Directorate of Distance Education

MA [Child Care and Education]
II - Semester
312 22

PRE-SCHOOL EDUCATIONAL ACTIVITIES
# SYLLABI-BOOK MAPPING TABLE

## Pre-School Educational Activities

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Pre-school education is very important for toddlers as it helps to prepare children for formal schooling. It is generally targeted for children below the age of three, who are soon going to be admitted to kindergarten. Pre-school education, through the use of educational activities helps children develop in many different spheres, so that they are ready to join formal training in schools. It uses the concept of ‘play’ to help educate children develop motor, language, cognitive, language and other skills.

Pre-school assists children adapt to the formal learning environment and understand the concept of discipline. The teachers at this stage should be careful to motivate the children and encourage them to pick up activities which are of their interest. A lot of planning and organizing goes into deciding the educational activities for children at this age. And this is what constitutes the field of pre-school educational activities.

This book, Pre-School Educational Activities, is written with the distance learning student in mind. It is presented in a user-friendly format using a clear, lucid language. Each unit contains an Introduction and a list of Objectives to prepare the student for what to expect in the text. At the end of each unit are a Summary and a list of Key Words, to aid in recollection of concepts learnt. All units contain Self-Assessment Questions and Exercises, and strategically placed Check Your Progress questions so the student can keep track of what has been discussed.
INTRODUCTION

‘Pre-School’ refers to ‘previous to primary school’, or ‘initial education’ or ‘early years education’. Pre-school is presently known by many other names and has frequently fused identity with Play School, Day Care, and Kindergarten. Generally, pre-school education typically covers children aged 1.5 to 6 or 7.

Education that focuses on educating children from the ages of infancy until six years old is considered as pre-school education. This age is very important and needs to be handled with special care. This age is a period when the child should be engaged in learning what is preparatory to formal learning. The emphasis is, thus, on preparation for formal education and the most important task of an instructor is to make sure the child gets this (NCF 2005). The aim of pre-schooling is not to start formal education early, but to prepare the children to be confident and efficient in learning. We should enhance all the latent capabilities of a child, such as social, physical, communicative, cognitive, intellectual, aesthetic, and psychological skills, so that children will complete their pre-school years fully prepared for the learning that happens for many more years thereafter. In this unit,
you will be introduced to the subject of pre-school education. This will include its
meaning, importance, objectives along with the curriculum and educational activities
followed and undertaken.

1.1 OBJECTIVES

After going through this unit, you will be able to:

- Describe the meaning and importance of pre-school education
- Discuss the history of pre-school education
- Explain the objectives of pre-school education
- Examine the pre-school curriculum and educational activities

1.2 PRE-SCHOOL EDUCATION: AN OVERVIEW

The system of pre-school education varies widely, with different approaches,
theories, and practices within different school jurisdictions. The term pre-school
education includes such programmes as nursery school, day care, or kindergarten.
These are distinct entities which are occasionally used interchangeably. The
pedagogies in these approaches differ but there is a general agreement that pre-
school is responsible for providing education before the commencement of any
proper education.

Many of the psychologists worked on the nature of psychological
development that occurs in the early years of childhood like the pioneering work
of Swiss psychologist Jean Piaget. This was the cause of proliferation of pre-
school education in the twentieth century. Even earlier, some of the educators
such as German pedagogue Friedrich Froebel recognized that children need
stimulation, particularly that is provided by play and role playing, from a young
age in order to develop their full potential, as well as from the needs of large
numbers of working mothers to provide a good environment for their young children
during working hours. Thus, pre-school environments vary depending on whether
their main focus is care of the children such as in a daycare programme, which
nonetheless acts as a socialization experience that extends beyond the family and
prepares the children for school, and those which were specifically designed to
provide early educational experiences for young children, such as the kindergarten.

Day care

Day care or child care is care of a child during the day by a person other than the
child’s parents or legal guardians, typically someone outside the child’s immediate
family. The service is known as ‘child care’ in the United Kingdom and Australia
and ‘day care’ in America. Child care or day care is provided in nurseries or
crèches or by childminders caring for children in their own homes. Child care or
day care is ongoing care during specific periods, such as the parents’ time at work. Child care can also take on a more formal structure, with education, child development, and discipline falling into the fold of services. Home day care is often a stay-at-home parent who seeks supplemental income while caring for their own child. Home day care providers may also be certified. Local legislation may regulate the number and ages of children allowed and subject the home to more stringent safety regulations before it is considered an official day care center.

Nursery School

A nursery school is a school for children between the ages of three and five, staffed by qualified teachers and other professionals who encourage and supervise educational play rather than simply providing childcare. In some jurisdictions the provision of nursery school services is on a user pays or limited basis while some governments fund nursery school services. In the UK, pre-school education in nursery classes or schools is usually funded by the government and is generally available to children aged over three. Private nursery education is also available throughout the UK and varies between structured pre-school education and a service offering child-minding facilities. In Scotland children are entitled to a place in a nursery class when they reach their third birthday. This gives parents the option of two years of funded pre-school education before beginning primary one, the first year of compulsory education. Nursery children who are three years old are referred to as ante-pre-school whilst children who are four years old are termed pre-school. Pre-school education in Scotland is planned around the document “A Curriculum Framework For Children 3 To 5,” which identifies learning intentions around the following five areas of development:

- Emotional, Personal and Social Development,
- Communication and Language,
- Knowledge and Understanding of the World,
- Expressive and Aesthetic Development,
- Physical Development and Movement

Kindergarten

Kindergarten (German, literally means ‘children’s garden’) is a form of education for young children which serves as a transition from home to the commencement of more formal schooling. Children are taught to develop basic skills through creative play and social interaction. In the United States (and Canada) kindergartens are usually administered in an elementary school as part of the educational system (the K in K-12 schools). Children usually attend at kindergarten ages five to six but in some states, they may start as young as four. Kindergarten is considered the first year of formal education although the child may have gone to pre-school/nursery school. It is, however, considered a grade, and not an optional pre-school
experience. In Israel, a fully developed kindergarten (or Gan) system has been developed to cope with the extremely high percentage of working women in society. There are two streams, private commercial and state funded. Attendance in kindergarten is compulsory from the age of five years. Private kindergartens are supervised by the Ministry of Education and cater for children from three months to five years. They cater for children from three to six years in three age groups; ages three to four (Trom Trom Hova), four to five (Trom Hova), five to six (Hova). At the conclusion of the Hova year (five to six), the child will either begin primary school or will repeat the Hova year, if not deemed psychologically and cognitively ready for primary school. In Morocco, pre-school is known as école maternelle, Kuttab or Ar-Rawd. State-run, free maternelle schools are available throughout the kingdom, welcoming children aged from two to five (although in many places, children under three may not be granted a place). It is not compulsory, yet almost 80 percent of children aged three to five attend. It is regulated by the Moroccan department of education.

Regardless of the level of overt educational goals, however, children in these environments develop social skills as well as develop familiarity with a situation in which the child is separated from his or her parents for an extended period and must spend time in the company of peers who are not their siblings. When the child learns these skills successfully, pre-school education plays a valuable role in preparing the child for school.

Nature of Pre-school Education

In case of pre-school education, informal education is important. Even in early Childhood Education (ECCE) Centers and in pre-schools, nature of education is to be more informal than formal. A child’s learning begins in the family. There are also interactions outside the home with peers and other members of the community. These experiences lead to the informal education of the child. Pre-school education is today imparted through institutions like kindergartens, Montessori schools, etc. with certain aims. They also have a curriculum to achieve those aims. However, the curriculum is flexible, and the instructions are supposed to be informal in nature. These centers have trained teachers and also infrastructural facilities required for attaining the aims. However, many argue that education in pre-school should be provided through play-way methods rather than in a formal way in formal settings. Anganwadis, Balwadis, and crèches also impart institutionalized services that include education but not that in a strictly formal sense. Informal education is thus the most common type of education at the pre-school stage imparted by the family, community and even ECCE centers/pre-schools.

1.2.1 Importance of Pre-school Education

Children begin learning from the time they take birth. Here is why pre-schools are important part of your child’s journey towards development in every sphere:
1. Prepares Kids for Kindergarten
Pre-schools assist in favouring play time as well as learning pre-match and pre-literary skills, which are required for success in kindergarten. When a child enters kindergarten, the environment is more competitive academically. Taking admission in pre-school will help the child encounter a high-quality early childhood education.

2. Children Learn to Care for Themselves and Peers
A child’s sense of self-growth and competence is fostered, when they learn to care for themselves and their peers. Some of the pre-schools allow children to help themselves out in classroom. For example, keep personal belonging in cubby, or settling down together during snack time, sharing food with other children etc.

3. Pre-school is a Way to Experience Growth
For many kids, pre-schools admission is essential because it is also their first experience in a structured setting, where they can freely interact with groups of children and teachers. It is a fine opportunity to learn new things, know importance of sharing, and follow instructions which are crucial to qualify for elementary school.

4. Promotion of Emotional and Social Development
To learn, children need to feel secure and cared with a caregiver or teacher. When a 2 to 3-year old child is able to spend time with people others than his/her parents, they learn to build trusting relationship with adults. The best daycare service concentrates on nurturing warm relationships among kids, parents, and teachers, forming a close personal connection, which is a way to develop social and emotional skills.

5. Enhances Language and Cognitive Skills
By offering a ‘language-rich’ surrounding, pre-schools help enhance the child’s vocabulary skill by making them learn how to structure long sentence, poetry, role-play and more, in a conversational manner without dominating the discussion. In day cares, staff and teacher ask thought provoking questions, which enable children to develop their cognitive skills by introducing situations.

6. Children Are Able to Make Choices
When a pre-school provides children with facility of activities which the child can choose from, it is said to be the best pre-school, since the child is able to be part of a group, and understand his/her priorities, or priorities as per the situation at hand.

7. Structured Environment for Education
Every child needs to experience a structured environment for education, and it best starts at a tender age. That does not mean there would be lots of rules and regulations, but teachers will be able to inculcate kids to formal-education setup. A pre-school classroom is organized and encourages social interaction by minimizing conflicts.
8. Nurture Curiosity in Children
To nurture curiosity among children and fill them up with motivation to learn, teachers may use a kid’s ideas, interests etc., to create activities. By doing so, nurseries help to discover child’s inner potential by tapping it the right way. Some of the ways to promote curiosity in children is organizing activities in events in outdoor play area in indoor group sessions. The young minds of children get introduced to new learning.

9. Gives Boost to Motor Skills
In pre-school education, children get to explore their environment and improve physical coordination besides learning pre-literary and pre-math skills. Activities involving making kids climb, run, and engage in active play enables kids to develop fine motor skills. Activities such as craft, threading beads etc., hone hand-eye coordination.

The above-mentioned nine factors of why pre-schools are important is a gateway to how your child will develop immensely socially, academically, mentally, and physically, and how the skills learn in early-school will aid them to face elementary schooling and further, in a much more confident way.

1.2.2 Historical Perspectives of Pre-School Education
Education is imparted at various levels: pre-primaries, primary, secondary and tertiary levels. Let us discuss the historical perspective of pre-school education by presenting the views of few educationists. Plato stressed the benefits of education for the young child more than 2000 years ago. In the 17th century Czech educator and writer, Comenius had given the idea of parent education in his ‘School at the Mother’s Knee’, which means that education of an infant should take place at home with the support of his/her mother. ‘Infant Schools’ in Scotland were founded by Robert Owen, a Scottish philanthropist, during the early part of 18th century which was a kind of community schooling. According to Rousseau, a child’s education should take place in the lap of nature. Two sisters, Margaret Macmillan and Rachel Macmillan established the first nursery school in London in 1909, for taking care of neglected children of poor parents. Maria Montessori, an Italian physician, started a pre-school in Italy ‘Casa dei Bambini’ which means House of Children. In these schools, children were encouraged to use various materials for developing their motor and mental skills. Thus several European educators, including Robert Owen of Great Britain, Johann Heinrich Pestalozzi of Switzerland, Friedrich Froebel in Germany, and Maria Montessori of Italy developed educational systems designed for early childhood in order to actively help the children during their one of the most crucial stages in human development in the nineteenth century as discussed above. Froebel coined the term ‘kindergarten’ (meaning ‘children’s garden) and created the first kindergarten school. The idea of ‘Kindergarten’ which aimed at development of children through play activities was given in the 19th
Kindergarten may be considered as the forerunners of the modern pre-schools. Froebel believed that human beings were given almost limitless potential from God and saw kindergarten education as a means to start the process of realizing such potential at an early age. His curriculum focused on giving children the freedom to discover their abilities and personalities without forcing pre-determined self-images upon them, supporting the development of creativity, language, and social skills. Froebel’s kindergarten programme was spread by a number of teachers he trained. While the German idealism and Christian aspects that Froebel and other early pre-school educators advocated were not as popular in secularly run educational systems, nonetheless the core principals were widely understood and beneficial to helping child development and a more educated public. Generally, however, pre-school education is a matter of choice; formal, state mandated education beginning with entry into elementary school.

1.2.3 Pre-School Education Scenario in India

In India, according to Census 2011 data, there are 164.48 million children of 0-6 years of age. Recognizing the need to provide quality pre-primary programmes, a number of constitutional and policy provisions have been made such as the 86th Constitutional Amendment which introduced Article 21A on the right to free and compulsory education for 6-14 years old children and Article 45 to urge states to provide Early Childhood Care and Education (ECCE) for all children until they complete the age of six years.

The Right of Children to Free and Compulsory Education (RTE) Act 2010 guarantees children their right to quality elementary education. ECE is not recognized as a compulsory provision by RTE, but it urges states to provide free pre-school education for children above three years. The 12th Five Year Plan acknowledges the importance of ECE and improving school preparedness. The Government of India approved the National Early Childhood Care and Education (ECCE) Policy in 2013. The Policy framework also includes the National Curriculum Framework and Quality Standards for ECCE.

The Policy caters to all children under 6 years of age and commits to universal access to quality early childhood education. The Ministry of Women and Child Development (MWCD) is the nodal department for ECCE. MWCD is responsible for the Integrated Child Development Services (ICDS) programme, which is a centrally sponsored and state administered ECE programme, covering around 38 million children through a network of almost 1.4 million Anganwadi centres (a village courtyard). ICDS includes delivery of an integrated package of services such as supplementary nutrition, immunization, health check-up, pre-school education, referral services and nutrition & health education. ECCE is one of the components and aims at psycho-social development of children and developing school readiness.
Despite the recognition of the importance of ECE by the Government of India, the challenges in implementation still remain. There are still substantial numbers of children not enrolled in pre-schools. Even in elementary education, while there is a significant rise in enrolments, the dropout rate continues to be a matter of concern, with drop outs being highest in the first two grades of elementary schooling. Interventions in early childhood are proven to have long-term effects on future social adjustment and economic success and may even be passed on to subsequent generations.

Evidence indicates that Early Childhood Education (ECE) programmes can ‘change the development trajectory of children by the time of entering school’. Research in the South Asian region, particularly in India, has documented the effects of Early Child Development programmes on the academic and social preparedness of children for formal schooling. In 2014, UNICEF staff and government counterparts participated in ‘Forum on Investing in Young Children’ and panel discussion on neuroscience and early childhood development (ECD). These were excellent capacity enhancement opportunities and advocacy platform for increasing investments in ECCE. India Country Office hosted South Asia ECD Meeting bringing together 6 countries in South Asia to discuss ECD priorities and programming. The events provided a major boost to growing momentum on ECD in South Asia region.

1.2.4 Objectives of Pre-School Education

As you have read earlier, children begin learning from the time they take birth. The realization as to who his/her parents are, and who are not, how to react when one feels hungry, and even every emotional response is structured by observing the surroundings. It is said that when your children are between ages 1 to 3, it is the right time to get them admitted to a top playgroup, which will help in laying the foundation for learning, both academically and socially to succeed in any elementary school.

Early childhood education can have a strong, positive influence on success in subsequent schooling. Pre-school education may be particularly effective in reducing subsequent primary school dropout rates, especially among the poor (Adams, 2002). Education is an integral part of national development. The progress of a nation lies in the quality of education provided to its citizens. Hence, good quality education should start from pre-school stage itself.

The children who access pre-school education gain the pre-requisite skills for the next level of education. Thus, those children who receive pre-school education have a greater chance to complete the primary school successfully and start secondary education. Therefore, pre-school is necessary for universalization of elementary education.
Check Your Progress

1. List the three programmes generally included in the term pre-school education.
2. How do pre-schools help develop language and cognitive skills in children?
3. Name some of the European educators who developed educational systems designed for early childhood.
4. What does Article 45 of the Constitution of India stand with regards to pre-school education?

1.3 PRE-SCHOOL CURRICULUM

From learning what sounds letters make to counting to 10, pre-school is about discovery. And by the time a child graduates from pre-K, he or she will have learned a lot.

Pre-school curriculum refers to the entire span of lessons and content that a child is taught during the course of a pre-school education. Depending on the pre-school chosen and the early childhood education philosophy it follows, a child may explore a wide variety of academic, social, physical, and emotional lessons. In addition to academics and social skills, many pre-schools work on critical speech and motor skills. By the time of kindergarten, the children who participate in pre-school should be ready to speak in full sentences, use a pair of scissors, and kick a ball. In many settings, pre-schools are also able to help children complete their toilet training.

1.3.1 Structure and Implementation

Because pre-schools are not governed by the standards that apply to K-12 education, individual schools and groups of schools have the freedom to teach what they please in the manner they prefer. For example, pre-schools located in religious institutions may include religious education in their curriculum. Montessori pre-schools use specific materials and activities to encourage children in hands-on learning. Teachers may vary their educational approaches to suit the needs of individual children in their class. While pre-schools don’t adhere to educational guidelines, they’re intended to prepare students for kindergarten. That means most good pre-schools work on key skill areas like these:

- Letters
- Numbers
- Shapes
- Colours
Introduction to Pre-School Education

NOTES

- Cutting
- Colouring
- Writing letters and numbers
- Sorting objects
- Drawing
- Gluing
- Sharing
- Cooperation
- Taking turns
- Transitioning from one activity to another
- Calendar, including the seasons and months of the year
- Physical activity like running, jumping, skipping, hopping on one foot, and using playground equipment and balls

Implementation

Most pre-schools have a set of goals and a philosophy to which each teacher must adhere. In some cases, teachers follow those general guidelines in an informal way. In many cases, however, teachers must actually complete lesson plans and rubrics for assessing the students’ progress.

Pre-school curricula takes into account the length of the pre-school day. Many pre-schools run for only a few hours a day, while others (especially in public school settings) run for much longer days. Some even run longer than a typical school day to cover all the parent’s work hours.

During any given day, pre-schoolers are likely to take part in:

- Specific activities, such as circle time, song time, calendar time, active play time, story time, and craft time
- Transitional periods that exist between activities like learning how to walk in a line with peers and how to clean up toys and supplies
- Special activities not necessarily taught by the primary pre-school teacher, but by a special art, music, library, or physical education teacher
- Field trips designed to enhance a lesson, such as a trip to the post office to learn about mail or a visit to the grocery store to learn about choosing healthy foods
- Sessions with special guest speakers who are brought in to provide more details to a lesson, such as a police officer to talk about safety or a dentist to discuss oral health
1.3.2 Importance of Play at Pre-School

While it may look like a pre-schooler is simply playing in the pre-school classroom all day, that’s not the case. Play is so much more than a child having fun, though kids are certainly having lots of that. Especially when it involves interacting with other children, play teaches young children how to develop friendships, take turns, learn how to cooperate, try out different ways of problem-solving, use their imaginations and think creatively. Play provides children with the opportunity to actively explore, manipulate, and interact with their environment. It allows children to experiment with the world around them and the emotional world inside them. To many it might seem like mere entertainment, but during such activities progress takes place in skill building, problem solving, overcoming physical and mental challenges, and so forth. Playing with products made especially for the pre-school children helps a child build self-confidence, encourages independent learning, and clears his concepts.

