropriate Practices among Pre-Primary, Primary and Secondary Teachers”, submitted to the University of Mumbai by Ms. Bhakti Gala in partial fulfillment for the degree of Master of Education is her own work carried out under my guidance and is worthy of examination.

Date: 30<sup>th</sup> April 2022

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## DECLARATION

I, *Ms. Bhakti Gala*, do hereby declare that the M.Ed. dissertation title **“A Study of Developmentally Appropriate Practices among Pre-Primary, Primary and Secondary Teachers”**, submitted by me is an original work done by me and no part or whole of this work has been submitted to this or any other University or Institution for award of any other Degree or Diploma.

Signature of the Candidate

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Signature of the Guide

Dr. Swasti Dhar

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# **CHAPTER - 1**

# CHAPTER 1 - INTRODUCTION

## 1.1 Introduction

“The beautiful thing about learning is that nobody can take it away from you”-

B.B. King.

This quote truly explains that learning is a must in each and every one's life. Learning starts when the child is in the womb. When the child comes to school, learning is actual, concrete and valuable. Foundational education is the most crucial part of education. Students develop the right skills and aptitude from an early stage to gain a competitive edge over others. The early years are the most significant years for the human growth, development and learning. There is growing evidence of the substantial benefits that are derived from the investments made in the early years. Researches from neurosciences have highlighted that this is the stage for rapid and extensive brain development. Providing adequate opportunities for stimulating experiences favourably affect various learning abilities. At the preschool stage children are curious and enchanted about the world. Getting an effective push at the nascent stage of learning lays the much-needed foundation among students.

The all-round capacities that emerge in 3 to 6 years age group or the early years are the pre-requisites for later success in school and life. Through creative play, well thought out games, and developmentally appropriate activities, children can be equipped to enhance their working memory, focus their attention and acquire self-control. These skills of executive functions and self-regulation provide children with the foundations which help them actualize their potential as confident and efficient learners in the later years. Coordination across preschool and early primary classes promotes smooth transitions, enables children to build on their foundational skills, and facilitates a coordinated, sequential strategy for promoting early learning, which provides support for children throughout their life. The child's ability to experience the world gets richer and more differentiated over the years. Children need to be given opportunities to investigate, explore, and develop an understanding of their immediate and wider environment – human, social and cultural. In the exploration of their environments, children are involved in observation, questioning, discussion, prediction, analysis, exploration, investigation, and experimentation. In this process they construct, modify, and develop a broad range of scientific concepts and ideas. Therefore,



preschool education helps in laying foundation for learning in secondary school. Each and every child has a right to an equitable learning environment that helps in their optimum and all-round development.

The primary years of early childhood education are significant because children are further inducted into the process of formal schooling. The preschool experience is often viewed as preparation for school, whereas with kindergarten (and increasingly with first grade) the process of schooling begins. How this instruction goes, determines how well children learn and whether they like the process of schooling. Children's attitudes toward themselves and their lives are determined at this time. The degree of success now becomes a benchmark of success for the entire life including the school life. Preparation for dealing with, engaging in, and successfully completing school tasks being in primary grades, which is carried on in secondary class too.

Secondary education is informally regarded as the education children receive during their teenage years. Secondary school education is one of the most important phases of every student's life. It has been one of the best ways to help empower girls, provide a foundation to many youngsters. Also, secondary education is a type of education designed to give students the skills and knowledge needed to succeed in life. Typically, secondary schools offer programs that prepare students for university or college. Secondary education is important because it prepares you for working life by providing the knowledge, skills, and experience needed to enter the job market. It's also a time when they're becoming exposed to new ideas and teachings, the beginnings of what could be the start of serious careers for many of them. Secondary education is crucial in developing life skills, communication skills and also generating employment opportunities, which helps in developing nation.

Education is significant in developing self-worth, self-esteem and positive self-concept. The significance of education in a child's life states that the role of a teacher in imparting education is key to their success.

## **1.2 Conceptual Framework**

Jean Piaget, a Swiss Psychologist, provides detail framework about the development stages that a child needs to achieve. The stages are as follows:

1. Sensory-motor stage (birth to 2 years)

2. Preoperational stage (2- 7 years)
3. Concrete Operational stage (7-11 years)
4. Formal Operational stage (adolescence- adulthood)

When these stages are not attained, developmental delays occur. Developmental delays can occur in all areas of development. Developmental delays if not corrected on time leads to further repercussions in life. Developmental delays can be avoided by achieving developmental milestones. Developmental milestones are the changes that a child goes through in skill development during a predictable time period. E.g., A child can count objects by the age of four years, a child can add two single digit numbers by the age of eight years. Another e.g., is a child can draw or make strokes in nursery, colour within the boundary of a shape in Junior KG and can start drawing recognizable patterns in Senior KG. Developmental milestones can be effectively reached by using Developmentally Appropriate Practices (DAP) in day-to-day activities. According to John Locke, an English philosopher, children are born into the world as blank slates or *tabula rasa*. He viewed children as empty vessels to be filled by teachers. It is a teacher's job to make them learn and through teachers can use DAP to promote virtuous learning in children of all age groups.

Developmentally appropriate practice refers to applying child development knowledge in making thoughtful and appropriate decisions about early childhood program practices-the understanding that "programs designed for young children be based on what is known about young children" (Bredekamp and Copple, 1997). Everything that has been learned through research and formulated into theory about how children develop and learn at various ages and stages and in particular contexts is used to create learning environments that match their abilities and developmental tasks. This means that developmentally appropriate practice is based only on what is presently known and understood about children. It is not based on what adults wish children were like, or hope they will be like, or even surmise they might be like.

Developmentally appropriate practice is based on the accumulation of data and facts of what children are like. Developmentally appropriate practice "is not a curriculum; it is not a rigid set of standards that dictate practice. Rather, it is a framework, a philosophy, or an approach to working with young children" (Bredekamp and Rosegrant, 1992). The intention is to focus philosophically on what we know about

children and what we can learn about individual children and their families as a basis for decision making. Developmentally appropriate practices are based on the knowledge of how children develop and learn. Developmentally appropriate practices are based the 12 basic principles of development. Developmentally appropriate practices focus not only on general child development but also on specific strength, needs and interests of individual child and the sociocultural context of the children's family lives. DAP is an educational perspective that helps in optimal development of a child. Developmentally appropriate practice does not mean making things easier for children. Rather, it means ensuring that goals and experiences are suited to their learning and development and challenging enough to promote their progress and interest.

National Association for the Education of Young Children (NAEYC) is a Washington based organization to promote high quality education to children studying in the foundational years. They also recommend practices that can be taken up by educators engaged in higher and adult education. NAEYC's publication specify DAP as the provision of child-centered, child-initiated, teacher-supported play learning environments. According to NAEYC, an activity to be a developmentally appropriate practice, there needs to be 3 main core considerations:

<b>Developmentally Appropriate</b>	<b>Individually Appropriate</b>	<b>Culturally Appropriate</b>
<ul style="list-style-type: none"> <li>• Practices should be in line with common development and learning of a child, should be focussing on accomplishing developmental milestones.</li> </ul>	<ul style="list-style-type: none"> <li>• Activities should be unique to a child, based on the child's characteristics, strength, needs, interest and abilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Activities should be free from biases of any type. While planning for activities, teachers should understand each child's background, culture, and values. Activities should be meaningful to a child.</li> </ul>

Carol Gestwicki, talks about play as the important developmentally appropriate practice. Play results in learning. Play is a vital tool through which children learn. Play is pleasurable, spontaneous, self-motivated, integrative activity that provides a medium for learning and development in all domains. The notion that children learn through play begins with Friedrich Froebel's (known as father of kindergarten) system

of educative play. He believed natural unfolding or development occurs through play. Maria Montessori viewed materials and prepared environment as a means through which children absorb knowledge and learn. John Dewey also advocated active learning and believed children learn through play.

Different categories of play were identified in Jean Piaget's cognitive theory of intellectual development through play (1962), based on observations of his own children. The three categories of play are: functional, symbolic, and games with rules. These categories coincide with certain cognitive developmental stages, although they continue in some form throughout development. Piaget believed that children's play evolves through these stages as their mental structures change. Piaget believed play promotes cognitive knowledge and is a means by which children construct knowledge of their world. He identified three kinds of knowledge: physical, logical-mathematical, and social. According to Piaget, through active involvement, children learn about things and the physical properties of objects; knowledge of the environment and their role(s) in it; and logical mathematical knowledge-numeration, seriation, classification, time, space, and number. E.g., while playing with blocks, the child understands placing a longer block at the bottom provides a sturdier base than placing a shorter one. Two processes, assimilation and accommodation allow children to make changes in their mental models.

Lev Vygotsky believed that the increasingly complex mental activities of the child were derived from social and cultural context. In Vygotsky's words, play creates a zone of proximal development in the child. In play, the child always behaves beyond his average age, above his daily behaviour: in play it is as though he were a head taller than himself. As in the focus of a magnifying glass, play contains all developmental tendencies in a condensed form and is itself a major source of development. Guided participation and scaffolding through play helps in all round development of a child. Since play, activity-based learning helps in holistic development of a child, it is considered DAP by psychologists.

The National Education Policy (2020), also gives importance to play based, activity-based, inquiry-based learning (hands on experiences) for holistic development of children.

### **1.3 Rationale of the Study**

Each and every child has a right to an equitable learning environment that helps in his optimum and all-round development. When activities cater to the needs of a child and the society, they help children achieve developmental milestones. The National Education Policy (2020), largely talks about a play based, activity based, inquiry-based learning (hands on experiences) for holistic development of children. Educators who engage in developmentally appropriate practices can foster a great joy of learning which is helpful in achieving the maximum potential of a child.

The researcher has taught in preschool for 2 years and also briefly in secondary school, before becoming a trainer. The researcher realizes that developmentally appropriate practices are conducted in the pre-primary section to a great extent and by the time a student reaches secondary school activities become more textbook based and formal.

Most of the studies on developmentally appropriate practices are conducted mainly by preschool teachers and developmentally appropriate practices reduces by the time a child goes to secondary section.

The researchers through this study, wants to know, whether teachers are aware of DAP, what is the extent to which DAP is used in all the 3 sections and which sections uses DAP maximum.

### **1.4 Statement of the Problem**

‘A Study of Developmentally Appropriate Practices among Pre-Primary, Primary and Secondary Teachers’

### **1.5 Variables of the Study**

The present study is based only on a survey, so there are no hypothesis and the main focus of the study is Developmentally Appropriate Practices amongst the teachers teaching in pre-primary, primary and secondary sections.

### **1.6 Definitions**

#### **1.6.1 Conceptual Definitions**

- 1) **Study** - To achieve a learning about

- 2) Developmentally Appropriate Practices (DAP)** - According to the National Association for the Education of Young Children (NAEYC), “developmentally appropriate practice” as methods that promote each child’s optimal development and learning through a strengths-based, play-based approach to joyful, engaged learning. Educators implement developmentally appropriate practice by recognizing the multiple assets all young children bring to the early learning program as unique individuals and as members of families and communities. Building on each child’s strengths-and taking care to not harm any aspect of each child’s physical, cognitive, social, or emotional well-being-educators design and implement learning environments to help all children achieve their full potential across all domains of development and across all content areas. Developmentally appropriate practice recognizes and supports each individual as a valued member of the learning community. As a result, to be developmentally appropriate, practices must also be culturally, linguistically, and ability appropriate for each child.

Developmentally Appropriate Practices will include the following guidelines given by NAEYC like:

- a) Creating a Caring, Equitable Community of Learners
- b) Engaging in Reciprocal Partnerships with Families and Fostering Community Connections
- c) Observing, Documenting, and Assessing Children’s Development and Learning
- d) Teaching to Enhance Each Child’s Development and Learning
- e) Planning and Implementing an Engaging Curriculum to Achieve Meaningful Goals
- f) Demonstrating Professionalism as an Early Childhood Educator

- 3) Pre-primary teachers** - Pre-primary teachers are those who teach children going to a preschool (the period in a child's life or education that ordinarily precedes attendance at primary school), aged between 3+ to 5+ years and who has completed her ECCEd. training.
- 4) Primary teachers** - Primary teachers are those who teach students between the age 7- 11 years and those who have completed D.Ed. or B.Ed.
- 5) Secondary teachers** - Secondary teachers are those who teach students between the age 12- 15 years which is an intermediate between elementary school and

college and usually offering general, technical, vocational, or college-preparatory courses and the one who has completed a minimum training of B.Ed.

### **1.6.2 Operational Definitions**

**1) Developmentally appropriate practices (DAP)** - DAP will include the following three guidelines given by NAEYC:

- a) Creating a Caring, Equitable Community of Learners
- b) Engaging in Reciprocal Partnerships with Families and Fostering Community Connections
- c) Teaching to Enhance Each Child's Development and Learning

The above 3 DAPs are explained in detail in Appendix B

**2) Pre-Primary** - Pre- Primary teachers are those who teach children going to a preschool, aged between 3- 6 years in Mumbai region.

**3) Primary** - Primary teachers are those who teach students between the age 7- 11 years studying in elementary school in Mumbai region.

**4) Secondary** - Secondary teachers are those who teach students between the age 12- 15 years in Mumbai region.

### **1.7 Research Questions**

The following are the research questions of the study -

- 1) Are the teachers aware of developmentally appropriate practices?
- 2) Are developmentally appropriate practices used in pre-primary, primary and secondary school teachers?
- 3) Are the teachers comfortable in using developmentally appropriate practices?
- 4) What is the extent to which developmentally appropriate practices are used by pre-primary, primary and secondary school teachers?
- 5) Are the teachers in pre-primary, primary and secondary able to create a caring, equitable community of learners?
- 6) Are the teachers in pre-primary, primary and secondary able to engage in reciprocal partnerships with families and fostering community connections?

- 7) Are the teachers in pre-primary, primary and secondary able to enhance each child's development and learning?

### **1.8 Aim of the Study**

The aim of the study is to find the use of developmentally appropriate practices amongst teachers teaching in pre-primary, primary and secondary section.

### **1.9 Objectives of the Study**

The study was conducted with the following specific objectives:

- 1) To find out the level of awareness of developmentally appropriate practices amongst teachers.
- 2) To identify the extent of developmentally appropriate practices used amongst teachers of preprimary, primary and secondary.
- 3) To determine the activities conducted for creating a caring, equitable community of learners by teachers teaching in pre-primary.
- 4) To determine the activities conducted for creating a caring, equitable community of learners by teachers teaching in primary.
- 5) To determine the activities conducted for creating a caring, equitable community of learners by teachers teaching in secondary.
- 6) To understand the type of activities conducted by teachers teaching in pre-primary for fostering community connection and developing reciprocal partnership with families.
- 7) To understand the type of activities conducted by teachers teaching in primary for fostering community connection and reciprocal partnership with families.
- 8) To understand the type of activities conducted by teachers teaching in secondary for developing reciprocal partnership with families and fostering community connection.
- 9) To find out the various types of practices used to enhance child's development and learning in pre-primary.
- 10) To find out the various types of practices used to enhance child's development and learning in primary.
- 11) To find out the various types of practices used to enhance child's development and learning in secondary.



- 12) To develop a module related developmentally appropriate practices.

### **1.10 Hypotheses of the Study**

The objective of the study is creation of a module, based on DAP with the help of the data received in the survey and therefore there are no hypotheses.

### **1.11 Scope and Delimitations of the Study**

- This study is limited to teachers teaching in pre-primary, primary, secondary section within the Metropolitan city of Mumbai.
- The study is limited to only to three DAPs as a guideline given by NAEYC.

### **1.12 Significance of the Study**

- 1) The study will help to recognize the awareness of developmentally appropriate practices amongst teachers in pre-primary, primary and secondary.
- 2) The study will be helpful in determining what are the various developmentally appropriate practices used by teachers at different levels in a school.
- 3) The study will help to deduce the reasons for the non-usage of developmentally appropriate practices at any level, if any.
- 4) The study will be helpful in understanding the extent to which teachers are able to create a caring, equitable community of learners.
- 5) The study will be useful in finding out reciprocal partnerships with families and if teachers are able to foster community connections.
- 6) The study will help to know whether the teachers enhance child's development and learning.
- 7) The module will be helpful in creation of awareness amongst teachers regarding DAP.

### **1.13 Conclusion**

Developmentally appropriate practices are extremely important and they help in promoting holistic development of a child. They make learning more fun and interesting for a child and therefore must be promoted by teachers teaching not only in pre-primary and primary but also in secondary. The impact of learning during school days has a large impact on the life of a child. Since children are like wet clay and can

be moulded as we want them, we must provide them with activities that have a lasting impression on a child.

## LIST OF ABBREVIATIONS

List of abbreviations in this chapter

Sr. No.	Abbreviation	Refers to:
1	DAP	Developmentally Appropriate Practices
2	NAEYC	National Association for the Education of Young Children
3	ECCEd.	Early Childhood Care and Education
4	D.Ed.	Diploma in Education
5	B.Ed.	Bachelors in Education

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## **CHAPTER - 2**

## **CHAPTER 2 - REVIEW OF RELATED LITERATURE**

### **2.1 Introduction**

Research uses knowledge accumulated in the past through constant human commitment. It can never be undertaken in isolation from work already done on issues directly or indirectly related to a study proposed by a researcher. A careful review of the research journal, books, dissertations, theses, and other sources of information on the problem under study is one of the important steps in planning any research study. A review of relevant literature should precede every well-planned research study.

A review of related literature is a usual component of any dissertation or thesis. The chapter on reviewing related literature "reviews" (reviews) the "literature" (reports of what others have done) in a "related field". This field is not necessarily identical but collateral to your field of research.

Through summary of writings about research carried on previously, it provides evidence that the researcher is familiar with the previous findings and what is still to be known and untested.

Since effective research is based on past knowledge, this step helps to avoid the duplication of what has been done previously and directs useful insights and helpful suggestions for further study.

The review of the literature includes a comprehensive nature of everything known on a given research topic or short summary of literature pertaining to a specific topic under study. It depends on the requirement for the research report and gives a direction about the one to use. In searching related literature, the researcher should follow certain important components.

The review of literature may include:

- background information establishing the existence of the problem under study
- previous research on the topic or a related topic theories relevant to the topic
- theoretical perspectives on the concept under study and the assumptions in each perspective
- research methods, strategies, tools and control variables used in previous studies

- results of previous studies and their interpretations of the strengths and weaknesses, if any, of previous studies.

Seeking advantage on the reviews of expert researchers will throw a light in providing helpful ideas and suggestions. Although review articles that summaries related studies are useful, they may not provide a satisfactory option for an independent search. However, it forms a valuable source of information in defining the problems, recognizing its significance, helping to frame and appropriate study design.

### **2.1.1 Purpose of Review of Literature**

Review of the related literature, allows the researcher to acquaint himself with current knowledge in the field or area in which he is going to conduct his research, serves the following specific purposes:

1. Review of related literature allows the researcher to define the boundaries of their field. It helps the researcher to delimit and define his problem. Knowledge of related literature brings the researcher up to date on the work that others have done and thus states the objective clearly and concisely.
2. By reviewing relevant literature, the researcher can avoid unsuccessful and unnecessary problem areas. He can select areas where positive results and his efforts will significantly increase. It helps to identify problems that the researcher may face in implementing selected research methodology or conceptual/theoretical perspective.
3. By reviewing related literature, the researcher can avoid unintended duplication of results well established. It is not necessary to replicate a study when the stability and validity of its results have been clearly established.
4. Review of related literature allows the researcher to understand the research methodology as it relates to how the study is to be conducted. It helps the researcher become familiar with the tools and instruments that have shown useful and promise in previous studies. The benefit of the related literature is also to provide information on the statistical methods by which the validity of the results should be established. It may provide assistance in constructing explanatory models.
5. The important specific reason for reviewing related literature is to know the recommendations of previous researchers listed in their studies for further research.

6. It helps the researcher to identify readymade tools available measure the concepts you have planned to study. It enables the researcher to evaluate his own research efforts in comparison to similar efforts made by others.
7. It provides the researcher a framework within which you can interpret the findings of the study. Above all, it enables you to approach your own particular topic more knowledgeably and expertly.

### **2.1.2 Overview of Review of Literature for the Present Study**

Review of related literature in the current study is a mix of published and unpublished researches, it includes one unpublished PhD research as well. The researcher found plenty of related studies in the non-Indian context, however, the literature in the Indian context was fewer in number. The researcher tried to get through teachers teaching in other universities and colleges to find out more related researches, though she was not very successful.

## **2.2 Studies in the Indian Context**

A. Satish, V. (2015) conducted research on “Developmentally Appropriate Computer Assisted Instruction”. The main aim of this study was to develop criteria to assess the developmental appropriateness of educational software used for children between four and seven years of age in Greater Mumbai and Navi Mumbai regions. The study adopted a multi-stage, multi-agent and multi-method approach. 37 schools were taken as a part of the sample. Structured and semi structured interviews were a part of the survey, general class observations and observations of selected children were used as the method of data collection. Findings of the background study indicate that a majority of the preschool children were exposed to educational software but did not get opportunities for individual exploration. Stage 2 of the research focused on the following: (a) developing criteria to assess the developmental appropriateness of educational software, (b) evaluating selected educational software used in pre-primary and primary schools on the criteria developed, and (c) designing guidelines for educators to aid in the selection and use of educational software in their classrooms. Using purposive sampling, individual educational software was evaluated in four schools when the software was in use. Six individual software titles for learning of languages, mathematics, and

science/EVS were also evaluated and inter-rater reliability was established. Guidelines were designed to help educators choose developmentally appropriate general individual software as well as school subject specific educational software such as for learning of languages, mathematics and science.

The similarity is between the above research and the current study is that both focus on DAP for pre-primary and primary, however the gap is, the above study focusses on DAP for Computer Assisted Instruction and doesn't include secondary section.

- B. Vengopal, K. (2014) conducted a study on “Blooming Flowers: A case for developmentally appropriate practice”. The researcher observed a rural preschool “Poo-kal,” situated in a village near the town of silk weavers Kanchipuram, South India. The vision of the school was to provide children with contextual learning experiences through a developmentally appropriate curriculum. Findings suggest that the school aims for the all-round development of the child body, mind, and spirit by involving the head, heart, and hand in the process of everyday learning. The curriculum is flexible and is built keeping in mind interests of the child. Learning is through group activities that promote sustained engagement and collaborative learning in children, which in turn fosters social skills. All learning material is locally available, and is provided by the school. Children develop a sense of pride in work they engage in which helps them to foster creativity as well. The curriculum also provides for quiet time and self-time to help children connect with their inner self. Yoga, traditional music, and art forms help children be connected with their cultural roots, promoting physical and emotional development alongside aesthetic sense. Teachers are engaged learners and act as facilitators. They are patient, kind, and firmly believe that every child is unique and has potential that need to be tapped with love and care. School activities also help foster and strengthen school–community linkages.

The similarities in the above-mentioned research and the current research in the both focus on developmentally appropriate practices while the gap between both is the above-mentioned study and the present study is that the above-mentioned study is a case study conducted in south India in preschool set up, and in the present study, the researcher plans to conduct a survey in Mumbai including only 3 categories of DAP in pre-primary, primary and secondary.



C. Hegde, A. & Cassidy, D. J. (2009) conducted a study on “Teachers’ beliefs and practices regarding developmentally appropriate practices: A study conducted in India.” The study was conducted to know the congruence between teachers’ beliefs and practices regarding developing appropriate practices. 40 kindergarten teachers were taken as a sample from the urban city of Mumbai. The study was divided into 2 parts - firstly observation by the researcher and secondly through survey. Tools used in the survey were Teacher belief scale (TBS-B) by Charlesworth et al, Instructional activities scale (IAS), Classroom practice inventory (CPI) by Hirsh-Pasek et al. Based on this study, there is a positive relationship between beliefs and stated practices and a positive relationship between stated practices and actual practices.

The above-mentioned study focuses on DAP in pre-primary- teachers’ beliefs and practices in Mumbai, however the present study focuses only on the practices followed by teachers teaching in pre-primary, primary, secondary.

D. Jambunathan, Saigeetha, Caulfield, Mathew (2008) conducted research on “Developmentally Appropriate Practices in Asian Indian Early Childhood Classrooms’’. The purpose of the study was to explore the use of developmentally appropriate practices in Asian Indian early childhood classrooms. 21 preschool classrooms were observed in a southern metropolitan city in south India. The observations were made in the categories of creating a caring community of learners, teaching to enhance development and learning, constructing appropriate curriculum, assessing children's learning and development, and reciprocal relationships with parents and families. Rating Scale to Assess the Use of Developmentally Appropriate Practices in Early Childhood Classrooms to evaluate the use of developmentally appropriate practices in the classrooms was used by the researcher. The observation lasted between 3-5 hours. The results of the study seemed to indicate that the Asian Indian classrooms did not have an abundance of appropriate practices occurring in the classrooms.

The similarities in the above-mentioned study and the current study are that both focus on DAP (category 1, 2, 3), however the gap between the two is, above-mentioned study focuses on 5 categories of DAP in preschool classroom in south India and in the present study researcher focuses only on 3 categories of DAP in pre-primary, primary and secondary classrooms in Mumbai.

E. Joshi, A. & Taylor, A. (2009) conducted a study on “Perceptions of early childhood teachers and parents of teacher–parent interactions in an Indian context”. The study measured the nature of parent–teacher interactions of preschool teachers in India with parents of preschool children. Specifically, the impact of teacher training, experience of the teachers, size of the class, satisfaction with training and the job with parents were examined. 65 preschool teachers and 173 parents from an urban city in India comprised the total sample. Results using teacher reports indicated that satisfaction with training and the job emerged significant, while the amount of training, years of experience and class size did not. According to parent reports amount of training of teachers inversely impacted the nature of teacher–parent interactions. These findings suggested the interplay of specific factors like limited space, finances and cultural notions of teaching/education, and adult–child relations.

The similarities in the above-mentioned study and present study is that they both discuss about the teacher- parent relationship/interaction, however the gap being above-mentioned study talks about perceptions of both parents and teachers about the teacher- parent relationship/interaction amongst teachers and parents of pre-primary children, the current focuses on parental involvement in school activities across pre-primary, primary and secondary from teachers point of view.

### **2.3 Studies in the Non-Indian Context**

A. Cade, J., Wardle, F. & Otter, J. (April, 2021) conducted research on “Toddler and preschool teachers’ beliefs and perceptions about the use of developmentally appropriate practice”. This study aimed to examine the extent to which classroom practices were developmentally appropriate in New Jersey state-approved kindergarten and preschool classrooms. The researchers used a qualitative case study design, which included semi-structured one-on-one interviews were of 60 mins in length, a focus group which was of approximately 75 mins, and collection of documentation (lesson plans, pictures of participants’ classrooms, and children’s work samples). A sample of 16 kindergarten teachers from three childcare centers were taken into consideration. Results of the study highlights that, two of the three childcare centers used a traditional K–12 pushdown approach to classroom practices while the other center used a more DAP curriculum. Findings also

revealed that of the 16 teachers, seven had no knowledge about the theoretical foundations of DAP. Responses from all participants in the study perceived their childcare centers as school highlighting the connection between early care and learning and the K–12 school system rather than a childcare center that is focused on the care and development of the young child.

The similarity in the above-mentioned study and current study is that both discuss about DAP from teacher's perspectives, but the gap is that above-mentioned study is conducted in New Jersey and emphasis on preschool teachers' belief and perception on the use of DAP, while the current study is conducted in India and focuses on DAP used in pre-primary, primary and secondary.

- B. Paige Johnson, B.S. (2021) conducted a study on “Attitudes Towards Developmentally Appropriate Classroom Practices Among Kindergarten Teachers in Tennessee”. The aim of this study was to examine the opinions of kindergarten teachers about developmentally appropriate practices and their effects on students externalizing behaviors. The kindergarten teachers participated by completing a survey, attending one individual interview, and one group discussion. The results show that the participants do not hold negative associations of current academic standards and believe that developmentally appropriate practice does mitigate some externalizing behaviors in students. The study found that teachers thought that student's externalizing problem behaviors were linked to internal traits related to each individual student and not directly to academic standards.

The gap between the current and the above-mentioned study is that the method undertaken to find about DAP is survey in the current study amongst teachers teaching in pre-primary, primary and secondary, however in the above-mentioned study it is a survey, interview group discussion, which involves only kindergarten teachers.

- C. Zou, B. (2021) conducted study on “An Investigation of the Relationship Between Shanghai Preschool Teachers' Developmentally Appropriate Beliefs and Practices”. The study examined the relationship between Shanghai preschool teachers' beliefs and their practices of Developmentally Appropriate Practice (DAP). A quantitative study was conducted in which 182 respondents from 13 preschools in Shanghai completed Teacher Beliefs and Practices Survey (three to

five-year-old) (including Teacher Beliefs Scale and Instructional Activities Scale) to report their DAP beliefs and practices in class. Survey was conducted through the websites set for the online survey. The results suggested a reasonable positive relationship between teachers' beliefs and practices, implying that their practices tend to reflect their beliefs, but other factors may impede teachers from fully putting their beliefs into practice.

The similarity in the above-mentioned study and current study is that both discuss about DAP from teacher's perspectives, but the gap is that above-mentioned study is conducted in Shanghai and emphasis on preschool teachers' belief and perception on the use of DAP, while the current study is conducted in India and focuses on DAP used in pre-primary, primary and secondary.

- D. Essuman, Korda & Essigyan, K. (2021) conducted a study on "Investigating the Developmentally Appropriate Practices of Teachers in the Early Childhood Classroom". The purpose of this study was to explore developmentally appropriate practices for early childhood teachers. 6 professional early childhood teachers from Bongo District in the Upper East Region of Ghana were sampled in the study using observations and interviews to collect data for the study. Thematic analysis was used to analyze the data. The results of the study identified that although some teachers know about the teaching strategies, they do not implement them due to several factors such as inadequate teaching and learning materials and overcrowding of the classroom. The study recommends that teaching strategies and assessment procedures, such as small group teaching and interviewing in the early childhood mathematics classroom and education actors, make efforts to contribute to make education conducive to the learning environment.
- E. Levinthal, Cristiana, Koivisto, Elina, Tirri & Kirsi (2021) conducted research on "Finnish and Portuguese Parents' Perspectives on the Role of Teachers in Parent-Teacher Partnerships and Parental Engagement". The study aimed to discover parents' views on the role of teachers in supporting parent-teacher partnerships and parental engagement with the school. Qualitative study was undertaken in which Finnish (N = 10) and Portuguese (N = 9) parents were interviewed. Inductive content analysis was performed to analyze the interviews. The results from a general standpoint, three patterns were found in the parents' narratives about the

role of teachers in supporting partnership and engagement: communication, professionalism, and invitations to active parental participation. From a cross-cultural standpoint, Finnish parents evidenced partnerships and engagement grounded in little face-to-face contact but consistent online communication with the teacher, as well as trust in their professionalism and independent work. The Portuguese parents revealed rather frequent active participation within the school premises, more recurrent face-to-face communication with the teacher, and appreciation for teachers' timely responses and support.

The similarity between the above-mentioned study and current study is both include Parent-Teacher Partnerships and Parental Engagement, however the gap been the above-mentioned study is conducted from the point of view of parents through qualitative method of data collection, whereas the current study talks about Parent-Teacher Partnerships and Parental Engagement from teachers' perspective.

F. Li, H., Forbes & Yang (2020) conducted a study on “Developing Culturally and Developmentally Appropriate Early STEM Learning Experiences”. The special issue aimed to collect the latest world-leading studies to show what they have achieved in early STEM education. The special issue was conceived to explore “those factors that clearly influence (positively or negatively) young learners’ abilities to make informed choices in authentic, problem-based, STEM-relevant scenarios and how those abilities have been identified, documented, and enhanced”. This issue collected ten research articles to provide empirical evidence obtained from diverse cultural contexts, including Australia, Germany, Hong Kong, Mainland China, Singapore, and United States, intending to address the critical question: where are we in early STEM?