For the development of the pre-schooler’s fine and large or gross motor movements, and for the growth of the child’s eye-hand coordination, it is extremely important for him to ‘play’ with the natural things around him. It encourages children to investigate, create, discover, and motivate them to take risks and add to their understanding of the world. It challenges children to achieve new levels of understanding of events, people, and the environment by interacting with concrete materials. Hands-on activities create authentic experiences in which children begin to feel a sense of mastery over their world and a sense of belonging and understanding of what is going on in their environment. This use of play follows from Jean Piaget’s idea that children should actively participate in their world and various environments so as to ensure they are not ‘passive’ learners but are ‘little scientists’ who are actively engaged.

Most pre-school education thinkers have communicated the centrality of play to children’s learning, because play is natural, spontaneous, attractive, enjoyable and rewarding to children, and it is self-initiated. However, many parents often view play as a waste of time and insist that children start studying from a young age. Play leads to the development in each domain of development—cognitive, social, emotional, moral, physical, psychomotor. It stimulates curiosity and exploration, leads to better body control, encourages creativity and social skills, and develops emotional balance and language skills. Hence, the term ‘activity-based curriculum’ is sometimes referred to as ‘play-based curriculum’ in pre-schools.

Pre-school settings must cater to the requirements of supervised play with objects meant for outdoor and indoor play. The play area should be appropriate for exploration and be spacious as children cannot sit still in one place for a long time. Playing on a jungle gym and spending time in walking and balancing areas will help children gain confidence. Running, jumping, and balancing are necessary for 3-to-5-year olds.
Play can be both indoors as well as outdoors. Outdoor play is more beneficial for the development of gross motor skills while indoor free play such as beading, peg boards, and puzzles is largely beneficial for the development of small muscles. Mechanical toys are helpful in enhancing fine motor skills. Indoor free play also provides time for play in small groups, for example solving puzzles and engaging in doll play or other acts of imitative play. Play can also include drawing and colouring as that colours and crayons are the means of expression. Children may be encouraged to be creative as they play with clay.

Promotion of healthy development in various domains of child development as Undermentioned follows different philosophies:

- **Physical development**: Concerning the physical growth and the development of both gross (such as walking) and fine motor (such as finger and eye movement) control of the body.

- **Perception and sensory development**: The child’s functions using the senses and the ability to process the information gained.

- **Communication and language development**: Using visual and sound stimuli, especially in the acquisition of language, also in the exchange of thoughts and feelings.

- **Cognitive development**: Concerning how the individual thinks and react.

- **Emotional Development**: Concerning children’s increasing awareness and control of their feelings and how does he react to these feelings in a given situation.

- **Social Development**: Concerning the child’s identity, their relationship with others, and understanding their place within a social environment.

Some professionals adhere more closely to behaviourism and others hold to the more unstructured maturations theories. Additionally, stage theories of Sigmund Freud and Erik Erikson are used to look at social and emotional development. Many early childhood teacher education programmes teach a mix of theories dominated by the constructivist approach put forth by Jean Piaget and Lev Vygotsky.

### 1.3.3 Inclusive Education at the Pre-School Stage

The importance of early childhood development for all children, including those with special educational needs was endorsed in the World Declaration on Education for All (Jomtien, Thailand, 1990) and the Convention on the Rights of the Child (1989). Specifically, the Convention on the Rights of the Child proclaims that ‘Children have the right to life and the best possible chance to develop fully (Article 6), and disabled children must be helped to be as independent as possible and be able to take full and active part in everyday life’ (Article 23). Furthermore, the World Conference on Special Needs Education (Salamanca, Spain, 1994) highlights early education as a priority area.
Inclusion at the early childhood stage will be successful only if the children with special needs are identified at an early stage itself. Such programmes have to be developed so as to enhance intellectual, social, emotional and physical development of children with special needs and also to promote their school readiness. These programmes have major economic and social values for the family, community and the nation since they prevent the further aggravation of disabilities of such children and help the society in tapping their potential. Programmes at this stage should recognize the principle of inclusion and include pre-school activities and early childhood health care. In this context UNICEF and other world educational agencies recognize the importance of Early Childhood Intervention, Early Stimulation and Community based Rehabilitation programmes.

1.3.4 Educational Activities at Pre-School Stage

From the pre-school stage itself life skill education needs to be provided. Life skills are innumerable, but the World Health organization and UNICEF have given a list of some core set of life skills, which are as follows: decision making, problem solving, creative thinking, critical thinking, effective communication, interpersonal relationship skills, self-awareness, empathy, coping with emotions and coping with stress.

Generally, primary or elementary education is considered as the early stage of formal education. But now researches show that early childhood is a very important stage and strengthening pre-primary education is essential for a healthy and educated society. The child acquires many personal and social habits before the age of six. It is during these years that the bases of later development are laid. In this regard pre-school education has close relation to the primary, secondary and even higher education. In other words, we can say it is the foundation of the entire educational system. Care and education provided in the early days of development determines an individual’s future as well as the future of the society.

Cognitive abilities develop rapidly at this stage. Children should be helped to nurture the abilities to recognize objects, people, and events and to relate recent knowledge with that already attained, looking at new patterns, exploring and making connections, using visual auditory, sensual and communicating skills. Apart from educational development, social development is also important at this stage. Social interaction with peers and teachers is required. Children need to develop for a social life. They need to be provided with an environment so that as social organisms they can build friendship and be part of a group, learn to give and take, share, wait for one’s turn, accept “no” for an answer, become responsible towards self and belongings and others and their belongings and so on. Physical development is also needed.

Developing motor and fine motor skills at this stage will be facilitated if children are allowed to carry out suitable activities, like playing, dancing, etc. Outdoor games help develop the physique while activities like reading, weaving,
working with puzzles enhance eye-hand co-ordination and fine motor skills. Aesthetic development is also important. Appreciating beauty-expressing emotions, being creative, developing performing skills and being artistically oriented can be nurtured at this stage through suitable activities. Psychological needs of children also need to be fulfilled. They need to feel secure, confident and comfortable in their environment and be independent in thought and action. Acquiring a sense of right and wrong, developing a sense of responsibility, orderliness, accountability and punctuality may be initiated by suitable educational activities.

Hands-on activities at pre-school level allow children to use their senses while learning. They see, touch, and move real objects to complete tasks. This means that letters, numbers, shapes, colors, and more are brought to life! Children begin to understand the meaning behind what they are doing. Children get excited and engaged because they are having fun! They have a longer attention span. This helps them to build knowledge and increase their long-term memory. Children will strengthen their fine motor development. They learn control, communication, concentration and dedication to finishing tasks and problem-solving skills. Hands-on toddler, pre-school, and kindergarten activities help children to build a lifelong love of learning!

Incorporating small group activities into daily schedule is essential for teaching cooperation and teamwork skills to pre-schoolers. By creating multiple learning stations in the classroom, we can help to facilitate pre-school small group activities. These activity centers are designed to suit groups of up to five or six children, featuring materials that they can play with and explore together. Since pre-schoolers are still in the process of developing their cognitive and social skills, they often function best when in small group settings. These activities are a great opportunity for all children involved to further develop their social skills through structured interaction, using language to express their thoughts and needs with peers to accomplish a task. Cooperation is also taught through pre-school small group activities. By working with just a few of their peers towards a common goal, they will further develop their cooperation skills, conversation skills, and discover how to share and be fair. Through small group play, they will learn that they won’t always get their way and sometimes have to compromise.

Check Your Progress

5. What are some of the critical speech and motor skills pre-school children must develop by the time of kindergarten?
6. How do hands-on activities help pre-schoolers?
7. Name some of the international documents which highlight the importance of early childhood development including those with special needs.
1.4 **ANSWERS TO CHECK YOUR PROGRESS QUESTIONS**

1. The term pre-school education includes such programmes as nursery school, day care, or kindergarten.

2. By offering a ‘language-rich’ surrounding, pre-schools help enhance the child’s vocabulary skill by making them learn how to structure long sentence, poetry, role-play and more, in a conversational manner without dominating the discussion. In daycares, staff and teacher ask thought provoking questions, which enable children to develop their cognitive skills by introducing situations.

3. Several European educators, including Robert Owen of Great Britain, Johann Heinrich Pestalozzi of Switzerland, Friedrich Froebel in Germany, and Maria Montessori of Italy developed educational systems designed for early childhood in order to actively help the children during their one of the most crucial stages in human development in the nineteenth century as discussed above.

4. Article 45 of the Constitution of India urges states to provide Early Childhood Care and Education (ECCE) for all children until they complete the age of six years.

5. In addition to academics and social skills, many pre-schools work on critical speech and motor skills. By the time of kindergarten, the children who participate in pre-school should be ready to speak in full sentences, use a pair of scissors, and kick a ball.

6. Hands-on activities create authentic experiences in which children begin to feel a sense of mastery over their world and a sense of belonging and understanding of what is going on in their environment.

7. The importance of early childhood development for all children, including those with special educational needs was endorsed in the World Declaration on Education for All (Jomtien, Thailand, 1990) and the Convention on the Rights of the Child (1989).

1.5 **SUMMARY**

- ‘Pre-School’ refers to ‘previous to primary school’, or ‘initial education’ or ‘early years education’. Pre-school is presently known by many other names and has frequently fused identity with Play School, Day Care, and Kindergarten. Generally, pre-school education typically covers children aged 1.5 to 6 or 7.
• The system of pre-school education varies widely, with different approaches, theories, and practices within different school jurisdictions. The term pre-school education includes such programmes as nursery school, day care, or kindergarten. These are distinct entities which are occasionally used interchangeably.

• Child care or day care is ongoing care during specific periods, such as the parents’ time at work. Child care can also take on a more formal structure, with education, child development, and discipline falling into the fold of services.

• A nursery school is a school for children between the ages of three and five, staffed by qualified teachers and other professionals who encourage and supervise educational play rather than simply providing childcare.

• Kindergarten (German, literally means ‘children’s garden’) is a form of education for young children which serves as a transition from home to the commencement of more formal schooling. Children are taught to develop basic skills through creative play and social interaction.

• In case of pre-school education, informal education is important. Even in early Childhood Education (ECCE) Centers and in pre-schools, nature of education is to be more informal than formal. A child’s learning begins in the family. There are also interactions outside the home with peers and other members of the community. These experiences lead to the informal education of the child.

• Children begin learning from the time they take birth. The realization as to who their parents are, how to react when one feels hungry, and even every emotional response is structured by observing the surroundings. It is said that when children are between 1-3 years old, it is the right time to get them admitted to a playgroup, which will help laying foundation for learning, both academically and socially to succeed in any elementary school.

• Plato stressed the benefits of education for the young child more than 2000 years ago. In the 17th century Czech educator and writer, Comenius had given the idea of parent education in his ‘School at the Mother’s Knee’, which means that education of an infant should take place at home with the support of his/her mother. ‘Infant Schools’ in Scotland were founded by Robert Owen, a Scottish philanthropist, during the early part of 18th century which was a kind of community schooling.

• Several European educators, including Robert Owen of Great Britain, Johann Heinrich Pestalozzi of Switzerland, Friedrich Froebel in Germany, and Maria Montessori of Italy developed educational systems designed for early childhood in order to actively help the children during their one of the most crucial stages in human development in the nineteenth century.
Recognizing the need to provide quality pre-primary programmes, a number of constitutional and policy provisions have been made such as the 86th Constitutional Amendment which introduced Article 21A on the right to free and compulsory education for 6-14 years old children and Article 45 to urge states to provide Early Childhood Care and Education (ECCE) for all children until they complete the age of six years.

The Right of Children to Free and Compulsory Education (RTE) Act 2010 guarantees children their right to quality elementary education. ECE is not recognized as a compulsory provision by RTE, but RTE urges states to provide free pre-school education for children above three years. The Right of Children to Free and Compulsory Education (RTE) Act 2010 guarantees children their right to quality elementary education. ECE is not recognized as a compulsory provision by RTE, but RTE urges states to provide free pre-school education for children above three years.

Pre-school curriculum refers to the entire span of lessons and content that a child is taught during the course of a pre-school education. Depending on the pre-school chosen and the early childhood education philosophy it follows, a child may explore a wide variety of academic, social, physical, and emotional lessons.

From the pre-school stage itself life skill education needs to be provided. Life skills are innumerable, but the World Health organization and UNICEF have given a list of some core set of life skills, which are as follows: decision making, problem solving, creative thinking, critical thinking, effective communication, interpersonal relationship skills, self-awareness, empathy, coping with emotions and coping with stress.

1.6 KEY WORDS

- **Pre-school**: It is responsible for providing education before the commencement of any proper education. It typically covers children aged 1.5 to 6 or 7.
- **Day care or child care**: It refers to the system of care of a child during the day by a person other than the child’s parents or legal guardians, typically someone outside the child’s immediate family.
- **Kindergarten**: A German word, it literally means ‘children’s garden’. It is a form of education for young children which serves as a transition from home to the commencement of more formal schooling.
1.7 SELF ASSESSMENT QUESTIONS AND EXERCISES

NOTES

Short Answer Questions
1. Write a short note on day care in pre-schooling education.
2. What is the nursery system like in Scotland?
3. How does Israel run the Kindergarten system of education?
4. What were Froebel’s contribution to pre-school education?
5. Briefly explain the objectives of pre-school education.
6. List the key skills which pre-school work includes in their curriculum.
7. Write a short note on inclusive education at the pre-school stage.

Long Answer Questions
1. Explain the importance of pre-school education.
2. Discuss the historical perspectives of pre-school education.
3. Comment on the pre-school education scenario in India.
4. Examine the importance of 'play' at pre-school.
5. Describe the educational activities at pre-school stage.

1.8 FURTHER READINGS

UNIT 2 THE PRE-PRIMARY SCHOOL AS A CENTRE FOR PLAY

Structure
2.0 Introduction
2.1 Objectives
2.2 Pre-School as a Centre for Play Activities
2.3 Pre-School as a Centre for Stimulation and Developmental Activities
   2.3.1 Cognitive Development
   2.3.2 Physical Development
   2.3.3 Social and Emotional Development
   2.3.4 Language Development
   2.3.5 Self Help
2.4 Answers to Check Your Progress Questions
2.5 Summary
2.6 Key Words
2.7 Self Assessment Questions and Exercises
2.8 Further Readings

2.0 INTRODUCTION

The first step to enter the realm of learning, pre-primary school stage is considered to be very important for the child. It is the stage which gives confidence to the children and helps them face different situations of real life.

This is very crucial stage as it is the first-time the child gets separated from the comfort zone of parents at home to the new system of school education. That is why school is considered as the second home of the child. It becomes the teacher’s responsibility at pre-primary school level that the child feels comfortable and secure in a new system. At this stage, the child learns about his/herself and communicates with teachers and the peer group. This interaction is also important as it helps the child to be confident for lifelong progress. Whatever the child learns in the pre-school has great impact on the aptitude and attitude of the child later in life.

The child’s positive learning attitude, the basic foundation in language, comprehension and management, helps the teacher facilitate the child’s learning at kindergarten and higher levels of education.
2.1 OBJECTIVES

After going through this unit, you will be able to:

- Discuss the benefits of pre-primary education
- Explain the role of pre-school as a centre for play activities
- Describe pre-school as a centre for stimulation and developmental activities

2.2 PRE-SCHOOL AS A CENTRE FOR PLAY ACTIVITIES

Pre-schools, as you have learnt in Unit 1, are very important for preparing the child for years of formal education that is to follow. It is like the initiation course for the child and a bridge between home and formal school. Let’s look at some of the benefits of pre-school education.

Benefits of Pre-school Education

- **Develops curiosity and imagination:** Children are born with an innate power to understand the environment around them. They have an active imagination and are always eager to discover new things, make new friends, and explore new environments. Preschool education nurtures this inquisitiveness and imagination of child so that they can become effective learners.

- **Aids better concentration:** Children during pre-primary stage have shorter span of attention in relation to any task. Activities at pre-school level helps the child in developing listening and speaking skills with better concentration power.

- **Boosts cognitive skills:** Pre-schools play a key role in strengthening the cognitive skills of young minds. Since toddlers get the opportunity to engage in a variety of practical activities, the fun learning environment motivates them to solve problems, observe things closely, and ask questions to satiate their curiosity.

- **Inculcates self-confidence and self-esteem:** Early childhood education encourages the child to be confident in social set-ups. Pre-primary schools appreciate the child in every big and small achievements and enable them to perceive the talents and capabilities in a positive yet realistic way. This instills a sense of competence in the child, thus, boosting their self-confidence and self-esteem.

- **Prepares them for socialization:** In order to develop the social competence of young children, pre-primary classrooms use fun ways to encourage toddlers to work in a team. By inculcating team-spirit in young
minds, pre-primary teachers teach students how to work collaboratively in a group environment to achieve a shared goal. As a result, the child becomes a good listener and learns to respect the opinion of his team members so that the team can function without any disruption.

- **Enhances social and emotional skills:** Pre-schools train children to become socially and emotionally aware by regulating their behaviour and helping them create a personal identity. At the same time, pre-schools promote social interactions as the child gets the opportunity to develop friendships with her fellow classmates.

- **Prepares for school:** Pre-primary education plays a critical role in preparing the children for kindergarten and beyond. Social readiness and emotional preparedness combined with pre-reading / writing skills and a basic understanding of mathematical concepts help him/her succeed in kindergarten and beyond.

- **Encourages patience:** Pre-primary schools provide the children with ample opportunities to learn the art of patience so that he can face challenging situations in life with persistence and fortitude.

To give the experience of ‘joy of learning’, teachers at pre-primary stage need to organize activities through which children can learn with interest. Following are some activities which can be organized at pre-primary level:

1. **Activities with Sand, Water and Dough**

   ![Activities with Play Dough](Fig. 2.1)

   To develop self-confidence and enhance physical development, different activities can be organized with sand. Lifting, digging, pouring and sifting are techniques which can be easily taught to the children by making use of sand. It also
The Pre-Primary School as a Centre for Play

helps in building their muscles and coordination. The concept of volume at early stage can be taught to the children by allowing them to participate in activities with water. When students involve in such activities hand-eye coordination can be improved.

Play dough has immense potential for learning. Not only does it help to strengthen fingers which will further help in writing, teaching motor skills, creativity, but play with dough has immense contribution for learning.

2. Role Play

Role play is an important part of child development, as it builds confidence, creativity, communication, physical development and problem-solving. Real life roles are not only helpful for building confidence but also helpful for understanding the social setup. It can be purely child-led and encourages children to take risks and be creative with the role they are playing. Roles of doctors, teachers, police and people involved in other sectors etc., are perfect for encouraging responsiveness towards society.

3. Drawing and Painting

Children enjoy the painting experience; this is the best way to express freely and also help to develop creativity. Through painting and drawing, children can perceive the world through sensory way and build confidence to further learn skills related to writing. Children can be given opportunities for using different tools for painting like toothbrushes, hair combs, sponges and nail brushes etc.

4. Blocks, Jigsaws, and Shape Sorters

For the development of logical thinking, knowing the order, recognizing the shapes and for spatial thinking, blocks, jigsaws and shapes are the best tools for learning with fun.
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5. Music, Dancing, and Singing

Singing and music are used at pre-primary level to enhance the listening skills, developing strength, and coordination. There are various concepts in Mathematics, English, Hindi which can be easily taught with the help of music and dance. For example, basic mathematical concepts such as counting.

6. Basic Board Games

There are so many board games available for even the youngest players, and these should be embraced – not only for their fun factor, but for their learning potential. In addition to the themes of numbers, colours, shapes, and early phonics, these games are vital for teaching children turn-taking and sharing.

2.3 PRE-SCHOOL AS A CENTRE FOR STIMULATION AND DEVELOPMENTAL ACTIVITIES

The early years of human life play the most substantial role for the growth, development and learning. At this stage brain development is rapid depending upon the environmental conditions provided to the child. For the proper working of brain cells and growth of neural pathways, environmental conditions are very significant. Providing right stimulation at the right time is the key to the networking
of brain cells, which shape the way individuals behave, think and learn for the rest of their lives. Hence, providing adequate opportunities for stimulating experiences favourably affect various learning abilities. For the development of cognitive domain, it is very much significant that pre-school activities should be aimed at providing the opportunities in a way that each child gets way to unfold his or her innate capabilities. At this pre-school stage the child enquires and tries to explore their surroundings. To boost child’s memory and increase their attention, plays, games and developmental activities are very much essential. The developmental activities done at the pre-school level helps the child to become a confident and efficient learner in the later years of life.

Pre-school stage acts as the perfect centre for stimulation activities which will benefit the young children in the following ways:

- Develops a child’s innate love of learning and gives freedom to each child to learn and progress at his/her own pace.
- Enhances visual and performing creativity among students.
- Encourages positive and happy attitude.
- Cultivates right communication skills.
- Creates a dynamic learning process through proving opportunities to think and explore.
- Facilitates and strengthens gross and fine motor development.
- Inculcates the values and development of life skills.
- Promotes the all-round development of child’s personality.
- Aids in the social and emotional development of child.

**Major Areas of Development**

As mentioned earlier, Unit 1, the following are the major areas of development addressed by pre-school education:

- Cognitive Development
- Physical Development
- Social/Emotional Development
- Language Development
- Self-Help/Adaptive Development

Let’s discuss each of these types individually.

### 2.3.1 Cognitive Development

The domain of cognitive development deals with skills regarding learning and thinking. Cognitive skills include:

- Questioning
- Developing attention span
Cognitive development is the domain which deals with how the child will learn, acquire new knowledge and learn about the environment which surrounds him/her. There are certain developmental activities which are helpful for the development of this domain at pre-school stage:

- **Music and songs**: Sing songs with the children and encourage them to sing along. Play their favourite songs and music. This activity helps to promote memory and word identification. Clinical research has confirmed other research that a child’s brain grows faster when learning music early on in life.

- **Understanding sound relation**: Involve children to identify noises that he/she hears throughout the day like bird singing, a car horn, running water etc. Through these activities, the children will begin to understand how sounds relate to objects in his everyday environment.

- **Alphabet practice**: At pre-school stage help children to practice and identify alphabets with alphabet puzzles. A pre-school teacher can help and encourage children to cut out the shapes of alphabets and recognize the shapes which resemble with the alphabets.

- **Counting practice**: A number of activities can be arranged throughout the day to practice counting. For example, count the number of toys, pencils and children in the classroom etc.

- **Practice shapes and colours**: Teachers/parents can help to identify shapes and colours when interacting with children. A number of examples can be taken from the daily life of students so that they can relate better. These opportunities can also be given in the playground also.

- **Questioning skill**: Another way of helping children learn to think for themselves is to ask them questions. For example: Why it is necessary to wash hands before eating anything? Or Why is it important to walk down the stairs slowly? Asking them questions helps them to learn how to solve the problem or questioned posed and better understand how environment works.

- **Visit interesting places**: Take trips to your local children’s museum, library or farmer’s market to stimulate curiosity and provide children ‘hands-on’ experiences. Ask them questions regarding what they have explored while visiting different places.

- **Involvement in games**: Play a variety of games with children to encourage problem solving and creativity. There are different games like board games,
puzzles and Hide and Seek etc. which will help for the cognitive development of the child.

2.3.2 Physical Development

Physical development activities are an important part of development of pre-school level and contributes a lot in the future development of the child. It includes activities related to muscle control, coordination and balance, healthy lifestyles and activities related to self-help skills.

Children during pre-school stage are naturally energetic and enjoy playful methods or games. During games there are opportunities to develop motor skills which will help to raise confidence among children. Following are some examples of activities related to physical domain:

- **Games**: For the development of gross motor skills, it is required that the children must be involved in those activities where muscles involved to complete the task. More opportunities should be given to children to involve in the activities like walking, jumping and climbing etc.

- **Fine motor skills**: This refers to the activities where physical activities are require using small muscles. Drawing different shapes like triangles, circles, squares etc., are some examples which involve small muscles for developmental activities. Children can be involved in paper cutting, making papers bags or puppets, painting etc., for developmental opportunities for children at pre-school stage.

- **Role Play**: It is a well-known fact that children have innate creativity and strong imagination power. Through role play activities, these capabilities can be utilised for the development skills related to physical domain. For example: Simon Says, freeze dance, Jungle walk are few activities which helps in physical development.

- **Outdoor Activities**: Allowing children to play outside with their peer group and involving in running, skipping spinning in circles football, cricket etc. are few activities which help the children to develop physical skills.

2.3.3 Social and Emotional Development

There is wide range of skills which are associated with social and emotional development of the child. It is very important to give opportunities to the children to regulate their emotions and behaviour in the right direction for the construction of positive personal identity.

Following activities are beneficial for social and emotional development:

- **Play Games**: For the social development, games are best way to develop such skills which are appropriate for learning cooperation and adjustment. In games children develop the ability to understand a social situation and use reasoning to deal with it in the most socially appropriate way. More
opportunities should be given to children to involve in age-appropriate puzzles and board games for indoor play and organize races and tag for outdoor fun.

- **Role-Play**: Encouraging your child to get involved in role-play helps to enhance social and emotional development because it requires communication skill. It is the best way to observe how the child is handling his/her emotions in different situations and in different roles. Some interesting role play activities related to their real life should be organized for children.

- **Make Art**: Art is the way to express emotions and it also help to release stress and provides the opportunities to express yourself in a better way. Creative activities provide your child with an outlet for emotional expression. Give opportunities to children for expressing their emotions through open art activities.

### 2.3.4 Language Development

Language development activities help children to be able to communicate feelings and ideas. It is the important aspect of pre-school stage as phonemic awareness, speaking and listening and describing things are learnt by children in this stage. Whatever language skill a child learns at this stage has a direct impact on reading and writing skills at later stages. Few activities related to language development are:

- **Describe new words**: Introduction of new words should be done in such way that it connects the child with the real life. For examples, ask child to describe what you are seeing and doing. Have children describe and label things, encourage them to make connections themselves. For example, have them taste sugar and salt and then have them describe the differences. Use real objects to teach new words, and let children feel the object when you name it.

- **Storytelling**: One of best language development activities involves storytelling. Even children with very limited language skills can enjoy building and telling a story. Wordless picture books are very helpful in helping the students to create story based on pictures.

- **Encourage group games and drama activities**: Through conversation in the social group during game children can naturally develop communication skills. Children can be involved in telephonic conversation through drama activities so that they enjoy the act and simultaneously build confidence in communicating with others.

### 2.3.5 Self Help

At the pre-primary stage children should be given opportunities to learn self-help skills like dressing, brushing teeth and hair, feeding oneself, washing hands and toilet training etc., so that children become more confident and independent in
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NOTES

Check Your Progress
1. How does play dough help in pre-school education?
2. Name some of the activities which involve small muscles in developmental activities.
3. What are the language skills children develop at the pre-school stage?

2.4 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. Play dough has immense potential for learning. Not only does it help to strengthen fingers which will further help in writing, teaching motor skills, creativity, but play with dough has immense contribution for learning.
2. Drawing different shapes like triangles, circles, squares etc., are some examples which involve small muscles for developmental activities.
3. Language development activities help children to be able to communicate feelings and ideas. It is the important aspect of pre-school stage as phonemic awareness, speaking and listening and describing things are learnt by children in this stage.

2.5 SUMMARY

- Pre-schools are very important for preparing the child for years of formal education that is to follow. It is like the initiation course for the child and a bridge between home and formal school.
- Pre-school education develops curiosity and imagination, aids better concentration, boosts cognitive skills, inculcates self-confidence and self-esteem, enhances social and emotional skills, and prepares for school, etc.
- Following are some activities which can be organized at pre-primary level: Activities with Sand, Water and Dough, Role Play, Drawing and Painting, Blocks, Jigsaws, and Shape Sorters, Music, Dancing, and Singing, Basic Board Games, etc.
- The early years of human life play the most substantial role for the growth, development and learning. At this stage brain development is rapid depending upon the environmental conditions provided to the child. For the proper working of brain cells and growth of neural pathways, environmental conditions are very significant. Providing right stimulation at the right time is
the key to the networking of brain cells, which shape the way individuals behave, think and learn for the rest of their lives.

- At this pre-school stage the child enquires and tries to explore their surroundings. To boost child’s memory and increase their attention, plays, games and developmental activities are very much essential. The developmental activities done at the pre-school level helps the child to become a confident and efficient learner in the later years of life.

- The following are the major areas of development addressed by pre-school education:
  - Cognitive Development
  - Physical Development
  - Social/Emotional Development
  - Language Development
  - Self-Help/Adaptive Development

- Cognitive development is the domain which deals with how the child will learn, acquire new knowledge and learn about the environment which surround him/her.

- Physical development activities are an important part of development of pre-school level and contributes a lot in the future development of the child. It includes activities related to muscle control, coordination and balance, healthy lifestyles and activities related to self-help skills.

- There is wide range of skills which are associated with social and emotional development of the child. It is very important to give opportunities to the children to regulate their emotions and behaviour in the right direction for the construction of positive personal identity.

- Language development activities help children to be able to communicate feelings and ideas. It is the important aspect of pre-school stage as phonemic awareness, speaking and listening and describing things are learnt by children in this stage. Whatever language skill a child learns at this stage has a direct impact on reading and writing skills at later stages.

- At the pre-primary stage children should be given opportunities to learn self-help skills like dressing, brushing teeth and hair, feeding oneself, washing hands and toilet training etc., so that children become more confident and independent in their daily life.

2.6 KEY WORDS

- Cognitive development: It is the domain which deals with how the child will learn, acquire new knowledge and learn about the environment which surround him/her.
NOTES

• **Fine motor skills:** This refers to the activities where physical activities are require using small muscles.

• **Language development activities:** These refer to activities help children to be able to communicate feelings and ideas.

### 2.7 SELF ASSESSMENT QUESTIONS AND EXERCISES

**Short Answer Questions**

1. How does pre-school stage act as a perfect centre for stimulation?
2. Name the major areas of development.
3. What are cognitive skills?
4. Mention some of the activities for language development at pre-school stage.
5. How is self-help an important area of development at pre-school stage?

**Long Answer Questions**

1. Discuss the benefits of pre-school education.
2. Describe some of the activities which can be organized at pre-primary level.
3. Examine the activities which can be organized to enhance cognitive development at pre-school stage.
4. Explain some of the activities which can be introduced at pre-school level for physical, social and emotional development.

### 2.8 FURTHER READINGS


UNIT 3 CLASSIFICATION OF EDUCATIONAL ACTIVITIES

3.0 INTRODUCTION

Students learn in many different ways in very different contexts. Since learners must do the learning, the aim is to create a total environment for learning that optimizes the ability of students to learn. There is of course no single optimum learning environment. There are an infinite number of possible learning environments, which is what makes teaching so interesting. Classification of educational activities on the basis of age, domain of development, teacher supervisions and place of activity is thereby important to ensure that a holistic education is being provided to the student covering different aspects and needs of the students. In this unit, you will learn about the classification of educational activities.

3.1 OBJECTIVES

After going through this unit, you will be able to:

- Discuss the concept of learning environment
- Describe educational activities based on age level of the child
- Explain the concept of domains of development
- Discuss the concept of grouping of children based on teacher supervision and place of activity
3.2 LEARNING ENVIRONMENT

Learning environment refers to the diverse physical locations, contexts, and cultures in which students learn. Since students may learn in a wide variety of settings, such as outside-of-school locations and outdoor environments, the term is often used as a more accurate or preferred alternative to classroom, which has more limited and traditional connotations—a room with rows of desks and a chalkboard, for example. The term also encompasses the culture of a school or class—its presiding ethos and characteristics, including how individuals interact with and treat one another—as well as the ways in which teachers may organize an educational setting to facilitate learning.

“The Glossary of Educational Reform (29 August, 2014)

Components of an effective learning environment

Developing a total learning environment for students in a particular course or program is probably the most creative part of teaching. While there is a tendency to focus on either physical institutional learning environments (such as classrooms, lecture theatres and labs), or on the technologies used to create online personal learning environments (PLEs), learning environments are broader than just these physical components. They will also include:

- the characteristics of the learners;
- the goals for teaching and learning;
- the activities that will best support learning;
- the assessment strategies that will best measure and drive learning
- the culture that infuses the learning environment.

Learning Activities

Learning activities, as the name suggests, are activities designed or deployed by the teacher to bring about or create the conditions for learning. Some learning activities stimulate experiential learning; others mobilize conceptual thinking, while still others prompt students to engage in analytical discussion.

The following table describes the learner characteristics and teaching strategies which should be employed at a particular age level:
## Table 3.1 Learning Characteristics and Teaching Strategies as per Age Level

<table>
<thead>
<tr>
<th>S.No</th>
<th>Age</th>
<th>Learner Characteristics</th>
<th>Teaching Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Toddlerhood</td>
<td>- Dependent on environment&lt;br&gt;- Needs security&lt;br&gt;- Explores self and environment&lt;br&gt;- Natural curiosity</td>
<td>- Orient teaching to caregiver&lt;br&gt;- Provide physical safety and emotional security&lt;br&gt;- Allow play and manipulation of objects</td>
</tr>
<tr>
<td>2</td>
<td>Pre-schooler</td>
<td>- Egocentric&lt;br&gt;- Animistic thinking&lt;br&gt;- Separation anxiety&lt;br&gt;- Motivated by curiosity&lt;br&gt;- Active imagination, prone to fears</td>
<td>- Use warm, calm approach&lt;br&gt;- Build trust&lt;br&gt;- Allow manipulation of objects&lt;br&gt;- Provide safe, secure environment Use simple drawings and stories&lt;br&gt;- Use play therapy, with dolls and puppets&lt;br&gt;- Stimulate senses: visual, auditory, tactile, motor</td>
</tr>
<tr>
<td>3</td>
<td>School aged Childhood</td>
<td>- More realistic and objective&lt;br&gt;- Understands cause and effect&lt;br&gt;- Deductive/inductive reasoning&lt;br&gt;- Wants concrete information&lt;br&gt;- Variable rates of physical growth&lt;br&gt;- Immediate orientation</td>
<td>- Encourage independence and active participation&lt;br&gt;- Be honest&lt;br&gt;- Use logical explanation&lt;br&gt;- Allow time to ask questions&lt;br&gt;- Use analogies to make invisible processes real&lt;br&gt;- Establish role models&lt;br&gt;- Use play therapy&lt;br&gt;- Provide group activities&lt;br&gt;- Use drawings, models, dolls, painting, audio-and video-tapes</td>
</tr>
<tr>
<td>4</td>
<td>Adolescence</td>
<td>- Abstract, hypothetical thinking&lt;br&gt;- Can build on past learning&lt;br&gt;- Reasons by logic and understands scientific principles&lt;br&gt;- Future orientation&lt;br&gt;- Motivated by desire for social acceptance&lt;br&gt;- Peer group important&lt;br&gt;- Intense personal preoccupation&lt;br&gt;- Feels invulnerable</td>
<td>- Establish trust, authenticity&lt;br&gt;- Know their agenda&lt;br&gt;- Address fears/concerns about outcomes of illness&lt;br&gt;- Identify control focus&lt;br&gt;- Include in plan of care&lt;br&gt;- Use peers for support and influence&lt;br&gt;- Negotiate changes&lt;br&gt;- Focus on details&lt;br&gt;- Make information meaningful to life&lt;br&gt;- Use audiovisuals, role play, contracts, reading materials</td>
</tr>
</tbody>
</table>

### 3.3 EDUCATIONAL ACTIVITIES CLASSIFIED AS PER AGE LEVEL OF THE CHILD

In this section, you will learn about the classification of educational activities based on the age level of the child. This categorization uses the following age level of children: toddlers, pre-schoolers and school age.
### Table 3.2 Educational Activities for Toddlers

<table>
<thead>
<tr>
<th>S.No</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bathtub with Stuffed Animals</td>
<td>Have a fun playtime with all your child’s favorite stuffed animals! Just simply put them in an empty bathtub and let them play. Let kids play for a long time using their imagination. They may pretend as if they are on Noah’s ark during the flood.</td>
</tr>
<tr>
<td>2</td>
<td>Car Wash with Toy Cars</td>
<td>This activity is SO fun! Let the kids take their toy cars and get them cleaned with car wash. Set the toy cars up by the sink. Then fill the sink with soapy water. Carry a bucket of water on the other side to rinse the cars off. Lastly, dry them with a towel. This will make the kids learn how to follow steps and do things on their own with a sense of completion.</td>
</tr>
<tr>
<td>3</td>
<td>Fine Motor Practice with Cheerios</td>
<td>Just take some play dough, roll it in a ball, then stick spaghetti noodles on the top. Have your toddler slide cheerios down the noodle. It’s simple, but great for practicing fine motor skills! And it really keeps them busy.</td>
</tr>
<tr>
<td>4</td>
<td>Melting Ice</td>
<td>There’s something about melting ice that’s fun for kids. We like to freeze water balloons and then squirt them with warm water in squeeze bottles. It’s also a great science lesson on water and ice. Or you could put little dinosaurs in the water balloons and make them Dino Eggs.</td>
</tr>
<tr>
<td>5</td>
<td>Ice Cube Painting</td>
<td>So for this activity, you just fill an ice tray with water and color the water with food coloring. Put them in the freezer and after 20 minutes, stick toothpicks or rounded popsicle sticks into them. Let them freeze until solid. Then you pop them out of the try and have your toddler paint with them. It will look like watercolors on the paper.</td>
</tr>
</tbody>
</table>

### Table 3.3 Educational Activity for Pre-schooler

<table>
<thead>
<tr>
<th>S.No</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Connect-the-dots with letters</td>
<td>This is a letter familiarity activity that will get your little ones moving and their creative juices flowing. Good old connect-the-dots gets revamped when you write a handful of repeating letters in random patterns down a length of butcher’s paper. Kids can connect the letters in any way they like, so long as all of the G’s are connected to the other G’s, and so on.</td>
</tr>
<tr>
<td>2</td>
<td>Crocodile circle</td>
<td>Picture a bin with a crocodile face on top, filled with letters and surprise cards. Students pass the crocodile around the circle singing Crocodile, crocodile down by lake, I’m going to reach right in and see what (letter) you ate. The student holding the crocodile then pulls a letter and calls it out. Extra surprise cards can let you repeat a turn, reverse directions or anything else you want to include.</td>
</tr>
<tr>
<td>3</td>
<td>Letter matching archaeology game</td>
<td>This activity allows students to practice letter recognition while playing archeologist. Drop a few magnetic letters onto a cookie sheet, writing the letters you chose on a piece of paper for your students to use as a key. Cover the letters in flour and give the kids a makeup brush to carefully ‘search the site’ for hidden letters. When they find one, they must match it to their paper key before continuing the hunt.</td>
</tr>
<tr>
<td>4</td>
<td>Mini alphabet sensory bins</td>
<td>This one is especially suited for a classroom environment and could be a staple setup in any preschool teacher’s arsenal. Tape the letter on the front of each box, or let the kids guess the letter as they examine the objects. Either way, these sensory bins transform a fun, hands-on-play activity into a literacy lesson.</td>
</tr>
</tbody>
</table>
Table 3.4 Educational Activities for School Aged Children

<table>
<thead>
<tr>
<th>S.No</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Make relaxation jars</td>
<td>Also known as ‘calm down jars,’ these creations are as useful as they are lovely. Using warm water, glitter glue and a hot glue gun, your child can create a jar using their favorite colors. Relaxation jars are a unique way to teach your child how to self-regulate her emotions by looking at her jar when she feels overwhelmed and they are ideal for the anxious child.</td>
</tr>
<tr>
<td>2</td>
<td>Dress up and put on a short play</td>
<td>Give your kids a theme, such as a summertime picnic or a winter kingdom, and ask them to put together a short play to present to you later. It should have a beginning, middle and an ending, but the rest is up to them. Encourage them to get into it by using whatever they can find to dress up as characters.</td>
</tr>
<tr>
<td>3</td>
<td>Make a Rainbow Poem</td>
<td>This activity uses the colors of a rainbow to help teach your child how to create a poem. Have your child choose the colors of his rainbow, and then come up with descriptions of each color. After all the descriptions are completed, he can line them up in a rainbow and will see that he has created his own poem!</td>
</tr>
</tbody>
</table>

3.3.1 Domains of Development

In relation to human development, the word ‘domain’ refers to specific aspects of growth and change. As you have learnt in the previous units, major domains of development include social-emotional, physical, language and cognitive.