The articles included:

1. *‘Once upon a star’: A science education program based on personification storytelling in promoting preschool children’s understanding of astronomy concepts*
2. *Teacher’s role in fostering preschoolers’ computational thinking: An exploratory case study*
3. *Engineering play, mathematics, and spatial skills in children with and without disabilities*

4. *Mathematics learning opportunities in preschool: Where does the classroom library fit in?*
5. *Exploring the relationships between scientific epistemic beliefs, science teaching beliefs and science-specific PCK among pre-service kindergarten teachers in China*
6. *Evaluation of an online early mathematics professional development program for early childhood teachers*
7. *The influence of parental educational involvement in early childhood on 4th-grade students' mathematics achievement*
8. *Family cohesion facilitates learning-related behaviors and math competency at the transition to elementary school*
9. *STEM for Inclusive Excellence and Equity*
10. *An analysis of the nature of young students' STEM learning in 3D technology-enhanced Makerspaces*

All the collected studies jointly indicated that young children could be engaged in high-quality STEM learning experiences, as long as their teachers and parents provide them with the opportunities, resources, and support in a culturally and developmentally appropriate way.

The gap between above-mentioned and current study is that above mentioned study focuses on STEM learning only which is not included in the current study.

G. Hegde, A. & Hewett, B.S. (2020) conducted research on “Examining effectiveness of online teaching modules on Developmentally Appropriate Practices (DAP) for guiding young children’s behavior: student and instructor perspectives”. This study developed online modules with video teaching components, and conducted both formative and summative evaluations with students and instructors using ongoing assessments and online surveys, to answer this overarching question, how can online modules be used to teach undergraduate students or pre-service teachers the principles of Developmentally Appropriate Practices (DAP) for guiding young children’s behavior? The results of these evaluations revealed that both students and instructors were very satisfied with the implementation of these modules. The modules supported students in their learning, encouraged them to think critically and allowed them to apply their learning and teaching strategies to real life.

Instructors appreciated real-life examples and teacher videos, as these resources made teaching difficult topics more manageable and applicable.

- H. Al- Dhafir & Mohammad (2015) conducted research on “Teachers’ Perceptions of Developmentally Appropriate Practices in Teaching Reading and Writing for First Grade Students in Kuwait”. The study was conducted to examine the perception of Developmentally Appropriate Practices of teachers with regards to teaching reading and writing teaching in first grade. 167 teachers teaching in first grade were given a questionnaire for the purpose of completing this study. The study states that the teachers hold moderate agreement towards developing inappropriate practices more than developmentally appropriate practices in teaching reading and writing. The study definitely highlights the need for providing information to teachers in first grade relating to developmentally appropriate practices in teaching reading and writing.

The gap between the above and the present study is that, the present study focuses on DAP in 3 categories amongst teachers teaching in pre-primary, primary and secondary, while the above-mentioned study focuses only on DAP in teaching reading and writing in first grade.

- I. Horn, M. L., Karlin, E & Ramey, S. (2011) conducted a study on “Effects of Developmentally Appropriate Practices on Social Skills and Problem Behaviors in 1st Through 3rd Grades”. This study looks at the outcomes of classroom and school-level use of classroom elements of DAP in 1st, 2nd, and 3rd grades on parent ratings of children's social skills at the end of the year, controlling for ratings of the same construct at the end of the previous year, gender, and ethnicity with a sample of between 1,145 and 2,111 students each year. Differential outcomes of DAP for males and females and for children of different ethnic backgrounds also were examined. Despite high power, no consistent effects of DAP were observed and no interactions found, suggesting that DAP does not affect parents' ratings of social skills in 1st through 3rd grades. The similarity between current and the above-mentioned study is that both include relationship between DAP and social skills, however the difference is that the above-mentioned study only focuses on impact of DAP on social skills of children

from grade 1 to 3 whereas the current study emphasis on DAP followed by teachers in pre-primary, primary, secondary.

- J. Kim, Kim & Maslak (2009) conducted research on “Toward an Integrative “Educare” System: An Investigation of Teachers' Understanding and Uses of Developmentally Appropriate Practices for Young Children in Korea”. The aim of this study was to investigate how early childhood teachers in Korea understand developmentally appropriate practices (DAP) and follow DAP's instructional guidelines. A comparison of early childhood teachers' beliefs and instructional activities by center type (i.e., kindergarten vs. child care) was conducted. Findings indicated that early childhood teachers in Korea showed positive beliefs in DAP and utilization of its practices. However, a large percentage of teachers reported inconsistent profiles of DAP beliefs and activities. It is unclear whether teachers differentiate appropriate and inappropriate uses of DAP. Only 45 (21.3 percent) of 211 kindergarten teachers and 26 (12.5 percent) of 208 child care teachers reported consistent DAP beliefs and activities. In terms of group differences, kindergarten teachers showed more positive profiles than child care teachers.

The similarity in the above-mentioned study and current study is that both discuss about DAP from teacher's perspectives, but the gap is that above-mentioned study emphasis on kindergarten teachers' and a child cares' belief and perception on the use of DAP, while the current study is conducted in India and focuses on DAP used in pre-primary, primary and secondary.

## **2.4 Conclusion**

From all the above researches, the following conclusions can be drawn. In India, there are hardly any studies done on DAP that are published. The researcher found it difficult to find published researches/studies on DAP, especially in Mumbai. Related literature focuses DAP in pre-primary section, there lacks DAP followed by teachers teaching in primary and secondary. Teachers' beliefs and perception on DAP are more focused on.



DAP is taken into a lot more consideration in foreign countries, this is clearly visible as there are many published articles, studies regarding DAP. However, this studies also focus on DAP for pre-primary sections and a few on primary sections. Studies on DAP in the foreign context includes a wide spectrum ranging developmentally appropriate practices used in school to teachers' beliefs and perception on DAP, from effect of DAP on social skills to its effect on writing and reading skills, from parental engagement to DAP in STEM learning.

There are few gaps identified in the review of related literature and the current study, mainly related to DAP followed in a particular the section of the school. The researcher feels it important to include primary and secondary grades as well for studying DAP amongst teachers. Therefore, the researcher has undertaken DAP used amongst the teachers teaching in pre-primary, primary and secondary section.

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## **CHAPTER - 3**

## CHAPTER 3 - RESEARCH DESIGN

### 3.1 Introduction

Research design is the overall plan for connecting the conceptual research problems to the pertinent and achievable empirical research. It is an inquiry which provides specific direction for procedures in research (Creswell, 2014).

Research design constitutes the blueprint or the roadmap for the collection, measurement, and analysis of data. Research design is a plan, a roadmap and blueprint strategy of investigation conceived so as to obtain answers to research questions (Kothari, 2004). It is the heart of any study.

Research design is the framework of research methods and techniques chosen by a researcher. The design allows researchers to hone in on research methods that are suitable for the subject matter and set their studies up for success.

According to Green and Tull,

*“A research design is the specification of methods and procedures for acquiring the information needed. It is the over-all operational pattern or framework of the project that stipulates what information is to be collected from which source by what procedures.”*

According to Kerlinger,

*“Research design in the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance.”*

The definition includes three important terms - *plan, structure and strategy*.

- The plan is the outline of the research scheme on which the researcher is to work.
- The structure of the research work is a more specific scheme and
- The strategy suggests how the research will be carried out i.e., methods to be used for the collection and analysis of data. (Pandya, 2010)

In brief, research design is the blueprint of research, a conceptual structure within which the research is conducted. It is the specification of methods and procedures for acquiring the information needed for solving the problem.

The research design has been considered as a "blueprint" for research, dealing with at least four problems: *what questions to study, what data are relevant, what data to collect, and how to analyze the results.*

The selection of the research design depends on the objectives of the study variables taken into consideration and the conditions under which it is conducted.

In order to conduct fruitful research, it is very important to have a systematic and a scientific design in place.

### **3.2 Need for Research Design**

Research design carries an important influence on the reliability of the results attained. It therefore provides a solid base for the whole research. It is needed due to the fact that it allows for the smooth working of the many research operations. This makes the research as effective as possible by providing maximum information with minimum spending of effort, money and time.

Just as the pole guides the person to grope his way through the dark unknown woods in the proper direction, the research design provides the investigator with a series of guiding points and helps to keep the research problem in the right direction. Research without clear design is like a ship without radar. A research design is a plan that saves the abundance of time and energy of the investigator that he/she can make necessary arrangement for research. The design of the research forms the basis or the through plan of the research that is important for execution of actual investigation. It gives direction in the research.

For building of a car, we must have a suitable blueprint made by an expert designer. In a similar fashion, we require a suitable design or plan just before data collection and analysis of the research project. Planning of design must be carried out cautiously as even a small mistake might mess up the purpose of the entire project. The design helps the investigator to organize his ideas, which helps to recognize and fix his faults, if any.

In a good research design, all the components go together with each other in a coherent way. The theoretical and conceptual framework must with the research goals and purposes. In the same way, the data gathering method must fit with the research purposes, conceptual and theoretical framework and method of data analysis.

Research design stands for advance planning of the methods to be adopted for collecting the relevant data and the techniques to be used in their analysis. The research design acts as the firm foundation on which the entire edifice of the research work is based. It directs the classification of the population, determination of the sample, the collection of the data and determination of the techniques of analysis of the data.

### **3.2.1 Significance of Research Design**

Research design is significant simply because it allows for the smooth sailing of the various research operations, thus making research as efficient as possible producing maximum information with nominal expenses of effort, time and money. Just as for better, economical and attractive construction of a home, we require a blueprint (or what is typically known as the map of the home) well planned and prepared by an expert architect, in the same way we require a design or a plan in advance of data collection and analysis for our research study. It means advance planning of the techniques to be implemented for accumulating the appropriate data and the strategies to be employed in their analysis, keeping in view the purpose of the research and the availability of staff, time and money. Preparation of the design must be carried out meticulously as any error in it may upset the complete project.

The design assists the researcher to organize his ideas in a form whereby it will be possible for him to watch out for flaws and inadequacies. This type of design can also be given to others for their comments and critical evaluation. In the absence of such a strategy, it will likely be challenging for the critic to supply a comprehensive review of the offered study.

A research design isn't just a work plan. A work plan details what needs to be done to complete the project but the work plan will flow from the project's design. The function of a research design is to make certain that evidence obtained allows us to answer the initial question as unambiguously as possible. Acquiring relevant evidence involves specifying the kind of evidence required to answer the research question, to test a theory, to judge a programme or to precisely describe some phenomenon.

A research design serves the following purposes:

1. Making decisions concerning the various aspects and steps of research explicit,

2. Justifying why these decisions are made,
3. Ensuring that these decisions are consistent with each other, and
4. Allowing for critical evaluation of the design elements and the overall plan before the research work begins. (Pandya, 2010)

### **3.2.2 Elements of Research Design**

Generally, a good research design minimizes bias and maximizes the reliability of the data collected and analyzed. The design which gives the smallest experimental error is reported to be the best design in scientific investigation. The key elements of good research design are

- Clear statement of research design
- Methods and techniques to be utilized for gathering information
- Approach to be applied for processing and analyzing the data
- Purpose of the study
- Type of investigation
- Researcher interference
- Study setting
- Time horizon
- Unit of analysis

### **3.2.3 Characteristics of Research Design**

- **Objectivity** - The findings obtained by the research should be objective. It is possible by allowing more than one person to agree between the final scores/ conclusion of the research.
- **Reliability** - If the similar research is carried out time and again in a similar setting it must give similar results. So, the researcher must frame the research questions to make it reliable and provide similar outcomes.
- **Validity** - Any measuring device can be said to be valid if it measures what it is expected to measure and nothing else. To make research valid the questionnaire framed before research must be framed accordingly.



- **Generalization** - The information collected from a given sample must be utilized for providing a general application to the large group of which the sample is drawn.

### 3.3 Research Methodology

Research Methodology is a scientific and systematic way to solve research problems. A researcher has to design his methodology, i.e., in addition to the knowledge of methods/techniques; he has to apply the methodology as well. The methodology may differ from problem to problem. Thus, the scope of research methodology is wider than research methods. In a way, research methodology deals with the research methods and takes into consideration the logic behind the methods. Methods of research, according to Good, Barr and Scates may be classified from many points of view, viz.

- the field to which applied (education, history, natural sciences, etc.);
- the purpose (description, prescription, determination of cause, determination of status etc.);
- place where it is conducted (in the field or in the laboratory);
- application (pure research or applied research);

Based on these, the most common methods are the following

1. Descriptive method
2. Historical method
3. Experimental method

1. **Descriptive method** - Descriptive research studies aim to obtain relevant and accurate information about the current state of phenomena and, as far as possible, to draw valid general conclusions from the facts discovered. They are not only limited to fact-finding, but can often result in the formulation of important knowledge and problem-solving principles regarding local, state, national, and international issues. Descriptive studies are more than just a collection of data; they involve measurement, classification, analysis, comparison and interpretation. Descriptive studies study phenomena in their natural environment. Their goal is

both immediate and long term. They are a primitive type of research and do not aspire to develop an organized body of scientific laws. Such studies, however, provide useful information for solving local problems and sometimes provide data to form the basis of research of a more fundamental nature. It includes surveys and fact-finding enquiries of different kinds. The main characteristic of this method is that the researcher has no control over the variables; he can only report what has happened or what is happening.

2. **Historical Method** - Researchers who are interested in reporting events and/or conditions that occurred in the past employ the historical method. An attempt is made to examine past events or combinations of events and establish facts in order to arrive at conclusions concerning past events or predict future events. Historical research attempts to establish facts in order to draw conclusions about past events. This is usually accompanied by an interpretation of those events and their relevance to present circumstances and what might happen in the future. The main objective of historical research is therefore to arrive at an accurate account of the past in order to gain a clearer perspective of the present. This knowledge allows us at least in part to predict and control our future existence. Historical research, like any other type of research, includes the delimitation of a problem, formulated search questions or temporary generalizations, the collection and analysis of the data and to arrive at the conclusions or generalizations based on reasoning.
3. **Experimental Research** - Experimental research establishes a systematic and logical association between manipulated factors and observed effects. Experimental design is the blue print of procedures that enables the researcher to test hypothesis by reaching valid conclusions about relationships between the independent and dependent variables. Selection of the particular design is based on the purpose of the experiment, the type of variables to be manipulated, and the conditions or limiting factors under which it is conducted. The design deals with such practical problems such as how subjects are to be assigned to experimental and control groups, the way extraneous variables are to be manipulated and controlled, how observations are to be made, and the type of statistical analysis to be employed in interpreting data relationships. The adequacy of experimental design is judged by the degree to which they eliminate threats to experimental validity.

There are essentially three categories of experimental designs:

1. Pre-Experimental Designs
2. True Experimental Designs
3. Quasi-Experimental Design

### **3.3.1 Methodology of the Present Study**

In order to ensure smooth functioning and to properly carry out a particular research project a researcher is required to select an appropriate research method. Selection of research method depends upon the nature of research, the objectives and hypotheses of the study.

For present study, descriptive-survey method was used to find out the various developmentally appropriate practices carried on teachers teaching in pre-primary, primary and secondary, the researcher has used the survey method of research. A pilot study was done before carrying out actual research. Participants for this study were teachers teaching in pre-primary, primary and secondary school selected from Mumbai.

### **3.4 Population of the Study**

A population is any group of individuals that has one or more characteristics in common and that are of interest to the researcher. A study's population refers to potential participants of the research, for whom the findings of the study are intended to be generalizable. The idea of the population in research is different from the common conception of the word, which is a group of individuals within certain geographical boundaries. A researcher's role is to select the population to whom the research problem is not only relevant, but also accessible and feasible within the available means.

In the present study, the population consisted of teachers teaching in pre-primary, primary and secondary school.

### **3.5 Sampling**

A sample is a small proportion of the population that is selected for observation and analysis. Sampling is the process by which a relatively small number of individuals

or measures of individual, object or events is selected and analyzed in order to find out something about the entire population from which it was selected. Sample should be representative of the whole population and free from biasness. Sampling procedures provide generalizations on the basis of a relatively small proportion of the population. The different types of sampling are simple random sampling, systematic random sampling, purposive sampling, stratified sampling and cluster sampling.

For the present study, the sample consisted teachers teaching in pre-primary, primary and secondary school from the Mumbai region.

### **3.6 Sampling Technique**

The technique used to select the sample from a larger population is called sampling. Sampling methods is divided into two categories:

1. **Probability sampling** - In probability sampling, by means of certain procedures which ensure that every unit of a population has one fixed probability of being included in the sample. The sampling procedure is such that it can specify the probability of each unit of the population to be included in the sample.

**Probability sampling techniques are of five types.**

- a. **Simple Random sampling** - In this all the members have the same chance (probability) of being selected.
- b. **Systematic sampling** - Each member of the sample comes after an equal interval from its previous member.
- c. **Stratified sampling** - The population is divided into smaller homogenous groups or strata by some characteristics and from each these strata at random members are selected.
- d. **Cluster sampling** - A researcher selects sampling units at random and then does complete observation of all units in the group.
- e. **Multistage sampling** - The sample to be studied is selected at random at different stages.

2. **Non-probability sampling** - The sampling procedure which do not have a provision to estimate the probability of an element which has to be included in the sample. This type of sampling uses human judgment in selecting units and has no theoretical basis for estimating population characteristics.

**Non-probability sampling techniques are of four types:**

- a. **Purposive sampling technique** - The researcher selects a ‘typical group’ of individuals who might represent the larger population and then collects data from this group.
- b. **Convenience sampling** - it refers to the procedures of obtaining units or members who are most conveniently available.
- c. **Quota sampling** - the sample is selected by the researcher who decides the quotas for selecting samples from specified subgroups of the population.
- d. **Snowball sampling** - the researcher identifying and selecting available respondents who meet the criteria for inclusion in the study.

The researcher is concerned with the generalizability of the data beyond the sample. For studying any problem, it is impossible to study the entire population. It is therefore convenient to pick out a sample out of the universe proposed to be covered by the study. The process of sampling makes it possible to draw valid inferences or generalizations on the basis of careful observation of variables within a small proportion of the population.

### **3.6.1 Sample Size**

In the present study, the researcher has used purposive sampling technique to choose the sample. The sample consists of 185 teacher teaching in pre-primary, primary and secondary.

**Table 3.6.1**

*Sample Distribution*

Sections	No. of Teachers
Pre-Primary	75
Primary	50
Secondary	60
<b>Total</b>	<b>185</b>

**Fig 3.6.1**

*Sample Distribution*

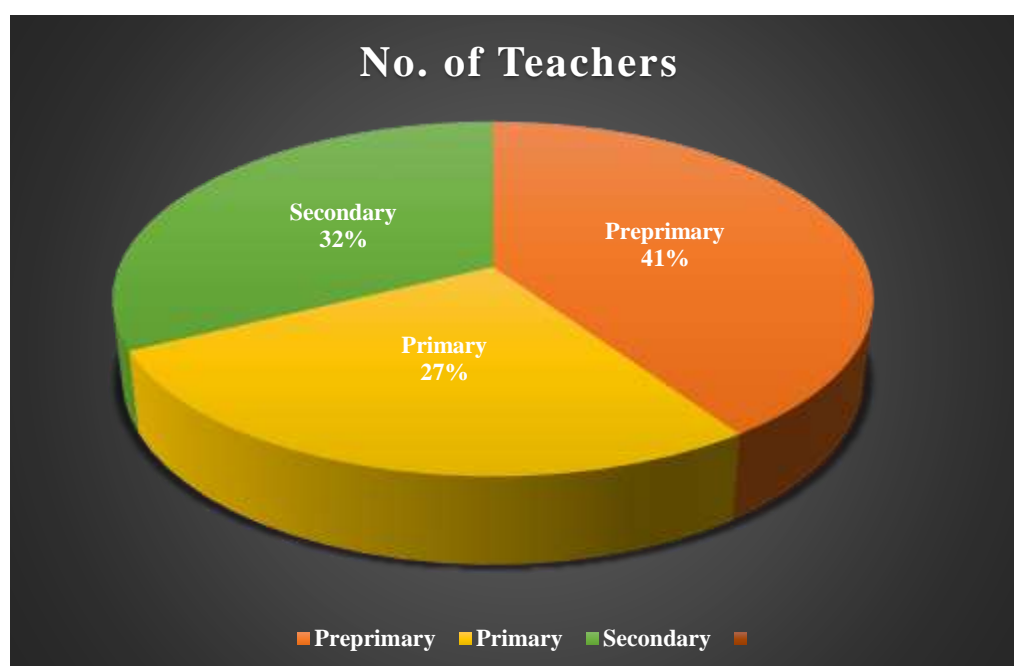


Fig 4.3.1 suggests that the 41 % teachers teaching in pre-primary are a part of the sample. 27% teachers teaching in primary are a part of the sample, whereas 32% of the sample teach in secondary

## **General Description of the sample considered for data**

1. **Pre-Primary** - The sample of 75 teachers consisted of all female teachers with minimum qualification as graduation, few of them had completed their post-graduation as well. It is clearly evident from the data that all the teachers teaching in pre-primary have completed their ECCEd. training. The sample consists of teachers teaching on various boards like SSC, CBSE, ICSE, IB, IGCSE.
2. **Primary** - The sample of 50 teachers from primary section represents that 46 teachers are female whereas 4 of them are male. Most of the teachers are graduates, few are post graduates, while talking about their training it shows a balance between ECCEd., D.Ed. and B.Ed. A handful of these teachers have completed TET/CTET. The sample consists of teachers teaching on various boards like SSC, CBSE, ICSE, IB, IGCSE.
3. **Secondary** - The sample of teachers teaching in secondary taken for the survey were 60 teachers out of which 49 teachers are female, 11 are male. Most of them are post graduates with a B.Ed., and 2 of them have completed M.Ed. too. Few are graduates with a B.Ed. A handful of these teachers have completed TET/CTET. The sample consists of teachers teaching on various boards like SSC, CBSE, ICSE, IB, IGCSE.

### **3.6.2 Delimitations of the Study**

This study was conducted to find out usage of DAP amongst teachers teaching in pre-primary, primary, secondary within the Metropolitan city of Mumbai.

### **3.7 Description of Data Gathering Tool**

The instruments that are employed to gather new facts or to explore new fields are called tools. Different tools are suitable for collecting different types of data. A data gathering tool must be reliable, that is it must have the ability to consistently yield the same result, when repeated measurements are taken of the same individuals under the same conditions. The data collection tool must produce information that is not only relevant but free from systematic error.

The use of a particular research tool depends upon the type of a research proposal. The research work may use one or more of the tools in combination for this purpose.

The different types of tools available for research are:

1. Rating Scale
2. Attitude Scale
3. Opinionnaire
4. Questionnaire
5. Aptitude test
6. Check list
7. Inventory
8. Semantic differential scale

In the present study, the research tool was a self-constructed questionnaire designed by the researcher to study the objectives of the study. The tool was validated by experts and the reliability was found out after administrating a pilot study.

The detailed description about the tool used for research is given below.

### **3.7.1 Validity of the tool**

The validity of a test, or of any measuring instrument, depends upon the fidelity with which it measures what it is supposed to measure. Validity is a relative term “the accuracy with which a test measures what it is supposed to measure”. A tool is said to be valid when it measures what it intends to measures.

Validity can be measured in different ways

1. Content validity - It checks if the items in the tool represents the behaviour/ discipline/subject area it is intended to measure.
2. Face Validity - The tool is valid from its appearance itself.
3. Construct Validity - It is the extent to which the tool measures a theoretical construct or trait or psychological variable.



4. Concurrent Validity - It refers to how well the scores obtained on the tool are correlated with the present criterion behaviour.
5. Predictive Validity - It refers to how well the scores obtained on the tool predict future criterion behaviour.

For the present study, the researcher has used content validity for validation of the tool. The tool was given to experts in the field of education and their valuable comments were accepted and the researcher made necessary changes wherever required, list of experts is attached in Appendix A.

### **3.7.2 Pilot Study**

The pilot study is conducted to find the reliability of the tool. It helps the researcher to understand the reliability and validity of the test.

In the present study, the first draft of the tool was administered on twelve teachers teaching pre-primary, primary and secondary school from Mumbai as a pilot study to check the efficacy of the tool.

### **3.7.3 Reliability of the tool**

Data collection must be reliable, i.e., it must have the ability to consistently yield the same result on testing and retesting, under the same conditions. This is called the reliability of a test. “The degree of consistency with which the test measures what it does measure” is called reliability.

Reliability refers to the consistency of a measure. A test is considered reliable if we get the same result repeatedly. For example, if a test is designed to measure a trait (such as student involvement), then each time the test is administered to a subject, the results should be approximately the same. Unfortunately, it is impossible to calculate the reliability exactly. The higher the coefficient of reliability (i.e., a measurement of the consistency) the minimum is the error in the measurement. The reliability or stability of the test which is measured as a correlation coefficient reinforces the tool.

Joppe (2000) defines reliability as: “The extent to which the results are consistent over time and are accurate representation of the total population under study”. If the

results of the study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. A test score is called reliable when we have reasons for believing the score to be stable and trustworthy.

There are several methods of estimating the reliability of a test, they are as follows

- Split half method- The test is administered on a sample of subjects, the scores of each individual are taken into two parts. The correlation coefficient is computed of the two halves.
- Test-retest method- The test is administered twice on the same sample with a reasonable time gap. The correlation coefficient is computed between the 2 sets as the reliability index.
- Parallel form- Alternative or parallel forms of a test can be developed, correlation coefficient is computed between the 2 forms is taken as the reliability index.
- Rational equivalence method or Internal Consistency- It stresses on the inter correlations of items in the test and the correlations of the items with the test as a whole.

For the present study, test-retest method was used. The pilot sample administrated the test and to check the reliability of the test, the sample was asked to fill the questionnaire again after a month. The reliability score measured using Pearson's Product Coefficient 'r' for pre-primary was very high,  $r = 0.96$ , for primary it showed a moderate reliability and  $r = 0.64$  whereas for secondary it was as high as 0.75.

### **3.8 Data Analysis**

Data analysis is performed in order to transform crude data into manageable form from which the researcher may be able to develop new meanings. This step should be planned beforehand (a priori), and not after the data have been collected (a posteriori). An appropriate plan of data analysis presumes that the theoretical basis for the research question is known in advance; the alternative runs a risk of bias, for example selecting analyses only after having first looked at the data. In the extreme, an a posteriori search for meaning may produce chance findings (known critically in research circles as a "fishing expedition" or "data dredging"). Such an exercise may

sometimes give rise to useful new hypotheses, but more often will produce spurious results. While this is not always a clear-cut issue, and there is a legitimate role for exploration and hypothesis generation, the best professional practice is to determine the analytical approach, a priori and not to be influenced by extraneous considerations when the time for analysis arrives.

**Factors to be considered in planning the data analysis include:**

1. Research rationale, objectives, questions and hypothesis
2. Data quality, frequency and level of measurement
3. Study type
4. Resources, especially availability of computers and appropriate statistical software.

For the present study, percent analysis was used to examine the data that was collected.

### **3.9 Statistical Method**

Statistical methods are extensively used in educational research. They provide an indispensable tool for collecting, organising, analysing and interpretation of data expressed in numerical terms. Statistical method uses measurement as the most precise and universally accepted method for assigning qualitative values to discourse relationship between variables under study.

In the present study, since there is no hypothesis, no statistical method was use. For propose of preparing the module, survey method was used to collect data.

### **3.10 Conclusion**

For the present study, care was taken to set up an appropriate method for the research. The study was conceived as a survey to ascertain the DAP among teachers of pre-primary, primary and secondary. The tools used was validated and reliable. Appropriate descriptive analysis methods were thought out before starting the study. The study aimed to develop a module on DAP using the data collected through survey.

## LIST OF ABBREVIATIONS

List of abbreviations in this chapter

<b>Sr. No.</b>	<b>Abbreviation</b>	<b>Refers to:</b>
4. 1	DAP	Developmentally Appropriate Practices
5.	ECCEd.	Early Childhood Care and Education
6.	D.Ed.	Diploma in Education
7.	B.Ed.	Bachelors in Education
8.	SSC	Secondary School Certificate
9.	CBSE	Central Board of Secondary Education
10.	ICSE	Indian Certificate of Secondary Education
11.	IGSCE	International General Certificate of Secondary Education
12.	IB	International Baccalaureate
13.	TET	Teacher Eligibility Test
14.	CTET	Central Teacher Eligibility Test

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## **CHAPTER - 4**

## CHAPTER 4 - DESCRIPTIVE ANALYSIS

### 4.1 Introduction

A research worker is not completely satisfied with collecting and classifying the data. One has to go through the facts more deeply to find the causes of occurrence of the phenomenon concerned with the problem.

According to Polit and Beck (2004), *“Data analysis is the systematic organization and synthesis of research data and the testing of research hypothesis using that data”*.

Therefore, to get a more meaningful picture out of the raw information collected, analysis and interpretation of data is required. Thus, analysis means studying tabulated material in order to determine the inherent facts or meanings. It involves breaking up of existing complex factors into simple parts and putting them together in a new arrangement for the purpose of interpretation.

Descriptive analysis is also known as descriptive statistics. It is the discipline of quantitatively describing the main features of a collection of data. It describes basic features of the data in the study. It provides simple summaries about the sample. It is used to prescribe quantitative description in manageable form. It helps to simplify large amount of data in a sensible way.

### 4.2 Descriptive Data Analysis

According to Hooper and Boars (1958), *“Analysis and Interpretation of the collected data is the most important stage in the research process. This process requires an alert flexible and open mind.”*

Descriptive analysis of data limits generalization to a particular group of individuals observed. No conclusions extend beyond this group and any similarity to those outside the group cannot be assumed. The data describe one group and that group only. Much simple action research involves descriptive analysis and provides valuable information about the nature of the particular group of individuals (Best & Kahn, 2003).

The descriptive analysis of data provides the following:

- The first estimates and summaries, arranged in tables and graphs, to meet the objectives.
- Information about the variability or uncertainty in the data.
- Indications of unexpected patterns and observations that need to be considered when doing formal analysis.

Descriptive analysis is used to describe the basic features of the data in the study. They provide simple summaries about the sample and the measures. Together with simple graphical analysis, they form the basic virtual of any quantitative analysis of data. With descriptive analysis, one simply describes what is or what the data shows. Description of data is needed to determine the normality of the distribution; description of the data is necessary as the nature of the techniques to be applied for inferential analysis of the data depends on the characteristics of the data.

Descriptive statistics include the numbers, tables, charts, and graphs used to describe, organize, summarize, and present raw data. Descriptive statistics is a set of brief descriptive coefficients that summarizes a given data set, which can either be a representation of the entire population or a sample.

Descriptive statistics helps summarize the overall trends or tendencies of our data, help us understand how varied our scores might be, and provide insight into where one score stands in comparison with others. Such summaries may be either quantitative, i.e., summary statistics, or visuals, i.e., in the form of simple to understand graphs. These summaries may either form the basis of the initial description of the data as part of a more extensive statistical analysis, or they may be sufficient in and of themselves for a particular investigation.

#### **4.2.1 Descriptive Analysis**

Descriptive statistics are recommended when the objective is to describe and discuss a data set more generally and conveniently than would be possible using raw data alone. They are routinely used in reports which contain a significant amount of qualitative or quantitative data. Descriptive statistics help summarize and support assertions of fact.

#### **Advantages**

Descriptive statistics can:



- be essential for arranging and displaying data
- form the basis of rigorous data analysis
- be much easier to work with, interpret, and discuss than raw data
- help examine the tendencies, spread, normality, and reliability of a data set
- be rendered both graphically and numerically
- include useful techniques for summarizing data in visual form
- form the basis for more advanced statistical methods

### **Disadvantages**

Descriptive statistics can:

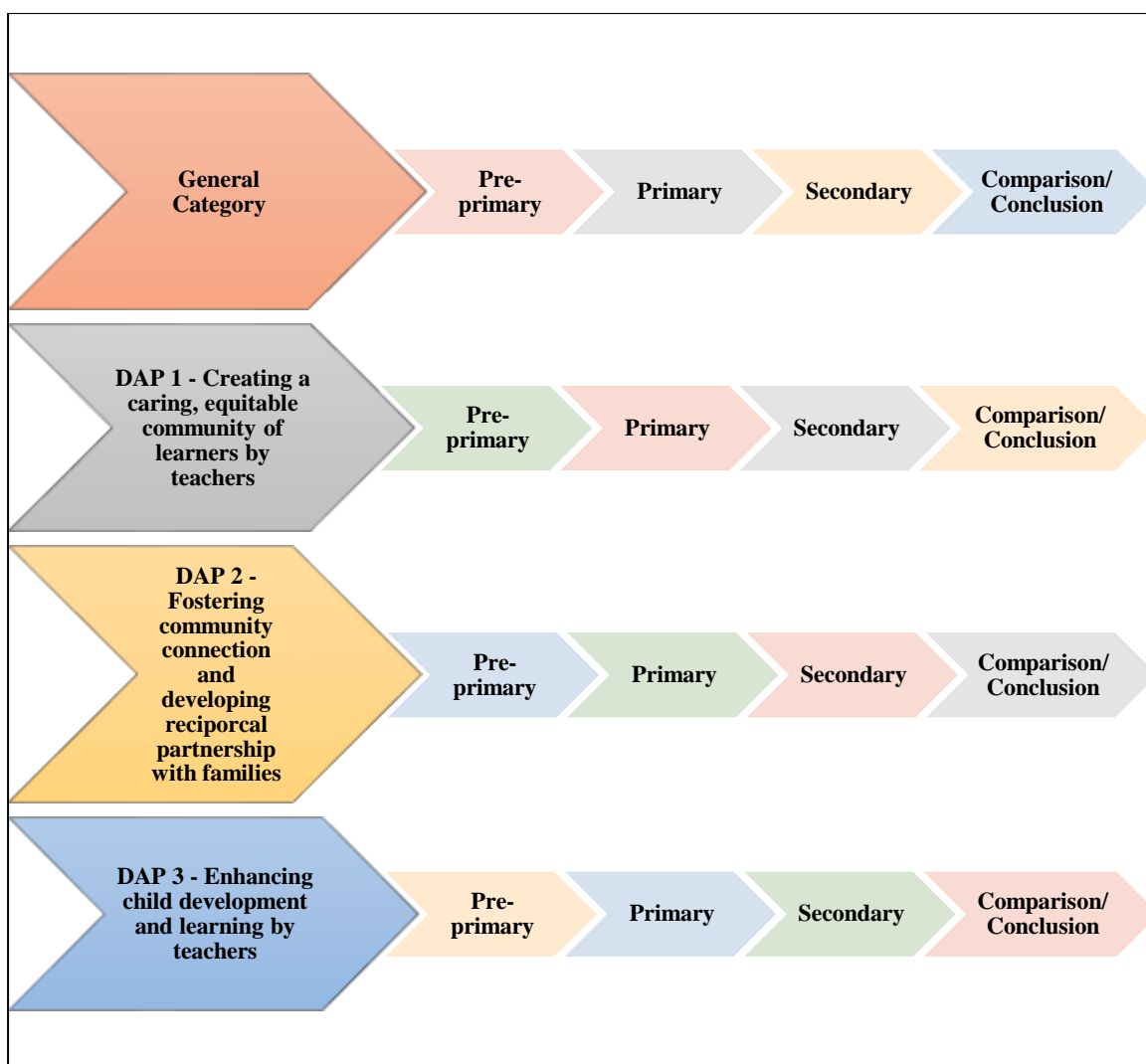
- be misused, misinterpreted, and incomplete
- be of limited use when samples and populations are small
- demand a fair amount of calculation and explanation
- fail to fully specify the extent to which non-normal data are a problem
- offer little information about causes and effects
- be dangerous if not analyzed completely

### **4.3 Analysis**

For the present study percentage analysis as a method of descriptive data analysis was used. Percentage analysis is the method to represent raw streams of data as a percentage (a part in 100 - percent) for better understanding of collected data.

Developmentally appropriate practices followed by teachers teaching in pre-primary, primary, secondary

The following tables, figures and interpretations state the various developmentally appropriate practices used by teachers teaching in pre-primary, primary, secondary. This is divided into 4 categories given below.



### General Category

#### **Tables, figures and interpretation of the teachers teaching in pre-primary section**

**Table 4.3.1**

*Analysis of Awareness of the term Developmentally Appropriate Practices amongst the Pre-primary Teachers*

Awareness of the term Developmentally Appropriate Practices	Frequency
Yes	53
No	9
May Be	13
Total	75

**Figure 4.3.1**

*Pie chart Representing Awareness of the term Developmentally Appropriate Practices amongst the Pre-primary Teachers*

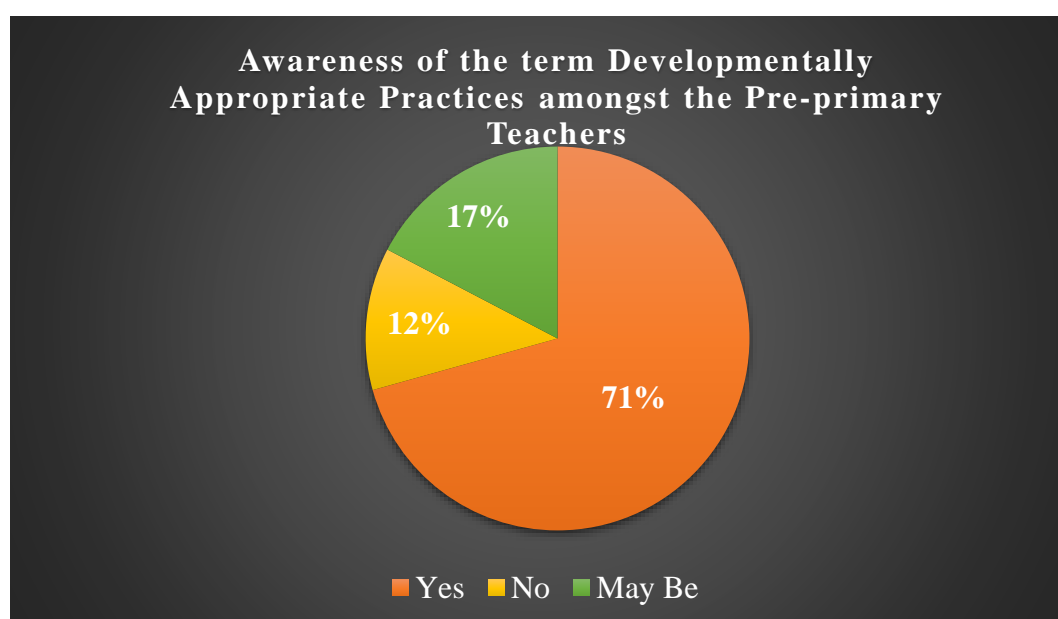


Figure 4.3.1 represents that out of the 75 teachers taken as a sample, 71% (53) teachers teaching in pre-primary are aware of the term developmentally appropriate practices where as 12% (9) teachers teaching in pre-primary are not aware of the term developmentally appropriate practices. There are 17% (13) teachers teaching in pre-primary feel that they may be aware of the term developmentally appropriate practices.

**Table 4.3.2**

*Analysis of Types of Developmentally Appropriate Practices by Pre-primary Teachers*

<b>Types of Developmentally Appropriate Practices (Multiple choice- Tick all the options that apply)</b>	<b>Frequency</b>
Activities that are age appropriate	64
Activities that are individually appropriate	42
Activities that are culturally appropriate	21
I don't know	3

**Figure 4.2.3**

*Bar graph Representing Types of Developmentally Appropriate Practices by Pre-primary Teachers*

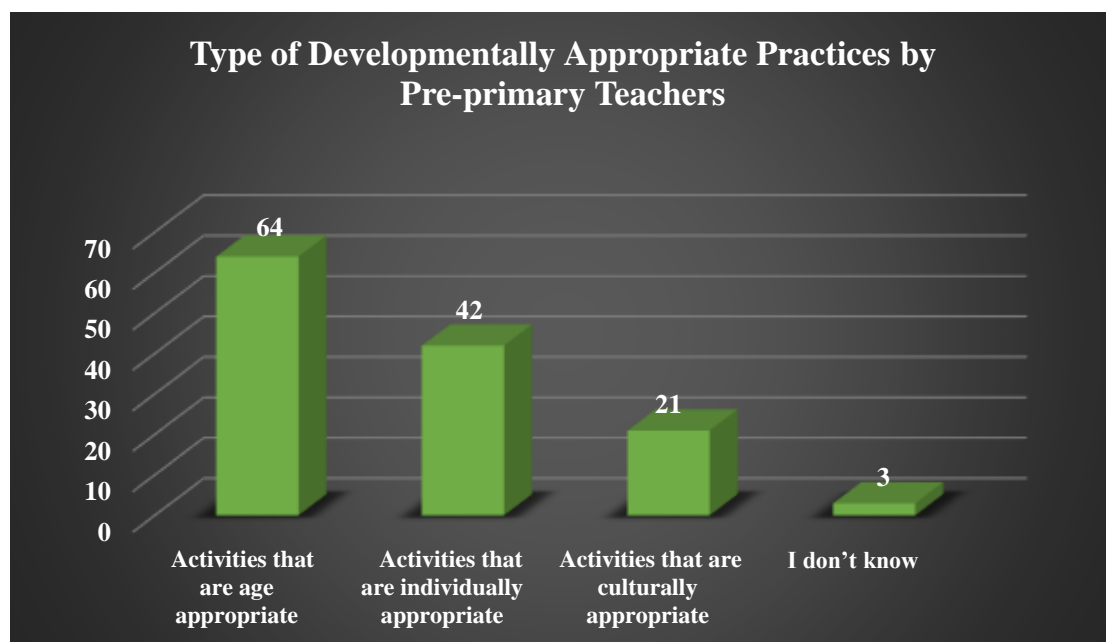


Figure 4.3.2 represents that out of 64 teachers teaching in pre-primary believe that activities that are appropriate to the age of the children are developmentally appropriate. 42 teachers teaching in pre-primary believe that activities that are individually appropriate are developmentally appropriate. There are 21 of them believe that activities that are culturally appropriate developmentally appropriate too. However, 3 teachers feel they have no idea about the what developmentally appropriate activities consists of.

**Table 4.3.3**

*Analysis of Pre-primary Teachers' Understanding of DAP*

Meaning of Developmentally Appropriate Practices (DAP)	Frequency
Making things easier for children	7
Ensuring that goals and experiences are suited to learning and development of children	66
I am not aware of this	2
Total	75

**Figure 4.3.3**

*Pie chart Representing Pre-primary Teachers Understanding of DAP*

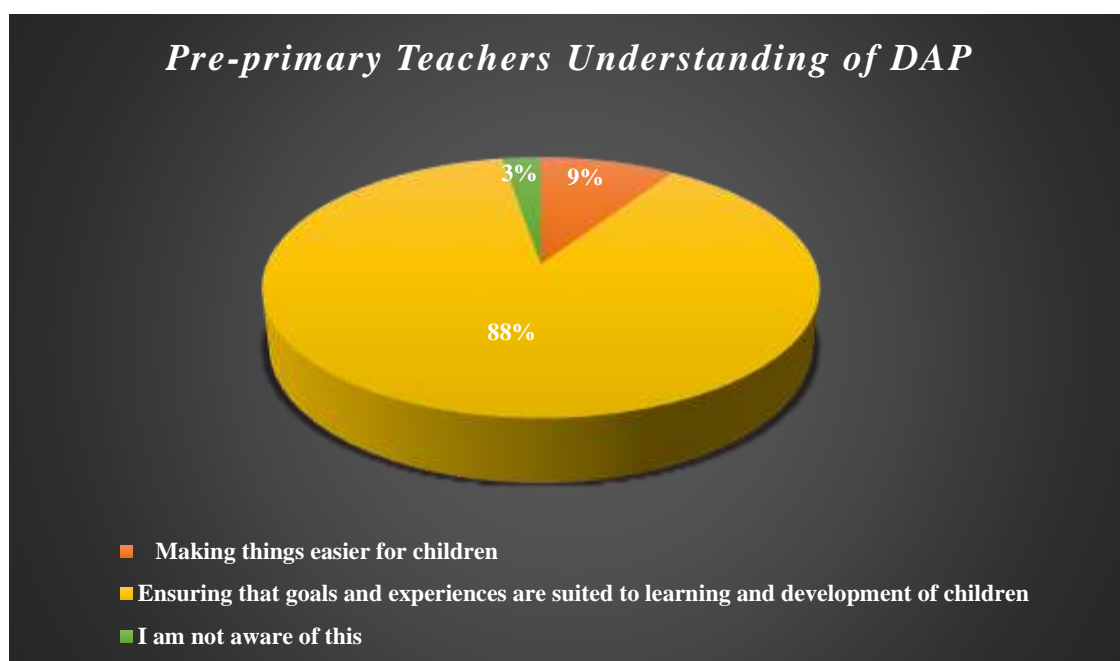


Figure 4.3.3 represents 88% teachers understands developmentally appropriate practices ensuring that goals and experiences are suited to learning and development of children. 9% teachers think it is making things easier for children whereas 3% teachers are not aware of the meaning of developmentally appropriate practices.

**Table 4.3.4**

*Pre-primary Teachers' Reaction on Students Non-Completion of DAP*

<b>Pre-primary Teachers' reaction to non-completion of DAP</b>	<b>Frequency</b>
Wait for them to complete the activity	68
Move on to another activity	3
Other	4
Total	75

**Figure 4.3.4**

*Pie chart Representing Pre-primary Teachers' Reaction on Students Non-Completion of DAP*

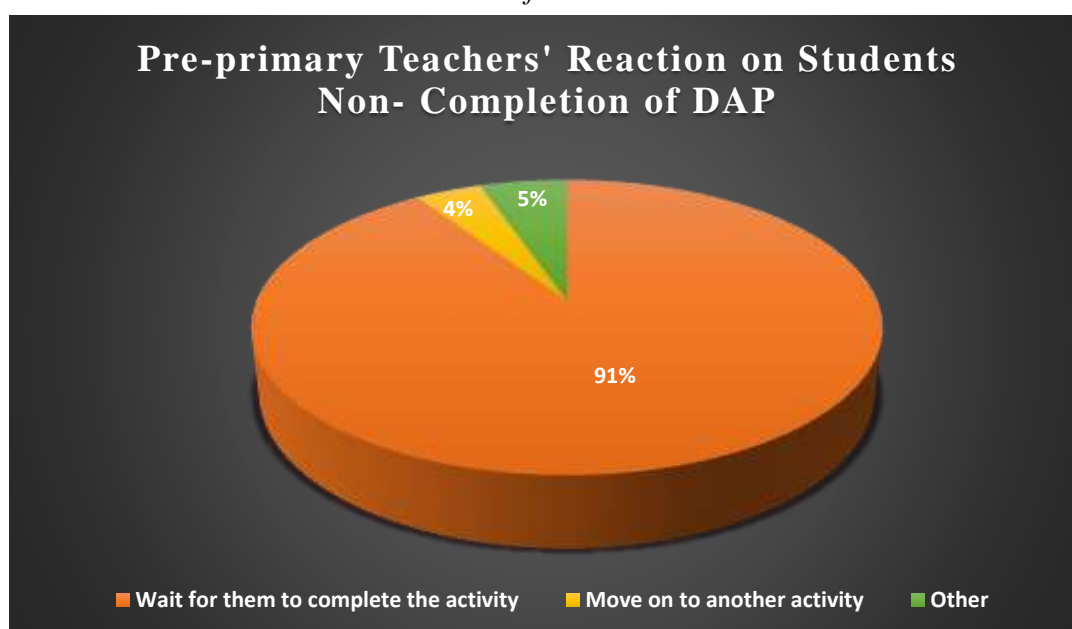


Figure 4.3.4. represents 91% (68) teachers wait for their students to complete the activity, 4% (3) teachers move on to another activity if students not complete any given activity. There are 5% (4) teachers adopt to practices like assigning a co teacher to help the student to complete the activity or they move to another activity and during free time ask children to complete the given task.

**Table 4.3.5**

*Pre-primary Teachers' Way of Planning DAP*

<b>Pre-primary Teachers' way of planning DAP</b> (Multiple choice- Tick all the options that apply)	<b>Frequency</b>
With the whole team together	66
Individually for my sessions/class	27
With the coordinator alone	11
I get a fixed curriculum to follow	23
I don't plan developmentally appropriate practices	3

**Figure 4.3.5**

*Bar graph Representing Pre-primary Teachers' Way of Planning DAP*

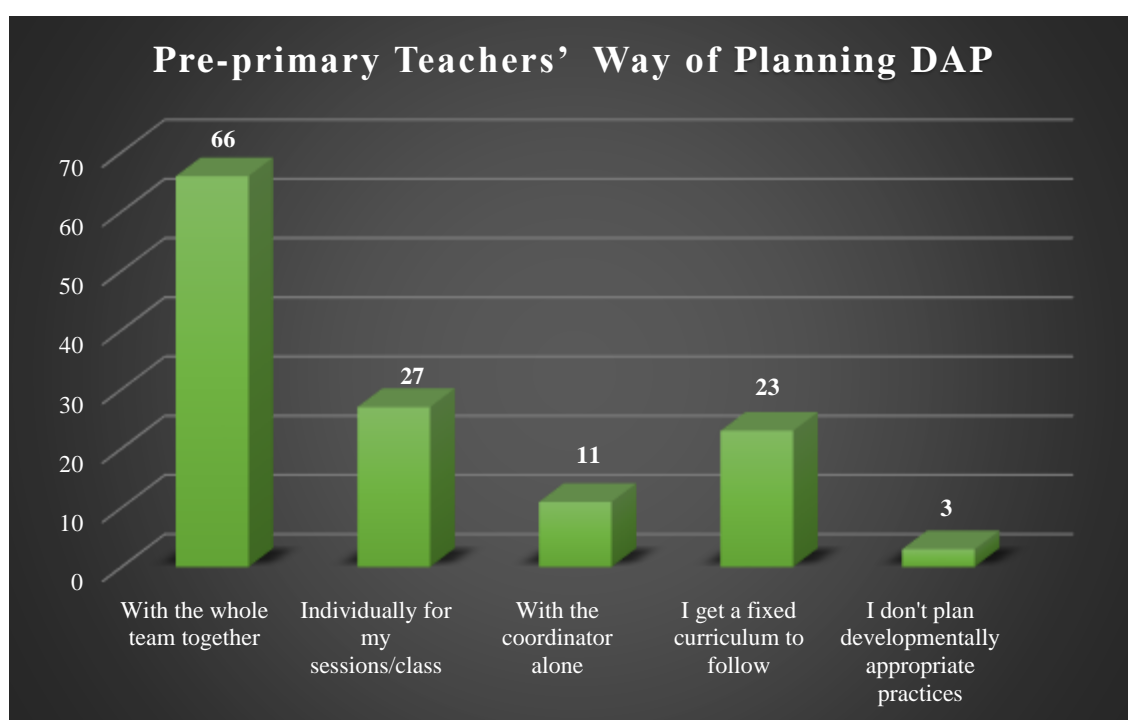


Figure 4.3.5 represents, 66 teachers do the planning of developmentally appropriate practices with the whole team together. 27 teachers individually plan for their respective class. 11 teachers plan with the coordinators alone. 23 teachers get a fixed curriculum to follow and they conduct activities given by the curriculum developers. 3 teachers out of them don't plan developmentally appropriate practices at all.

**Table 4.3.6***Reasons for Pre-primary Teachers Not Planning DAP*

<b>Reasons for not planning DAP</b> (Multiple choice- Tick all the options that apply)	<b>Frequency</b>
Fixed curriculum	21
Limited time	20
Limited resources (monetary and others)	9
Not aware of developmentally appropriate practices/ no knowledge about it	5
No guidance	3
No support from the management	2
I plan the above activities but did not know that they are called as developmentally appropriate practices	10
I plan the above activities regularly	35

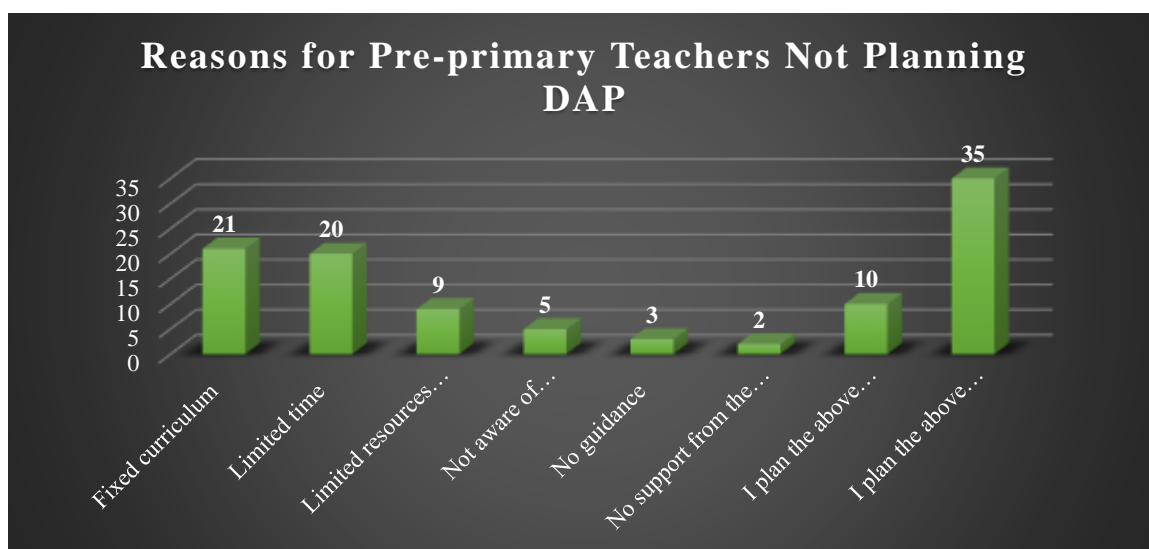
**Figure 4.3.6***Bar graph Representing Reasons for Pre-primary Teachers Not Planning DAP*

Figure 4.3.6 represents that 10 teachers feel they plan activities that are developmentally appropriate but never knew about it. 35 teachers feel this question is not applicable to them as they regularly plan developmentally appropriate activities. Out of the other teachers, 21 teachers of them follow fixed curriculum so don't plan DAP. 20 teachers, due to limited time are not able to plan. Due to limited resources, 9 teachers are not able to plan. Due to lack of knowledge 5 teachers don't plan for this



and 2 of them feel there is no support from the management and hence can't plan developmentally appropriate practices.

#### **Tables, figures and interpretation of the teachers teaching in primary section**

**Table 4.3.7**

*Analysis of Awareness of the term Developmentally Appropriate Practices amongst the Primary Teachers*

<b>Awareness of the term Developmentally Appropriate Practices</b>	<b>Frequency</b>
Yes	26
No	9
May Be	15
Total	50

**Figure 4.3.7**

*Pie chart Representing Awareness of the term Developmentally Appropriate Practices amongst the Primary Teachers*

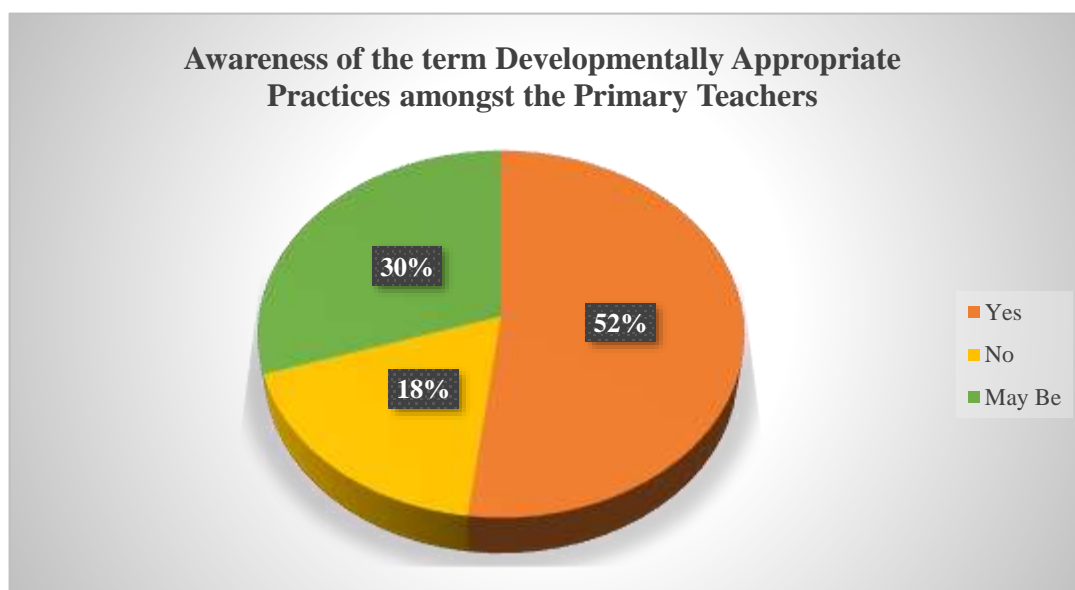


Figure 4.3.7. represents 52% (26) teachers are aware of the term Developmentally Appropriate Practices amongst the primary teachers. 18% (9) teachers are not aware of the term Developmentally Appropriate Practices amongst the primary teachers. 30% (15) teachers feel that they may be aware of the term Developmentally Appropriate Practices amongst the primary teachers.

**Table 4.3.8.**

*Analysis of Types of Developmentally Appropriate Practices by Primary Teachers*

<b>Types of Developmentally Appropriate Practices ((Multiple choice- Tick all the options that apply)</b>	<b>Frequency</b>
Activities that are age appropriate	36
Activities that are individually appropriate	26
Activities that are culturally appropriate	12
I don't know	4

**Figure 4.3.8.**

*Bar graph Representing Types of Developmentally Appropriate Practices by Primary Teachers*

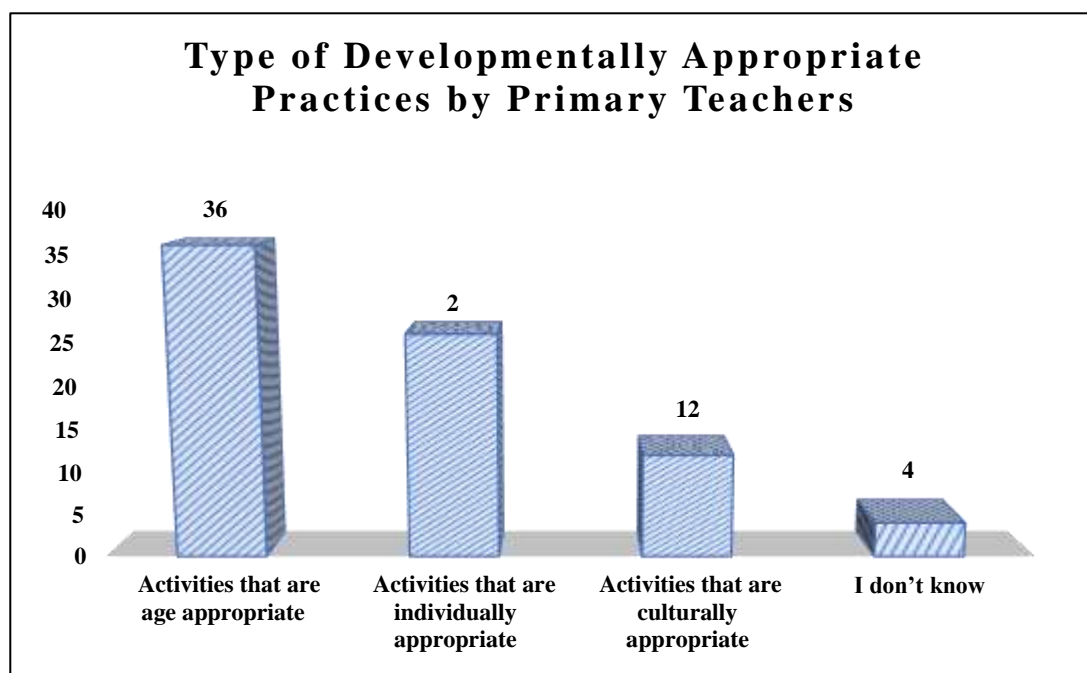


Figure 4.3.8. signifies that 36 teachers feel that activities that are age appropriate are Developmentally Appropriate Practices. 26 teachers feel that activities that are individually appropriate are Developmentally Appropriate Practices. While only 12 teachers feel that activities that are culturally appropriate are Developmentally Appropriate Practices. 4 teachers don't know what are DAPs.

**Table 4.3.9**

*Analysis of Primary Teachers' Understanding of DAP*

Meaning of Developmentally Appropriate Practices (DAP)	Frequency
Making things easier for children	7
Ensuring that goals and experiences are suited to learning and development of children	37
I am not aware of this	6
Total	50

**Figure 4.3.9**

*Pie chart Representing Primary Teachers' Understanding of DAP*

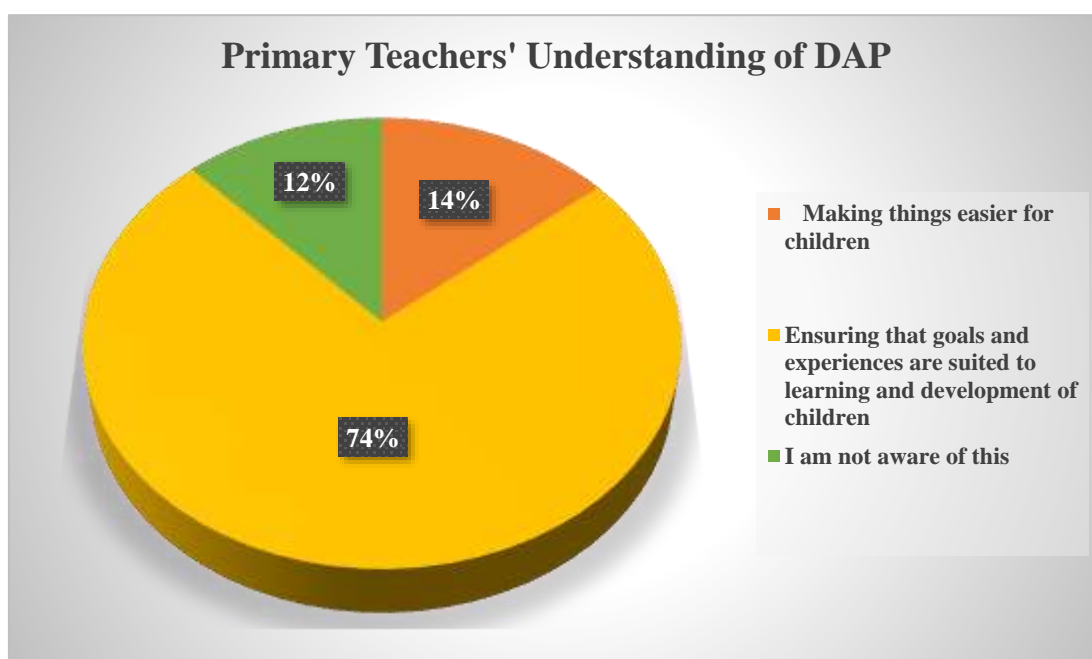


Figure 4.3.9. represents 74% (37) teachers feel that ensuring goals and experiences are suited to learning and development of children are Developmentally Appropriate Practices. 14% (7) teachers feel that making things easier for children are Developmentally Appropriate Practices. 12% (6) teachers are not aware of the meaning Developmentally appropriate practices.