Children begin developing at birth and continue to adulthood. The successful completion of developmental milestones helps the child reach his/her full potential. One may track the child’s physical development at well-child check-ups, but physical development covers only one domain of the five major domains of early childhood development. A child’s social, cognitive, communicative and adaptive development determines future success as much as physical development. We have discussed these in the previous units, let’s recapitulate the concept here.

- **Physical well-being and motor development**

Physical development includes mastering movement, balance and fine and gross motor skills. During early childhood, the child’s balance improves. He can walk on a line or small balance beam and balance on one foot. The child also develops the skill to throw and catch a ball, walk up and down stairs without assistance and do somersaults. At this age the children begins mastering motor skills that allow him to build block towers, draw circles and crosses and use safety scissors.

- **Social and emotional development**

Social development refers to a child’s ability to make and maintain relationships. The child cooperates with others during early childhood and begins to develop conflict resolution skills. She enjoys attention and may show off, while still showing empathy for others. At this age a child enjoys group games and begins to understand the concept of playing fairly. She can tell the difference between fantasy and reality but enjoys imaginative play with friends.
Classification of Educational Activities

NOTES

• Cognitive

Cognitive development includes skills pertaining to learning and thinking. During early childhood child develops the ability to sort objects and can organize materials by size or color. His attention span increases, and he seeks information through questions, such as ‘how?’ and ‘when?’. By the end of early childhood, he/she can count to 10, knows his colours and can read his name. He knows the difference between fact and fiction, making him capable of understanding the difference between the truth and a lie.

• Language and Communicative

Communicative development includes the child’s skills to understand the spoken word and express her verbally. During early childhood a child goes from speaking in short sentences to speaking in sentences of more than five words. The child, once understandable only to those closest to her, now speaks clearly enough that even strangers understand her words. She talks about experiences, shares personal information and understands positional concepts such as up and down. At this age, it becomes possible to carry on a back-and-forth conversation.

Table 3.5 Characteristics of Domains of Development

<table>
<thead>
<tr>
<th>S.No</th>
<th>Domain</th>
<th>Characteristics</th>
</tr>
</thead>
</table>
| 1    | Physical well-being and motor development | • Health and well-being: children’s formation of healthy routines, such as eating nutritiously, engaging in physical activity, and developing self-care habits.  
• Gross Motor Skills: large muscle development through control of movements such as walking, running, and climbing  
• Fine Motor Skills: small muscle development through control over movements such as reaching, grasping, coloring, and turning pages |
| 2    | Social                       | • Trust and Emotional Security  
• Self-Awareness  
• Self-Regulation  
• Relationships with others |
| 3    | Cognitive                    | • Exploration and discovery  
• Problem-Solving  
• Memory  
• Imitation and Make Believe |
| 4    | Communicative                | • Listening and Understanding  
• Communication and Speaking  
• Emergent Literacy |

Opportunities to children to develop respective domains

These five domains are intended to be overlapping and connected indicators of a child’s ability to succeed in a school setting. They’re not intended to be chronological milestones, but rather skills that children develop simultaneously.
The child’s first years in school will set them up for the rest of their academic career. For that reason, it’s important to make sure that they’re socially, emotionally, intellectually and physically ready to enter school premises. One can help children develop the skills they need to succeed by offering opportunities to engage in activities that allow them to build skills, grow as human beings and learn about the world. A strong, early learning foundation will help prepare the child for a lifetime of personal, professional and academic success.

Table 3.6 Different Domains and Opportunities to Learn

<table>
<thead>
<tr>
<th>S.No</th>
<th>Domain</th>
<th>Opportunities to Children to develop respective domains</th>
</tr>
</thead>
</table>
| 1    | Physical well-being and motor development | • Allow and encourage older infants and toddlers to assist with dressing themselves to the best of their abilities  
• Help and support toddlers by establishing healthy self-care activities, like hand washing and brushing teeth  
• Provide plenty of healthy food options, including foods from various cultures  
• Find opportunities to demonstrate good health behaviors and teach about personal hygiene (ex: ‘Please cover your mouth with your elbow when you cough.’)  
• Give infants frequent ‘tummy time’ while staying close to them, and notice when infants begin to lift their head and shoulders  
• Encourage older infants to move to get what they want, such as a toy that is out of reach  
• Play with toddlers indoors and outdoors and observe their increasing ability to run, jump, and climb  
• Encourage three-year-olds to climb on fun equipment, like a jungle gym at the park or playground  
• Use games and songs that involve movement and exercise (ex: ‘Hop like a bunny.’)  
• Play active games with babies, such as ‘patty cake,’ ‘peek-a-boo,’ and finger plays  
• Allow infants to have plenty of objects for grasping  
• Provide toddlers with toys that require eye-hand coordination (ex: nesting cups, fill and dump containers, stacking rings, sorting toys, large peg boards, etc.)  
• Provide toddlers with toys that allow them to explore and practice delicate movements (ex: beads on a string, lacing cards, crayons, markers, and paper) |
| 2    | Social/Emotional               | • Always be warm, nurturing, and welcoming  
• Listen to and sing with infants often, especially during daily routines, such as feeding and diaper changes  
• Reassure toddlers of when you or other familiar adults will return  
• Encourage independence and participation in new situations (ex: ‘Go ahead, you can do it!’)  
• Use children’s names when speaking to them  
• Help children learn to name their emotions  
• Offer toddlers a chance to make choices. Limit the choices to no more than three  
• Talk with children about what is going on around them, narrate what you are doing and what they are doing. |
### Classification of Educational Activities

<table>
<thead>
<tr>
<th></th>
<th>Language and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>• Engage in conversations with all children. Allow them to respond and then extend the conversation.</td>
</tr>
<tr>
<td></td>
<td>• With older infants, name and talk about the objects that they use. (ex: hand a spoon to the older infant and say, ‘Here’s your spoon.’)</td>
</tr>
<tr>
<td></td>
<td>• Make requests and ask questions using different and expressive tones of voice</td>
</tr>
<tr>
<td></td>
<td>• Give toddlers toys and experiences that allow them to hear different animal and people sounds</td>
</tr>
<tr>
<td></td>
<td>• Ask questions about different characters or objects in a book</td>
</tr>
<tr>
<td></td>
<td>• Talk about what belongs to other people by using pronouns</td>
</tr>
<tr>
<td></td>
<td>• Consistently name objects in the environment</td>
</tr>
<tr>
<td></td>
<td>• Introduce new words, sounds, signs, and body language during everyday activities by explaining what older infants are seeing, hearing, smelling, touching, and tasting</td>
</tr>
<tr>
<td></td>
<td>• Speak in complete sentences with toddlers.</td>
</tr>
<tr>
<td></td>
<td>• Hold and cuddle infants when you read to them</td>
</tr>
<tr>
<td></td>
<td>• Talk about print in the environment</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Cognitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>• Name and describe objects—infants are exploring and encourage them to continue to play with the objects by telling them you like their ‘music’ or banging</td>
</tr>
<tr>
<td></td>
<td>• Give infants safe toys that produce interesting results or movements in response to their actions</td>
</tr>
<tr>
<td></td>
<td>• Create an environment that encourages discovery, and give uninterrupted playtime</td>
</tr>
<tr>
<td></td>
<td>• Recognize toddlers' interest in the natural world and help describe what they see, hear, and experience</td>
</tr>
<tr>
<td></td>
<td>• Describe basic colors and shapes for three-year-olds and begin teaching more complex colors/shapes</td>
</tr>
<tr>
<td></td>
<td>• Respond promptly and warmly to infants when they make sounds, cry, or fuss</td>
</tr>
<tr>
<td></td>
<td>• For older infants, keep toys around that respond to actions, such as pop-up boxes, squinky toys, and musical instrument toys</td>
</tr>
<tr>
<td></td>
<td>• Encourage filling and emptying containers</td>
</tr>
<tr>
<td></td>
<td>• Ask toddlers questions, express wonder about problems, and respond to questions with enthusiasm (ex: ‘I wonder how that happened?’)</td>
</tr>
<tr>
<td></td>
<td>• Set up your surroundings to allow new ways of problem solving</td>
</tr>
<tr>
<td></td>
<td>• Give three-year-olds materials to practice measuring, comparing, and sorting</td>
</tr>
<tr>
<td></td>
<td>• Celebrate counting and include counting during daily routines</td>
</tr>
<tr>
<td></td>
<td>• Celebrate when infants find a dropped toy, and play hiding games with infants by partially covering a toy and then revealing it</td>
</tr>
<tr>
<td></td>
<td>• Keep toys and familiar objects in consistent locations so older infants begin to learn where things are kept</td>
</tr>
<tr>
<td></td>
<td>• Play memory games with toddlers</td>
</tr>
</tbody>
</table>
Classification of Educational Activities

NOTES

Self-Instructional Material

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• Ask three-year-olds to tell you what they think will happen next in a familiar book or story
• Ask three-year-olds questions that require them to use their memory
• Follow infants' leads and play with them
• Allow older infants to pretend play with real objects. Comment positively on pretend play.
• Play with toddlers using pretend roles. For example, you can pretend you are a farmer, and the children can be the animals on the farm
• Extend the pretend play with toddlers and three-year-olds

Precautions

If on suspects a developmental delay, it is important make an appointment with the child’s pediatrician. If the toddler needs developmental intervention, the pediatrician can recommend a specialist or program suited to the child’s specific needs. Possible causes of developmental delay include genetic factors, ear infections, and pregnancy and birth complications. Early diagnosis enables you to get the medical and developmental services your child needs and can even reverse the effects in certain cases.

Check Your Progress

1. What are some of the learner characteristics of pre-schoolers?
2. List the characteristics of cognitive development.
3. What are some of the possible causes of developmental delay?

3.4 GROUPING OF CHILDREN

Often when students are placed in a composite or multi-age class, parents of the younger children worry they won’t be able to keep up. Parents of the older children worry their advanced needs won’t be met.

In most schools, students are placed in a single-grade class (as in ‘Grade 2’ or ‘Year 2’), based on their age. Existing alongside this type of class are different types of mixed-grade class, sometimes formed by choice and sometimes by necessity.

‘Multi-age’ and ‘composite’ are only two types of mixed-grade class, though in common parlance the terms are used to describe all types of mixed-grade classes. Other types include ‘multi-grade’, ‘stage’, and ‘non-graded’. All have two or more grades in the one class but they all vary in significant ways.

In small rural schools, permanent multi-grade classes are a necessity because of the low number of students. In larger urban schools, temporary composite classes are formed on an annual basis to cope with the problem of uneven grade enrolments—when all the Year 3 and Year 4 classes are filled and
there are still, say, 12 students in Year 3 and 14 students in Year 4, then these 26 students are combined into a Year 3/4 class. The following year a different composite class might have to be formed, again by necessity.

Some teachers believe in the educational benefits of learning with and from others of different ages and prefer to teach a multi-age class of two or more (commonly three) different grades, such as a Year 4/5/6 class. They form multi-age classes by choice.

Should children be grouped by age anyway?

Putting students into classes based on their age is an administrative convenience. As all parents and teachers know, a child’s age tells you nothing definitive about his or her development — a boy can be much taller than other boys his age and be a better match physically to boys one or more years older. This boy can be a ‘star’ when he plays sport in an age-based team. The same boy, however, might have similar literacy skills to others his age but struggle to keep up in maths. His twin sister might be smaller than girls her age but outshine them in all subjects (or none) at school.

Children’s development follows a similar pattern, but their age is not always an accurate predictor of their actual development. Inherited characteristics as well as environmental factors such as nutrition and experiences will influence development and the age at which particular milestones are reached. It is not the class structure that affects learning so much as the type of learning activity engaged in, its relevance, its interest, a student’s learning to date, and many other factors including the student’s active involvement in the learning and the quality of the teaching.

Learning with others in genuinely collaborative groups is effective and can be organized in any type of class, but mixed-grade teachers have more opportunities to group students flexibly, in different ways at different times. Sometimes an ability group, with students from different grades, will be the correct choice. At other times, an ability group would be the wrong choice, because students need to benefit from different perspectives and such perspectives may not have any link to ability. Parents concerned about their child’s mixed-grade class should be reassured that learning occurs individually, in small groups, and as a whole class. Engaged students will learn whether the class is structured by age, grade, ability, or as some form of mixed-grade class.

Here are some suggestions for providing a suitable environment for student learning:

- for small group activity, arrange seating so that all participants can see each other’s faces - to ensure that all students feel included and encouraged to to contribute
- sit as one of the group, rather than separately to put yourself in the position of a fellow learner, and allow students greater freedom to experiment with ideas
organise furniture (chairs and tables) for flexible use to accommodate interaction with different group sizes to allow a variety of group activities

- ensure that all participants can clearly see and hear all that they need to
- ensure the students know your name and each other’s names; this helps group cohesion
- get to know and use the students’ names so that students will feel known and acknowledged ‘as a person’
- provide appropriate information and activities online, ensuring that students know what they are required to do and how. This gives them greater flexibility in when and how they access important information and perform required tasks
- structure online activities so that students can engage interactively with the course materials and with each other e.g. MyUni discussion board, electronic role play, online group work. This may be valuable for students whose first language is not English, or others who are shy in class
- make clear your goals and expectations and the processes for realising them, especially the criteria for their assessments
- provide structured classroom activities which facilitate student engagement in a range of group sizes; different learning activities work better with different group sizes
- be sensitive to the diversity among your students, modelling and requiring inclusive practices
- encourage attempts at tasks, building an incorrect or imperfect response, rather than rejecting them
- present yourself as a fellow learner, rather than the person who has all knowledge
- model problem-solving and other process activities such as structuring an essay or short answer
- seek regular feedback from your students in relation to their learning and the learning environment; be prepared to act on this feedback

The students can be divided into groups of many different types based on the needs of the classroom. This can be in the form of random grouping, ability grouping, subject grouping, task grouping, skill or student choice grouping.

Grouping Children based on the Level of Teacher Supervision and Place of Activity.

The grouping of students in this case will be done on the level of teacher supervision required. For example, the teacher may observe the students who need more time and help with learning certain activities and so small groups may be formed where in the teacher devotes more time to students who need help. Alternatively, the
teacher may form different groups in the class for activities based on the level of teacher supervision which the activity requires. For example, drawing may require less supervision and solving puzzle or counting may require more attention. By forming groups, the teacher can divide the class to carry out different activities as per the time, so that one group is engaged in an easy activity while the teacher devotes extra time to groups which are engaged in more complex tasks.

Similarly, with regards to grouping children as per the place of activity, the teachers in pre-schools may group children and have them seated as per the location of the activity they are engaged in. One example could be dividing the entire class in two four different zones each with a designed activity, including painting, jigsaw, story-time, games, etc. or a separate area for role play, for eating, for playing, etc. The students may even rotate their place as per the stipulated time, so that they know that each area signifies a particular task and it needs to be done only there. The teacher tool will find it easier to management and engage the students in the activity in a better manner.

### 3.4.1 Instructional Groups used by Teachers

A classroom has been grouped when the one large group of students assigned to that classroom is divided into a set of smaller groups for some portion of the time they are in the classroom. While in operation, each small group is recognized and treated as a separate and distinct social entity by the teacher and the students in the classroom. To be considered instructional, the activities carried out by students in a small group must include learning of educational material.

Teachers place different configurations of students in classroom instructional groups, assign the groups different sorts of learning goals and tasks, evaluate student performance in different ways and maintain group membership for different periods of time. Several types of groups result. More effective teachers use more than one type of group.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Type of Instructional Groups</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Learning Cycle Groups</td>
<td>Students with similar learning needs are brought together for a short time. Students are assigned to groups based on need for additional help, time and practice in order to master the content and skills covered in a particular unit or lesson the teacher already has taught to the entire classroom group. Students who have mastered the specific content and skills engage in enrichment activities.</td>
</tr>
<tr>
<td>2</td>
<td>Cooperative Groups</td>
<td>Cooperative groups require students with diverse ability and characteristics to work together and learn from one another to accomplish assigned learning goals or tasks.</td>
</tr>
</tbody>
</table>
### Self-Instructional Material

3. Group Investigation

A small group of four to six diverse students is assigned a topic of study. Different students are assigned subparts of the work to be done. Completion of assigned tasks requires each student's work to be combined with that of other students to produce a group effort. Students may be assigned to play different roles in the group process. Task completion is contingent on cooperation. The group's collective product is evaluated. Each student's performance is judged based on this evaluation and, in addition, may include an individual score for the subtask completed by the student. Group membership changes for different assignments. Generally, there is no inter-group competition.

4. Peer Tutoring

A small group of four to six students with a cross section of characteristics is formed to teach information and skills. Tasks assigned to groups emphasize material previously taught to the entire class by the teacher.