**Table 4.3.10**

*Primary Teachers' Reaction on Students Non-Completion of DAP*

<b>Primary Teachers' Reaction to Non-completion of DAP</b>	<b>Frequency</b>
Wait for them to complete the activity	42
Move on to another activity	2
Other	6
Total	50

**Figure 4.3.10**

*Pie chart Representing Primary Teachers' Reaction on Students Non-Completion of DAP*

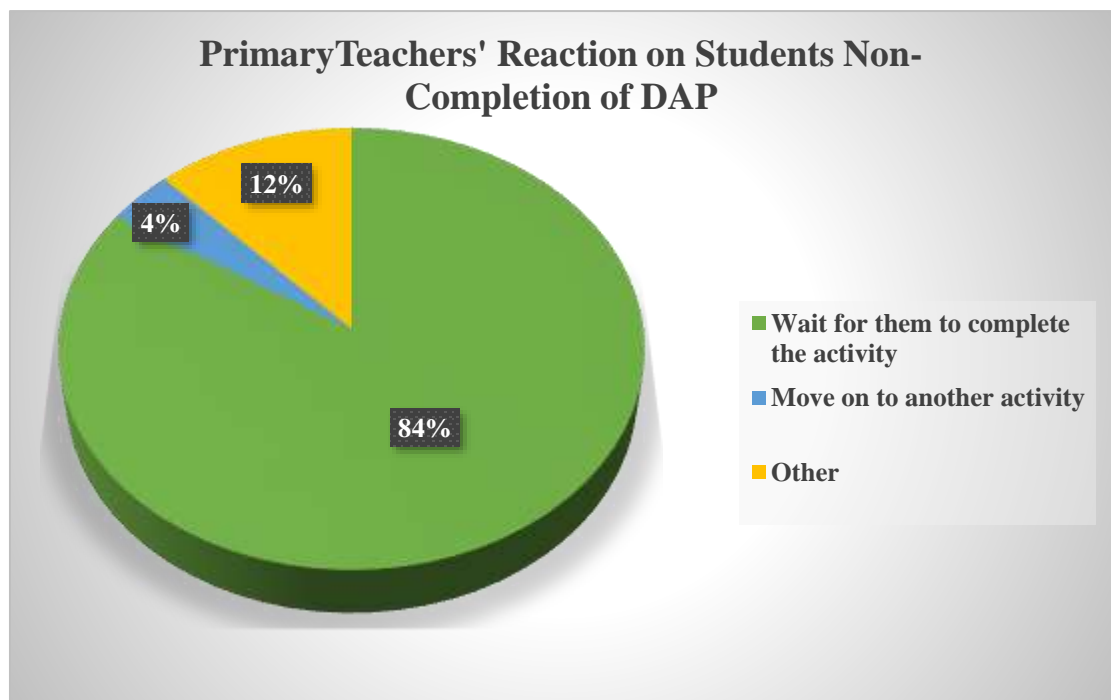


Figure 4.3.10 denotes 84% (42) teachers wait for their students to complete the activity, 4% (2) teachers move on to another activity if students not complete any given activity. There are 12% (6) teachers adopt to practices like assigning a co teacher to help the student to complete the activity or it depends from activity to activity or situation to situation, they also give the activity as a homework to be completed and inform parents about the same.

**Table 4.3.11***Primary Teachers' Way of Planning DAP*

<b>Primary Teachers' Way of Planning DAP</b> (Multiple choice- Tick all the options that apply)	<b>Frequency</b>
With the whole team together	31
Individually for my sessions/class	29
With the coordinator alone	9
I get a fixed curriculum to follow	13
I don't plan developmentally appropriate practices	0

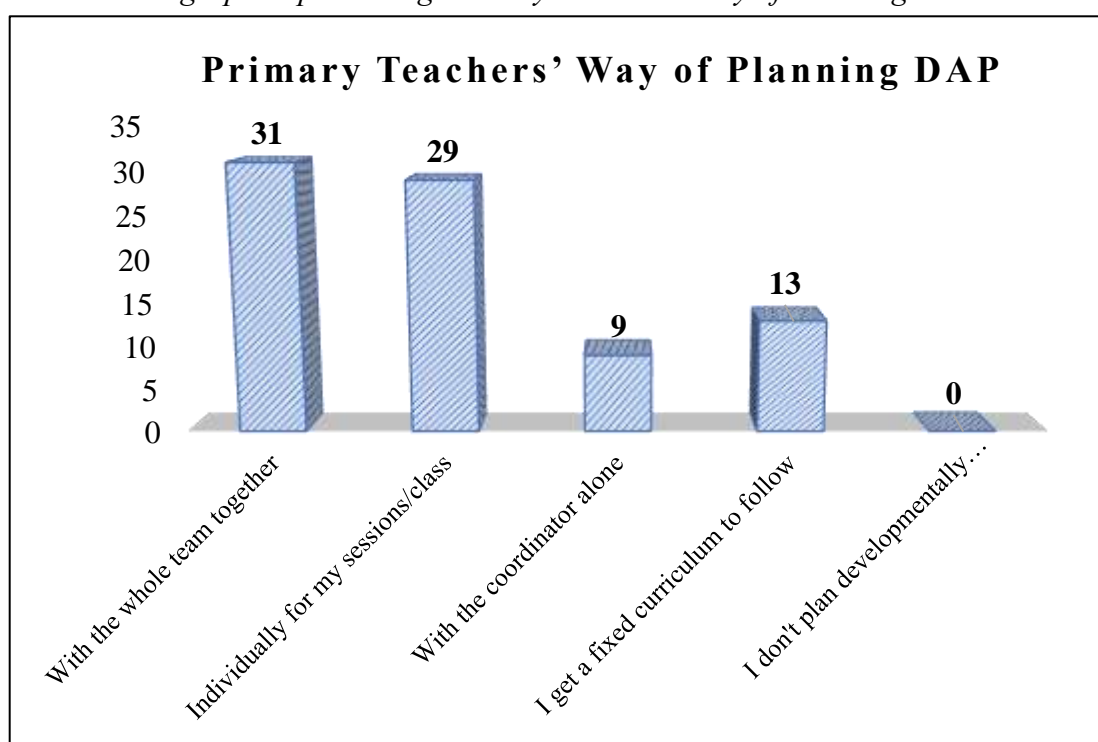
**Figure 4.3.11***Bar graph Representing Primary Teachers' Way of Planning DAP*

Figure 4.3.11 shows, 31 teachers do the planning of developmentally appropriate practices with the whole team together. 29 teachers individually plan for their respective class. 9 teachers plan with the coordinators alone. 13 teachers get a fixed curriculum to follow and they conduct activities given by the curriculum developers.

**Table 4.3.12**  
*Reasons for Primary Teachers' Not Planning DAP*

<b>Reasons for Not planning DAP (Multiple choice- Tick all the options that apply)</b>	<b>Frequency</b>
Fixed curriculum	16
Limited time	18
Limited resources (monetary and others)	7
Not aware of developmentally appropriate practices/ no knowledge about it	2
No guidance	2
No support from the management	1
I plan the above activities but did not know that they are called as developmentally appropriate practices	16
I plan the above activities regularly	1

**Figure 4.3.12**

*Bar graph Representing Reasons for Primary Teachers' Not Planning DAP*

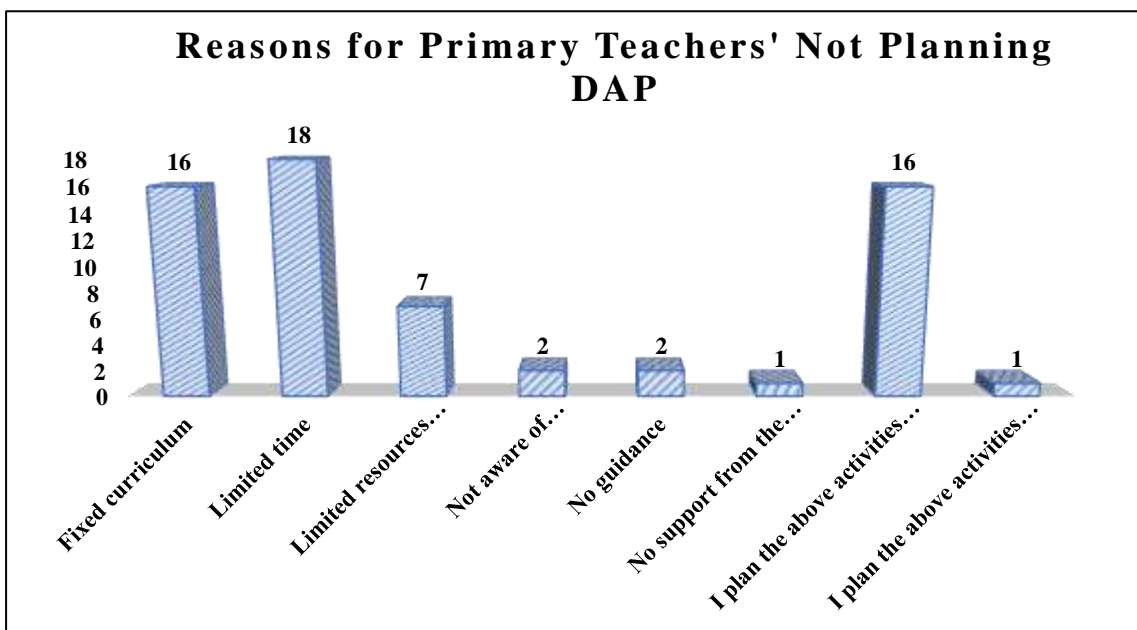


Figure 4.3.12 represents that 16 teachers feel they plan activities that are developmentally appropriate but never knew about it. One of them feels this question is not applicable to them as they regularly plan developmentally appropriate activities. Out of the other teachers, 16 teachers of them follow fixed curriculum so don't plan DAP. 18 teachers, due to limited time are not able to plan. Due to limited resources, 7 teachers are not able to plan. Due to lack of knowledge and guidance, 2 teachers don't

plan for this and 1 of them feels there is no support from the management and hence can't plan developmentally appropriate practices.

### Tables, figures and interpretation of the teachers teaching in secondary section

**Table 4.3.13**

*Analysis of Awareness of the term Developmentally Appropriate Practices amongst the Secondary Teachers*

Awareness of the term Developmentally Appropriate Practices	Frequency
Yes	34
No	5
May Be	21
Total	60

**Figure 4.3.13**

*Pie chart Representing Awareness of the term Developmentally Appropriate Practices amongst the Secondary Teachers*

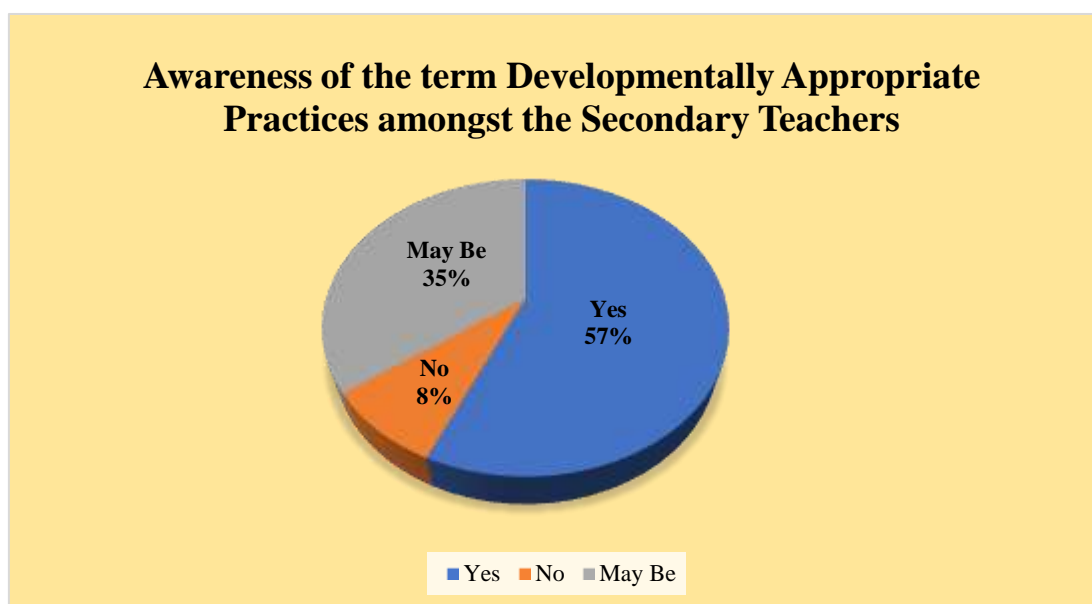


Figure 4.3.13 signifies that that 57% (34) secondary teachers are aware of the term Developmentally Appropriate Practices, 8% (5) secondary teachers are not aware of the term Developmentally Appropriate Practices and 35% (21) secondary teachers feel that they may be aware of the term Developmentally Appropriate Practices.

**Table 4.3.14.**

*Analysis of Types of Developmentally Appropriate Practices by Secondary Teachers*

<b>Types of Developmentally Appropriate Practices (Multiple choice- Tick all the options that apply)</b>	<b>Frequency</b>
Activities that are age appropriate	43
Activities that are individually appropriate	37
Activities that are culturally appropriate	13
I don't know	1

**Figure 4.3.14.**

*Bar graph Representing Types of Developmentally Appropriate Practices by  
Secondary Teachers*

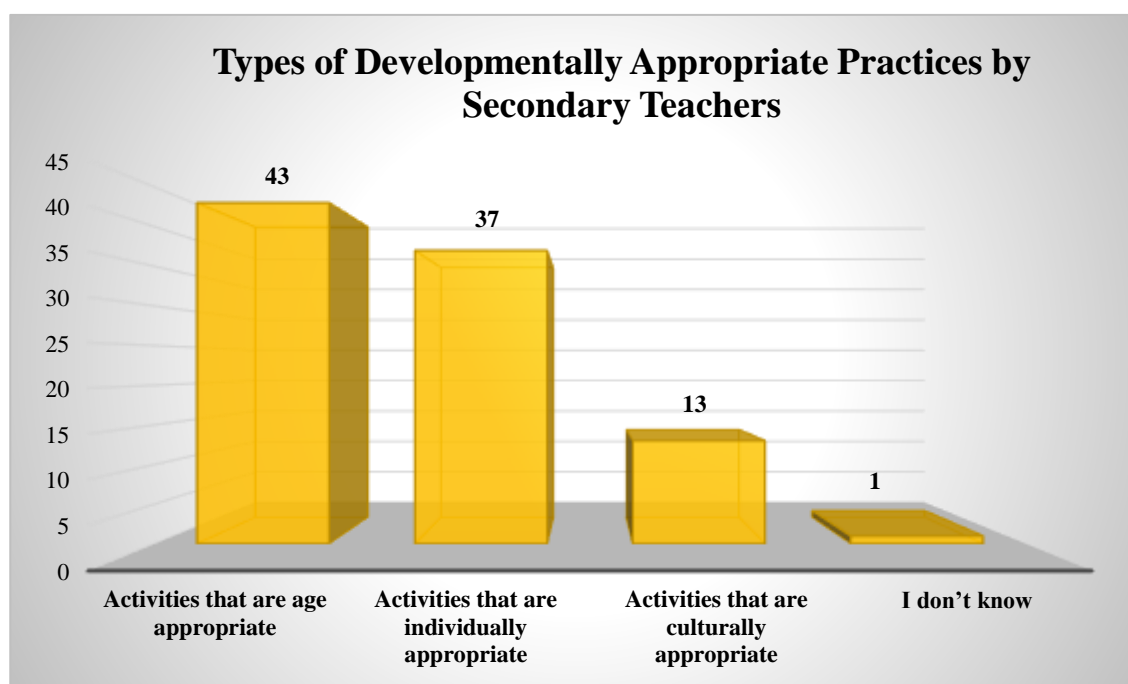


Figure 4.3.14. suggests that 43 secondary teachers feel that activities that are age appropriate are DAP, 37 teachers believe that activities that are individually appropriate are DAP, 13 teachers believe that activities that are culturally appropriate are DAP while 1 teacher does not know about DAP.



**Table 4.3.15.**

*Analysis of Secondary Teachers' Understanding of DAP*

Meaning of Developmentally Appropriate Practices (DAP)	Frequency
Making things easier for children	4
Ensuring that goals and experiences are suited to learning and development of children	53
I am not aware of this	3
Total	60

**Figure 4.3.15.**

*Pie chart Representing Secondary Teachers' Understanding of DAP*

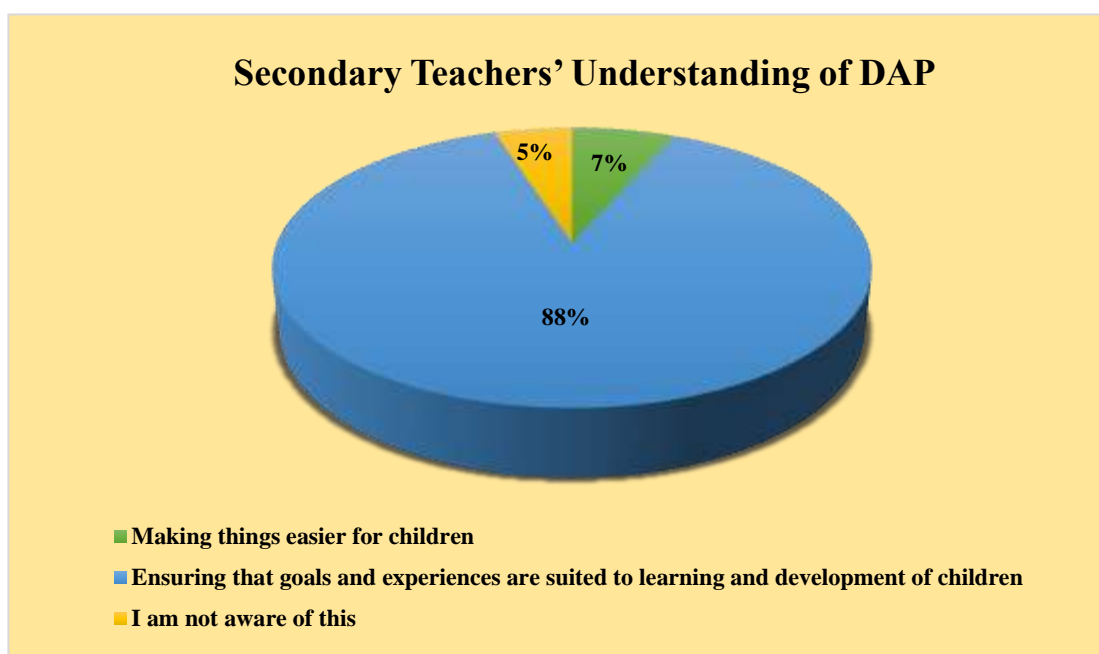


Figure 4.3.15. shows that 4 teachers believe that meaning of Developmentally appropriate practices is making things easier for children, 53 teachers think it is ensuring the goals and experiences are suited to learning and development of children while 3 teachers are not aware of the meaning of Developmentally Appropriate Practices.

**Table 4.3.16**

*Secondary Teachers' Reaction on Students Non-Completion of DAP*

<b>Secondary Teachers' Reaction to Non-Completion of DAP</b>	<b>Frequency</b>
Wait for them to complete the activity	50
Move on to another activity	3
Other	7
Total	60

**Figure 4.3.16.**

*Pie chart Representing Secondary Teachers' Reaction on Students Non-Completion of DAP*

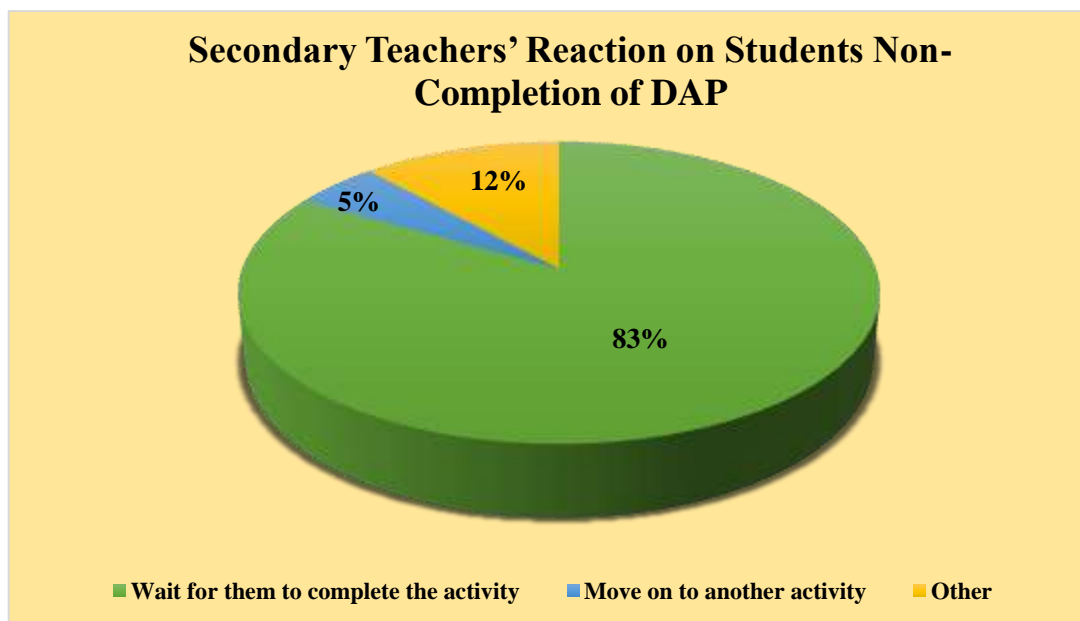


Figure 4.3.16. signifies that 83% (50) secondary teachers wait for the students to complete DAP; 5% (3) secondary teachers move on to another activity while 12% (3) secondary teachers have other reactions on non-completion of DAP, they give time for students to complete activity after class hours, give it as homework, keep reminding them.

**Table 4.3.17.**

*Secondary Teachers' Way of Planning DAP*

<b>Secondary Teachers' Way of Planning DAP (Multiple choice- Tick all the options that apply)</b>	<b>Frequency</b>
With the whole team together	40
Individually for my sessions/class	36
With the coordinator alone	8
I get a fixed curriculum to follow	12
I don't plan developmentally appropriate practices	1

**Figure 4.3.17.**

*Bar graph Representing Secondary Teachers' Way of Planning DAP*

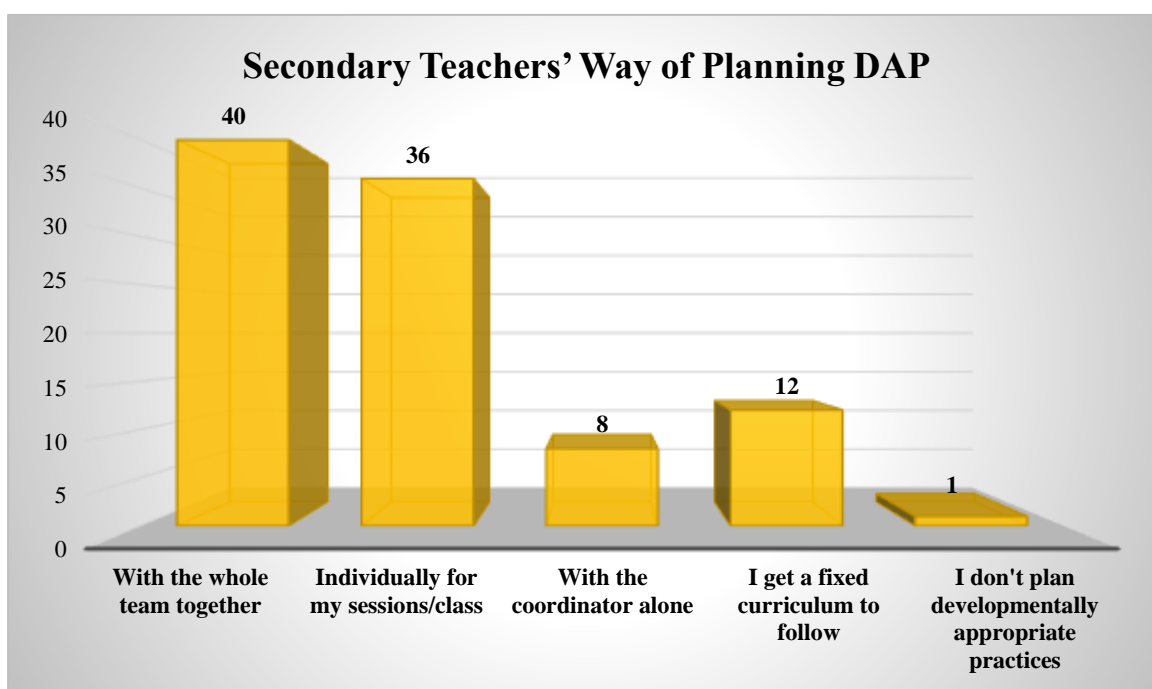


Figure 4.3.17. represents that 40 secondary teachers plan DAP with the whole team together, 36 secondary teachers plan DAP individually for his/her session/class, 8 secondary teachers plan DAP with the coordinator alone, 12 secondary teachers get a fixed curriculum to follow, 1 secondary teacher does not plan DAP while 2 secondary teachers have other thoughts on planning DAP.

**Table 4.3.18.**

*Reasons for Secondary Teachers' Not Planning DAP*

<b>Reasons for Not Planning DAP</b> (Multiple choice- Tick all the options that apply)	<b>Frequency</b>
Fixed curriculum	19
Limited time	32
Limited resources (monetary and others)	14
Not aware of developmentally appropriate practices/ no knowledge about it	4
No guidance	3
No support from the management	0
I plan the above activities but did not know that they are called as developmentally appropriate practices	17
I plan the above activities regularly	15

**Figure 4.3.18**

*Bar graph Representing Reasons for Secondary Teachers' Not Planning DAP*

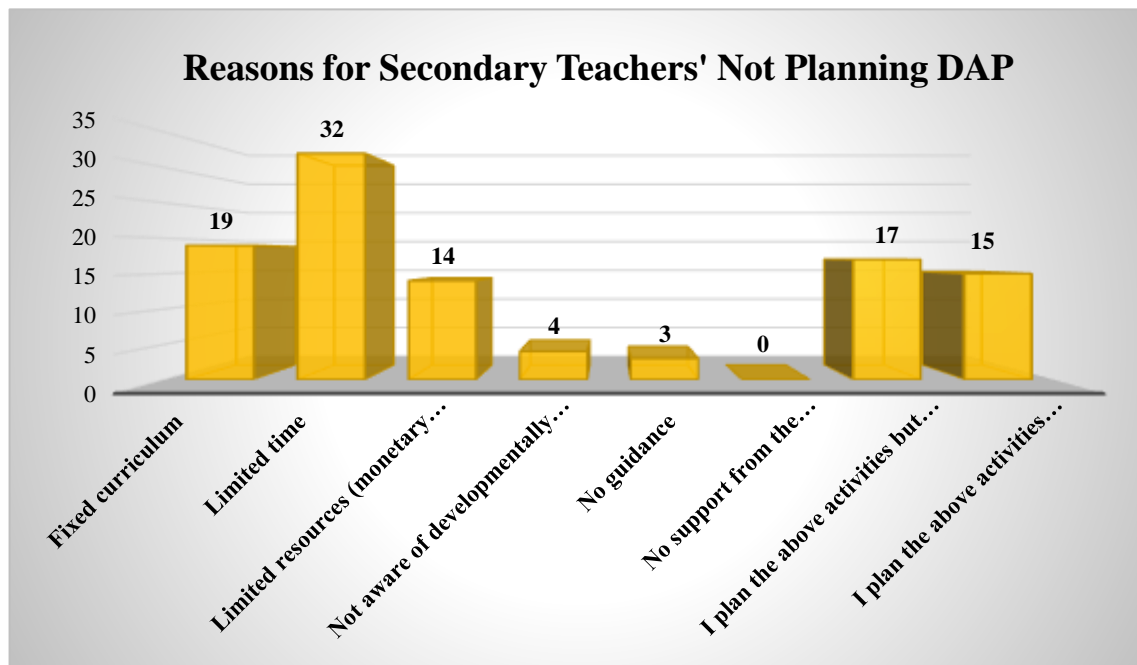


Figure 4.3.18. signifies that 19 secondary teachers do not plan DAP because of fixed curriculum, 32 secondary teachers do not plan DAP because of limited time, 14 secondary teachers do not plan DAP because of limited resources, 4 secondary teachers are not aware of DAP, 3 secondary teachers do not plan DAP because they do not have

any guidance, 17 secondary teachers plan the above activities but were not aware those activities were known as DAP, 15 secondary teachers plan the above activities regularly.

### **Conclusion for the general category**

To conclude, most of the teachers teaching by pre-primary, primary are aware of the term DAP in comparison secondary teachers. This could be because secondary teachers are not taught about DAP in their B.Ed. training. Though the teachers are not aware of the term DAP, they plan most of the activities for all round development of the child.

DAP are activities that are age appropriate, individually appropriate and also culturally appropriate, most of the teachers teaching at all levels feel that DAP are age appropriate, individually appropriate and only a handful feel they are age appropriate, individually appropriate and also culturally appropriate.

One interesting fact observed by the researcher is that most of the teachers across the levels plan DAP with the whole team together, whereas few plan with individually with the coordinator. DAP must be plan individually for each class, because needs of each student vary for class to class, section to section, few teachers don't plan DAP owing to fixed curriculum and limited time or because of no guidance.

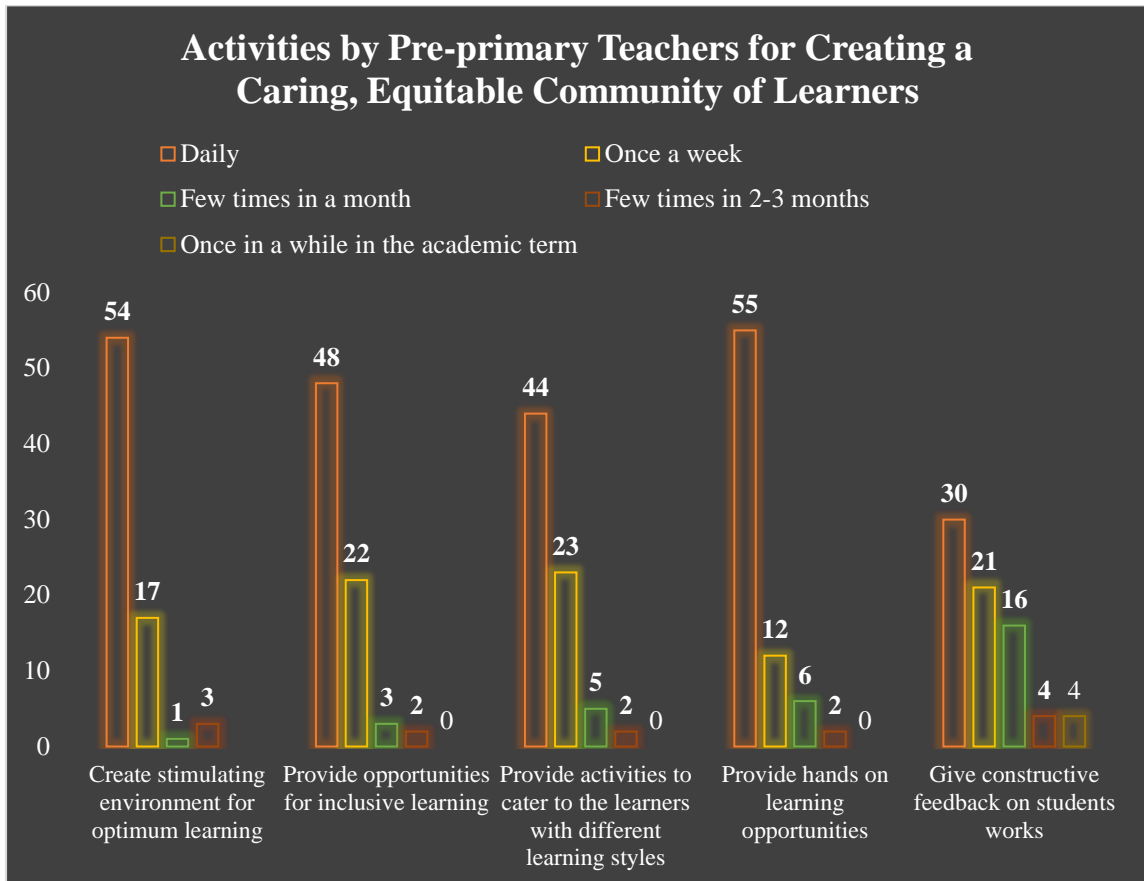
**DAP 1- Creating a caring, equitable community of learners****Table 4.3.19**

*Checklist Responses of Pre-primary Teachers for Questions Related to Creating a Caring, Equitable Community of Learners*

<b>Statement</b>	<b>Daily</b>	<b>Once a week</b>	<b>Few times in a month</b>	<b>Few times in 2-3 months</b>	<b>Once in a while in the academic term</b>	<b>Total</b>
Create stimulating environment for optimum learning	54	17	1	3	0	75
Provide opportunities for inclusive learning	48	22	3	2	0	75
Provide activities to cater to the learners with different learning styles	44	23	5	2	0	75
Provide hands on learning opportunities	55	12	6	2	0	75
Give constructive feedback on students works	30	21	16	4	4	75

**Figure 4.3.19**

*Bar graph Representing Responses of Pre-primary Teachers for Questions Related to Creating a Caring, Equitable Community of Learners*



- Figure 4.3.19 denotes that 54 pre-primary teachers create a stimulating learning environment on a daily basis for optimum growth of their children, handful of the teachers (17) create a stimulating learning environment once a week for optimum growth of their children, 1 teacher feels she creates stimulating environment for optimum learning few times in a week however, 3 teachers create stimulating environment for optimum learning few times in 2-3 months.
- 48 teachers provide opportunities for inclusive learning on a daily basis, 23 teachers provide opportunities for inclusive learning once a week, 3 teachers believe in providing opportunities for inclusive learning few times a month, 2 teachers provide opportunities for inclusive learning few times in 2-3 months.
- 44 teachers provide opportunities for providing activities to cater to the learners with different learning styles on a daily basis, 23 teachers provide activities to cater to the learners with different learning styles once a week, 5 teachers

believe in providing activities to cater to the learners with different learning styles few times a month, 2 teachers provide activities to cater to the learners with different learning styles few times in 2-3 months

- 55 teachers provide hands on learning opportunities on a daily basis, 12 teachers provide hands on learning opportunities once a week, 6 teachers believe in providing hands on learning opportunities few times a month while 2 teachers provide hands on learning opportunities few times in 2-3 months
- 30 teachers give constructive feedback on student work on daily basis, 21 teachers give constructive feedback on student works once in a week, 16 teachers give constructive feedback on student work few times in a month, 4 teachers give constructive feedback on student work few times in 2-3 months while 4 teachers give constructive feedback on student work once in a while in an academic year.

Gist of the practices followed by the pre-primary teachers is given below.

*For creating caring, equitable community of learners, teachers teaching in pre-primary conduct activities like planning field trips, nature walk, provide materials for experiments, creative art, dramatics, group games. They provide activities like puzzles, mazes, domino cards, quizzes on Kahoot, materials for seriation, classification, sorting for evolving critical thinking and problem-solving skills. The teachers encourage students to involve themselves in circle time activities, dramatization, outdoor/indoor play, doll/ sand/ block/ water play, art and craft activities to promote cooperative and group activities. They also planned break out room activities during the pandemic for the same.*



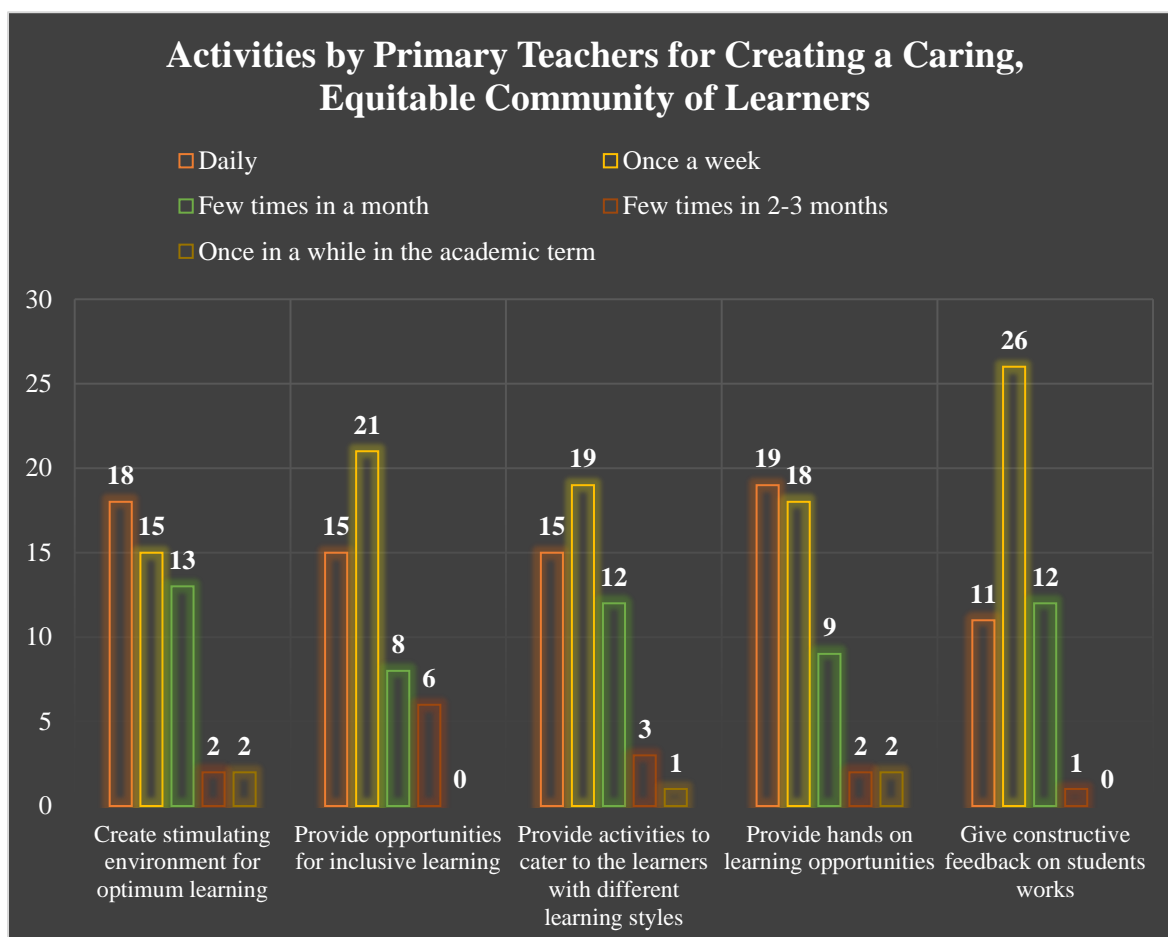
**Table 4.3.20.**

*Checklist Responses of Primary Teachers for Questions Related to Creating a Caring,  
Equitable Community of Learners*

<b>Statement</b>	<b>Daily</b>	<b>Once a week</b>	<b>Few times in a month</b>	<b>Few times in 2-3 months</b>	<b>Once in a while in the academic term</b>	<b>Total</b>
Create stimulating environment for optimum learning	18	15	13	2	2	50
Provide opportunities for inclusive learning	15	21	8	6	0	50
Provide activities to cater to the learners with different learning styles	15	19	12	3	1	50
Provide hands on learning opportunities	19	18	9	2	2	50
Give constructive feedback on students works	11	26	12	1	0	50

**Figure 4.3.20.**

*Bar graph Representing Responses of Primary Teachers for Questions Related to Creating a Caring, Equitable Community of Learners*



- Figure 4.3.20. shows that 18 primary teachers believe in creating stimulating environment for optimum learning daily, 15 primary teachers feel it is good to create stimulating environment for optimum learning once a week, 13 primary teachers create stimulating environment for optimum learning few times a month, only 2 primary teachers create stimulating environment for optimum learning once in 2-3 months while only 2 primary teachers in create a stimulating environment for optimum learning once in an academic term
- 15 primary teachers provide opportunities for inclusive learning on daily basis for creating a caring, equitable community of learners, 21 primary teachers believe in providing opportunities for inclusive learning once a week, 8 primary teacher provide opportunities for inclusive learning few times a month, 6 primary teachers think of providing opportunities for inclusive learning few times in 2-3 months

- 15 primary teachers provide activities to cater to the learners with different learning styles on daily basis for creating a caring, equitable community of learners, 19 primary teachers provide activities to cater to the learners with different learning styles for once in a week, 12 primary teachers believe in providing activities to cater to the learners with different learning styles few times a month, 3 primary teachers believe in providing activities to cater to the learners with different learning styles few times in 2-3 months, only 1 primary teacher believes in providing activities to cater to the learners with different learning styles once in an academic term
- 19 primary teachers provide hands on learning opportunities on daily basis for creating a caring, equitable community of learners, 18 primary teachers provide hands on learning opportunities once in a week, 12 provide hands on learning opportunities few times a month for creating a caring, equitable community of learners, 3 primary teachers provide hands on learning opportunities few times in 2-3 months for creating a caring, equitable community of learners, 2 primary teachers provide hands on learning opportunities once in an academic term for creating a caring, equitable community of learners.
- 11 primary teachers give constructive feedback on students works on daily basis for creating a caring, equitable community of learners, 26 primary teachers give constructive feedback on students works once in a week, 12 primary teachers give constructive feedback on students works few times a month

Gist of the practices followed by the primary teachers is given below.

*For creating caring, equitable community of learners, teachers teaching in primary conduct activities like planning field trips, nature walk, group games, provide materials for experiments, creative art, dramatics, celebration of festivals, religion days. They provide activities like puzzles, mazes, domino cards, ask open ended questions, materials for seriation, classification, sorting for developing critical thinking and problem-solving skills. To promote cooperative and group activities, the teachers encourage students to involve themselves in circle time activities, dramatization, outdoor/indoor play, doll/ sand/ block/ water play, art and craft activities. They also plan break out room activities during the pandemic for the same.*

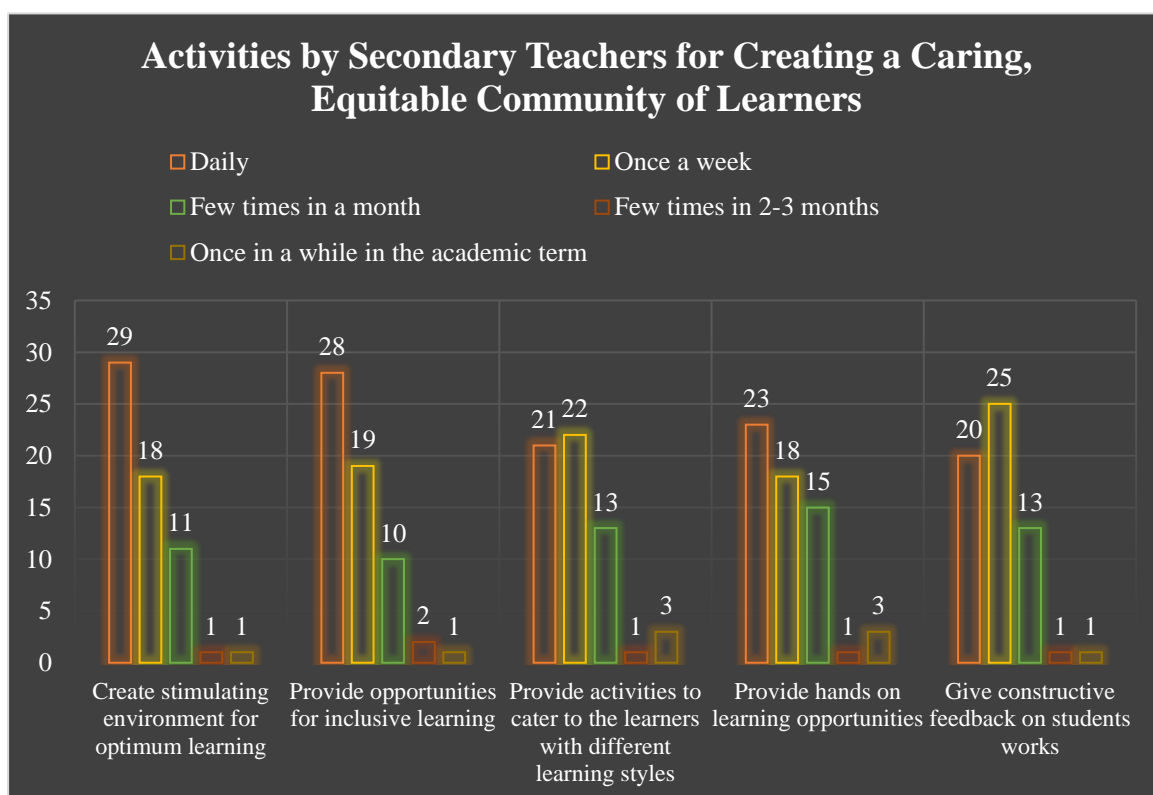
**Table 4.3.21.**

*Checklist responses of Secondary Teachers for Questions Related to Creating a Caring, Equitable Community of Learners*

<b>Statement</b>	<b>Daily</b>	<b>Once a week</b>	<b>Few times in a month</b>	<b>Few times in 2-3 months</b>	<b>Once in a while in the academic term</b>	<b>Total</b>
Create stimulating environment for optimum learning	29	18	11	1	1	60
Provide opportunities for inclusive learning	28	19	10	2	1	60
Provide activities to cater to the learners with different learning styles	21	22	13	1	3	60
Provide hands on learning opportunities	23	18	15	1	3	60
Give constructive feedback on students works	20	25	13	1	1	60

**Figure 4.3.21.**

*Bar graph Representing responses of Secondary Teachers for Questions Related to Creating a Caring, Equitable Community of Learners*



- Figure 4.3.21. shows that 29 secondary teachers create stimulating environment for optimum learning on daily basis, 18 secondary teachers believe in creating stimulating environment for optimum learning once a week, 11 secondary teachers believe in creating stimulating environment for optimum learning few times a month, only 1 secondary teacher creates stimulating environment for optimum learning few times in 2-3 months and once in an academic term respectively for creating a caring, equitable community of learners.
- 28 secondary teachers provide opportunities for inclusive learning on daily basis, 19 secondary teachers provide opportunities for inclusive learning once a week, 10 secondary teacher provide opportunities for inclusive learning few times a month, 2 teachers teaching in secondary think of providing opportunities for inclusive learning few times in 2-3 months while only 1 secondary teacher provide opportunities for inclusive learning once in an academic term for creating a caring, equitable community of learners.
- 21 secondary teachers provide activities that cater to the learners with different learning styles on daily basis, 22 teachers teaching in secondary provide activities

to cater to the learners with different learning styles for once in a week, 13 secondary teachers provide activities to cater to the learners with different learning styles few times a month, 1 teacher in secondary believes in providing activities to cater to the learners with different learning styles few times in 2-3, only 3 secondary teachers provide activities that cater to the learners with different learning styles once in an academic term for creating a caring, equitable community of learners.

- 23 secondary teachers provide hands on learning opportunities on daily basis, 18 teachers provide hands on learning opportunities once in a week, 15 secondary teachers provide hands on learning opportunities few times a month, one 1 teacher in secondary provides hands on learning opportunities few times in 2-3 months, a handful of secondary teachers (3) provide hands on learning opportunities once in an academic term for creating a caring, equitable community of learners.
- 20 teachers teaching in secondary give constructive feedback on students works on daily, 25 secondary teachers give constructive feedback to students once in a week, 13 secondary teachers give constructive feedback on students works few times a month, only 1 secondary teacher believes in giving constructive feedback on students works few times in 2-3 months while 1 secondary teacher gives constructive feedback on students works once in an academic term for creating a caring, equitable community of learners.

Gist of the practices followed by the secondary teachers is given below.

*For creating caring, equitable community of learners, teachers teaching in secondary engage students in field visits, celebrations of festivals, assembly, group activities on a regular basis and a few of them also take them for nature walks, plan music and drama. To develop critical thinking skills, secondary teachers involve students in group discussions, case studies, experiential learning. For group work they plan activities like group assemblies, role play and various other cooperative learning activities.*

## **Conclusion**

Most of the teachers in pre-primary, secondary create stimulating environment by hands on learning, giving constructive feedback, catering to learners with different learning

styles on a daily basis or at least once a week. This can be because most of the teachers in pre-primary get to change the plan as per their class requirements and secondary teachers are mostly subject teachers so they change as per their subjects. However, handful of them plan few times in 2-3 months or once in an academic term. The trend in the primary teachers is that they plan these activities mostly once a week, few of them do it on a daily basis. Overall, maximum teachers try to create a caring, equitable community of learners.

**DAP 2- Fostering community connection and developing reciprocal partnerships with families**

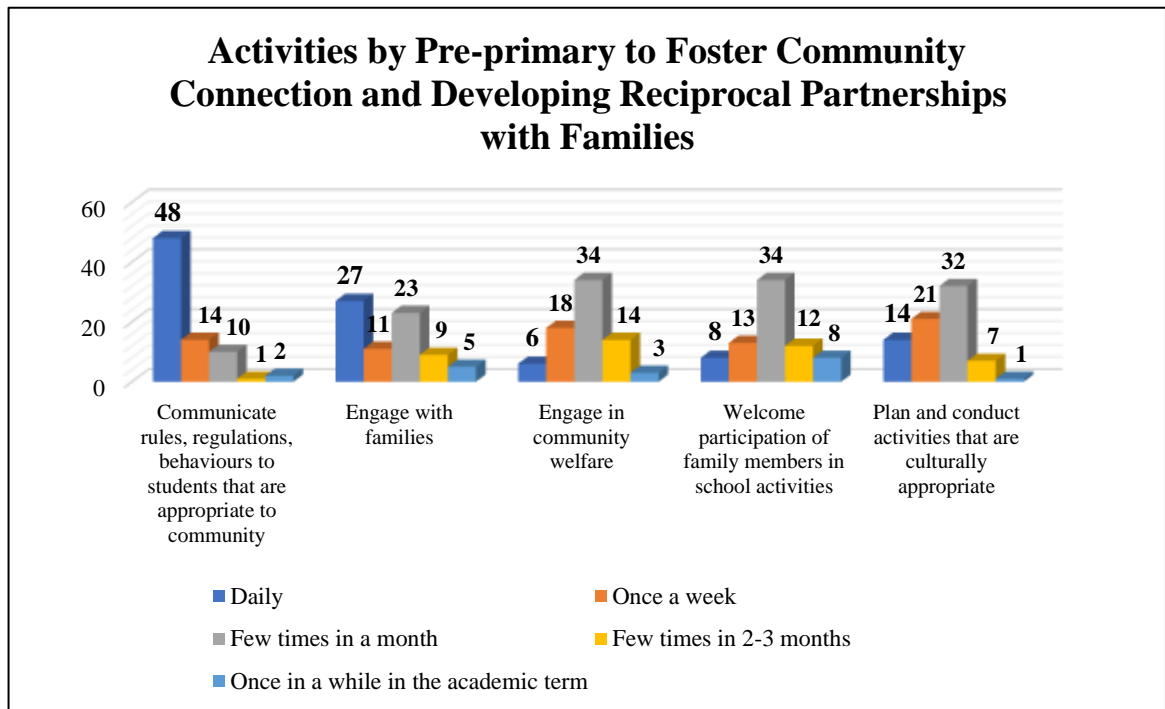
**Table 4.3.22.**

*Checklist Responses of Pre-primary Teachers for Questions Related to Fostering Community Connection and Developing Reciprocal Partnerships with Families*

<b>Statement</b>	<b>Daily</b>	<b>Once a week</b>	<b>Few times in a month</b>	<b>Few times in 2-3 months</b>	<b>Once in a while in the academic term</b>	<b>Total</b>
Communicate rules, regulations, behaviours to students that are appropriate to community	48	14	10	1	2	75
Engage with families	27	11	23	9	5	75
Engage in community welfare	6	18	34	14	3	75
Welcome participation of family members in school activities	8	13	34	12	8	75
Plan and conduct activities that are culturally appropriate	14	21	32	7	1	75

**Figure 4.3.22.**

*Bar graph Representing Responses of Pre-primary Teachers for Questions Related to Fostering Community Connection and Developing Reciprocal Partnerships with Families*



- Figure 4.3.22 shows that 48 pre-primary teachers communicate rules, regulations, behaviours to students that are appropriate to community on daily basis, 14 pre-primary teachers communicate rules, regulations, behaviours to students that are appropriate to community once a week, 10 teachers teaching in pre-primary communicate rules, regulations, behaviours to students that are appropriate to community few times a month, only 1 pre-primary teacher communicates rules, regulations, behaviours to students that are appropriate to community few times in 2-3 months, handful (2) pre-primary teachers communicate rules, regulations, behaviours to students that are appropriate to community once in an academic term for fostering community connection and developing reciprocal partnerships with families.
- 27 pre-primary teachers engage with parents/families on daily basis, 11 pre-primary teachers engage with families once a week, 23 teachers in pre-primary engage with families few times a month, 9 teachers from pre-primary engage with parents/families few times in 2-3 months, 5 pre-primary teachers engage with



parents/families once in an academic term for fostering community connection and developing crucial reciprocal partnerships with families.

- 6 pre-primary teachers engage in community welfares on daily basis, 18 pre-primary teachers engage in community welfares once a week, 34 pre-primary teachers engage in community welfares few times a month, 14 teachers in pre-primary engage in community welfares few times in 2-3 months, 3 teachers teaching in pre-primary believe in engaging in community welfares once in an academic term for fostering community connection and developing reciprocal partnerships with families
- 8 pre-primary teachers welcome participation of family members in school activities on daily basis, 13 teachers teaching in pre-primary welcome participation of family members in school activities once a week, 34 pre-primary teachers welcome participation of family members in school activities few times a month, 12 pre-primary teachers welcome participation of family members in school activities few times in 2-3 months, 8 pre-primary teachers welcome participation of family members in school activities once in an academic term for fostering community connection and developing reciprocal partnerships with families
- 14 teachers teaching in pre-primary plan and conduct activities that are culturally appropriate on daily basis, 21 teachers plan and conduct activities that are culturally appropriate once a week, 32 pre-primary teachers plan and conduct activities few times a month that are culturally appropriate, 7 teachers in pre-primary plan and conduct activities that are culturally appropriate few times in 2-3 months, only 1 pre-primary teacher believes in planning and conducting activities that are culturally appropriate once in an academic term for fostering community connection and developing crucial reciprocal partnerships with families

Gist of activities by pre-primary teacher conducted for fostering community connection and developing reciprocal partnerships with families.

*For fostering community connection and developing reciprocal partnerships with families' pre-primary teachers communicate with parents via PTM, calls, messages and during the pandemic it is done through online meetings. A galore of activities are conducted to engage parents like participation in school activities like celebration of different festivals, national and international days, parents conducting activities for children, etc. Most of the schools engage in community welfare by planning donations drives, fairs and exhibitions, while a few engage in sponsored walks and also involve parents, families of children to conduct activities for the welfare of the community.*

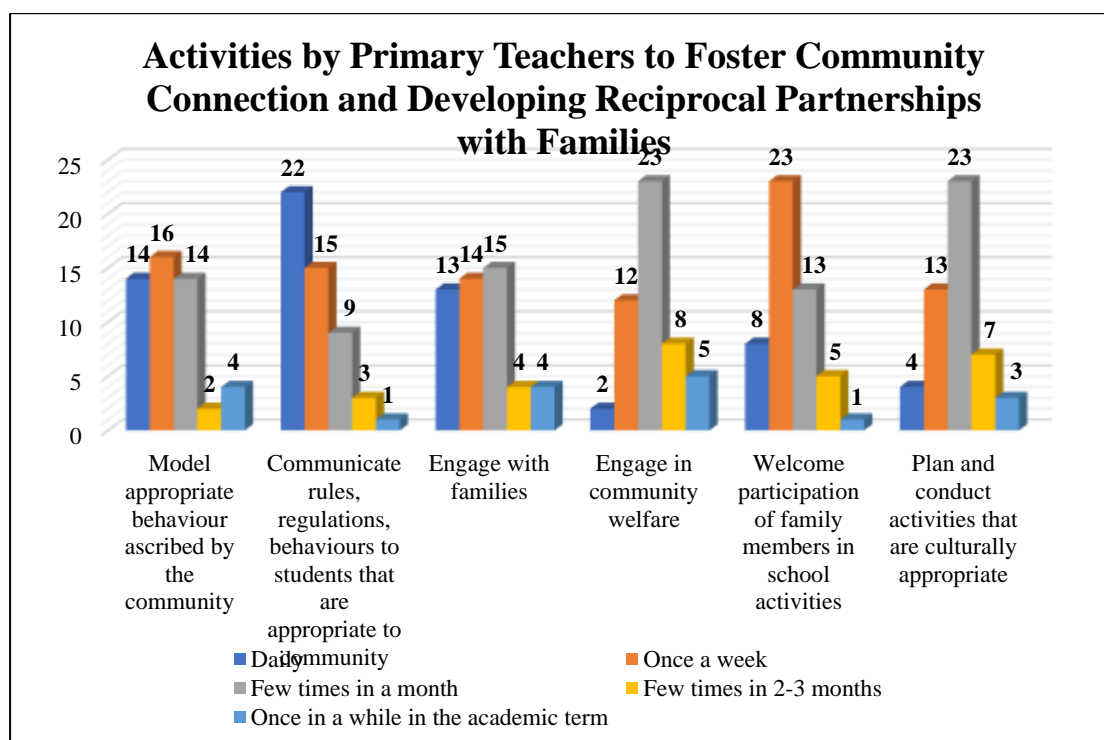
**Table 4.3.23.**

*Checklist Responses of Primary Teachers for Questions Related to Fostering  
Community Connection and Developing Reciprocal Partnerships with Families*

<b>Statement</b>	<b>Daily</b>	<b>Once a week</b>	<b>Few times in a month</b>	<b>Few times in 2-3 months</b>	<b>Once in a while in the academic term</b>	<b>Total</b>
Model appropriate behaviour ascribed by the community	14	16	14	2	4	50
Communicate rules, regulations, behaviours to students that are appropriate to community	22	15	9	3	1	50
Engage with families	13	14	15	4	4	50
Engage in community welfare	2	12	23	8	5	50
Welcome participation of family members in school activities	8	23	13	5	1	50
Plan and conduct activities that are culturally appropriate	4	13	23	7	3	50

**Figure 4.3.23.**

*Bar graph Representing Responses of Primary Teachers for Questions Related to Fostering Community Connection and Developing Reciprocal Partnerships with Families*



- Figure 4.3.23. shows that 14 teachers teaching in primary model appropriate behaviour ascribed by the community on daily basis, 16 primary teachers model appropriate behaviour ascribed by the community once a week, 14 teachers teaching in primary model appropriate behaviour ascribed by the community few times a month, 2 primary teachers believe in model appropriate behaviour ascribed by the community few times in 2-3 months, 4 primary teachers model appropriate behaviour ascribed by the community once in an academic term for fostering community connections and developing reciprocal partnerships with families.
- 22 primary teachers communicate rules, regulations, behaviours to students that are appropriate to community on daily basis, 15 teachers in primary communicate rules, regulations, behaviours to students that are appropriate to community once a week, 9 primary teachers communicate rules, regulations, behaviours to students few times a month, 3 teachers teaching in primary communicate rules, regulations, behaviours to students that are appropriate to community few times in 2-3 months, only 1 primary teacher communicates rules, regulations, behaviours to students that

are appropriate to community once in an academic term for fostering community connections and developing reciprocal partnerships with families.

- 3 primary teachers engage with families on daily basis, 14 primary teachers engage with families once a week, 15 teachers in primary engage with families few times in a month, 4 primary teachers engage with families few times in 2-3 months, 4 primary teachers engage with families once in an academic term for fostering community connections and developing crucial reciprocal partnerships with families.
- 2 teachers teaching in primary engage in community welfares on daily basis, 12 primary teachers engage in community welfares once a week, 23 primary teachers engage in community welfares few times a month, 8 teachers in primary engage in community welfares few times in 2-3 months, 5 primary teachers engage in community welfares once in an academic term for fostering community connections and developing reciprocal partnerships with families.
- 8 teachers in primary welcome participation of family members in school activities on daily basis, 23 primary teachers welcome participation of family members in school activities once in a week, 13 teachers in primary welcome participation of family members in school activities few times a month, 5 teachers teaching in primary welcome participation of family members in school activities few times in 2-3 months, only 1 primary teacher welcomes participation of family members in school activities once in an academic term for fostering community connections and developing reciprocal partnerships with families.
- 4 teachers teaching in primary plan and conduct activities that are culturally appropriate on daily basis, 13 primary teachers plan and conduct activities that are culturally appropriate once a week, 23 teachers in primary plan and conduct activities that are culturally appropriate few times a month, 7 primary teachers plan and conduct activities that are culturally appropriate few times in 2-3 months, only 3 primary teachers plan and conduct activities that are culturally appropriate once in an academic term for fostering community connections and developing partnerships with families.

Gist of activities by primary teacher conducted for fostering community connection and developing reciprocal partnerships with families.

*For fostering community connection and developing reciprocal partnerships with families' primary teachers communicate with parents via PTM, calls, messages and during the pandemic it is done through online meetings. Mammoth of activities are conducted to engage parents like participation in school activities like celebration of different days, parents conducting activities for children, etc. Most of the schools engage in community welfare by planning donations drives, sponsored walks, while a few engage in fairs and exhibitions and also involve parents, families of children to conduct activities for the welfare of the community.*

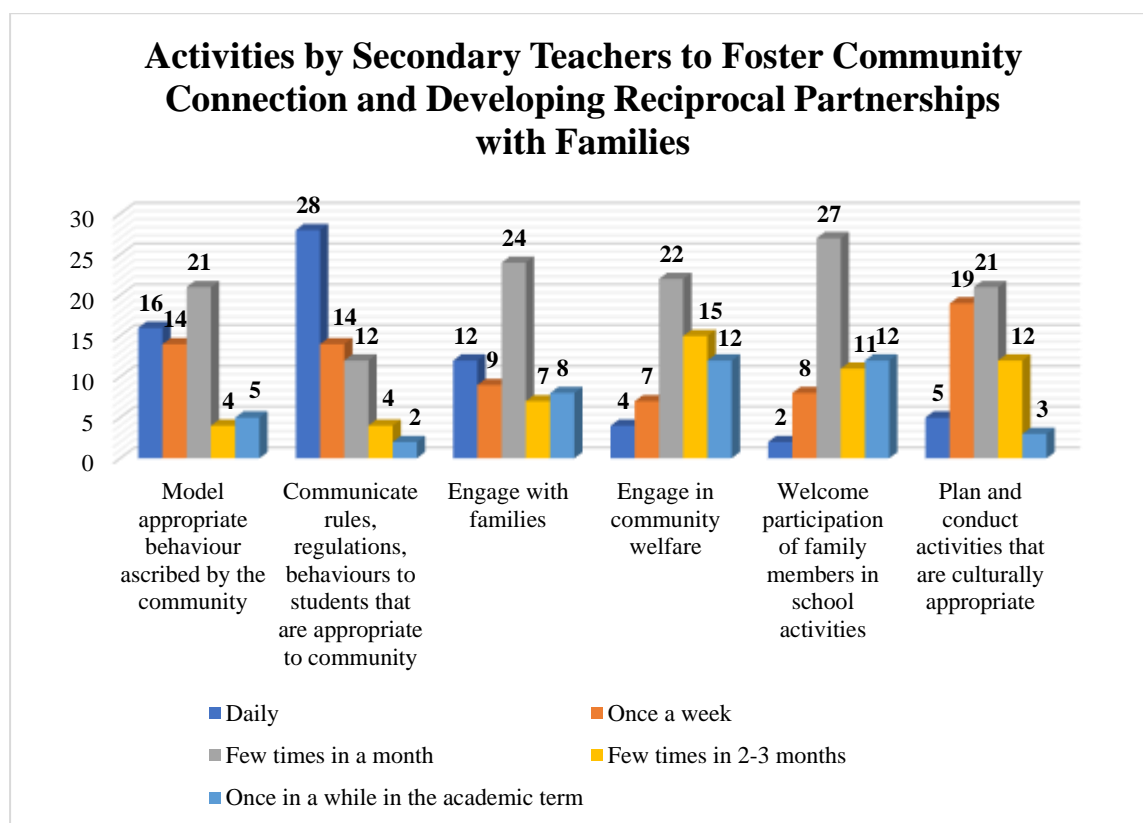
**Table 4. 3.24.**

*Checklist Responses of Secondary Teachers for Questions Related to Fostering Community Connection and Developing Reciprocal Partnerships with Families*

<b>Statement</b>	<b>Daily</b>	<b>Once a week</b>	<b>Few times in a month</b>	<b>Few times in 2-3 months</b>	<b>Once in a while in the academic term</b>	<b>Total</b>
Model appropriate behaviour ascribed by the community	16	14	21	4	5	60
Communicate rules, regulations, behaviours to students that are appropriate to community	28	14	12	4	2	60
Engage with families	12	9	24	7	8	60
Engage in community welfare	4	7	22	15	12	60
Welcome participation of family members in school activities	2	8	27	11	12	60
Plan and conduct activities that are culturally appropriate	5	19	21	12	3	60

**Figure 4. 3.24.**

*Bar graph Representing Responses of Secondary Teachers for Questions Related to Fostering Community Connection and Developing Reciprocal Partnerships with Families*



- Figure 4.3.24. denotes 16 teachers in secondary model appropriate behaviour ascribed by the community on daily basis, 14 secondary teachers model appropriate behaviour ascribed by the community once a week, 21 teachers in secondary model appropriate behaviour ascribed by the community few times a month, 4 secondary teachers model appropriate behaviour ascribed by the community few times in 2-3 months, 5 secondary teachers model appropriate behaviour ascribed by the community once in an academic term for fostering community connections and developing reciprocal partnerships with families.
- 28 teachers teaching in secondary communicate rules, regulations, behaviours to students that are appropriate to community, 14 secondary teachers communicate rules, regulations, behaviours to students that are appropriate to community once a week, 12 teachers in secondary communicate rules, regulations, behaviours to students that are appropriate to community few times a month, 4 secondary teachers communicate rules, regulations, behaviours to students that are appropriate to community few times in 2-3 months, 2 secondary teachers communicate rules, regulations, behaviours to students that are appropriate to community once in an academic term.

community few times in 2-3 months for fostering community connections and developing partnerships with families, 2 secondary teachers communicate rules, regulations, behaviours to students that are appropriate to community once in an academic term fostering community connections and developing reciprocal partnerships with families.