5. Long Term Ability Groups

Students are assigned to groups based on academic ability. Changes in group assignments occur only when a student's academic performance changes. Assignments seldom change. For the most part, a student's assignment to an ability group level will be maintained through grade three and beyond. Most changes are based on factors other than achievement, e.g., social behaviour and neatness, and are to a lower rather than higher ability group. Learning in small group is teacher-directed. Instruction may be provided in a 'pull-out' situation in which students are taught by a different teacher from the one who teaches the class. Group instruction may take place in a setting outside the regular classroom. Students are evaluated individually.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Use</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To assure that all students learn</td>
<td>Total classroom groups typically include students with a variety of characteristics. Students differ in mastery of the skills and knowledge prerequisites for successful learning in that classroom. Students differ in the time needed for learning a given unit of material or to attain a particular educational objective. The slowest 10 percent of students need 2.4 to 6 times as much time as the highest 10 percent. Students differ in race, sex, socioeconomic level of parents and age. Students differ in self-concept, interest in school, motivation to learn and personal education goals. Accommodating such student heterogeneity is one of the most troublesome and enduring problems faced by teachers. Both high and low ability students do better academically in classes where the total group includes students with a wide range of academic ability. The impact is greater on low ability students. There is no difference in average ability students' academic performance in classes that are academically heterogeneous or homogeneous.</td>
</tr>
</tbody>
</table>
Short-term lesson-by-lesson instructional groups provide review, practice and enrichment opportunities that effectively meet the diverse learning needs of students in a heterogeneous classroom. Although instructional grouping is used to reduce the range of differences in the students being taught at a given point in time, the abilities of students in the various groups, even long-term ability groups, overlap considerably. Most studies of small group versus whole class instruction find greater learning on the part of students when the teacher uses small instructional groups for at least part of the time. High and low ability students benefit more than average students. Achievement gains are less clear in mathematics than reading. In math, students in peer tutoring groups show more significant gains in math computation than in math concepts and applications. Students who complete group investigation tasks acquire more high level math skills than those engaged in total class instruction. Cooperative group experiences increase girls’ achievement more than boys’. Student achievement in instructional groups is related to the teacher's ability to solve classroom management problems associated with the use of small groups.

To increase student engagement in learning, high levels of student on-task time occur in small groups. In particular, low ability students spend much less time off task in cooperative small group situations than in total class instruction largely because they spend less time in waiting for instructions and feedback. Engagement of low ability students decreases as the diversity of the students in the small group decreases. When all students in a group are low ability and their placement in the group extends for more than a few days, these low ability students have almost twice as much off-task time as students assigned to long-term high ability groups. This occurs even when the teacher directs the low group. A factor related to high engagement rates in instructional groups is the success rate students must have to learn effectively. When students receive immediate feedback, as they do in some groups, only a 70 to 80 percent success rate is required. When students work on their own in a total class seatwork situation, an initial success rate of 95 to 100 percent is required. Formation of lesson-by-lesson groups based on differences in students’ learning needs reduces the amount of review and practice time needed by all students to achieve high success. However, students who are assigned repeatedly to groups that receive more review and practice time than other groups, over time, require ever increasing amounts of review and practice to achieve mastery of the skills and knowledge covered in later lessons.
### Classification of Educational Activities

**NOTES**

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<table>
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<tbody>
<tr>
<td>3</td>
<td>To teach students how to work with others</td>
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<tr>
<td></td>
<td>Small groups teach students when to perform work on their own and when it is proper to seek the assistance and knowledge of others. Students learn to cooperate with others when assigned group tasks that require each student to complete a subpart of the task. Individual learning effort also increases. Students' perceptions of other students as helpful and cooperative rather than competitive increases when students engage in cooperative group activities. Students who engage in small group activities for some of their instructional time decide how to do school work more quickly and freely than students who only engage in total class, teacher-directed instruction. They also show more self-initiative and assume greater individual responsibility for completion of assigned tasks. Students who participate in group investigation and concept development groups acquire negotiation, consensus and compromise skills.</td>
</tr>
<tr>
<td>4</td>
<td>To facilitate social interaction among students</td>
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<tr>
<td></td>
<td>The more interdependent the group activities in which students engage, the more positive the prosocial outcomes are for the students. Group membership influences student friendships in and out of the classroom and school. Cooperative groups encourage friendships among students of diverse ability and social levels. Long-term ability groups limit student friendships. Higher ability students refuse to interact with students who are not in their group. In most small groups, students' liking for students in one group increases without loss of liking of other members of the class. Long-term ability groups are an exception. When classroom instruction in a subject area takes place mainly in cooperative, student directed groups, no academic hierarchy is found relative to student interactions and students' perceptions of other students. Cooperative groups promote greater contact, trust, acceptance and support among students of different races, social classes, achievement levels and sexes. Handicapped students interact more with non-handicapped students when placed in small cooperative groups. They also give more management input to learning activities. They receive more academic support from their non-handicapped peers. Non-handicapped students become more open-minded regarding handicapped students and the ideas they provide when they work with handicapped students in cooperative groups.</td>
</tr>
<tr>
<td>5</td>
<td>To teach students how to learn in a variety of ways</td>
</tr>
<tr>
<td></td>
<td>Most small group activities do not involve direct instruction by the teacher. Students are responsible for gathering information, coordinating work, helping one another and solving problems. Students learn from one another. Group interaction about how to complete assigned tasks leads students to seek additional information and to approach existing information from new perspectives. Particularly in group investigation and concept development groups, learning tasks expand beyond the listening, reading and writing tasks that predominate in total class instruction. Interviewing, role playing, model building, illustrating and observing are used.</td>
</tr>
</tbody>
</table>
Check Your Progress

4. What are cooperative instructional groups?
5. Define peer tutoring.

3.5 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. Some learner characteristics of a pre-schooler includes:
   - Egocentric
   - Animistic thinking
   - Separation anxiety
   - Motivated by curiosity
   - Active imagination, prone to fears

2. Characteristics of communicative development include: Listening and Understanding, Communication and Speaking, and Emergent Literacy.

3. Possible causes of developmental delay include genetic factors, ear infections, and pregnancy and birth complications.

4. Cooperative groups require students with diverse ability and characteristics to work together and learn from one another to accomplish assigned learning goals or tasks.

5. Peer tutoring refers small group of four to six students with a cross section of characteristics is formed to teach information and skills. Tasks assigned to groups emphasize material previously taught to the entire class by the teacher.

3.6 SUMMARY

- Students learn in many different ways in very different contexts. Since learners must do the learning, the aim is to create a total environment for learning that optimizes the ability of students to learn. There is of course no single optimum learning environment. There are an infinite number of possible learning environments, which is what makes teaching so interesting.

- Developing a total learning environment for students in a particular course or program is probably the most creative part of teaching. While there is a tendency to focus on either physical institutional learning environments (such as classrooms, lecture theatres and labs), or on the technologies used to create online personal learning environments (PLEs), learning environments are broader than just these physical components.
Learning activities, as the name suggests, are activities designed or deployed by the teacher to bring about or create the conditions for learning. Some learning activities stimulate experiential learning; others mobilize conceptual thinking, while still others prompt students to engage in analytical discussion.

The classification of educational activities may be based on the age level of the child. This categorization uses the following age level of children: toddlers, pre-schoolers and school age.

In relation to human development, the word ‘domain’ refers to specific aspects of growth and change. As you have learnt in the previous units, major domains of development include social-emotional, physical, language and cognitive. Children begin developing at birth and continue to adulthood. The successful completion of developmental milestones helps your child reach her full potential.

There are different characteristics for different domains of development.

The child’s first years in school will set them up for the rest of their academic career. For that reason, it’s important to make sure that they’re ready socially, emotionally, intellectually and physically to enter school premises. One can help children develop the skills they need to succeed by offering opportunities to engage in activities that allow them to build skills, grow as human beings and learn about the world.

In most schools, students are placed in a single-grade class (as in ‘Grade 2’ or ‘Year 2’), based on their age. Existing alongside this type of class are different types of mixed-grade class, sometimes formed by choice and sometimes by necessity.

Putting students into classes based on their age is an administrative convenience. As all parents and teachers know, a child’s age tells you nothing definitive about his or her development.

Children’s development follows a similar pattern, but their age is not always an accurate predictor of their actual development. Inherited characteristics as well as environmental factors such as nutrition and experiences will influence development and the age at which particular milestones are reached. It is not the class structure that affects learning so much as the type of learning activity engaged in, its relevance, its interest, a student’s learning to date, and many other factors including the student’s active involvement in the learning and the quality of the teaching.

A classroom has been grouped when the one large group of students assigned to that classroom is divided into a set of smaller groups for some portion of the time they are in the classroom. While in operation, each small group is recognized and treated as a separate and distinct social entity by the teacher and the students in the classroom. To be considered instructional, the activities
carried out by students in a small group must include learning of educational material.

- Different types of instructional groupings include: learning cycle groups, cooperative groups, group investigation, peer tutoring and long term ability groups.

3.7 KEY WORDS

- **Learning environment**: It refers to the diverse physical locations, contexts, and cultures in which students learn.
- **Learning activities**: As the name suggests, these are activities designed or deployed by the teacher to bring about or create the conditions for learning.
- **Domain**: In relation to human development, the word ‘domain’ refers to specific aspects of growth and change.
- **Developmental delay**: It refers to the considerable delay in the physical or mental development of children when compared with their peers.
- **Instructional grouping**: It refers to the grouping when one large group of students assigned to that classroom is divided into a set of smaller groups for some portion of the time they are in the classroom.

3.8 SELF ASSESSMENT QUESTIONS AND EXERCISES

**Short Answer Questions**

1. What are the non-physical components of learning environment?
2. Briefly explain the characteristics of domains of development.
3. Should children be grouped by age?
4. Write a short note on the suggestions for providing a suitable environment for student learning.
5. What are the different types of instructional groups?

**Long Answer Questions**

1. Discuss the learning characteristics and teaching strategies as per age level.
2. Describe the educational activities classified as per age level of the child.
3. Explain the relationship between different domains and opportunities to learn for children.
4. Examine the uses of instructional grouping.
3.9 FURTHER READINGS


UNIT 4 EDUCATIONAL ACTIVITIES FOR MUSCLE COORDINATION

Structure
4.0 Introduction
4.1 Objectives
4.2 Gross Motor Skills
  4.2.1 Educational Activities for Gross Muscle Co-ordination
  4.2.2 Fine Motor Skills
  4.2.3 Activities for Motor Development of the Toddlers and Pre-Schoolers
4.3 Answers to Check Your Progress Questions
4.4 Summary
4.5 Key Words
4.6 Self Assessment Questions and Exercises
4.7 Further Readings

4.0 INTRODUCTION
During the early years, children develop a concept of self which results in a growing sense of autonomy and an increased understanding of the world around them. They begin to take initiatives, make choices and assert themselves in socially acceptable ways. At the same time, they become ardent observers and persistent explorers experimenting with their surroundings and their interaction with parents and teachers. Children explore their surroundings using different skills like fine motor skills and gross motor skills. Both the skills are connected to each other. Balance and coordination are the two important and essential factors for these skills. In this unit, you will learn about the educational activities for gross muscle co-ordination and activities for motor development of the toddlers and pre-schoolers.

4.1 OBJECTIVES
After going through this unit, you will be able to:
• Explain the concept of gross motor skills
• Discuss the educational activities for gross muscle co-ordination
• Describe activities for motor development of the toddlers and pre-schoolers
4.2 GROSS MOTOR SKILLS

Gross motor skills involve those physical skills which involves the whole-body movements or large muscle skills to perform day to day task. These skills involve muscular strength and endurance to perform everyday task like standing, walking, running etc. When the child achieve mastery in gross motor skills then child:

- Throws, catches, and kicks a ball with increasing control with proper hand and eye coordination.
- Moves with direction and increasing coordination (running, jumping, hopping, galloping)
- Climbs stairs with minimal or no support.
- Maintains right posture while standing and sitting.

Some of the Gross Motor Difficulties are as follows:

- Children start crawling and walking late.
- They are unable to participate in activities which need more physical work.
- They feel tired and exhaustive very frequently in any physical activity.
- They face difficulty in climbing stairs.
- They are unable to perform small actions in sports like throwing, catching, jumping, running etc.
- They are unable to keep right posture while standing, sitting.

4.2.1 Educational Activities for Gross Muscle Co-ordination

It is very important that the pre-schoolers are encouraged to undertake activities which help in the proper development of gross muscle co-ordination which will have foundational benefit for the entire lifetime.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Skill</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Balance</td>
<td>One of the skills mostly to work on in physical therapy is balance. A basic 2*4 is a great way to improve balance of the learner. Take a balance beam. Ask the learner to walk across the balance beam. If the child is easily able to do so, then increase the challenge by having them walk across the balance beam and pick up objects from the grounds, or step over different things or asking them to play games on balance beam to increase the challenge of this activity. Such activity enhances the self-esteem among learners.</td>
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<tr>
<td>2</td>
<td>Dynamic Balance</td>
<td>Dynamic balance is another skill used frequently in physical therapy to improve motor skills among learners. This refers to a learner’s ability to stand on an uneven or wobbly surface. For this, make the child stand on squishy foam or cushion or pillow. This helps child in making their balance. Increase the challenge by asking the child to stand on pool noodle and maintain their posture. This way children learn have to put more effort to complete the task safely. Children become skillful and try to use different tactics to accomplish the task.</td>
</tr>
</tbody>
</table>
3 Balloon Tennis

Balloon tennis can be a fun activity and important to improve hand eye coordination. Hand eye coordination is very helpful and essential in sports and also to develop fine motor skills like copying words down from board in classroom. In this activity either a spatula can be used as a racket or a paper plate taped to a paint stirrer can be used as a racket. Now ask the learner to hit the balloon back and forth without letting it hit the floor. At the same time the teacher can count the number of times the learner is hitting the balloon to keep on increasing their motivation for the activity. This develops the sporting ability among learner and confidence to participate in sports.

4 Playground Play

Playing in playground leads to development of many different skills among learners. Children sitting on see-saw learn how to make co-ordination with the partner. Running in playground helps in maintaining body balance. Swinging on swing helps in maintaining hands, legs and back balance while going back and forth. Sliding requires body positioning and pushing which helps in balance and coordination. Ask learner to climb the bars which helps in strengthening the muscles. Climbing bars develops the ability of using alternate steps. While climbing bars ask children to take one step at a time to avoid any injury. Gross motor skills and fine motor skills are very much interconnected. Playground activities requires both kinds of skills to be used together. These activities make their body flexible. So, learners should be given playground time every day.

5 Stickers

Stickers are fantastic way to develop fine motor skills as it requires peeling off the backing and pasting them on paper. Use some beautiful attractive stickers. Ask the child to paste four different coloured stickers near the four corners of paper then divide the paper into four quarters with a pen or color. Ask the child to perform a color matching activity by peeling off the stickers and placing them with the sticker of same color like blue sticker to be pasted with blue, green sticker to be pasted with next to green, red sticker with red and yellow next to yellow. And at the end they will have a beautiful colorful paper full of stickers.

6 Straw and Matchsticks

Take some colorful straws and matchsticks. Color the matchsticks to turn them into lovely different colors. Ask the learner to pass the matchsticks through the straw one by one. This will help learners in developing hand eye coordination. This way the fine motor skills are developed in the children as they use their finger muscles to perform this task. They learn to manipulate small objects like zip, button, using crayon etc., and develops motor learning means learning from past or previous steps to avoid any mistake in next step.

7 Warm Up Exercises

Warm up exercises require whole body movement. Teacher demonstrates the hand, leg and body movement steps in front of the students, and they copy the steps. Simple warm up exercises are like asking the children to rise their arms and shake the hands and moving their body round and round. These kinds of exercises require large muscle movements like hand, shoulder, leg and increases muscular strength and endurance. Children learn to balance their body along with hand and eye coordination. This develops the gross motor skills among children.

8 Between the Lines activity

Draw two parallel lines on the floor. Ask the children to walk in between the lines one by one. Children balance their body while doing so. Few of them might go here and there as they are not capable of balancing their body. Few of them might not be able to take alternate steps. But after few trials they can perform this task in proper way. Teacher should...
9 Jump Over Obstacles

Take 10-12 newspapers. Spread them on the floor either in circular way or in straight line. Keep a small gap between two newspapers. Ask the learner to jump on the space between the two newspapers. They should not touch the newspaper. Some children might use both the legs to jump over and some might use one leg at a time depending on their body balance and capability to climb. Some might fall off and some might control the body. This activity helps in developing body balance and coordination among children. Also, it improves eye and foot coordination. It requires lot of effort and increases body strength. Repeatedly performing this activity improves whole body balance and increases gross motor skills.

10 Hula Hoop Activity

Take some hula hoop rings. Spread them on floor one after the other. Ask the child to jump in each ring one by one without touching the boundary of rings. This helps the teacher in knowing whether the child is falling off or able to control the body. Initially the teacher can hold the child’s hand while jumping. Later on, after few trials they can jump on their own. This activity can be done in a modified way where teacher holds the hula hoop in her hand in vertical position and ask the child to crawl through it without letting their knees touching the floor means they have to walk through the hoop like a monkey using two hands and feet. This helps in identifying delays in muscular exercises, postural control, bodily awareness and balance. It is always a fun activity which is enjoyed by learners a lot.

11 Tunnel Activity

Take a plastic or cloth tunnel. Ask the learner to pass through the tunnel. Child will bend their body, crawl in the tunnel, mind their hand, leg and shoulder movement while doing this task. This helps in developing hand, shoulder and leg coordination. Also, the child learns about movement planning known as Praxis. Ask the child to change the speed. First ask them to do the activity slowly then a bit fast. This helps in increasing the speed of muscle movement. Also increase the duration of activity gradually to increase endurance among children.

12 Touch, feel and Say

Take various different objects like pencil, crayon, eraser, sharper, cotton ball, paper, rubber ball, ruler, paint brush etc. Show all the items to the students. Then put all these items in a bag. Ask the students to come one by one, close their eyes or blindfold them, pick one object from the bag touch it, feel its texture and say what object it is. This helps in developing thinking skill among children along with the development of their finger and hand muscle.

4.2.2 Fine Motor Skills

You have learnt in Unit 2 that fine motor skills are described as the small movements needed to perform any task. The task involves use of small muscles which not only uses fingers but lips and toes as well. When the child achieve mastery in fine motor skills then child:

- Manipulates smaller objects with increasing control like while using crayons, the child uses the thumb and fingers properly.
- Makes several basic strokes or figures, draws some recognizable objects like bat, hut, boy car etc.
- Prints and traces different shapes like circle, triangle, square, rectangle and also make letters appropriately.
- Perform basic tasks like turning pages, buttoning & unbuttoning, zip up, holding glass, using scissors.
Some of the Fine Motor Difficulties are as follows:

- Unable to hold crayon or pencil.
- Tire quickly while doing small task.
- Face difficulty in cutting and pasting.
- Unable to press button, turn pages.
- Unable to eat themselves properly.

### 4.2.3 Activities for Motor Development of the Toddlers and Pre-Schoolers

The following are the activities which are important to develop motor skills in toddlers and pre-schoolers.