- 12 teachers teaching in secondary engage with families on a daily basis, 9 secondary teachers feel they engage with families once a week, 24 secondary teachers engage with families few times in a month, 7 teachers in secondary engage with families few times in 2-3 months while 8 teachers teaching in secondary feel they engage with families once a while in an academic term for fostering community connections and developing partnerships with families.
- 4 secondary teachers feel they engage in community welfare on a daily basis, 7 secondary teachers engage in community welfare once a week, 22 teachers teaching in secondary engage in community welfare few times in a month, 15 teachers in secondary engage in community welfare few times in 2-3 month, 12 teachers feel they engage in community welfare once in a while in academic fostering community connections and developing reciprocal partnerships with families.
- 2 teachers in secondary welcome participation of family members in school activities on daily basis, 8 teachers in secondary welcome participation of family members in school activities once a week, 27 teachers teaching in secondary welcome participation of family members in school activities few times in a month, 11 teachers teaching in secondary feel they welcome participation of family members in school activities few times in 2-3 month, 12 teachers teaching in secondary feel they welcome participation of family members in school activities once in a while in an academic term for fostering community connections and developing partnerships with families.
- 5 teachers teaching in secondary plan and conduct activities that are culturally appropriate on daily basis, 19 secondary teachers plan and conduct culturally appropriate activities once a week, 21 secondary teachers plan and conduct culturally appropriate activities few times in a month, 12 teachers teaching in secondary plan and conduct culturally appropriate activities few times in 2-3 months, 3 teachers plan and conduct activities that are culturally appropriate once in an academic term fostering community connections and developing reciprocal partnerships with families.

Gist of activities by secondary teacher conducted for fostering community connection and developing reciprocal partnerships with families.

*For fostering community connection and developing reciprocal partnerships with families' teachers in secondary communicate with parents mostly via PTM, calls, messages and during the pandemic it is done through online meetings. Enormous activities are conducted to engage parents like participation in school activities like celebration of different days, parents conducting activities for children, etc. Most of the schools engage in community welfare by planning donations drives, sponsored walks, fairs and exhibitions and also involve parents, families of children to conduct activities for the welfare of the community. Teachers in secondary also take help of their students to plan community outreach programmes for the welfare of local communities.*

## **Conclusion**

All teachers understand the need to involving parents in day-to-day activities of school and also involving students in community welfare and they plan various activities for the same. In comparison of pre-primary and primary, secondary teachers are more involved in community work whereas teachers teaching in pre-primary and primary engage a lot more with parents and families. The main reason behind could be that secondary students are older and can be involved in planning and executing community work while since children are small in pre-primary, they require their parents to be around.



**DAP 3- To enhance child's development and learning**

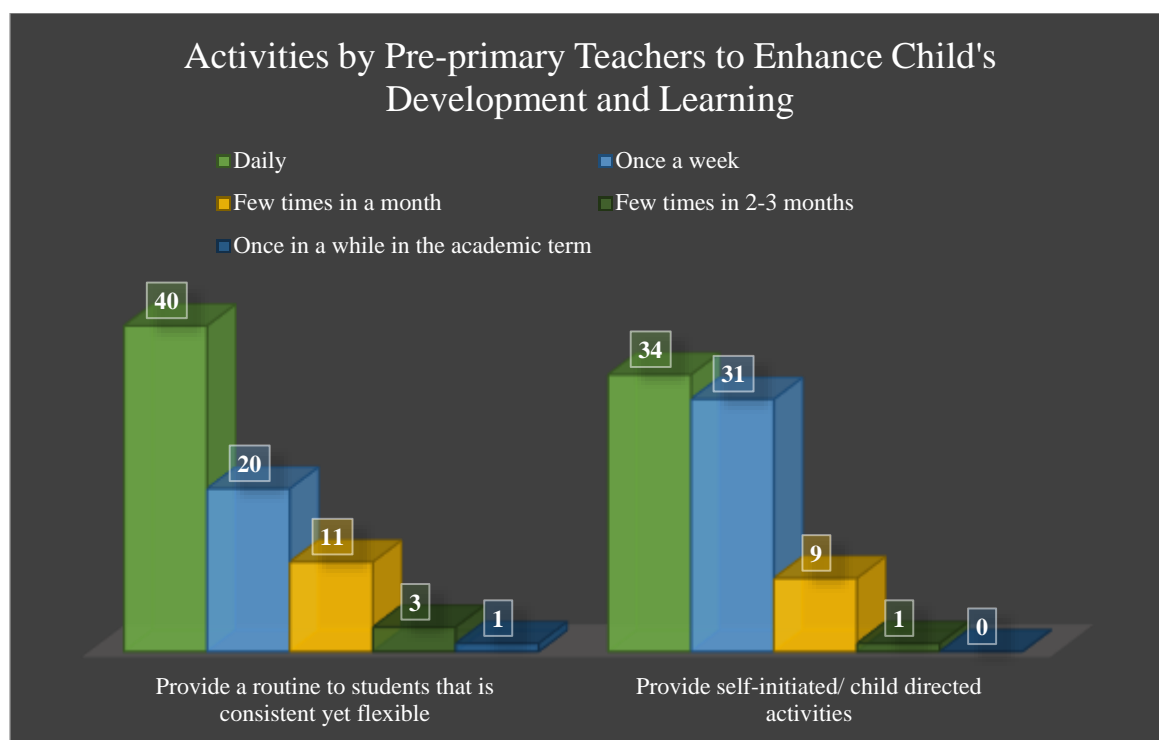
**Table 4.3.25.**

*Checklist Responses of Pre-primary Teachers Related to Enhance Child's Development and Learning*

Statement	Daily	Once a week	Few times in a month	Few times in 2-3 months	Once in a while in the academic term	Total
Provide a routine to students that is consistent yet flexible	40	20	11	3	1	75
Provide self-initiated/ child directed activities	34	31	9	1	0	75

**Figure 4. 3.25.**

*Bar graph Representing responses of Pre-primary Teachers Related to Enhance Child's Development and Learning*



- Figure 4.3.25. represents 40 pre-primary teachers provide a routine to students that is consistent yet flexible on daily basis, 20 pre-primary teachers provide a routine to students that is consistent yet flexible once a week, 11 teachers in pre-primary provide a routine to students that is consistent yet flexible few times a month, few (3) pre-primary teachers provide a routine to students that is consistent yet flexible few times in 2-3 months, only 1 teacher provides a routine to students that is consistent yet flexible once in an academic term to enhance child development and learning.
- 34 teachers teaching in pre-primary provide self-initiated/ child directed activities on daily basis to their children, 31 pre-primary teachers provide self-initiated/ child directed activities once a week, 9 pre-primary teachers provide self-initiated/ child directed activities few times a month, only 1 pre-primary teacher provide self-initiated/ child directed activities few times in 2-3 months to enhance child development and learning.

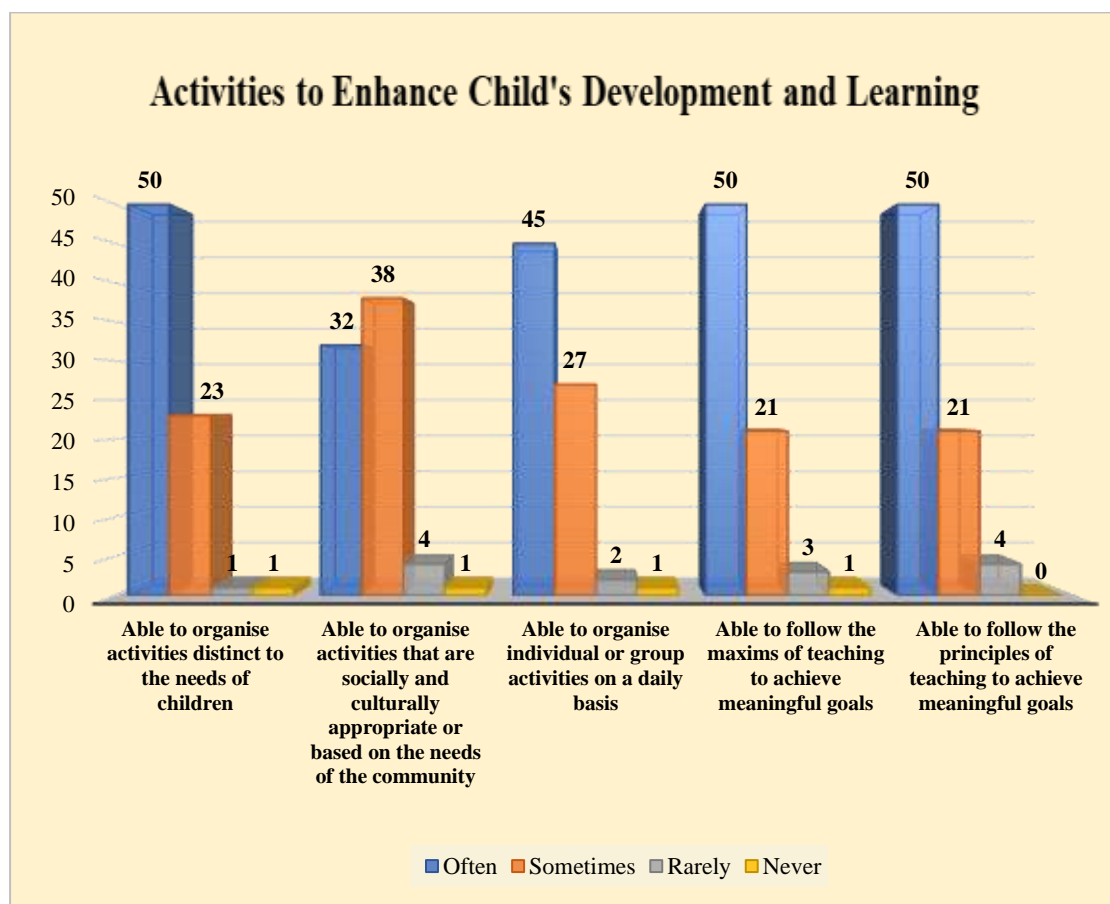
**Table 4.2.26.a.**

*Checklist Responses of Pre-primary Teachers for Question (01-05) Related to Enhance Child's Development and Learning*

<b>Statement</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>	<b>Total</b>
Able to organise activities distinct to the needs of children	50	23	1	1	75
Able to organise activities that are socially and culturally appropriate or based on the needs of the community	32	38	4	1	75
Able to organise individual or group activities on a daily basis	45	27	2	1	75
Able to follow the maxims of teaching to achieve meaningful goals	50	21	3	1	75
Able to follow the principles of teaching to achieve meaningful goals	50	21	4	0	75

**Figure 4. 3.26.a.**

*Bar graph Representing Responses of Pre-primary Teachers for Questions (01-05)  
Related to Enhance Child's Development and Learning*



- Figure 4.3.26.a. signifies 50 pre-primary teachers are often able to organise activities distinct to the needs of children, 23 pre-primary teachers are sometimes able to organise activities distinct to the needs of children, 1 pre-primary teacher is able to organise activities distinct to the needs of children rarely, 1 pre-primary teacher feels she is never able to organise activities distinct to the needs of children to enhance child development and learning.
- 32 pre-primary teachers are often able to organise activities that are socially and culturally appropriate or based on the needs of the community, 38 pre-primary teachers are sometimes able to organise activities that are socially and culturally appropriate or based on the needs of the community, 4 pre-primary teachers are able to organise activities that are socially and culturally appropriate or based on the needs of the community rarely, 1 pre-primary teacher feels she is never able to

organise activities that are socially and culturally appropriate or based on the needs of the community to enhance child development and learning.

- 45 teachers in pre-primary are able to often organise individual or group activities on daily basis, 27 pre-primary teachers are able to organise individual or group activities on daily basis sometimes, 2 pre-primary teachers are able to organise individual or group activities on daily basis rarely, only 1 teacher teaching in pre-primary feels she is never able to organise individual or group activities on daily basis to enhance child development and learning.
- 50 pre-primary teachers are able to follow the maxims of teaching to achieve meaningful goals often, 21 pre-primary teachers are sometimes able to follow the maxims of teaching to achieve meaningful goals, 3 pre-primary teachers are able to follow the maxims of teaching to achieve meaningful goals, only 1 pre-primary teacher is never able to follow the maxims of teaching to achieve meaningful goals to enhance child development and learning.
- 50 pre-primary teachers are often able to follow the principles of teaching to achieve meaningful goals, 21 teachers in pre-primary are sometimes able to follow the principles of teaching to achieve meaningful goals, only 4 teachers are rarely able to follow the principles of teaching to achieve meaningful goals to enhance child development and learning.

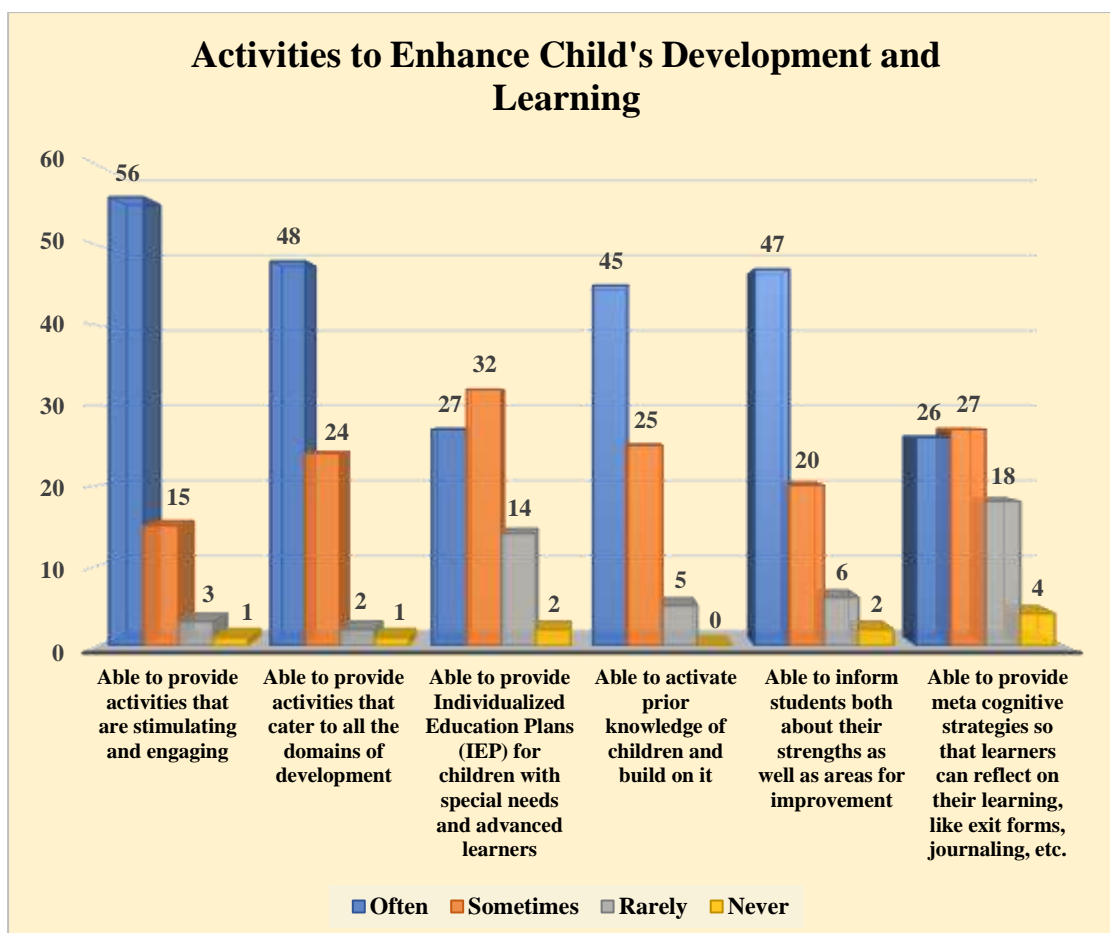
**Table 4.3.26.b.**

*Checklist Responses of Pre-primary Teachers for Questions (06-11) Related to Enhance Child's Development and Learning*

<b>Statement</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>	<b>Total</b>
Able to provide activities that are stimulating and engaging	56	15	3	1	75
Able to provide activities that cater to all the domains of development	48	24	2	1	75
Able to provide Individualized Education Plans (IEP) for children with special needs and advanced learners	27	32	14	2	75
Able to activate prior knowledge of children and build on it	45	25	5	0	75
Able to inform students both about their strengths as well as areas for improvement	47	20	6	2	75
Able to provide meta cognitive strategies so that learners can reflect on their learning, like exit forms, journaling, etc.	26	27	18	4	75

**Figure 4. 3. 26.b.**

*Bar graph Representing Responses of Pre-primary Teachers for Questions (06-11)  
Related to Enhance Child's Development and Learning*



- Figure 4.3. 26.b. denotes 56 teachers teaching in pre-primary are often able to provide activities that are stimulating to enhance child development and learning of teachers, 15 pre-primary teachers are sometimes able to provide activities that are stimulating, only 3 teachers are rarely able to provide activities that are stimulating to enhance child development and learning of teachers, only 1 pre-primary teacher feels she is never able to provide activities that are stimulating.
- 48 pre-primary teachers are often able to provide activities that cater to all the domains of development, 24 teachers in pre-primary are sometimes able to provide activities that cater to all the domains of development, only 2 pre-primary teachers are rarely able to provide activities that cater to all the domains of development, but 1 teacher feels she is never able to provide activities that cater to all the domains of development to enhance child development and learning.

- 27 teachers teaching in pre-primary are often able to provide individualised education plan (IEP) for children with special needs and advanced learners, 32 pre-primary teachers are sometimes able to provide individualised education plan (IEP) for children with special needs and advanced learners, 14 pre-primary teachers are rarely able to provide individualised education plan (IEP) for children with special needs and advanced learners, only 1 pre-primary teacher is never able to provide individualised education plan (IEP) for children with special needs and advanced learners to enhance child development and learning.
- 45 pre-primary teachers are often able to activate prior knowledge of children and build on it, 25 teachers teaching in pre-primary are sometimes able to activate prior knowledge of children and build on it to enhance child development and learning of teachers, however, 5 pre-primary teachers feel they are rarely able to activate prior knowledge of children and build on it to enhance child development and learning.
- 47 pre-primary teachers are often able to inform students both about their strengths as well as areas for improvement, 20 teachers in pre-primary are sometimes able to inform students both about their strengths as well as areas for improvement, 6 pre-primary teachers are rarely able to inform students both about their strengths as well as areas for improvement, only 2 pre-primary teachers are never able to inform students both about their strengths as well as areas for improvement to enhance child development and learning.
- 26 teachers in pre-primary are often able to provide meta cognitive strategies so that learners can reflect on their learning, like exit forms, journaling, etc., 27 pre-primary teachers are sometimes able to provide meta cognitive strategies so that learners can reflect on their learning, 18 pre-primary teachers are rarely able to provide meta cognitive strategies so that learners can reflect on their learning, while 4 pre-primary teachers feel they are never able to provide meta cognitive strategies so that learners can reflect on their learning, like exit forms, journaling, etc. to enhance child development and learning.

Gist of activities by pre-primary teachers to enhance child's development and learning

*To enhance child's development and learning, maximum teachers in pre-primary organise activities distinct to the needs of the learners often, plan group and individual child directed activities as well as teacher directed. Teachers follow maxims and principles of teaching to cater to holistic development of the child. This is done by engaging children in physical activities like yoga, gym, PT. They conduct games, stories telling, free play, sand play, water play, doll play, etc. for social-emotional development of children. For developing good language skills, teachers have all the boards, charts labelled, plan activities like RAS, PT/OT. Teachers provide stimulating environment, hands on experiences for developing cognitive skills. They also try to use scaffolding techniques like asking probing questions, peer learning for better understanding and learning. Based on these activities performed by children, teachers often give them constructive feedback to children.*

**Table 4.3.27.**

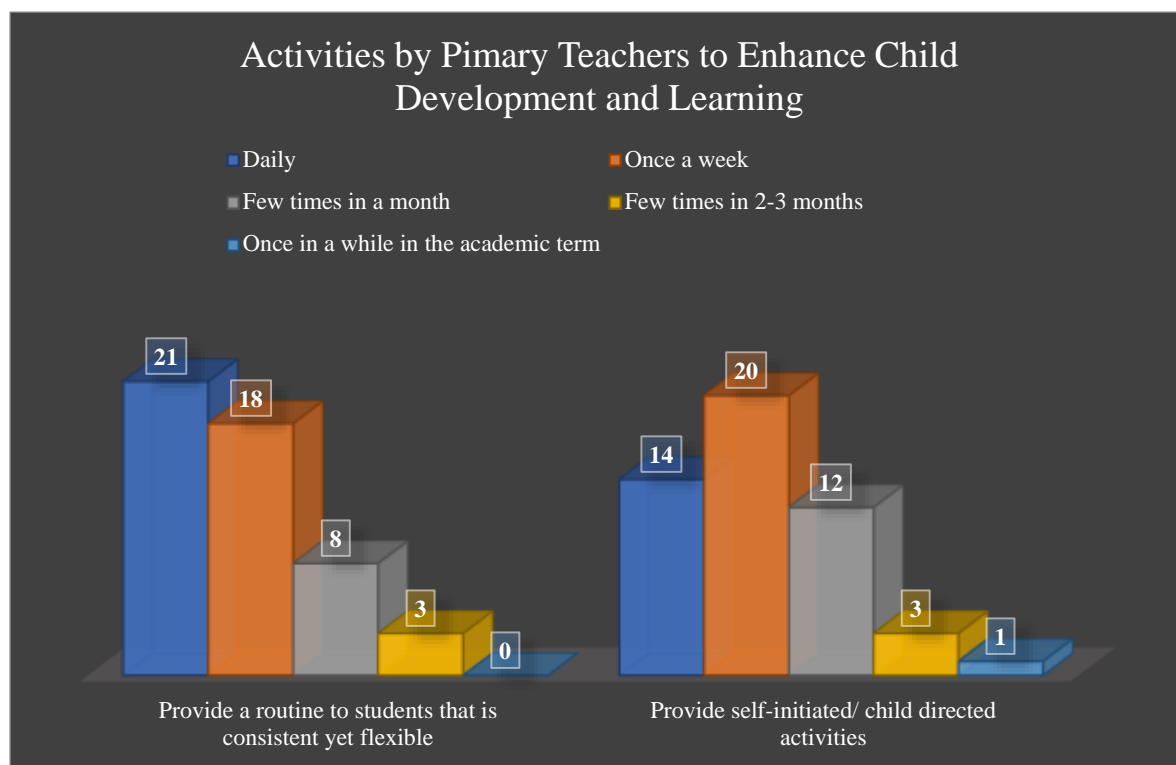
*Checklist Responses of Primary Teachers Related to Enhance Child's Development and Learning*

<b>Statement</b>	<b>Daily</b>	<b>Once a week</b>	<b>Few times in a month</b>	<b>Few times in 2-3 months</b>	<b>Once in a while in the academic term</b>	<b>Total</b>
Provide a routine to students that is consistent yet flexible	21	18	8	3	0	50
Provide self-initiated/child directed activities	14	20	12	3	1	50



**Figure 4.3. 27.**

*Bar graph Representing Responses of Primary Teachers Related to Enhance Child's Development and Learning*



- Figure 4.3.27 displays that 21 primary teachers provide a routine to students that is consistent yet flexible on daily basis, 18 teachers in primary provide a routine to students that is consistent yet flexible once in a week, 8 primary teachers provide a routine to students that is consistent yet flexible few times in a month, 3 of them provide a routine to students that is consistent yet flexible few times in 2-3 months to enhance child development and learning
- 14 primary teachers provide self-initiated/ child directed activities on daily basis, 20 teachers in primary provide self-initiated/ child directed activities once in a week, 12 primary teachers provide self-initiated/ child directed activities few times a month, only a handful (3) primary teachers provide self-initiated/ child directed activities few times in 2-3 months, only 1 primary teachers provide self-initiated/ child directed activities once in an academic term to enhance child development and learning.

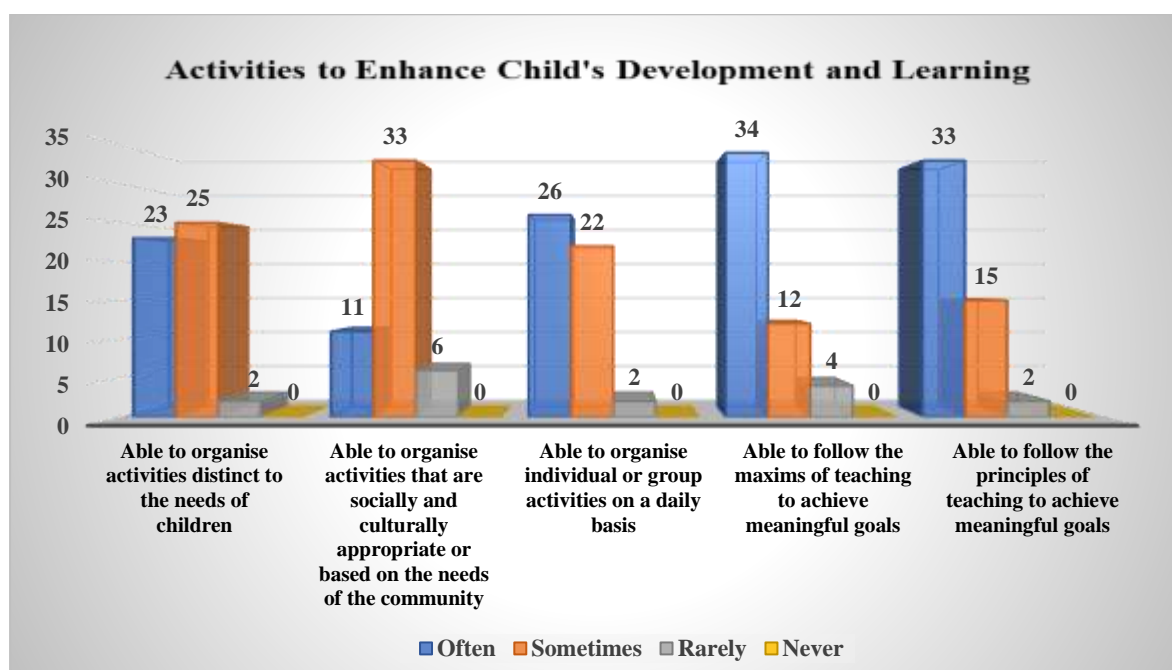
**Table 4.3.28.a.**

*Checklist Responses of Primary Teachers for Questions (01-05) Related to Enhance  
Child's Development and Learning*

Statement	Often	Sometimes	Rarely	Never	Total
Able to organise activities distinct to the needs of children	23	25	2	0	50
Able to organise activities that are socially and culturally appropriate or based on the needs of the community	11	33	6	0	50
Able to organise individual or group activities on a daily basis	26	22	2	0	50
Able to follow the maxims of teaching to achieve meaningful goals	34	12	4	0	50
Able to follow the principles of teaching to achieve meaningful goals	33	15	2	0	50

**Figure 4. 3. 28.a.**

*Bar graph Representing Responses of Primary Teachers for Questions (01-05)  
Related to Enhance Child's Development and Learning*



- Figure 4.3. 28.a. shows that 23 teachers teaching in primary are able to organise activities distinct to the needs of children often, 25 primary teachers are sometimes able to organise activities distinct to the needs of children and only 2 primary teachers are able to organise activities distinct to the needs of children rarely to enhance child development and learning.
- 11 primary teachers often organise activities that are socially and culturally appropriate or based on the needs of the community, 33 teachers in primary are able to organise socially and culturally appropriate activities sometimes, 6 primary teachers are able to organise activities that are socially and culturally appropriate or based on the needs of the community rarely to enhance child development and learning.
- 26 teachers in primary are able to organise individual or group activities on daily basis often, 22 primary teachers are sometimes able to organise individual or group activities on daily basis and only 2 primary teachers are rarely able to organise individual or group activities on daily basis to enhance child development and learning.
- 34 teachers teaching in primary are often able to follow the maxims of teaching to achieve meaningful goals, 12 primary teachers are sometimes able to follow the maxims of teaching to achieve meaningful goals however 4 primary teachers are able to follow the maxims of teaching to achieve meaningful goals rarely to enhance child development and learning.
- 33 primary teachers are often able to follow the principles of teaching to achieve meaningful goals, 15 teachers are sometimes able to follow the principles of teaching to achieve meaningful goals and only 2 primary teachers are rarely able to follow the principles of teaching to achieve meaningful goals to enhance child development and learning.

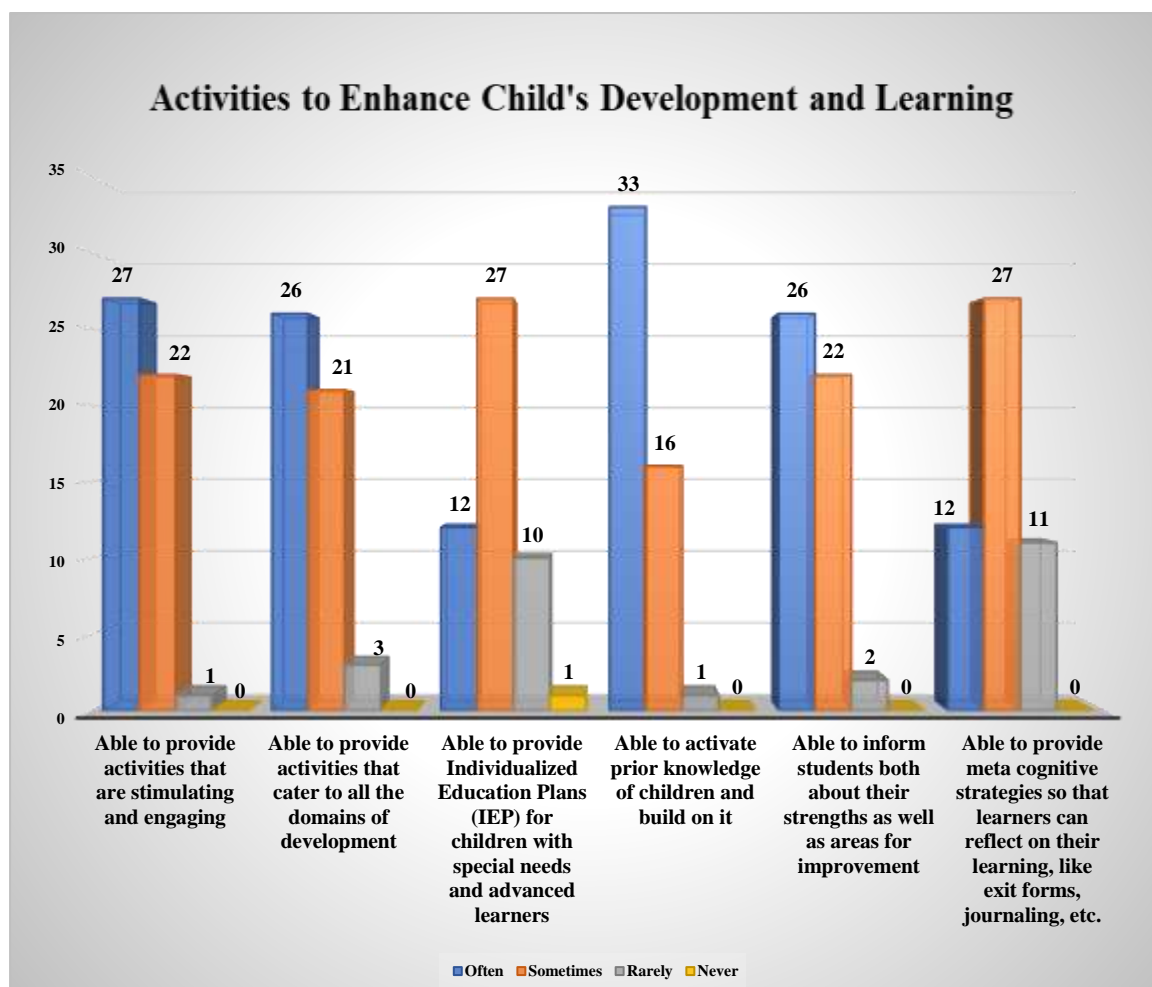
**Table 4.3.28.b.**

*Checklist Responses of Primary Teachers for Questions (06-11) Related to Enhance  
Child's Development and Learning*

<b>Statement</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>	<b>Total</b>
Able to provide activities that are stimulating and engaging	27	22	1	0	50
Able to provide activities that cater to all the domains of development	26	21	3	0	50
Able to provide Individualized Education Plans (IEP) for children with special needs and advanced learners	12	27	10	1	50
Able to activate prior knowledge of children and build on it	33	16	1	0	50
Able to inform students both about their strengths as well as areas for improvement	26	22	2	0	50
Able to provide meta cognitive strategies so that learners can reflect on their learning, like exit forms, journaling, etc.	12	27	11	0	50

**Figure 4.3. 28.b.**

*Bar graph Representing Responses of Primary Teachers for Questions (06-11)  
Related to Enhance Child's Development and Learning*



- Figure 4.3. 28.b. represents that 27 primary teachers often provide activities that are stimulating, 22 teachers are sometimes able to provide activities that are stimulating while 1 primary teacher rarely provides activities that are stimulating to enhance child development and learning
- 26 primary teachers often provide activities that cater to all the domains of development, 21 teachers teaching in primary are sometimes able to provide activities that cater to all the domains of development however 3 primary teachers are rarely able to provide activities that cater to all the domains of development to enhance child development and learning.
- 12 teachers in primary often provide individualised education plan (IEP) for children with special needs and advanced learners, 27 primary teachers are sometimes able to provide individualised education plan (IEP) for children with

special needs and advanced learners, 10 teachers are rarely able to provide individualised education plan (IEP) for children with special needs and advanced learners to enhance child development and learning.

- 33 primary teachers are often able to activate prior knowledge of children and build on it, 16 teachers are sometimes able to activate prior knowledge of children and build on it, however only 1 primary teacher feel she is rarely able to activate prior knowledge of children and build on it to enhance child development and learning
- 26 teachers teaching in primary often inform students both about their strengths as well as areas for improvement, 22 teachers are sometimes able to inform students both about their strengths as well as areas for improvement only 2 primary teachers are rarely able to inform students both about their strengths as well as areas for improvement to enhance child development and learning.
- 12 primary teachers are often able to provide meta cognitive strategies so that learners can reflect on their learning, like exit forms, journaling, etc., 27 teachers sometimes provide meta cognitive strategies so that learners can reflect on their learning, 11 teachers are rarely able to provide meta cognitive strategies so that learners can reflect on their learning, like exit forms, journaling, etc. to enhance child development and learning.

*To enhance child's development and learning, maximum teachers teaching in primary organise activities distinct to the needs of the learners often, plan child directed, teacher directed, group and individual activities. Teachers follow maxims and principles of teaching to cater to holistic development of the child. This is done by engaging children in physical activities like yoga, gym, dance, PT. They conduct games, stories telling, free play, etc. for social-emotional development of children. For developing good language skills, teachers have all the boards, charts labelled, plan activities like RAS, PT/OT, essay, elocution and debate competitions, etc. Teachers provide stimulating environment, hands on experiences for developing cognitive skills. They also try to use scaffolding techniques like asking probing questions, peer learning for better understanding and learning. Primary teachers sometime focus on providing metacognitive strategies like self-questioning, meditation, reflection for the growth and development of children. They focus on peer learning through cooperative and collaborative learning, Think-Pair-Share. Based on these activities performed by children, teachers often give them constructive feedback to children.*

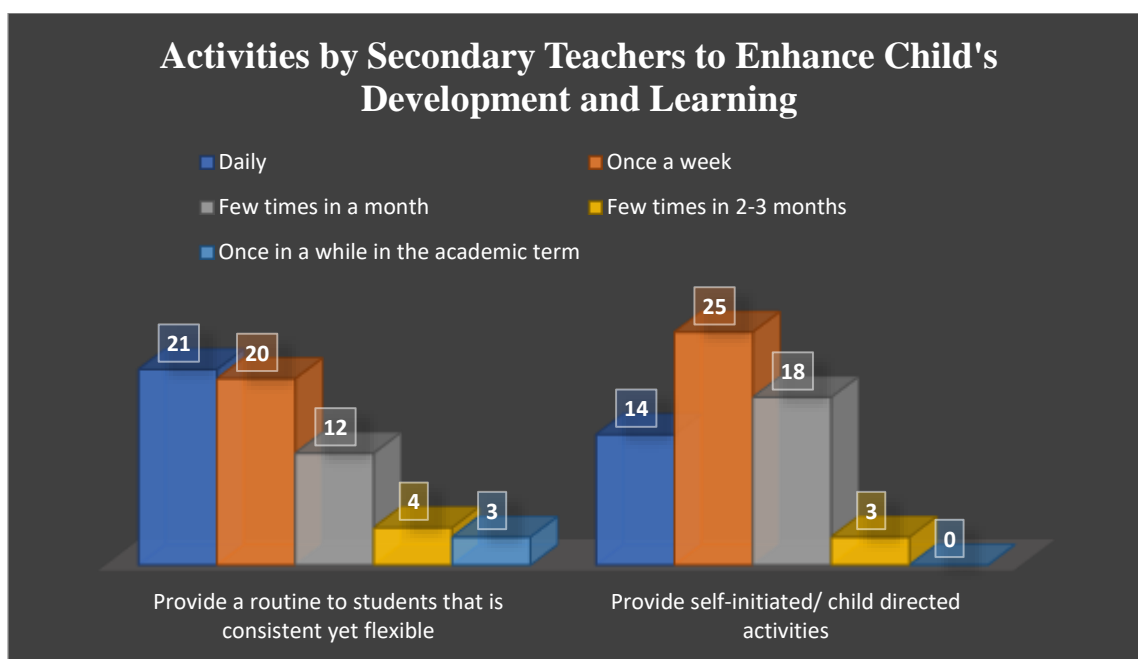
**Table 4.3.29.**

*Checklist Responses of Secondary Teachers Related to Enhance Child's Development and Learning*

Statement	Daily	Once a week	Few times in a month	Few times in 2-3 months	Once in a while in the academic term	Total
Provide a routine to students that is consistent yet flexible	21	20	12	4	3	60
Provide self-initiated/ child directed activities	14	25	18	3	0	60

**Figure 4.3.29.**

*Bar graph Representing Responses of Secondary Teachers Related to Enhance Child's Development and Learning*



- Figure 4.3.29. represents 21 secondary teachers provide a routine to students that is consistent yet flexible on daily basis, 20 teachers provide a routine to students that

is consistent yet flexible once in a week, 12 secondary teachers provide a routine to students that is consistent yet flexible few times in a month, 4 teachers teaching in secondary provide a routine to students that is consistent yet flexible few times in 2-3 months, while 3 secondary teachers provide a routine to students that is consistent yet flexible once in an academic term to enhance child development and learning.

- 14 teachers teaching in secondary provide self-initiated/ child directed activities on daily basis, 25 secondary teachers provide self-initiated/ child directed activities once in a week, 18 teachers provide self-initiated/ child directed activities few times a month, only 3 secondary teachers provide self-initiated/ child directed activities few times in 2-3 months to enhance child development and learning.

**Table 4.3.30.a.**

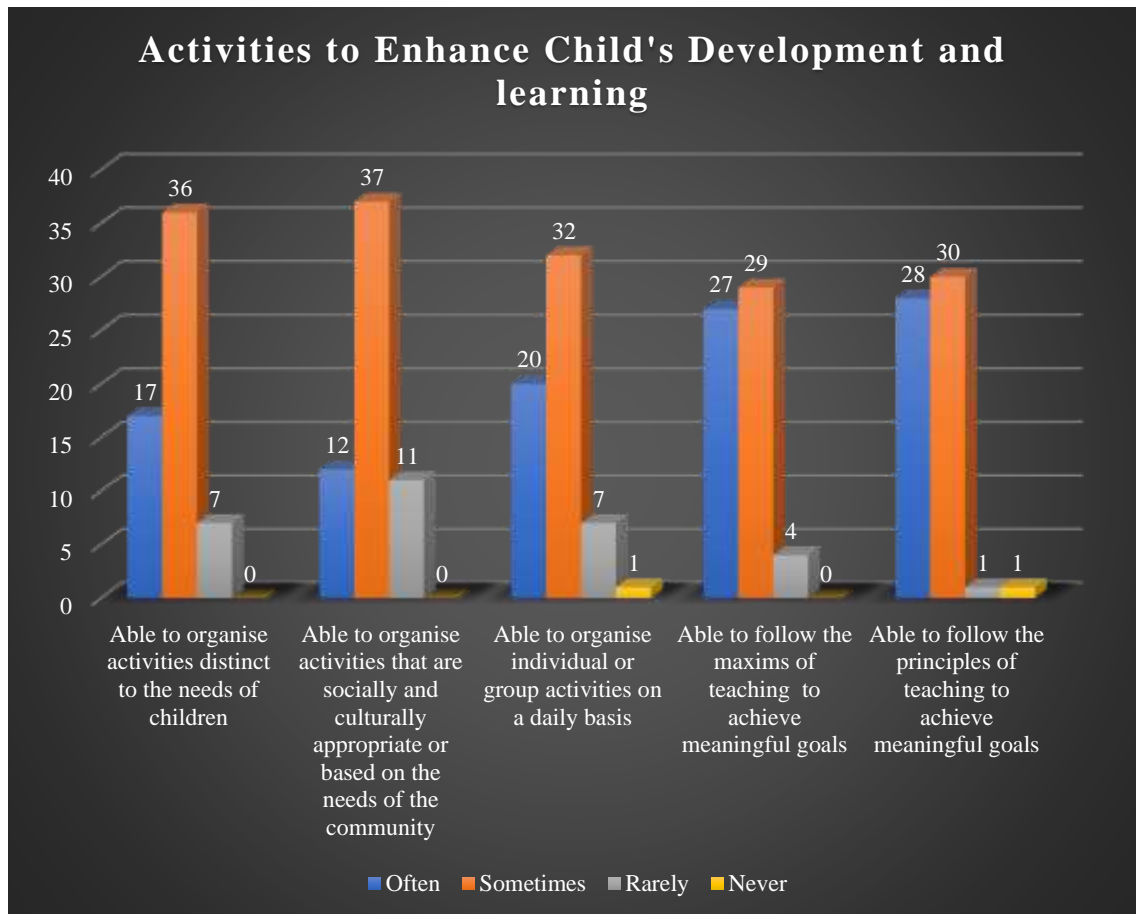
*Checklist Responses of Secondary Teachers for Questions (01-05) Related to Enhance Child's Development and Learning*

<b>Statement</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>	<b>Total</b>
Able to organise activities distinct to the needs of children	17	36	7	0	60
Able to organise activities that are socially and culturally appropriate or based on the needs of the community	12	37	11	0	60
Able to organise individual or group activities on a daily basis	20	32	7	1	60
Able to follow the maxims of teaching to achieve meaningful goals	27	29	4	0	60
Able to follow the principles of teaching to achieve meaningful goals	28	30	1	1	60



**Figure 4.3. 30.a.**

*Bar graph Representing Responses of Secondary Teachers for Questions (01-05)  
Related to Enhance Child's Development and Learning*



- Figure 4.3.30.a. denotes that 17 teachers teaching in secondary often organise activities distinct to the needs of children, 36 secondary teachers are able to organise activities distinct to the needs of children sometimes, 7 secondary teachers rarely organise activities distinct to the needs of children to enhance child development and learning.
- 12 secondary teachers often organise activities that are socially and culturally appropriate, 37 teachers sometime organise activities that are socially and culturally appropriate, 11 secondary teachers are rarely able to organise activities that are socially and culturally appropriate or based on the needs of the community rarely to enhance child development and learning.
- 20 teachers teaching in secondary are often able to organise individual or group activities on daily basis to enhance child development and learning, 32 secondary teachers are sometimes able to organise individual or group activities on daily,

while 7 secondary teachers organise individual or group activities on daily basis rarely and only 1 secondary teacher is never able to organise individual or group activities on daily basis.

- 27 secondary teachers often follow the maxims of teaching to achieve meaningful goals to enhance child development and learning, 29 teachers sometimes follow the maxims of teaching to achieve meaningful goals while 4 teachers teaching in secondary rarely follow the maxims of teaching to achieve meaningful goals.
- 28 secondary teachers are often following the principles of teaching to achieve meaningful goals, 30 teachers teaching in secondary sometimes follow the principles of teaching to achieve meaningful goals to enhance child development and learning of teachers, while 1 secondary teacher rarely follows the principles of teaching to achieve meaningful goals and 1 secondary teacher is never able to follow the principles of teaching to achieve meaningful goals to enhance child development and learning.

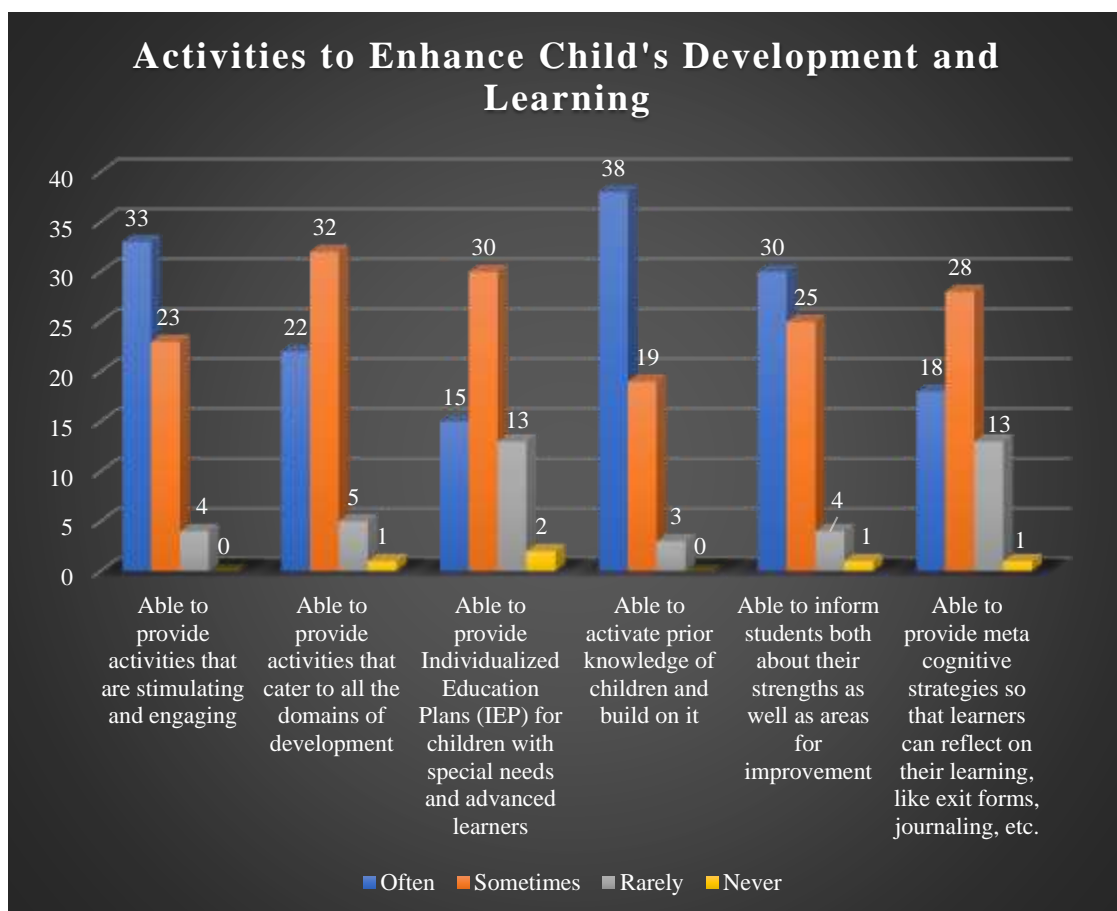
**Table 4.3.30.b.**

*Checklist Responses of Secondary Teachers for Questions (06-11) Related to Enhance  
Child's Development and Learning*

<b>Statement</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>	<b>Total</b>
Able to provide activities that are stimulating and engaging	33	23	4	0	60
Able to provide activities that cater to all the domains of development	22	32	5	1	60
Able to provide Individualized Education Plans (IEP) for children with special needs and advanced learners	15	30	13	2	60
Able to activate prior knowledge of children and build on it	38	19	3	0	60
Able to inform students both about their strengths as well as areas for improvement	30	25	4	1	60
Able to provide meta cognitive strategies so that learners can reflect on their learning, like exit forms, journaling, etc.	18	28	13	1	60

**Figure 4.3. 30.b.**

*Bar graph Representing Responses of Secondary Teachers for Questions (06-11)  
Related to Enhance Child's Development and Learning*



- Figure 4.3. 30.b. indicates that 33 secondary teachers are often provide activities that are stimulating to enhance child development and learning, 23 teachers sometimes provide activities that are stimulating, 4 teachers in secondary are rarely able to provide activities that are stimulating to enhance child development and learning.
- 22 secondary teachers often to provide activities that carter to all the domains of development, 32 teachers in secondary are sometimes able to provide activities that carter to all the domains of development, while 5 secondary teachers rarely provide activities that carter to all the domains of development and 1 secondary teacher is never able to provide activities that carter to all the domains of development to enhance child development and learning.
- 15 secondary teachers often provide individualised education plan (IEP) for children with special needs and advanced learners, 30 teachers teaching in secondary are sometimes able to provide individualised education plan (IEP) for

children with special needs and advanced learners, 13 secondary teachers rarely provide individualised education plan (IEP) for children with special needs and advanced learners, however 2 secondary teachers are never able to provide individualised education plan (IEP) for children with special needs and advanced learners to enhance child development and learning.

- 38 teachers teaching in secondary are often able to activate prior knowledge of children and build on it, 19 secondary teachers are sometimes able to activate prior knowledge of children and build on it and only 3 secondary teachers rarely activate prior knowledge of children and build on it to enhance child development and learning.
- 30 secondary teachers are often able to inform students both about their strengths as well as areas for improvement, 25 secondary teachers sometimes inform students both about their strengths as well as areas for improvement, 4 teachers are rarely able to inform students both about their strengths as well as areas for improvement however only 1 teacher teaching in secondary never informs students both about their strengths as well as areas for improvement to enhance child development and learning of teachers.
- 18 teachers teaching in secondary often provide meta cognitive strategies so that learners can reflect on their learning, like exit forms, journaling, etc., 28 secondary teachers sometimes provide meta cognitive strategies so that learners can reflect on their learning, 13 teachers are rarely able to provide meta cognitive strategies so that learners can reflect on their learning, and only 1 teacher teaching in secondary is never able to provide meta cognitive strategies so that learners can reflect on their learning, like exit forms, journaling, etc. to enhance child development and learning.

*To enhance child's development and learning, maximum secondary teachers organise activities distinct to the needs of the learners often, plan group and individual activities. Teachers follow maxims and principles of teaching to cater to holistic development of the child. This is done by engaging children in physical activities like yoga, gym, dance, PT. They conduct skit, drama, assembly, cultural and doodling activities, etc. for social-emotional development of children. For developing good language skills, elocution and debate competitions, TED talks, etc., are organised. They also try to use scaffolding techniques like asking probing questions, peer learning for better understanding and learning. Secondary teachers focus on providing metacognitive strategies like self-questioning, meditation, reflection for enhancing higher order thinking and the growth and development of children. They focus on peer learning through cooperative and collaborative learning, Think-Pair-Share. Based on these activities performed by children, teachers often give them constructive feedback to children.*

## **Conclusion**

It is utmost important to enhance child's development and learning for optimum growth of children. The above data suggests that pre-primary teachers are able to enrich learning through play, group activities, using different methods of teaching for promoting holistic development in child. Play is focused more in pre-primary because play is the best way of learning during early years. Activities to cater to distinct needs of children is focused on across all the sections. However, these teachers sometimes able to plan IEP for CWSN. More emphasis is given to metacognitive strategies in secondary and primary in comparison to pre-primary as the emphasis is more on building higher order thinking capacities in children.

## LIST OF ABBREVIATIONS

List of abbreviations in this chapter

Sr. No.	Abbreviation	Refers to:
1	DAP	Developmentally Appropriate Practices
2	B.Ed.	Bachelors in Education
3	PT	Physical Training
4	GYM	Gymnastics
5	PTM	Parents Teachers Meeting
6	RAS	Rhyme, Action Song, Story
7	PT/OT	Picture Talk/Object Talk
8	IEP	Individualized Educational Plans

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# **CHAPTER - 5**



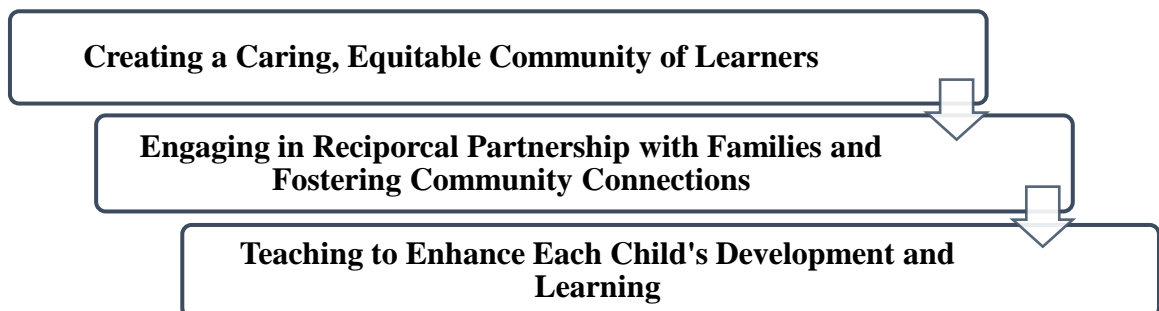
## **CHAPTER 5 - MODULE ON DEVELOPMENTALLY APPROPRIATE PRACTICES**

### **5.1 Introduction**

Developmentally Appropriate Practices is an educational perspective that helps in optimal development of a child. Developmentally appropriate practice does not mean making things easier for children. Rather, it means ensuring that goals and experiences are suited to their learning and development and challenging enough to promote their progress and interest.

Developmentally appropriate practices are based on the various principles of child development. NAEYC defines “developmentally appropriate practice” as methods that promote each child’s optimal development and learning through a strengths-based, play-based approach to joyful, engaged learning. Educators implement developmentally appropriate practice by recognizing the multiple assets all young children bring to the early learning program as unique individuals and as members of families and communities. Building on each child’s strengths—and taking care to not harm any aspect of each child’s physical, cognitive, social, or emotional well-being—educators design and implement learning environments to help all children achieve their full potential across all domains of development and across all content areas. Developmentally appropriate practice recognizes and supports each individual as a valued member of the learning community.

There are 6 major guidelines recommended by NAEYC, but for this study only 3 guidelines are taken in consideration. They are:



- 1) **Creating a Caring, Equitable Community of Learners** - The foundation of a community is a caring, positive relationship between all the members of the

community. School is the first community for a child outside home. This community is of utmost importance for an all- round development of a child.

- 2) **Engaging in Reciprocal Partnership with Families and Fostering Community Connections** - Developmentally appropriate practices require knowledge about each child and this can be achieved through reciprocal relationship with the child's family.
- 3) **Teaching to Enhance Each Child's Development and Learning** - Developmentally appropriate practices encompasses skills, strategies that are appropriate individually, socially and culturally, and are also suitable to the age and development of a child. Children are active constructors of their own knowledge of the world around them. Developmentally appropriate practices help children to make choices within a planned environment to support specific experiences and achieve meaningful goals. Children benefit most by self-directed activities and also through interacting with others. Developmentally appropriate practices include a mix of self- directed, guided activities and it also allows students to choose materials and resources for constructing their own learning. Practices must extend children's interest and learning in meaningful ways through small and large group activities for ensuring that experiences are stimulating, engaging and developmentally, linguistically and culturally responsive across all developmental domains.

**(Detailed description of the above guidelines is given in Appendix B)**

To help teachers plan, execute and organize materials for DAP suitable to the needs of children, the researcher based on the responses received in the survey has planned FDP. This FDP will help teachers understand importance of each of the above-mentioned DAP and help them to create a fun, engaging learning environment for children.

The FDP is divided into 3 modules for ease of learning. The teachers can join any module from between.

Pre FDP-requirements - A short video will be sent out on DAP to the teachers registered for FDP on meaning, importance of DAP to make the attendees aware of why the FDP is necessary

## 5.2 Module on DAP

### MODULE 1

A 4-day FDP on DAP 1- Creating a caring, equitable community of learners

(4 day\* 2.5 hours= 10 hours)

#### **Day 1 - Workshop on creating Stimulating Environment**

	<b>Description</b>
<b>Objective</b>	To enable teachers to be able to create a stimulating environment
<b>Planned Activity</b>	Meaning of stimulating environment Features of stimulating environment Why is it needed? Characteristics, Role of a teacher in providing a stimulating environment Benefits of stimulating environment Challenges of stimulating environment How to create a stimulating classroom environment? Classroom setting and things to keep in mind Activities
<b>Suggested Activity</b>	Teacher will be put in groups of 3-4 and will be given different materials. They need to use the materials and plan activities for creating a stimulating classroom environment
<b>Expected Outcome</b>	The teachers will create a stimulating environment

#### **Day 2 - Workshop on Inclusive Learning**

	<b>Description</b>
<b>Objective</b>	To enable teacher to identify CWSN and include them
<b>Planned Activity</b>	Difference between diversity, disability and inclusion Meaning and need of inclusion Models of inclusion Concept of CWSN and types Educational facilities, provisions for CSWN Strategies for differentiated instruction Use of ICT IEPs Role of a Teacher
<b>Suggested Activity</b>	A case study on CSWN will be given, the teachers need to develop IEP

<b>Expected Outcome</b>	Teachers will identify CSWN and cater to their needs
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### **Day 3 - Workshop on Different Learning Styles**

	<b>Description</b>
<b>Objective</b>	Teacher will an understanding on the different learning styles
<b>Planned Activity</b>	Meaning on learning styles Ways in which children learn (How to recognise, how to cater- strategies) Kolb's theory on learning style Identify your own learning style Catering to the needs of learning with different styles Benefits Challenges
<b>Suggested Activity</b>	Teachers will assess their own learning style using the Kolbs Learning Style quiz
<b>Expected Outcome</b>	Teachers know what their learning style is

**Day 4 - Concluding day presentation on different types of learners and giving feedback emphasizing on giving constructive feedback** (review the process, discussion of activity, outcomes, teachers sharing their view)

	<b>Description</b>
<b>Objective</b>	Teachers will learn a to give constructive feedback
<b>Planned Activity</b>	Meaning of feedback Types of feedback Importance of constructive feedback for children
<b>Suggested Activity</b>	Teachers will be put into group of 3-4, they will plan and conduct a lesson on a theme given keeping in mind the 1 learning style given to them. After the presentation, each group will be given constructive feedback on the lesson presented by their peers
<b>Expected Outcome</b>	Teachers give constructive feedback

## **MODULE 2**

A 2- day workshop on second DAP - Fostering community connection and developing reciprocal partnerships with families

(2 days \* 2 hours = 4 hours)

## Day 1 - Community Outreach Programmes

	Description
<b>Objective</b>	To enable teachers to plan a community outreach programme
<b>Planned Activity</b>	Meaning of community outreach programme, Importance of community outreach programme, Resources requires (Human, Material, Capital) Techniques of community study (to study the allied agencies, location, status) Planning of a community outreach programme (steps involved) Strategies for working with the community Steps to implement community strategy
<b>Suggested Activity</b>	Planning a community outreach programme keeping in mind the theory part The teachers will plan a 2-day community outreach programme to create awareness in a rural area of Maharashtra regarding the vaccination for COVID – 19 for young children and also safety precautions that needs to be taken for reopening of schools
<b>Expected Outcome</b>	The teachers will plan a 2-day community outreach programme

## Day 2 - Workshop Parent Education

	Description
<b>Objective</b>	The teachers will learn the importance of involving parents
<b>Planned Activity</b>	Meaning of Parent Education Need of Parent Education Why parent-school partnership is important? Key to building an effective partnership Role of a teacher How to involve parents/ Making contacts Uses/Benefits of involving parents
<b>Suggested Activity</b>	1) Chart out a plan to communicate with parents of your school 2) Along with parents, plan a programme to help children learn about importance of saving animals
<b>Expected Outcome</b>	Teachers include parents in day-to-day activities

### **MODULE 3**

A 5-day FDP on third DAP enhancing child's development and learning.