#### Table 4.2 Motor Development Activities for Toddlers and Pre-schoolers

<table>
<thead>
<tr>
<th>S.No</th>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Play-Dough</td>
<td>Play-Dough is a great way to work on finger and hand strengthening. All the play doughh activities requires the use of both hands together which helps in improving the fine motor skills among toddlers. Give some amount of play dough in learner’s hand and ask them to roll it into a snake. Instruct them to keep their fingers straight while rolling the doughh back and forth. They will have a long snake. Then ask to keep the snake on palm, stack it up and press it hard into a pancake. This helps in development of fine motor skills. To further strengthen the skill, hide some tiny objects like beads, buttons, pulses etc. into the play dough and ask the learner to pick out the treasures.</td>
</tr>
<tr>
<td>2</td>
<td>Animal Walk</td>
<td>Take the learners out in the playground. Ask them to keep their arms outstretched and run like a bird. Ask the learner to walk on all four arms and legs to move like a monkey. Ask them to sit down and hop like a bunny. Ask them to keep the arms in front of chest and take big leaps to walk like a Kangaroo. For moving like a Penguin, ask the learner to waddle keeping the ankles close together and arms pinned to sides. These activities help the child in using new muscles with fun. Also increases the learner’s confidence in gross motor activities.</td>
</tr>
<tr>
<td>3</td>
<td>Feed the Monster</td>
<td>Strengthening of finger and hand movement leads to development of fine motor skills. One of the ways to achieve the same is to play a game called Feed The Monster. For this game, take a tennis ball and use a utility knife to cut about a two-inch opening and ask the learner to decorate the face around the cut which seems to be as lips. Ask the learner to hold the ball right on either side of the lips, press it hard to squeeze and put something like beads, pulses etc. in the opening known as mouth. Here the learner feels like feeding the monster.</td>
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<tr>
<td>4</td>
<td>Trampolines</td>
<td>Trampolines can be a great fun activity for the learner to develop the fine motor skills. In this activity children learn to balance themselves in a fun way. Children jump, fall, stand and repeat which requires strong gross motor skills, balance and coordination. Always give some prior important instructions to the learner before going for trampoline.</td>
</tr>
</tbody>
</table>
## 5 Pom Pom Balls
Take some colorful Pom Pom balls, one small container and some colorful big clothes peg. Tell about the different grips that learner might use while doing this activity. For example, learner can use their fingers in a more pincer like action or they can use their fist grip which is much easier. This activity involves squeezing and releasing. Learner squeeze the peg to open it, release the peg to pick a pom pom ball and again squeeze to drop the ball in the container. Repeatedly doing it helps in developing fine motor skills among children with more precision.

## 6 Sponge Activity
Take two bowls. One empty bowl and another one filled with water. Take a medium size sponge. Make the learner sit on floor. Ask him/her to transfer the whole water from filled bowl to empty bowl using sponge. Now child will use the sponge, squeeze it to take water from filled bowl and release in the empty bowl. This activity will make the child learn patience and to develop hand eye coordination. Their finger and hand muscles get strengthened up by doing this activity. Hence their fine motor skills are developed.

## 7 Sorting Activity
Take a bowl full of different pulses like Kidney beans, Chick Peas, Black dal, Yellow dal, Black Chana etc. As we have taken five different pulses so we need five empty bowls. Now ask the child to sort the pulses into separate bowls by picking them one by one. Here learner uses their thumb and index finger to pick. This activity helps the child to build hand and eye coordination and fine muscle control which later on helps children in holding pencil. Also, it helps child to concentrate and be focussed.

## 8 Stringing Activity
For this activity, the items required are pastas, macaroni and two strings of wool. Color the pasta and macaroni to make them beautiful and attractive for the children. Dip one end of the wool into fevicol to make it hard and tie the other end to anything like pen, pencil crayon etc. only to support the material which the child is going to string. Now as the one end of the wool string is stiffed by dipping it in fevicol, it will be easy for the child to sting the pasta and macaroni. Ask the child to string the pastas and macaroni according to the color like one red, one green, one blue and so on. This activity improves hand eye coordination among learner and fine motor skills.

## 9 Pyramid Activity
Take some ice cream sticks. Ask the child to make a pyramid using these sticks. The child will put one stick over the other very slowly to make a pyramid. The child will use his thumb and index finger to put the stick properly. This will help child in developing good hand eye coordination and be focussed. This kind of fun activity are easy to conduct at any time as it does not require elaborate arrangements.

## 10 Button Line Activity
Button line activity develops hand eye coordination among learners which later on helps in drawing letters and numbers on line in proper way. Material required for this activity are one paper, pen and buttons. Take buttons of big size. Draw a straight line on paper either vertical or horizontal. Ask the child to put buttons one by one on the straight line to cover up the whole line. Once the child achieve success in doing this activity with straight line and big buttons. Increase the challenge of activity by drawing a curve or zig zag line and ask the child to perform the task using small buttons. The child learns the precision and coordination with this kind of activity.
Educational Activities for Muscle Coordination

11 Exercise Ball
Playing with exercise ball is loved by children a lot. It is very good for tummy time. Make the child lie on their tummy over the ball and rock them back and forth. Child can also sit on it and bounce as they would love doing it. Teacher can sing the song like row row row you boat. Child work to balance his/her body on the ball. This way they learn to control their body movement and their stamina increases. This develops the gross motor skills among learners.

12 Peeling and Cutting
To perform this activity, take some bananas. Give one banana to each student. Teacher should also take one banana to demonstrate the activity to the students. Ask them to peel the banana using tripod grip i.e. using thumb, index finger and middle finger all together. Once they peel the bananas, give them plastic knives to cut the banana into small pieces. It helps in developing hand eye coordination and also develops the finger grip among children which later on helps in holding pencil and using erasers. Also it improves their arms and shoulder ability. Once they cut the banana into pieces ask them to start eating.

13 What is in The Jelly?
In this activity, take a jelly and hide any small toy inside the jelly. Roll it into a ball. Tell the child about the toy inside jelly. Do not tell the name of toy to keep the learner curious to find themselves. Ask the child to take out the toy in the jelly. The child will use their finger muscles to prick and dig. Ask the child to use both the hands. Keep on instructing while the child is doing the activity. Once the child finds the toy, ask him/her to roll the jelly back into ball shape. Here the child will use palm muscle to turn it into a ball. This helps in developing hand eye coordination, improves attention span and gripping which improves the fine motor skills among children.

Check Your Progress

1. Define dynamic balance.
2. How is the 'pyramid activity' conducted?
3. What is the benefit of the ‘What is in the Jelly’ activity?

4.3 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. Dynamic balance is another skill used frequently in physical therapy to improve motor skills among learners. This refers to a learner’s ability to stand on an uneven or wobbly surface.

2. The ‘pyramid activity’ is conducted in the following way: Take some ice cream sticks. Ask the child to make a pyramid using these sticks. The child will put one stick over the other very slowly to make a pyramid. The child will use his thumb and index finger to put the stick properly.
3. The benefit of ‘What is in the Jelly’ activity is that it helps in developing hand eye coordination, improves attention span and gripping which improves the fine motor skills among children.

4.4 SUMMARY

- During the early years, children develop a concept of self which results in a growing sense of autonomy and an increased understanding of the world around them. They begin to take initiatives, make choices and assert themselves in socially acceptable ways.
- Children explore their surroundings using different skills like fine motor skills and gross motor skills. Both the skills are connected to each other. Balance and coordination are the two important and essential factors for these skills.
- Gross motor skills involve those physical skills which involves the whole body movements or large muscle skills to perform day to day task. These skills involve muscular strength and endurance to perform everyday task like standing, walking, running etc.
- It is very important that the pre-schoolers are encouraged to undertake activities which help in the proper development of gross muscle co-ordination which will have foundational benefit for the entire lifetime.
- Some educational activities for gross muscle co-ordination include balance, dynamic balance, stickers, balloon tennis, straw and matchsticks, jump over obstacles etc.
- Fine motor skills are described as the small movements needed to perform any task. The task involves use of small muscles which not only uses fingers but lips and toes as well.
- The following are the activities which are important to develop motor skills in toddlers and pre-schoolers: play-doh, feed the monster, trampolines, pom pom balls, sponge activity, pyramid activity, peeling and cutting.

4.5 KEY WORDS

- Gross motor skills: It involves those physical skills which involves the whole-body movements or large muscle skills to perform day to day task.
- Hula hoop rings: It refers to a large plastic ring that you spin around your waist by moving your hips.
- Trampolines: It refers to a strong fabric sheet connected by springs to a frame, used as a springboard and landing area in doing acrobatic or gymnastic exercises.
4.6 SELF ASSESSMENT QUESTIONS AND EXERCISES

NOTES

Short Answer Questions
1. What are the skills children posses when they achieve mastery in gross motor skills?
2. List some of the gross motor difficulties.
3. What are the things that children can do when they have fine motor skills?
4. Mention some of the fine motor difficulties.

Long Answer Questions
1. Explain the educational activities for gross muscle co-ordination.
2. Describe activities for motor development of toddlers and pre-schoolers.

4.7 FURTHER READINGS


Websites
kisdense@childdevelopment.com.au
www.Understood.org
kisdense@childdevelopment.com.au
https://www.youtube.com/watch?v=MuewNFpeNzg
https://www.youtube.com/watch?v=MD86MGSBr8w
https://www.youtube.com/watch?v=59BvEm-yB8Y
https://www.youtube.com/watch?v=_uR0mMgYkOo&t=334s
https://www.youtube.com/watch?v=YuVkkhpiHTA
5.0 INTRODUCTION

It is significant to enhance motor skills, sensory detection and processing before children advance in age and move towards higher learning. It is important here to note that ‘play’ is vital in the development of gross and fine motor skills of children. Child care providers have to engage children in play activities that provide children regular opportunities to move their bodies, thereby making the children practice control and coordination of large body movements and small movements of hands and fingers.
In this unit, you will study about the educational activities which promote the development of sensory motor and fine motor skills essential for the overall development of children.

### 5.1 OBJECTIVES

After going through this unit, you will be able to:

- State the significance of sensory motor skills
- Identify the building blocks necessary to develop efficient sensory processing/motor integration
- Analyse the impact of sensorimotor development on the cognitive development of the child
- Prepare a list of sensorial activities for toddlers, pre-schoolers and young kids
- State the art and craft activities which assist in development of the sensory motor and fine motor skills
- Examine the indoor and outdoor equipment necessary to promote gross muscle and fine muscle coordination

### 5.2 SENSORY MOTOR SKILLS

Sensory motor skills involve the process of receiving sensory messages (sensory input) and producing a response (motor output). We receive sensory information from our bodies and the environment through our sensory systems (vision, hearing, smell, taste, touch, vestibular, and proprioception). This sensory information then needs to be organized and processed to be able to produce an appropriate motor, or movement response to be successful in daily tasks at home or at school. It is crucial to improve motor skills, sensory detection, and processing before any higher learning, behavioural or academic changes can truly happen.

**Sensory Processing**

Sensory processing or integration is the effective registration of sensory input in the environment (including one’s body). It is the way the brain receives, organizes and responds to sensory input in order to behave in a meaningful and consistent manner. Children who have difficulty processing sensory information have what is known as Sensory Processing Disorder.

#### 5.2.1 Importance of Sensory Processing/Integration

A new born is able to see, hear and sense his body but is unable to organize these senses well; therefore, this information means very little. They are
unable to judge distances or feel the shape of one object versus another. As the infant is exposed to various sensory inputs, they gradually learn to organize them within their brain and are able to give meaning to them. They become better able to focus in on one sensation and as a result performance improves. Their movement changes from being jerky and clumsy, to more refined and they are able to manage multiple amounts of sensory input at one time. By organizing sensations, the child is able to modulate their response and as a result, they seem to be more connected with the world and in control of their emotions.

When children are efficient in their processing, appropriate responses to the environment around them occurs and is demonstrated by appropriate skill mastery, behaviour, attention and self-regulation (controlling their physical activity, emotional and cognitive responses). Children are able to sit and attend to the important pieces of information in a classroom and, therefore, stand a good chance of achieving their academic potential. Furthermore, the child is able to understand his body’s movement in relation to his surroundings. This permits achieving whole body (gross motor) activities. This in turns aids the social development of the child.

To consolidate:

- It helps in the natural development of the child and gives him a sense of self identity and security within the learning environment.
- It gives a basis for learning in an orderly manner, which supports psychological and neurological development.
- The sensory experiences acquired are lifelong lessons.
- Sensorial material is based on a logical learning sequence, progressing from concrete to the abstract.
- The materials provide indirect preparation for intellectual life. They refine the senses and develop cognitive skills such as thinking, judging, associating and comparing.
- Children develop powers of observation such as attention and concentration.

5.2.2 Building Blocks Necessary to Develop Efficient Sensory Processing/Motor Integration

All the sensory systems need to work together for effective sensory processing. It is important to recognize that there are, in fact, seven senses that make up the sensory system. It is these sensory systems that process information as the building blocks to many other skills.

1. **Visual sense**: It is the ability to understand and interpret what is seen. The visual senses uses the eyes to receive information about contrast of light and dark colour and movement. It detects visual input from the environment through light waves stimulating the retina.
2. **Auditory sense**: It is the ability to interpret information that is heard. The auditory system uses the outer and middle ear to receive noise and sound information. They receive information about volume, pitch and rhythm. It is important for the refinement of sounds into meaningful syllables and words.

3. **Gustatory sense**: It is the ability to interpret information regarding taste in the mouth. It uses the tongue to receive taste sensations and detects the chemical make-up through the tongue to determine, if the sensation is safe or harmful.

4. **Olfactory sense**: It is the ability to interpret smells. It uses the nose to receive information about the chemical make-up of particles in the air to determine, if the smell is safe or harmful.

5. **Tactile sense**: It is the ability to interpret information coming into the body by the skin. It uses receptors in the skin to receive touch sensations like pressure, vibration, movement, temperature and pain. It is the first sense to develop (in the womb), and as such is very important for overall neural organization.

6. **Proprioceptive sense**: It is the ability to interpret where your body parts are in relation to each other. It uses information from nerves and sheaths on the muscles and bones to inform about the position and movement of body through muscles contracting, stretching, bending, straightening, pulling and compressing.

7. **Vestibular sense**: It is the ability to interpret information relating to movement and balance. The vestibular system uses the semi-circular canals in the inner ear to receive information about movement, change of direction, change of head position and gravitational pull. It receives information about how fast or slow we are moving, balance, movement from the neck, eyes and body, body position, and orientation in space.

These senses are responsible for gathering information from the environment and transmitting them to the brain. There are ten fundamental senses known to experimental psychology.

<table>
<thead>
<tr>
<th>Sense</th>
<th>Organ for the sense</th>
<th>Function</th>
<th>Deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual sense</td>
<td>Eye</td>
<td>Size, black and white, light intensity, movement and shape</td>
<td>Blind</td>
</tr>
<tr>
<td>Auditory sense</td>
<td>Ear</td>
<td>Pitch or tone (music), human voice, noise and absence of noise</td>
<td>Deaf</td>
</tr>
<tr>
<td>Smell</td>
<td>Nose</td>
<td>Fragrance putrid, burned and spicy</td>
<td>Anosmia</td>
</tr>
</tbody>
</table>
Taste | tongue | Ability to taste bitter, sweet, salty and sour | Ageusia
---|---|---|---
Tactile | touch | It ranges from rough to smooth |  
Kinesthetic | Muscular framework | It makes us aware of parts and movement that the body makes. |  
Thermic Sense | Cells | The sense that registers temperature- hot and cold |  
Baric | Cells | It is the sense of weight like heavy to light |  
Pain | Skin, joints and bones and body organs | Pain of pressure and piercing |  
Stereo gnostic | Tactile and muscular senses | It help us to be conscious of 3 Dimensional objects |  

**Check Your Progress**

1. What are sensory motor skills?
2. Define sensory processing/integration.

### 5.3 FINE MOTOR SKILLS

Fine motor skills are finger and hand skills such as writing, cutting, opening lunch boxes, and tying shoelaces. The development of these skills relies upon the age appropriate development of physical skills (such as core trunk control and shoulder strength) providing the stable base from which the arm and hand can then move with control.

#### 5.3.1 Dysfunction in Sensory Integration: How to Promote Fine Motor Skills

Sensory Processing Disorder (SPD) formerly called ‘sensory integration dysfunction’ refers to a brain disorder that impacts the ability to interpret sensory stimuli such as what one feels or sees. Symptoms may include low muscle tone, tactile defensiveness (i.e. discomfort with touch), decreased body awareness.

**SPD and Motor Skills**

Children with vestibular disorders often have low muscle tone that makes it difficult to stabilize the trunk, shoulders, and arms while manipulating objects with the hands. Muscle tone refers to the amount of tension in our muscles that enables us to maintain our posture.
Some children have what is called sensory defensiveness. They may be picky eaters and sensitive to smells. Children with tactile defensiveness may avoid manipulating objects and have decreased body awareness that impacts learning to grasp objects efficiently.

As SPD impacts communication between the right and left sides of the brain, children often present with difficulties using the hands together, crossing mid-line (i.e. the right hand reaching to the left side of the body) and developing a hand dominance. Occupational therapists promote these skills during both gross and fine motor activities such as crawling through a tunnel, propelling a scooter board, or throwing a bean bag with the right hand into a box positioned on the left.

**How can you tell if a child has problems with Sensory processing/integration difficulties?**

Kids with sensory processing issues have trouble organizing information the brain receives from the senses. If a child has difficulties with sensory processing they might exhibit the following symptoms:

- Show heightened reactivity to sound, touch or movement.
- Be under-reactive to certain sensations (for example, not noticing their name being called, being touched, high pain threshold).
- Appear lethargic/disinterested; appearing to mostly be in their ‘own world’.
- Have difficulty regulating their own behavioural and emotional responses; increased tantrums, emotional reactive, need for control, impulsive behaviour, easily frustrated or overly compliant.
- Have poor motor skills; appears clumsy, has immature coordination, balance and motor planning skills, and/or poor handwriting skills.
- Have poor sleep patterns.
- Become distressed during self-care tasks (e.g. hair-brushing, hair-washing, nail cutting, dressing, tying shoe laces, self-feeding).
- Avoid movement based equipment (for example, swings, slides etc).
- Perform tasks with too much force, has big movements, moves too fast, writes too light or too hard.
- Have delayed communication and social skills, is hard to engage in two-way interactions.
- Prefer to play on their own or has difficulty in knowing how to play with other children.
5.3.2 Impact of Sensorimotor Development on the Cognitive Development of the Child

A child’s cognitive development begins with the significant stage of sensorimotor development. This stage can be defined as the phase in which cognitive connections and growth take place in the brain as a result of the interaction between sensory and motor stimulation from the environment. Renowned Swiss psychologist, Jean Piaget describes this stage as one in which ‘infants are busy discovering relationships between their bodies and the environment’. While sensory skills are responsible for receiving information from the environment through our inherent senses of sight, hearing, smell, taste and touch, motor skills allow the body to express the information received and processed. This vital collaboration is a fundamental tool that forms the basis for learning.

Sensorimotor skills, in fact, start developing while the child is still in the mother’s womb and continue to develop after birth and into the first two years of infancy. At birth, a baby uses its inherent sense of sight and hearing to react to stimuli from the environment. For example, he/she gets startled by a loud sound and may react with a jerk. Their innate sense of hearing enables connections to be formed in the brain and the information is organized and processed to produce movement using her motor skills. The development and integration of sensory and motor skills, as they grow, is essential for the proper movement of her limbs. This coordination also allows them to learn to move their hand to their mouth, and thus, to use her sense of taste.

Learnings from Sensorial Material

Development of Logic and calculative skills
- Units of measurements
- Mathematical relationships
- Relative size weight and volume are highlighted
- Accurate observation skills are developed

Development of Language and writing Ability
- Encourages left to right movements
- Develops attention span
- Develops visual and auditory discrimination
- Develops eye hand coordination
- Helps to develop pincer grip for writing
- Increases vocabulary and makes vocabulary more precise
- Strengthens and refines muscles
Enrichment in Musical skills

- Music and movement programmes not only aid a child’s physical development, they help children ‘feel good about their movement abilities, thus, they are more likely to make physical activity part of their lives’
- Music is vital to the development of language and listening skills. We know that singing is an important early literacy practice and is a key way children learn about language.
- Music’s melody and rhythmic patterns help develop memory, which is why it is easier to remember song lyrics than prose text. This is why we learn our ABC’s in a song.
- Music and language arts both consist of symbols and ideas; when the two are used in combination, abstract concepts become more concrete and are, therefore, easier for children to grasp.
- Musical skills has social and emotional benefits, as it helps children unleash creativity through physical expression like dance. Certain games and activities can also teach them cooperation and help them work together with peers and adults.