(5 day\* 2 hours= 10 hours) A short video will be sent out on meaning and why a teacher needs to adopt different teaching methodology/ models/ approaches -

#### **Day 1 - Concept Attainment Model**

	<b>Description</b>
<b>Objective</b>	To enable teachers to use CAM in classroom
<b>Planned Activity</b>	Meaning and background of CAM 5 essential components of CAM Steps Things to keep in mind while planning a lesson using CAM Role of a teachers Uses of CAM Benefits of CAM Challenges CAM will be done with the help of 3 eggs., for better understanding
<b>Suggested Activity</b>	Write a lesson to introduce any topic using CAM
<b>Expected Outcome</b>	Teachers plan lesson using the CAM

#### **Day 2 - Inductive Method**

	<b>Description</b>
<b>Objective</b>	To enable teachers to use Inductive Method in classroom
<b>Planned Activity</b>	Meaning and background of Inductive Method Essential components of Inductive Method Things to keep in mind Role of a teachers Uses/Benefits of Inductive Method Challenges of Inductive Method Inductive Method will be done with the help of 3 eggs., for better understanding
<b>Suggested Activity</b>	Write a lesson plan using inductive method
<b>Expected Outcome</b>	Teachers plan lesson using inductive method

### Day 3 - Activity Method/ Experiential method

	Description
<b>Objective</b>	To enable teachers to plan activities for children
<b>Planned Activity</b>	Meaning of Activity Method Features of Activity Method Purpose of Activity Method Types of Activity Method Steps involved Various activities teachers must focus on Role of a Teacher Benefits of Activity Method Challenges of Activity Method
<b>Suggested Activity</b>	Teachers will be paired; materials will be given and they need to plan activities with the materials given and make others play it
<b>Expected Outcome</b>	Teachers plan activities

### Day 4 - Cooperative learning

	Description
<b>Objective</b>	To enable teachers to learning importance of cooperative learning
<b>Planned Activity</b>	Meaning of Cooperative learning Features of Cooperative learning Purpose of Cooperative learning 5 key elements of Cooperative learning Cooperative learning strategies Benefits Challenges
<b>Suggested Activity</b>	Each teacher will plan 1 activity using the cooperative learning technique
<b>Expected Outcome</b>	Teachers use cooperative leaning in class

## Day 5 - Multiple Intelligences

	Description
<b>Objective</b>	Teachers will learn about MI
<b>Planned Activity</b>	Meaning of MI, background of Howard Gardner 9 types of intelligence + teaching for the intelligence Teachers will take the MI test by Howard Gardner Benefits Challenges
<b>Suggested Activity</b>	A theme will be provided to the teachers, each teacher will be given a different intelligence, they need to plan a lesson keeping in mind the theme and intelligence
<b>Expected Outcome</b>	Teachers plan lessons based on MI

### 5.3 Conclusion

Classrooms that are filled with developmentally appropriate practices are welcoming spaces that allow children the opportunity to express their individuality, explore their interests in an environment where distinct culture and backgrounds are respected. Teachers who prioritize developmentally appropriate practices are creating the best learning environments for children to thrive. Developmentally appropriate practices must be used properly by teachers in pre-primary, primary and secondary for holistic development of children.

DAP is very important especially in foundational years for child's growth and development. These practices help to develop interest in learning and also make learning more fun. The module-based FDP is a way to create awareness amongst teachers across all the sections with respect to DAP. It will help teachers to learn how to create stimulating environment that focusses on different needs of students. It will also create an awareness on the importance of engaging families, parents in day-to-day school activities along with community welfare. The module planned will help teachers to know the different methodology of teaching. The FDP tries to make teachers aware of DAP, its correct and prompt implication in the classroom scenario.



## LIST OF ABBREVIATIONS

List of abbreviations in this chapter

Sr. No.	Abbreviation	Refers to:
1	DAP	Developmentally Appropriate Practices
2	NAEYC	National Association for the Education of Young Children
3	FDP	Faculty Development Programmes
4	IEP	Individualized Educational Plans
5	CWSN	Children With Special Needs
6	CAM	Concept Attainment Model
7	MI	Multiple Intelligences

## REFERENCES

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NAEYC National Governing Board. (2020). *A Position Statement of the National Association for the Education of Young Children*. NAEYC.

### Weblinks

<https://www.naeyc.org/resources/position-statements/dap/contents>

<https://blog.teachmint.com/the-inductive-method-of-teaching/>

<https://www.valamis.com/hub/cooperative-learning>

<https://www.uopeople.edu/blog/what-is-the-multiple-intelligences-theory/>

<https://www.rasmussen.edu/degrees/education/blog/types-of-learning-styles/>

<https://teach.com/what/teachers-know/learning-styles/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2690881/>

<https://primarylearning.org/classroom/creating-effective-learning-environment/>

<http://www.bunbury.wa.gov.au/pdf/environment/u472/Appendix%2019%20U472%20Community%20Facilitator%20Kolb%20Questionnaire%20Final.pdf>

### **YouTube links**

<https://www.youtube.com/watch?v=0BU8KddyQGg>

[https://www.youtube.com/watch?v=1xGmK\\_AJPNQ](https://www.youtube.com/watch?v=1xGmK_AJPNQ)

## **CHAPTER - 6**

## **CHAPTER 6 - SUGGESTIONS AND CONCLUSION**

### **6.1 Introduction**

“Children are the world’s most valuable resource and the best hope for the future”.

Early years play an important role in a person’s life. Early years education or preschool education is the most crucial part of education for any person. Preschool helps children not only to develop cognitive and language skills but also develops social, emotional, physical and motor skills which play utmost importance in primary and secondary school. Self-esteem, independence, confidence is established in children during school years. Life skills can be thoroughly attained to a great extent when the child goes to primary and secondary school.

School is the place where a child's foundation for lifelong progress is laid. Each and every child has a right to an equitable learning environment that helps in their optimum and all-round development. When activities cater to the needs of a child and the society, they help children achieve developmental milestones. Developmental milestones are the changes that a child goes through in skill development during a predictable time period. Developmental delays can be avoided by achieving developmental milestones. Developmental milestones can be effectively reached by using developmentally appropriate practices in day-to-day activities.

### **6.2 Statement of the Problem**

‘A Study of Developmentally Appropriate Practices among Pre-Primary, Primary and Secondary Teachers’

### **6.3 Major Findings of the Study**

The major findings as per objectives are as follows:

1) To find out the level of awareness of developmentally appropriate practices amongst teachers.

**Findings:** Pre-primary and primary teachers are more aware of DAP in comparison to teachers teaching in secondary. Though the secondary teachers are not aware about the term DAP, they have been conducting activities that are developmentally appropriate.

2) To identify the extent of developmentally appropriate practices used amongst teachers of pre-primary, primary and secondary.

**Findings:** Teachers at all the levels have been providing activities that are developmentally appropriate to a great extent to their children for all round development. The teachers provide stimulating environment for learning, cater to the needs of the children and provide activities that cater to holistic development quite often. They involve parents and engage in community welfare programmes too, to a large extent.

3) To determine the activities conducted for creating a caring, equitable community of learners by teachers teaching in pre-primary.

**Findings:** Teachers teaching in pre-primary conduct activities like planning field trips, nature walk, provide materials for experiments, creative art, dramatics, group games. They provide activities like puzzles, mazes, domino cards, quizzes on Kahoot, materials for seriation, classification, sorting for evolving critical thinking and problem-solving skills. The teachers encourage students to involve themselves in circle time activities, dramatization, outdoor/indoor play, doll/ sand/ block/ water play, art and craft activities to promote cooperative and group activities.

4) To determine the activities conducted for creating a caring, equitable community of learners by teachers teaching in primary.

**Findings:** Teachers teaching in primary conduct activities like planning field trips, nature walk, group games, provide materials for experiments, creative art, dramatics, celebration of festivals, religion days. They provide activities like puzzles, mazes, domino cards, ask open ended questions, materials for seriation, classification, sorting for developing critical thinking and problem-solving skills. To promote cooperative and group activities, the teachers encourage students to involve themselves in circle time activities, dramatization, group games.

5) To determine the activities conducted for creating a caring, equitable community of learners by teachers teaching in secondary.

**Findings:** For creating caring, equitable community of learners, teachers teaching in secondary engage students in field visits, celebrations of festivals, assembly, group

activities on a regular basis and a few of them also take them for nature walks, plan music and drama. To develop critical thinking skills, secondary teachers involve students in group discussions, case studies, experiential learning. For group work they plan activities like group assemblies, role play and various other cooperative learning activities.

6) To understand the type of activities conducted by teachers teaching in pre-primary for fostering community connection and developing reciprocal partnership with families.

**Findings:** For fostering community connection and developing reciprocal partnerships with families' pre-primary teachers communicate with parents via PTM, calls, messages and during the pandemic it is done through online meetings. A galore of activities are conducted to engage parents like participation in school activities like celebration of different festivals, national and international days, parents conducting activities for children, etc. Most of the schools engage in community welfare by planning donations drives, fairs and exhibitions, while a few engage in sponsored walks and also involve parents, families of children to conduct activities for the welfare of the community.

7) To understand the type of activities conducted by teachers teaching in primary for fostering community connection and reciprocal partnership with families.

**Findings:** Primary teachers communicate with parents via PTM, calls, messages and during the pandemic it is done through online meetings. Mammoth of activities are conducted to engage parents like participation in school activities like celebration of different days, parents conducting activities for children, etc. They engage in community welfare by planning donations drives, sponsored walks, while a few engage in fairs and exhibitions and also involve parents, families of children to conduct activities for the welfare of the community.

8) To understand the type of activities conducted by teachers teaching in secondary for developing reciprocal partnership with families and fostering community connection.

**Findings:** Teachers in secondary communicate with parents mostly via PTM, calls, messages and during the pandemic it is done through online meetings. Enormous

activities are conducted to engage parents like participation in school activities like celebration of different days, parents conducting activities for children, etc. Most of the schools engage in community welfare by planning donations drives, sponsored walks, fairs and exhibitions and also involve parents, families of children to conduct activities for the welfare of the community. Teachers in secondary also take help of their students to plan community outreach programmes for the welfare of local communities with the help of NSS and NCC.

9) To find out the various types of practices used to enhance child's development and learning in pre-primary.

**Findings:** To enhance child's development and learning, teachers follow maxims and principles of teaching to cater to holistic development of the child. This is done by engaging children in physical activities like yoga, gym, PT. They conduct games, stories telling, free play, sand play, water play, doll play, etc. for social-emotional development of children. For developing good language skills, teachers have all the boards, charts labelled, plan activities like RAS, PT/OT. Teachers provide stimulating environment, hands on experiences for developing cognitive skills. Maximum teachers in pre-primary organise activities distinct to the needs of the learners often, plan group and individual child directed activities as well as teacher directed. They also try to use scaffolding techniques like asking probing questions, peer learning for better understanding and learning. Based on these activities performed by children, teachers often give them constructive feedback to children.

10) To find out the various types of practices used to enhance child's development and learning in primary.

**Findings:** To enhance child's development and learning, primary teachers sometime focus on providing metacognitive strategies like self-questioning, meditation, reflection for the growth and development of children. They focus on peer learning through cooperative and collaborative learning, Think-Pair-Share. Based on these activities performed by children, teachers often give them constructive feedback to children. Maximum teachers teaching in primary organise activities distinct to the needs of the learners often, plan child directed, teacher directed, group and individual activities. Teachers follow maxims and principles of teaching to cater to holistic development of the child. This is done by engaging children in physical activities like yoga, gym, dance,

PT. They conduct games, stories telling, free play, etc. for social-emotional development of children. For developing good language skills, teachers have all the boards, charts labelled, plan activities like RAS, PT/OT, essay, elocution and debate competitions, etc. Teachers provide stimulating environment, hands on experiences for developing cognitive skills. They also try to use scaffolding techniques like asking probing questions, peer learning for better understanding and learning.

11) To find out the various types of practices used to enhance child's development and learning in secondary.

**Findings:** Maximum secondary teachers organise activities distinct to the needs of the learners often, plan group and individual activities. Teachers follow maxims and principles of teaching to cater to holistic development of the child. This is done by engaging children in physical activities like yoga, gym, dance, PT. They conduct skit, drama, assembly, cultural and doodling activities, etc. for social-emotional development of children. For developing good language skills, elocution and debate competitions, TED talks, etc., are organised. They also try to use scaffolding techniques like asking probing questions, peer learning for better understanding and learning. Secondary teachers focus on providing metacognitive strategies like self-questioning, meditation, reflection for enhancing higher order thinking and the growth and development of children. They focus on peer learning through cooperative and collaborative learning, Think-Pair-Share. Based on these activities performed by children, teachers often give them constructive feedback to children.

#### **6.4 Conclusion of the study**

To conclude, we can say that less than half the teacher teaching in pre-primary and primary taken as a sample are not aware of the term DAP, whereas half of the teacher teaching in secondary are not aware of the term DAP. However, all of the teachers plan and conduct many activities that are developmentally appropriate. They mostly plan the activities which are individually appropriate and age appropriate which caters to holistic development of the children. Teachers plan these activities individually for their class or for the entire section together with the coordinators. Teachers plan and conduct activities for creating caring, equitable community of learners, for developing reciprocal partnership with families and fostering community connection and to enhance child's development and learning.



## 6.5 Recommendations

To help children learn better and in a conducive and an enriching environment, teachers must use DAP in classroom. For more and more teachers to be aware of DAP, following suggestions can be taken into consideration at minor and greater levels.

### 1) Incorporating DAP as a part of the pre service training programmes

- a. ECCEd.
- b. D.Ed.
- c. B.Ed.

DAP must be included in the curriculum of all teacher training programmes. This will help the budding teachers to gain knowledge of DAP and its implications in the classroom. A set of workshops can be planned in view of helping trainee teachers to learn about DAP which should be followed by trainees' teachers planning some activities catering to DAPs. This may include providing coaching, mentoring, planning time, and release time to support educators in their ongoing professional development journeys. This will help to reflect on the diversity of the students and embrace the guidelines and principles of DAP.

### 2) DAP as a part of in-service training for teachers

Educators also require ongoing opportunities to reflect on their practice, conduct teacher research, and extend and deepen their repertoire of effective teaching strategies. Peer support and coaching groups across grade levels can be an important way to support educators' use of developmentally appropriate practices and support the coherence and continuity of children's learning experiences. Each and every school must plan in-service training programmes for their teachers. DAP must be one of the topics. This is can done by calling experts in the field or through tying up with training college who can conduct such training for teachers on a regular basis. Short term courses, workshop or FDP can be planned to train teachers in service.

### 3) School must include DAP in objective of education, curriculum planning and evaluation

Schools, while planning their vision, mission and objective of the school and education, must consider DAP. Coordinators while framing long term and short-term plans must keep DAP in mind. Teachers to must include DAP while doing weekly and daily

planning and also while planning evaluation strategies. Schools must consider admitting students from all religions, cast, race and cater to their needs. Schools must have an unbiased plan of action. Active engagement of family members in planning and implementing must be reinvigorated.

## **6.6 Suggestions for Further Research**

The following areas would be worth looking into as a scope for further research:

- a) A Study on Developmentally Appropriate Practices through a case study.
- b) A Study on Developmentally Appropriate Practices and Teachers' Perception.
- c) A Comparative Study on Teachers' Perception and Students' Perception of DAP in Secondary section of CBSE School.
- d) A Comparative Study on Teachers' Perception and Students' Perception of DAP in Secondary section of ICSE School.
- e) A Comparative Study on Teachers' Perception and Students' Perception of DAP in Secondary section of IGCSE School.
- f) A Comparative Study on Teachers' Perception and Students' Perception of DAP in Secondary section of IB School.
- g) A Comparative Study of DAP used during Foundational Years between ICSE and CBSE boards.
- h) A Comparative Study of DAP used during Foundational Years between ICSE and IB boards.
- i) A Comparative Study of DAP used during Foundational Years between IGCSE and CBSE boards.
- j) A Comparative Study of DAP used during Foundational Years between SSC and CBSE boards.
- k) A Study on Observing, Documenting, and Assessing Children's Development and Learning as a way of DAP.
- l) A Study on Planning and Implementing an Engaging Curriculum to Achieve Meaningful Goals as a way of DAP.

## 6.7 Conclusion

In conclusion, the study conducted on DAP is a mirror that shows the use of DAP amongst teachers teaching in pre-primary, primary and secondary. The module developed on DAP will be helpful in creating awareness about DAP amongst teachers. This module will help teachers to plan an encouraging, engaging, stimulating, motivating and a thought-provoking curriculum which will lead to holistic and all-round development of students across the various age groups. The module will be aid in for creating caring, equitable community of learners, for developing reciprocal partnership with families and fostering community connection and to enhance child's development and learning.

### LIST OF ABBREVIATIONS

List of abbreviations in this chapter

Sr. No.	Abbreviation	Refers to:
1	DAP	Developmentally Appropriate Practices
2	B.Ed.	Bachelors in Education
3	D.Ed.	Diploma in Education
4	ECCEd.	Early Childhood Care and Education
5	PT	Physical Training
6	PTM	Parents Teachers Meeting
7	RAS	Rhyme, Action Song, Story
8	PT/OT	Picture Talk/Object Talk
9	NSS	National Service Scheme

10	NCC	National Cadet Corps
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**APPENDIX - A**  
**LIST OF EXPERTS**

1. Dr. Sunita Wadikar,  
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2. Dr. Sunita Jain,  
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Vidyavihar, Mumbai 400077.
5. Ms. Suman Ananthanarayan,  
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## **APPENDIX - B**

### **INTRODUCTION TO DEVELOPMENTALLY APPROPRIATE PRACTICES**

**1) Creating a Caring, Equitable Community of Learners** - The foundation of a community is a caring, positive relationship between all the members of the community. School is the first community for a child outside home. This community is of utmost importance for an all- round development of a child. To achieve this goal, educators must:

- Educators must understand the unique needs, strengths of each child and provide opportunities to children to learn by themselves, develop positive regards for others irrespective of any disabilities, cultural, social, linguistic differences.
- Educators must create relationships with children, among children through collaborative, cooperative play and group work. This helps in language development, cooperation with others and also in developing problem-solving skills and critical thinking skills (e.g., activities in pre-primary and primary can be solving puzzles, mazes, outdoor play, make believe play, dramatization, circle time activity, etc. Activities for secondary can be participation in group discussions, assembly, role play, think-pair-share, etc.)
- Educators should develop responsibilities and self-regulation in children, model appropriate behaviour in interaction with students, colleagues and others. They must provide a consistent and predictable routine which can be flexible. Educators ought to effectively communicate rules, positive behaviours needed in the community.
- Educators must provide a safe, secure and healthy physical environment for learning and development. Play, hands on experiences, inquiry-based opportunities must be provided to children for better learning and understanding. Self-initiated activities must be given importance for holistic development of a child (e.g., in all grades experimentation method can be used, other activities can be field visits, nature walk)

**2) Engaging in Reciprocal Partnership with Families and Fostering Community Connections** - Developmentally appropriate practices require knowledge about each child and this can be achieved through reciprocal relationship with the child's family.

- Educators who engage in developmentally appropriate practices form and maintain strong and healthy relationships with family and community. Educators should maintain two-way communication through informal and formal conversation (e.g., PTM, phone, messages, emails, pick and drop)
- Educators must engage in frequent interactions with families, parents, administrators for providing engaging experiences. They must try to offer culturally appropriate activities in accordance with home, community experiences. Practices should be such that the child's family, language and cultural are reflected in the experiences (e.g., celebration of national and international days, festivals through parental involvement).
- Educators take responsibility of establishing respectful partnership with families of children, encourage them to know and share resources for optimum development of children with each other (e.g., talk by a parent, conducting class/ activities one in a while)
- Educators' welcome family members for participation in school and involve families as a source of information about the child. They also should contribute to the development of the community (e.g., community outreach programmes, donation drives)

### **3) Teaching to Enhance Each Child's Development and Learning -**

Developmentally appropriate practices encompasses skills, strategies that are appropriate individually, socially and culturally, and are also suitable to the age and development of a child. Children are active constructors of their own knowledge of the world around them. Developmentally appropriate practices help children to make choices within a planned environment to support specific experiences and achieve meaningful goals. Children benefit most by self-directed activities and also through interacting with others. Developmentally appropriate practices include a mix of self-directed, guided activities and it also allows students to choose materials and resources for constructing their own learning. Practices must extend children's interest and learning in meaningful ways through small and large group activities for ensuring that experiences are stimulating, engaging and developmentally, linguistically and culturally responsive across all developmental domains. The following descriptions of educators' actions illustrate teaching practices that are developmentally appropriate for young children from birth through the primary grades and also in secondary grades.

- Educators integrate a variety of activities, experiences, equipments and different teaching strategies to cater to individual differences, needs and interest of a child, and to bring home culture and language to enhance communication.
- Educators must provide opportunities to participate in all activities and encourage inclusive behaviour. Individualised education plans must be prepared for children with special needs and advanced learners.
- Educators effectively implement curriculum to attain individualized goals across all domains (physical, social, emotional, cognitive, language). Educators design experiences to diversity in social identities and activities to build on the prior knowledge of the class.
- Educators plan hands-on, meaningful experiences for promoting investigation, exploration and reasoning skills.
- Educators must use a multilingual approach to cater to bilingual and multilingual children and also non-verbal cues and gestures of communication. They must provide a language rich environment which gives importance to vocabulary development (e.g., in pre- primary and primary, charts with suitable labels should be put, story with high vocabulary, etc. should be included. In secondary use of elocution competitions, talk in various language can be done.)
- Educators must stimulate a child's thinking by asking questions, giving suggestions and feedback for enhancing conceptual understanding. Use strategies so that children can reflect and revisit their experiences. Feedback must be given for their development and the educators must focus on what they can do rather than what they can't.
- Educators must use scaffolding techniques for building skills. Peer learning is an important scaffolding technique (e.g., asking probing questions, giving cues and hints, encouraging the use of collaborative and cooperative technique).
- Lastly, a differentiated instructional approach should be adopted to match the needs, interest and knowledge of various learners.

## APPENDIX - C

### TOOL

#### A) Background questions:

- a) Your full name: \_\_\_\_\_
- b) Gender: Male/ Female
- c) Your email id: \_\_\_\_\_
- d) Your qualification: Graduate, Post graduate, ECCED, D.Ed., B.Ed., M.Ed., TET/CTET passed
- e) Name of the school you are working in: \_\_\_\_\_
- f) Board of the school: SSC, CBSE, ISCE, IGCSE, IB
- g) Section that you teach in: Preprimary, Primary, Secondary
- h) Subject you teach: \_\_\_\_\_ (In case you teach in primary, secondary section. Pre-primary teachers can write NA))
- i) Number of years of experience as a teacher: \_\_\_\_\_

#### B) Questions related to Developmentally Appropriate Practices:

1. Are you aware of the term Developmentally Appropriate Practices?
  - Yes
  - No
  - May be
2. According to you, which of the following are Developmentally Appropriate Practices? (Multiple choice- Tick all the options that apply)
  - Activities that are age appropriate
  - Activities that are individually appropriate
  - Activities that are culturally appropriate
  - I don't know
3. According to you, Developmentally Appropriate Practices (DAP) means
  - Making things easier for children
  - Ensuring that goals and experiences are suited to learning and development of children
  - I am not aware of this

4. How often do you?

<b>Statement</b>	<b>Daily</b>	<b>Once a week</b>	<b>Few times in a month</b>	<b>Few times in 2-3 months</b>	<b>Once in a while in the academic term</b>
Model appropriate behaviour ascribed by the community					
Provide a routine to students that is consistent yet flexible					
Communicate rules, regulations, behaviours to students that are appropriate to community					
Engage with families					
Engage in community welfare					
Welcome participation of family members in school activities					
Plan and conduct activities that are culturally appropriate					
Provide self-initiated/ child directed activities					
Create stimulating environment for optimum learning					
Provide opportunities for inclusive learning					
Provide activities to cater to the learners with different learning styles					
Provide hands on learning opportunities					
Give constructive feedback on students works					

5. How often do you?

<b>Statement</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
Able to organise activities distinct to the needs of children				
Able to organise activities that are socially and culturally appropriate or based on the needs of the community				
Able to organise individual or group activities on a daily basis				
Able to follow the maxims of teaching (moving from simple to complex, concrete to abstract, near to far, easy to difficult, etc.) to achieve meaningful goals				
Able to follow the principles of teaching (principle of interest, need, learner centered, community centered, flexibility, etc.) to achieve meaningful goals				
Able to provide activities that are stimulating and engaging				
Able to provide activities that cater to all the domains of development				
Able to provide Individualized Education Plans (IEP) for children with special needs and advanced learners				
Able to activate prior knowledge of children and build on it				
Able to inform students both about their strengths as well as areas for improvement				
Able to provide meta cognitive strategies so that learners can reflect on their learning, like exit forms, journaling, etc.				

6. Which of the following Developmentally appropriate practices do you include in your class? (Multiple choice- Tick all the options that apply)

- Field visits/ virtual visits
- Nature walks
- Hands on learning
- Experimentation
- Celebration of festivals/days
- Group games/ group activities
- Music and drama
- Creative dramatics
- None
- Any other \_\_\_\_\_

7. Which of the following activities do you include in class for developing problem solving/ critical thinking skills? (Multiple choice- Tick all the options that apply)

*In case you teach in pre-primary and primary section*

- Jigsaw Puzzles
- Mazes
- Sequencing cards
- Classification and sorting activities
- Dominoes
- Seriation cards
- Experimentation
- Asking open ended questions
- None
- Any other \_\_\_\_\_

Which of the following activities do you include in class for developing problem solving/ critical thinking skills? (Multiple choice- Tick all the options that apply)

*In case you teach in secondary section*

- Group Discussion



- Case Studies
- Solving minor problems regarding events
- Experiential learning
- None
- Any other \_\_\_\_\_

8. Which of the following activities do you provide for promoting cooperative play/group work? (Multiple choice- Tick all the options that apply)

*In case you teach in pre-primary and primary section*

- Circle time activities
- Dramatization
- Outdoor play
- Doll play/Sand play/ Water play
- Art and craft activities
- Break out rooms for group work
- None
- Any other \_\_\_\_\_

Which of the following activities do you provide for promoting cooperative play/group work? (Multiple choice- Tick all the options that apply)

*In case you teach in secondary section*

- Group assembly
- Role play
- Think-pair-share
- Outdoor work
- Planning of cultural event
- Group assignments
- Break out rooms for group work
- None
- Any other \_\_\_\_\_

9. How do you communicate with families? (Multiple choice- Tick all the options that apply)

- Phone calls
- Messages
- Email
- PTM
- Pick and drop
- Online meetings after the class
- Any other \_\_\_\_\_

10. What type of activities do you conduct to engage and include parents/families in school activities? (Multiple choice- Tick all the options that apply)

- Participation of parents in celebration of festivals
- Participation of parents in cultural events like Hindi Diwas, Marathi Diwas, Parents Day, Grandparents Day, etc.
- Participation of parents in other National and International days
- Participation during annual day
- Participation during sports day
- Participation of parents in project work
- Accompanying students for field visits
- Talk by parents
- Parent volunteers to take sessions, workshop
- Involving parents/families for narrating stories and conducting fun activities offline and also online
- Any other \_\_\_\_\_

11. Does your school work for the welfare of the community?

- Yes
- No
- May be

If yes, how? (Multiple choice- Tick all the options that apply)

- Donation drives
- Community outreach program
- Parent volunteers conducting activities

- Fair and exhibitions
- Sponsored walks
- Encouraging student participation in NCC, NSS activities
- Any other \_\_\_\_\_

12. How do you promote fine motor development in children? (Multiple choice-  
Tick all the options that apply)

*In case you teach in pre-primary section*

- Colouring
- Creative activities like paper tearing, paper crumpling, printing and dabbing activities, etc.
- Origami
- Sand play/ water play
- Threading beads
- Clay work
- Kneading, pounding, buttoning/unbuttoning, tying/untying
- Cutting using blunt or child friendly scissors
- None
- Any other \_\_\_\_\_

13. How do you promote gross motor development in children? (Multiple choice-  
Tick all the options that apply)

*In case you teach in pre-primary section*

- Outdoor activities
- Gymnastics
- Yoga
- Physical training
- Different type of physical games like hopping, running, etc.
- Rhythmic movements
- Balancing games like balance on the beam, wooden plank, etc.
- None
- Any other \_\_\_\_\_

How do you promote physical development in children? (Multiple choice-  
Tick all the options that apply)

*In case you teach in primary section*

- Dance
- Yoga
- Gymnastics
- Origami
- Sand play/ water play
- Outdoor activities
- Different type of physical games like hopping, running, etc.
- Sports and games like cricket, basketball, football, etc.
- None
- Any other \_\_\_\_\_

How do you promote physical development in children? (Multiple choice-  
Tick all the options that apply)

*In case you teach in secondary section*

- Dance
- Yoga
- Gymnastics
- Outdoor activities
- Sports and games like cricket, basketball, football, etc.
- None
- Any other \_\_\_\_\_

14. What type of activities do you plan for promoting socio-emotional  
development? (Multiple choice- Tick all the options that apply)

*In case you teach in preprimary, primary section*

- Circle time activities
- Small/large group activities
- Free play (indoor/outdoor)
- Stories
- Teacher directed games

- Dramatization/role play
- Assigning responsibilities, duty of the week/ helper of the week
- Activities like nature walk, gardening, field trips
- Sand play, water play, doll play
- Games for emotional expression, emotions chart
- Creative art activities
- None
- Any other \_\_\_\_\_

What type of activities do you plan for promoting socio-emotional development? (Multiple choice- Tick all the options that apply)

*In case you teach in secondary section*

- Group discussions
- Group work
- Skit and drama
- Cultural activities
- Assigning responsibilities, duty of the week/ helper of the week
- Activities like nature walk, gardening, field trips
- Planning for events
- Some games for showing emotions like emotions hat, speak from your heart, etc.
- Painting and drawing activities
- Doodling activities
- Break out rooms for students to interact
- None
- Any other \_\_\_\_\_

15. What type of activities do you plan for promoting language development? (Multiple choice- Tick all the options that apply)

*In case you teach in preprimary, primary section*

- Developing listening skills
- Picture talk/Object Talk
- Rhymes/Action songs

- Stories telling/Book reading
- Charts with distinct labels
- Circle time talk by children
- Sending story books home
- Spin a tale
- Teacher using rich vocabulary
- Asking open ended questions
- Riddles
- None
- Any other \_\_\_\_\_

What type of activities do you plan for promoting language development?  
(Multiple choice- Tick all the options that apply)

*In case you teach in secondary section*

- Elocution/debate
- TED talks
- Essay competitions
- Speech competitions
- Library period
- Newspaper reading
- Speech and drama
- Story narration
- None
- Any other \_\_\_\_\_

16. Which type of scaffolding technique do you use? (Multiple choice- Tick all the options that apply)

- Asking probing questions
- Giving cues and hints
- Encouraging peer learning
- None
- Any other \_\_\_\_\_

17. Do you encourage peer learning?

- Yes
- No

If yes, how?

- Through cooperative leaning
- Through collaborative learning
- Think- pair – share
- One -to- one peer interaction
- Any other \_\_\_\_\_

18. What different types of metacognitive strategies are you able to provide to your students? (Multiple choice- Tick all the options that apply)

*In case you teach in primary, secondary section*

- Self-Questioning
- Meditation
- Reflection
- SWOT analysis chart
- Mnemonic aids
- Thinking aloud
- Checklists for day-to-day activities
- None
- Any other \_\_\_\_\_

19. What type of activities do you plan for promoting cognitive development?

20. How do you communicate rules, appropriate behaviour in class?

21. If at all, the students don't complete any of the above planned activity, then you

- Wait for them to complete the activity
- Move on to another activity
- Any other \_ \_\_\_\_\_

22. Do you enjoy planning developmentally appropriate practices, mark this question on the scale of 1- 10 with 1 being the least and 10 being the highest?

23. How do you actually plan developmentally appropriate practices? (Multiple choice- Tick all the options that apply)

- With the whole team together
- Individually for my sessions/class
- With the coordinator alone
- I get a fixed curriculum to follow
- I don't plan developmentally appropriate practices
- Any other \_\_\_\_\_

24. If at all, you don't plan any of the above developmentally appropriate practices, what is the reason behind the same? (Multiple choice- Tick all the options that apply)

- Fixed curriculum
- Limited time
- Limited resources (monetary and others)
- Not aware of developmentally appropriate practices/ no knowledge about it
- No guidance
- No support from the management
- I plan the above activities but did not know that they are called as developmentally appropriate practices
- I plan the above activities regularly
- Any other \_\_\_\_\_