Check Your Progress

3. What is Sensory Processing Disorder (SPD)?
4. When do sensorimotor skills start developing in an infant?

5.4 TYPES OF SENSORIAL ACTIVITIES FOR TODDLERS, PRE-SCHOOLERS AND YOUNG KIDS

As a parent and a teacher, one must encourage activities that help enhance the child’s or students sensorimotor skills as 75 per cent of the brain development takes place in the first six years. Cognitive development in the first two years is most significant as it is in this period that the brain makes neural connections to form a network that can receive, store and process information. And, this happens only when the brain receives adequate stimuli that enable it to think and discover. So, once a child learns to sit, she/he can be given several activities that help connect his senses to understand a concept. Here is a list of few exercises involving materials that are easily available in our homes:
### Table 5.2 Sensorial Activities for Toddlers

<table>
<thead>
<tr>
<th>S. No</th>
<th>For Toddlers</th>
<th>Sensorial Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water Play-</td>
<td>You can use water to teach your child or student different concepts like hot and cold, less and more or empty and full. You can give her two cups and allow her to pour the water from one to the other so that she discovers the concept of volume. This action will also help improve her eye-hand coordination. Or, you can give her a small piece of wood and a coin, and ask her to drop both objects into the water. She will see that one sinks and the other floats.</td>
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<tr>
<td>2</td>
<td>Sand Play-</td>
<td>Sand is an extremely good sensorial material and can be manipulated in diverse ways. Put some beach sand in a small tray or box. Allow your child to play with it spontaneously and let her explore its texture. You could also hide small objects of different shapes (e.g. a bangle, a plastic tile or a small toy) in the sand and ask her to find them. This will enable her to use her senses of touch and sight to find the objects and discover their different shapes.</td>
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<tr>
<td>3</td>
<td>Coloured Ice Sensory Play –</td>
<td>This coloured ice can be put in a pool outside during hot weather, but it would do just as well in a sink or sensory bin inside. Explore the concept of ‘cold’ with toddlers using this activity.</td>
</tr>
</tbody>
</table>

*Source: [https://www.giftofcuriosity.com/essential-water-play-toys-splash-into-summer/](https://www.giftofcuriosity.com/essential-water-play-toys-splash-into-summer/)*


*Source: [https://www.sudocrem.co.uk/antiseptic-healing-cream/blog/simple-summer-sensory-play-idea-coloured-ice-paddling-pool/](https://www.sudocrem.co.uk/antiseptic-healing-cream/blog/simple-summer-sensory-play-idea-coloured-ice-paddling-pool/)*
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<tr>
<td>4</td>
<td>Peek-A-Boo Sensory Board is a way to explore textures with young children who love to open and close things.</td>
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<td><img src="https://motherhoodandotheradventures.files.wordpress.com/2014/06/20140625-131012.jpg" alt="Image" /></td>
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<td></td>
<td><em>Source:</em> <a href="https://motherhoodandotheradventures.files.wordpress.com/2014/06/20140625-131012.jpg">https://motherhoodandotheradventures.files.wordpress.com/2014/06/20140625-131012.jpg</a></td>
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<tr>
<td>5</td>
<td>Playing with soap</td>
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<td></td>
<td><img src="https://handsonaswegrow.com/soapy-water-toddler-bubbles-sensory-activity/" alt="Image" /></td>
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<tr>
<td>6</td>
<td>Moving and dancing on any famous song or rhymes.</td>
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<td></td>
<td><img src="https://www.alsc.ala.org/blog/2014/11/music-and-movement-at-the-library/" alt="Image" /></td>
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<tr>
<td>7</td>
<td>Using shakers bells wooden sticks</td>
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<td></td>
<td><img src="https://wondertreekids.com/music-movement/" alt="Image" /></td>
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<td><em>Source:</em> <a href="https://wondertreekids.com/music-movement/">https://wondertreekids.com/music-movement/</a></td>
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| **8** | Primary colour squishy bag experiment-  
Primary Colours Squishy Bag Experiment is a wonderful sensory experience for children to see how colours mix and form other colours. Children use their hands to blends and squish the different coloured paints together for form new colours. The three primary colours, red, blue and yellow are the minimum number of colours that can be mixed to make the greatest number of other colours or secondary colours.  
*Source: [https://www.pinterest.com/sshannon89/organizer/?lp=true](https://www.pinterest.com/sshannon89/organizer/?lp=true)* |
| **9** | Play dough  
Mix a little water with some refined flour and let it cook for a while till it becomes a gooey paste. Once it cools, you can ask your toddler to take a handful of the paste and rub it on chart paper. He will enjoy playing with the slop, using his sense of touch to examine its soft and smooth consistency. He can even draw in it or trace out lines and shapes. The shape or pattern made by the child can be preserved once it dries.  
| **10** | Bubble play  
### Table 5.3  Sensorial Activities for Pre-Schoolers

<table>
<thead>
<tr>
<th>No.</th>
<th>Activity</th>
<th>Source</th>
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<tbody>
<tr>
<td>1</td>
<td>Sensory alphabet unit</td>
<td><img src="https://www.teacherspayteachers.com/Product/Alphabet-Activities-Letter-Collage-Sheets-Editable-ABC-Activity-Pages-1677409?utm_source=Pinterest%20collage%20letters&amp;utm_campaign=buttons" alt="Sensory alphabet unit" /></td>
</tr>
<tr>
<td>2</td>
<td>Sensory play with buttons</td>
<td><img src="https://www.learning4kids.net/2012/08/05/play-dough-buttons/" alt="Sensory play with buttons" /></td>
</tr>
<tr>
<td>3</td>
<td>Sorting shapes sensory bin</td>
<td><img src="https://www.pinterest.com/pin/491314640577642992/?lp=true" alt="Sorting shapes sensory bin" /></td>
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<tr>
<td></td>
<td>Educational Activities to Promote Sensory Motor and Fine-Muscle Coordination</td>
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<td>4</td>
<td>Sink or float</td>
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<td><img src="https://craftulate.com/sink-or-float-experiment-with-craft-materials/" alt="Sink or float" /></td>
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<td><em>Source</em>: <a href="https://craftulate.com/sink-or-float-experiment-with-craft-materials/">https://craftulate.com/sink-or-float-experiment-with-craft-materials/</a></td>
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<td>5</td>
<td>Water play</td>
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<td><img src="http://fourcheekymonkeys.com/play-love-learn/frozen-water-play-sensory-play-kids/" alt="Water play" /></td>
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<tr>
<td>6</td>
<td>Sand play</td>
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<td><img src="https://www.childrensfactory.com/blog/2016/05/04/sand-water-play-pathway-development/" alt="Sand play" /></td>
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<td><em>Source</em>: <a href="https://www.childrensfactory.com/blog/2016/05/04/sand-water-play-pathway-development/">https://www.childrensfactory.com/blog/2016/05/04/sand-water-play-pathway-development/</a></td>
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<tr>
<td>7</td>
<td>Cookery</td>
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### Table 5.4 Sensorial Activities for Young Kids

<table>
<thead>
<tr>
<th></th>
<th>For Young Kids:</th>
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<tbody>
<tr>
<td>1</td>
<td>Cookery</td>
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<tr>
<td>2</td>
<td>Clay art</td>
</tr>
<tr>
<td>3</td>
<td>Mixing colour</td>
</tr>
</tbody>
</table>

**NOTES**

8. Finger painting


9. Music and movement

<table>
<thead>
<tr>
<th></th>
<th>Educational Activities to Promote Sensory Motor and Fine-Muscle Coordination</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Squeezing lemons &lt;br&gt;Source: <a href="https://www.fantasticfunandlearning.com/easy-strawberry-lemonade-popsicle-recipe.html">https://www.fantasticfunandlearning.com/easy-strawberry-lemonade-popsicle-recipe.html</a></td>
</tr>
</tbody>
</table>
As a parent or a teacher, one can help the child or student explore, discover and learn through these sensory experiences that can bring about enhanced development and functioning. If a child’s sensorimotor skills do not develop properly, it will affect his ability to function normally as the brain will be unable to smoothly process and appropriately respond to the information it receives. When a child cannot respond like his peers to stimuli from his environment, it will slow down his learning. This will manifest as frustration, bad behaviour and low tolerance levels. Weak coordination of movements, clumsiness, learning disabilities and poor academic performance are also indicators of poor development of sensorimotor skills. Parents or teachers whose kids or students show any of these signs should seek the advice of professionals who will help identify and compensate for these learning disabilities. They will assess the child’s sensory skills and follow it up with supplementary exercises and activities that are essential for reinforcing the development of motor skills. Seeing how important sensorimotor skills are to the development of the children’s brain, it is very important that they get every opportunity to hone these skills.

Motor activities involve a number of different skills, including:

- Muscle tone, strength, and coordination
- Rhythm and timing
- Bilateral coordination
- Dominance
- Gross and fine motor skills
- Primitive and postural reflexes
- Eye-muscle balance and coordination
- Vestibular balance and posture

Table 5.5 Fine Motor Skills Developmental Milestones for Different Age Group

<table>
<thead>
<tr>
<th>Fine Motor Skill</th>
<th>Activities</th>
<th>Developmental Milestones</th>
<th>Possible implications if milestones not achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toddlers (12 to 36 months)</td>
<td>Builds tower of three small blocks</td>
<td>• Puts four rings on stick</td>
<td>• Poor development of hand and finger strength</td>
</tr>
<tr>
<td></td>
<td>Places five pegs in pegboard</td>
<td>• Turns pages two or three of a book at a time</td>
<td>• Delayed independent play skills</td>
</tr>
<tr>
<td></td>
<td>Turns knobs</td>
<td>• Scribbles</td>
<td>• Delayed development of self-care skills (such as eating)</td>
</tr>
<tr>
<td></td>
<td>Paints with whole arm movement, shifts hands, makes strokes</td>
<td>• Self-feeds with minimal assistance</td>
<td>• Delayed manipulation skills</td>
</tr>
<tr>
<td></td>
<td>Self-feeds with minimal assistance</td>
<td>• Able to use signing to communicate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brings spoon to mouth</td>
<td>• Holds and drinks from cup independently</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Holds and drinks from cup independently</td>
<td>• Poor development of hand and finger strength</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Strings four large beads</td>
<td>• Delayed self-care skills (such as eating)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Turns single pages of a book</td>
<td>• Delayed pre-writing skill development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Snips with scissors</td>
<td>• Delayed manipulation of small objects such as toys, pencils and scissors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Holds crayon with thumb and fingers (not fist)</td>
<td>• Frustration when manipulating small toys and objects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Uses one hand consistently in most activities</td>
<td>• Makes circular, vertical, and horizontal strokes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imitates circular, vertical, and horizontal strokes</td>
<td>• Paints with some wrist action, makes dots, lines, circular strokes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paints with some wrist action, makes dots, lines, circular strokes</td>
<td>• Rolls, pounds, squeezes, and pulls play-dough</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rolls, pounds, squeezes, and pulls play-dough</td>
<td>• Eats without assistance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eats without assistance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Educational Activities to Promote Sensory Motor and Fine-Muscle Coordination

**NOTES**

**Pre-schoolers (3 to 5 years)**

Highly developed small motor skills are essential for many activities in life including learning how to write. In kindergarten, children are expected to trace and form letters and numbers, so during the preschool years children should strengthen their small muscles, develop fine motor control, and improve eye/hand coordination. These skills do not develop overnight; they must be practiced. Luckily, the range of activities that allow children to develop these motor skills is enormous as well as lots of fun.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Builds tower of nine small blocks</td>
<td>Delayed pre-writing skill development</td>
</tr>
<tr>
<td>Copies circle</td>
<td>Frustration and/or avoidance of pencil based tasks</td>
</tr>
<tr>
<td>Imitates cross</td>
<td>Poor pencil grasp and pencil control</td>
</tr>
<tr>
<td>Manipulates clay material (rolls balls, makes snakes, cookies)</td>
<td>Poor self-care skills (such as eating)</td>
</tr>
<tr>
<td>Uses non-dominant hand to assist and stabilize the use of objects</td>
<td>Delayed drawing skills</td>
</tr>
<tr>
<td>Snips paper using scissors</td>
<td>Delayed pre-writing skill development</td>
</tr>
<tr>
<td>Cuts on line continuously</td>
<td>Frustration and/or avoidance of pencil based tasks</td>
</tr>
<tr>
<td>Copies cross</td>
<td>Poor pencil grasp and pencil control</td>
</tr>
<tr>
<td>Copies square</td>
<td>Poor self-care skills (such as eating)</td>
</tr>
<tr>
<td>Writes name</td>
<td>Delayed drawing skills</td>
</tr>
<tr>
<td>Writes numbers 1-5</td>
<td></td>
</tr>
<tr>
<td>Copies letters</td>
<td></td>
</tr>
<tr>
<td>Handedness is well established</td>
<td></td>
</tr>
<tr>
<td>Dresses and undresses independently</td>
<td></td>
</tr>
</tbody>
</table>
Pre primary (6 to 8 years)

- Cuts out simple shapes
- Copies triangle
- Colours within lines
- Uses a 3 fingered grasp of pencil and uses fingers to generate movement
- Pastes and glues appropriately
- Can draw basic pictures
- Forms most letters and numbers correctly
- Writes consistently on the lines
- Demonstrates controlled pencil movement
- Good endurance for writing
- Can build Lego, K’nex and other blocks independently
- Ties shoelaces independently

- Difficulties learning to form letters and numbers correctly
- Poor handwriting
- Difficulties demonstrating academic ability on paper
- Fatigue during pencil based tasks
- Frustration and/or avoidance of pencil based tasks
- Difficulties getting ideas down on paper
- Experiences fatigue during handwriting tasks
- Difficulty keeping up in class due to slow handwriting speed
- Poor legibility of handwriting
- May impact on self-esteem when comparing work to peers
- Possible frustration and/or behavior difficulties due to avoidance of pencil based task


Table 5.6 Fine Motor Skills Activities

<table>
<thead>
<tr>
<th>S.No</th>
<th>Fine motor Skills activities</th>
<th>Pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poms in general are small. Which takes small movements to grasp them, pick them up and move them. They are fantastic material to work on hand eye coordination</td>
<td><img src="poms.png" alt="Picture 1" /></td>
</tr>
<tr>
<td>2</td>
<td>Buttons are also small items that work great in developing fine motor skills. Picking them up works those small muscles, But the true fine motor skills comes in the act of buttoning something up, that takes some amazing finger strength and hand eye coordination.</td>
<td><img src="buttons.png" alt="Picture 2" /></td>
</tr>
</tbody>
</table>
### Educational Activities to Promote Sensory Motor and Fine-Muscle Coordination

#### NOTES

<table>
<thead>
<tr>
<th></th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Paper Clips</td>
<td>Great for finger movements and manipulation. Being able to slide the clip onto a piece of paper takes a lot of concentration for kids in preschool and kindergarten.</td>
</tr>
<tr>
<td>4</td>
<td>Clothespins</td>
<td>A fantastic material for building finger strength. We use them a lot in our learning activities that the kids absolutely love.</td>
</tr>
<tr>
<td>5</td>
<td>Rubber Bands</td>
<td>Work on finger strength, but in the opposite way that most materials do. These are a fantastic addition to any fine motor activity!</td>
</tr>
<tr>
<td>6</td>
<td>Tweezers</td>
<td>Take a lot of hand eye coordination to be able to operate successfully and move an item from one place to another. Try it!</td>
</tr>
<tr>
<td>7</td>
<td>Pipe Cleaners</td>
<td>Can be used as a great tool for fine motor skills. They can be threaded and poked!</td>
</tr>
<tr>
<td>8</td>
<td>Straws</td>
<td>Can be used as beads, to thread onto something! But they also work great with play dough too.</td>
</tr>
<tr>
<td>9</td>
<td>Play Dough</td>
<td>Fantastic for building those small muscles! Kneading, pushing and rolling the dough really helps! Find out how to make home-made play dough.</td>
</tr>
<tr>
<td></td>
<td>Educational Activities to Promote Sensory Motor and Fine-Muscle Coordination</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Knobs and Screws (or Nuts and Bolts), any real tool from Dad’s toolbox is a hit for my kids! These also take incredible hand eye coordination and concentration to be able to tighten and loosen.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Stickers are amazing! Let children try to peel the stickers off the sticker sheet! If it’s tricky, you can remove the non-sticker part of the sheet and it’s still an amazing fine motor activity. And then placing the sticker on a paper also takes hand control.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Hole Punch are hard! Children will need to work up to this amount of muscle strength in their hands before they’ll be able to successfully do this. So plan to help out, but give them the chance to try.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Syringes are so much fun for kids and have the added bonus of working those small muscles in their hands with control so they don’t squirt the liquid out too fast.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Eye Droppers are a fun way for kids to work on their pincer grasp. Suck it up and let it out!</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Kitchen Tongs can be a great tool for working on hand strength and control. Bring them out during clean up time and I bet your child will be more willing to pick up their toys plus you get the added bonus of working on their fine motor skills.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Toothpicks are small and take a good pincer grasp to be able to hold it.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Educational Activities to Promote Sensory Motor and Fine-Muscle Coordination</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Getting dressed with belts, buttons, zippers and snaps</td>
<td><img src="https://childhood101.com/8-dress-up-storage-solutions/" alt="Getting dressed" /></td>
</tr>
<tr>
<td>18</td>
<td>Pushing Lego blocks together (and pulling them apart)</td>
<td><img src="https://www.littlerockfamily.com/post/108895/lovin-legos-7-building-events-in-january" alt="Pushing Lego blocks" /></td>
</tr>
<tr>
<td>19</td>
<td>Eating with fork, knife, spoon and chopsticks</td>
<td><img src="https://www.tablinstore.info/product/4022" alt="Eating" /></td>
</tr>
<tr>
<td>20</td>
<td>Washing toys</td>
<td><img src="https://handsonaswegrow.com/fine-motor-skills-activities/" alt="Washing toys" /></td>
</tr>
</tbody>
</table>

Sensory and fine motor skill are most important parts of each child’s growth. Creating activities and lessons to enhance these skills are very crucial part of early childhood teaching. Through sensory play, children develop not only language social, emotional but physical skills too without which
their holistic development remain incomplete. Early childcare centres and schools should take care to include lessons to promote them regularly in their schedules.

5.5 USING ART ACTIVITIES TO IMPROVE FINE MOTOR SKILLS

The development of fine motor skills helps children function in their daily lives. From buttoning a shirt to writing note, people use these skills at home, school and work. Children need opportunities to practice these, just as they would their spelling words or multiplication tables. Arts and crafts are fun and easy way to practice fine motor skills. Here are some specific ideas for you to incorporate into your classroom.

Art Activities

Students who lack sufficient development of fine motor skills can benefit from art activities. The art teacher and special education teacher can use special education team teaching to focus students on their fine motor skills practice. Here are a few art activities to get students enthused—and they will even realize they are developing skills:

- Students can use tracing paper or even dot-to-dot pictures to practice their fine motor skills. Using a pencil to trace lines or to connect dots helps students develop muscles in their fingers and their hand and eye coordination. When students are finished connecting dots, they can use a fine tip marker to trace the pencil lines. Choose pictures with small areas to colour. Ask students to use crayons, coloured pencils or even fine-tip markers to color neatly in the lines.

- Another one of the fun activities to improve fine motor skills is creating clay sculptures. This activity is usually one of students’ favourites. Students can make clay animals, bowls, pots or anything else they can think of. Moulding and sculpting the clay helps develop fine motor skills. So does painting or glazing it afterwards.

- Using different-sized crayons, pencils, markers, pastels, paintbrushes, chalks and sculpting tools allows students to manipulate objects, use them to create art, and work on their fine motor skills all at the same time.

Craft Activities

Craft activities will also improve fine motor skills. It is important to give students plenty of opportunities to engage in activities to improve fine motor skills without going over budget.
• **Bead necklaces and bracelets:** Students of all ages like to make bead necklaces and bracelets with beads and string. Making this jewellery is great fine motor skills practice, especially since students will need to manipulate and string the beads.

• **Melty beads** are also popular with elementary students. Students use a type of peg board to make bead designs and shapes. Then teachers use an iron to melt the beads together. You can turn these into magnets, photo frames and other creative projects. Melty beads are available from many craft supply stores and can also be found online. You can also enlist the aid of room parents to help with the ironing.

• Students will get plenty of practice with fine motor skills when they are using any type of needle and thread to create a craft project. Easy student projects include pillows, holiday ornaments and even aprons.

Be creative when coming up with activities to improve fine motor skills. Anything from practical, daily use, such as zipping a zipper to more creative uses like drawing a picture with a marker is helpful. Children won’t even know they are practicing!

### 5.6 INDOOR AND OUTDOOR EQUIPMENT TO PROMOTE GROSS MUSCLE AND FINE MUSCLE COORDINATION

Let’s now have a look at some indoor and outdoor equipment to promote gross muscle and fine motor coordinator.

**For Toddlers**

Children, with their enthusiastic and inquisitive behaviour, require a lot of supervision. With their constant jumping, kicking and running around, one needs to ensure a balance between protection and freedom during playtime. One can consider using child safety equipment that has essential tools to keep children safe from dangerous injury.

**Indoor Safety Equipment for Kids**

1. **Gates and Barriers:** They keep the toddlers from climbing up the stairs, tumbling down, or going into rooms with potential hazards such as the kitchen.

2. **Window Locks:** Window locks are important so your windows do not open far too much. After all, the active toddler could be inquisitive and try to climb out.

3. **Harnesses:** A five point harness is good to use for push-chairs or highchairs. This prevents the child from falling off.
4. **Appropriate Surfaces**: Proper, smooth surfaces in play areas help an active child to reduce pain during injury.

5. **Anti-slip Products**: Using anti-slip products during bath-time can let the toddler maintain balance in the bathroom.

6. **Covered Edges**: Ensuring that the furniture does not have any sharp edges helps protect your child. If it does, use corner and edge guards to protect the child from getting scratched.

7. **Nightlights**: They make sure children do not trip or bump into objects when they get up to go to the toilet at night.

**Pre-schoolers**

**Indoor equipment**

*Table 5.7 Indoor Equipment for Muscle and Motor Coordination*

<table>
<thead>
<tr>
<th>S.No</th>
<th>Equipment</th>
<th>Visual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Jungle Jumparoo</strong> is safe for kids of all ages even adults. That would be important for preschool teacher also, because she should also play with students and often up on equipment with them pretending to be a pirate or monster or just having fun.</td>
<td><img src="https://www.notimeforeflashcards.com/wp-content/uploads/2016/10/Jungle-Jumparoo-gross-motor-.jpg" alt="Jungle Jumparoo" /></td>
</tr>
<tr>
<td>2.</td>
<td><strong>Hula Hoops</strong> are a great tool for any classroom. When kids are small, use them as bases for hopping into and targets for bean bags.</td>
<td><img src="https://www.notimeforeflashcards.com/wp-content/uploads/2016/10/hula-hoops-455x455.jpg" alt="Hula Hoops" /></td>
</tr>
<tr>
<td>3.</td>
<td>Plasma Cars are perfect for preschool because they have no pedals. Pedalling is tricky and when the goal is to get extra energy out spending time on something so possibly frustrating defeats the purpose. Plasma cars allow kids to get right into playing.</td>
<td><img src="https://www.notimeforeflashcards.com/wp-content/uploads/2016/10/hula-hoops-455x455.jpg" alt="Plasma Cars" /></td>
</tr>
</tbody>
</table>
Educational Activities to Promote Sensory Motor and Fine-Muscle Coordination

NOTES

4. Gorilla Gym-It help keep them from climbing the walls during a super wet winter, it helped them calm down during stress too. The swing and rings are favorites but we use all the attachments.

5. Hop Balls require a lot of skill but even very young kids can do it and what is great is that while they work on all these developing skills like balance, spatial awareness, and gross motor skills they do not need a huge amount of space.

Outdoor Equipment

There are various outdoor equipment that can be used including merry-go-round, sea saw, jungle-jim, slides, etc. The following precautions must be followed:

- The playground equipment should be tightly anchored below the earth’s surface. This prevents them to rise up all of a sudden or come out loose when a child is using them.
- Play equipment should be used as per your toddler’s age. For example, if in the ‘monkey bar’ apparatus, the distance between two bars is wider than half the height of a kid, don’t use it!
- The equipment present in the playground must meet the standards of basic safety. Slides should have a large top deck and rails on both sides to hold. Swings should be placed at a good distance, so that two of them do not collide with one another. The merry-go-round should have flattened surfaces and places to hold onto.
Educational Activities to Promote Sensory Motor and Fine-Muscle Coordination

These are some outdoor games which help students enhance their motor skills.

Check Your Progress

5. Give examples of two sensorial activities for toddlers.
6. Mention any two craft activities that will help children develop their fine motor skills.
7. What are the indoor safety equipment necessary for kids?

5.7 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. Sensory motor skills involve the process of receiving sensory messages (sensory input) and producing a response (motor output). We receive sensory information from our bodies and the environment through our sensory systems (vision, hearing, smell, taste, touch, vestibular, and proprioception).

2. Sensory processing or integration is the effective registration of sensory input in the environment (including one’s body). It is the way the brain receives, organizes and responds to sensory input in order to behave in a meaningful and consistent manner.

3. Sensory Processing Disorder (SPD) formerly called ‘sensory integration dysfunction’ refers to a brain disorder that impacts the ability to interpret sensory stimuli such as what one feels or sees.

4. Sensorimotor skills start developing while the infant is still in the mother’s womb and continue to develop after birth and into the first two years of infancy. At birth, a baby uses its inherent sense of sight and hearing to react to stimuli from the environment.

5. Two examples of sensorial activities for toddlers are water play and sand play.
Educational Activities to Promote Sensory Motor and Fine-Muscle Coordination

NOTES

6. Two craft activities that help children develop their fine motor skills are making bead necklace and bracelets, and melty beads.

7. The indoor safety equipment necessary for kids are the following:
   - Gates and Barriers: They keep your toddler from climbing up the stairs, tumbling down, or going into rooms with potential hazards such as the kitchen.
   - Window Locks: Window locks are important so your windows do not open far too much. After all, your active toddler could be inquisitive and try to climb out.
   - Harnesses: A five point harness is good to use for push-chairs or highchairs. This prevents your child from falling off.
   - Appropriate Surfaces: Proper, smooth surfaces in play areas help your active child to reduce pain during injury.

5.8 SUMMARY

- Sensory motor skills involve the process of receiving sensory messages (sensory input) and producing a response (motor output). We receive sensory information from our bodies and the environment through our sensory systems (vision, hearing, smell, taste, touch, vestibular, and proprioception).
- Sensory processing or integration is the effective registration of sensory input in the environment (including one’s body).
- A newborn is able to see, hear and sense his body but is unable to organize these senses well; therefore, this information means very little. They are unable to judge distances or feel the shape of one object versus another.
- All the sensory systems need to work together for effective sensory processing. It is important to recognize that there are, in fact, seven senses that make up the sensory system.
- Fine motor skills are finger and hand skills such as writing, cutting, opening lunch boxes, and tying shoelaces.
- Children with vestibular disorders often have low muscle tone that makes it difficult to stabilize the trunk, shoulders, and arms while manipulating objects with the hands. Muscle tone refers to the amount of tension in our muscles that enables us to maintain our posture.
- A child’s cognitive development begins with the significant stage of sensorimotor development. This stage can be defined as the phase in which cognitive connections and growth take place in the brain as a
result of the interaction between sensory and motor stimulation from the environment.

- As a parent and a teacher, you must encourage activities that help enhance your child’s or students sensorimotor skills as 75 per cent of the brain development takes place in the first six years.
- The development of fine motor skills helps children function in their daily lives. From buttoning a shirt to writing note, people use these skills at home, school and work.
- Students who lack sufficient development of fine motor skills can benefit from art activities. The art teacher and special education teacher can use special education team teaching to focus students on their fine motor skills practice.
- Children, with their enthusiastic and inquisitive behaviour, require a lot of supervision. With their constant jumping, kicking and running around, you need to ensure a balance between protection and freedom during playtime.

5.9 KEY WORDS

- Experimental psychology: It seeks to explore and better understand behaviour through empirical research methods.
- Muscle tone: It refers to the amount of tension in our muscles that enables us to maintain our posture.
- Pincer grip: This enables the child to pick up small items using the thumb and index finger.

5.10 SELF ASSESSMENT QUESTIONS AND EXERCISES

Short Answer Questions

1. What is the importance of sensory processing/integration?
2. What are the symptoms which highlight a child’s problems with sensory processing?
3. How do art and craft activities assist in improving fine motor skills in children?
4. Prepare a list of the indoor and outdoor equipment needed to promote gross muscle and fine muscle coordination.
**Long Answer Questions**

1. How do gross motor activities aid in the social development of the child?

2. Explain the building blocks necessary to develop efficient sensory processing.

3. Analyse the impact of sensorimotor development on the cognitive development of the child.

4. Give examples of sensorial activities for toddlers, pre-schoolers and young kids.

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**5.11 FURTHER READINGS**


Indian Association for Pre-School Education. 2000. *Activity-Based Curriculum for Pre-School Education*. Dehradun, India.

Indian Association for Pre-School Education. 1999. *Strategies for Effective Pre-School Education*. Dehradun, India.

**Websites:**

https://www.learning4kids.net/list-of-sensory-play-ideas/
UNIT 6  EDUCATIONAL ACTIVITIES TO PROMOTE LANGUAGE DEVELOPMENT IN CHILDREN

Structure
6.0 Introduction
6.1 Objectives
6.2 Introduction to Pre-Reading and Pre-Writing Activities to Promote Language Development
6.3 Stories for Children
6.4 Answers to Check Your Progress Questions
6.5 Summary
6.6 Key Words
6.7 Self Assessment Questions and Exercises
6.8 Further Readings

6.0 INTRODUCTION

Before a child actually begins to read, he/she will develop a set of skills known as pre-reading skills. These pre reading skills are the signs of early literacy and, though it may look as though the child is merely playing, he/she is organizing what he/she knows about books and language and how they work together for this magical skill known as “reading”. It is actually quite a lot of fun to work on pre reading skills with your child. It is not hard at all and can capture your imagination right along with the child.

In this unit, you will study about the pre-reading and pre-writing activities that promote language development in children along with the use of storytelling as a significant tool of language development.

6.1 OBJECTIVES

After going through this unit, you will be able to:

• List the set of skills exhibited by infants between birth and five years of age
• Analyse the significance of storytelling as a tool of language development
• Identify the essential guidelines to be followed while narrating a story
• Prepare a list of activities related to storytelling at different levels, i.e., toddlers, pre-schoolers and young children
6.2 INTRODUCTION TO PRE-READING AND PRE-WRITING ACTIVITIES TO PROMOTE LANGUAGE DEVELOPMENT

Every child is unique, with his or her own personality, interests and developmental timetable. Not all babies speak, crawl or walk at the same time. Think of all the hours your child spends learning to roll over, sit up, crawl, cruise furniture and walk holding your hand before letting go to take the first big steps alone. Similarly, parents eagerly await the day their child speaks those exciting first words. Some children talk early, others a little later. Some children prefer to watch and listen to everyone else, not saying a word at first. Then all of a sudden he is talking nonstop, catching you by surprise. The same is true for all childhood milestones. Some skills may suddenly appear ‘out of the blue,’ while other skills may need much more exposure and practice before your child shows she can do it. For language and pre-reading development, it is very similar.

- Babies learn first to pay attention to voices, words, songs and books. They respond by smiling, cooing, pointing to pictures and making sounds that eventually become words.

- Toddlers pay attention longer and begin to show an interest in reading by turning pages, pointing to and naming pictures and finishing sentences.

- By age 3, little ones understand more about story plots, characters’ problems and feelings and simple connections with their own lives. They also learn about letters, start to recognize their own names in print and show pleasure with stories and songs that rhyme, repeat phrases or use words that start with the same sound. Drawing, pretending to write and ‘reading’ to their toys may become favourite activities.

- By ages 4 and 5, children start to show an awareness of the reading readiness skills they have been exposed to, such as knowing most letter names and letter sounds, understanding more about word parts, or maybe even reading and trying to spell some words. A lot of work, disguised as play, by you and your child will make these reading development breakthroughs possible.

There are four sets of skills that develop between birth and 5 years of age that are essential for solid reading readiness. These skills have been shown in Figure 6.1.
Fig. 6.1 Essential Reading Skills

As much as these skills individually are important, they also overlap and go hand-in-hand.

For example:

- The larger a child’s vocabulary, the more likely is the child to recognize words that rhyme in stories and songs or to name words that start with the same sound.
- The more letter names and letter sounds a child knows, the more beginning writing skills he is likely to use.

Most of us remember some favourite books from our own childhood that evoke happy feelings. We may remember listening to stories read to us with someone special, choosing a book from the book fair at our elementary school or receiving a book as gift from our parents or grandparents. Reading books with your young child will build a strong emotional bond that will remain with your child for a lifetime and leave you with lifelong memories too. Hopefully, it will help alleviate your worries by sharing typical development and things you can try each day to encourage growth. If you have concerns about your child’s reading development, talk to your doctor and check out on the local resources that can offer assistance.

Children begin learning to read and write long before they pick up a book or a pencil. If a child is ready to start his language development journey, the pre-reading activities are a good starting point. There is nothing more beautiful to observe a child enter his period of sensitivity for language. These are numerous ways to gradually develop the child’s logic, problem-solving, focus, and concentration skills, for example, Pre-Reading Story Sequence Cards. You can create these cards to apply to a simple act in daily life, like giving a hug. You can also apply these cards to science with the life cycle, or even a story from a child’s favourite book. Children put the cards in order, working their reading comprehension early on in their journey to reading.
6.3 STORIES FOR CHILDREN

Storytelling is a very old procedure which has been embedded in our culture since ages. It was the primary source of family entertainment before the television. It remains as one of the most effective ways to reach out to someone and move them with your message. Storytelling is considered as one of the most effective and influential methods, and has been recorded broadly in various fields. Stories can be utilized to shape vision, to pass on learning and knowledge, and to shape character and organizational culture.

Children have a natural love for stories. Stories create magic and feeling of marvel of the world. Stories teach us about ourselves, about others and about life. Storytelling is a one of a kind path for students to develop an understanding, regard and appreciation for different societies, and can promote a positive attitude of people from various grounds, races and religion.

There are a number of ways in which storytelling can enhance intercultural understanding and communication.

- Stories allow children to explore their own cultural roots.
- Stories allow children to experience diverse cultures.
- Stories enable children to empathise with unfamiliar people/places/situations.
- Stories offer insights into different traditions and values.
- Stories help children understand how wisdom is common to all peoples/all cultures.
- Stories offer insights into universal life experiences.
- Stories help children consider new ideas.
- Stories reveal differences and commonalities of cultures around the world.
- Stories enhance listening skills.

Points to remember while narrating a story

DO's

- Vary the volume, pitch and tempo of your voice (enunciate clearly and exaggerate expression)
- Use your face, body and gestures (let your body speak)
- Make your body and face respond to the tale
- Have a clear focus and maintain concentration
- Maintain engaging eye contact with the audience/ individual listeners
- Create a charismatic presence (make the audience believe in you)
- Use different, exaggerated character voices
• Use your space/be dynamic
• Remember to pace yourself
• Always remember to regain your style as a narrator
• Use silence and pauses to add dramatic effect

DON’Ts
• Give attention to your audience. Make it your story and then tell it.
• Do not memorize only the general ideas. Vital ideas can slip away when you are under the stress of facing your audience.
• Do not memorize precisely. You will be restricted to your material.
• Avoid the use of flashbacks; have little time change in the story.
• Avoid interrupting your story to make corrections; this is very confusing to audience.
• Never ‘talk down’ to the children, treat them as equals.
• Do not keep talking when you have reached the end. Do not add explanations, apologies or afterthought after you reached your conclusion.

Milestone related to Speech and Language

1. Toddlers

Table 6.1 Speech and Language Milestones for Toddlers

<table>
<thead>
<tr>
<th>Birth to 5 months</th>
<th>Turn head toward a sound source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Watches your face when you speak</td>
</tr>
<tr>
<td></td>
<td>Vocalizes pleasure and displeasure sounds (laughs, giggles, cries, or fusses)</td>
</tr>
<tr>
<td></td>
<td>Makes noise when talked to</td>
</tr>
<tr>
<td>6 - 11 months</td>
<td>Understands ‘no-no’</td>
</tr>
<tr>
<td></td>
<td>Babbles (says ‘ba-ba-ba’ or ‘ma-ma-ma’)</td>
</tr>
<tr>
<td></td>
<td>Tries to communicate by actions or gestures</td>
</tr>
<tr>
<td></td>
<td>Tries to repeat your sounds</td>
</tr>
<tr>
<td>12 - 17 months</td>
<td>Attends to a book or toy for about two minutes</td>
</tr>
<tr>
<td></td>
<td>Follows simple directions accompanied by gestures</td>
</tr>
<tr>
<td></td>
<td>Answers simple questions non-verbally</td>
</tr>
<tr>
<td></td>
<td>Points to objects, pictures and family members</td>
</tr>
<tr>
<td></td>
<td>Says two to three words to label a person or object (pronunciation may not be clear)</td>
</tr>
<tr>
<td></td>
<td>Tries to imitate simple words</td>
</tr>
</tbody>
</table>
## Educational Activities to Promote Language Development in Children

### NOTES

#### 18 - 23 months
- Follows simple commands without gestures
- Points to simple body parts such as 'nose'
- Understands simple verbs such as 'eat', 'sleep'
- Correctly pronounces most vowels and n, m, p, h, especially in the beginning of syllables and short words. Also begins to use other speech sounds.
- Says 8 to 10 words (pronunciation may still be unclear)
- Asks for common foods by name
- Makes animal sounds such as 'moo'
- Starting to combine words such as 'more milk'
- Begins to use pronouns such as 'mine'

#### 2 - 3 years
- Knows some spatial concepts such as 'in', 'on'
- Knows pronouns such as 'you,' 'me,' 'her'
- Knows descriptive words such as 'big,' 'happy'
- Says around 40 words at 24 months
- Speech becomes more accurate but may still leave off ending sounds
- Strangers may not be able to understand much of what is said
- Answers simple questions
- Begins to use more pronouns such as 'you,' 'I'
- Speaks in two to three word phrases
- Uses question inflection to ask for something (for example, 'My ball!')

### 2. Pre-schoolers

#### Table 6.2 Speech and Language Milestones for Pre-Schoolers

#### 3 - 4 years
- Groups objects such as foods, clothes, etc.
- Identifies colours
- Uses most speech sounds but may distort some of the more difficult sounds such as l, r, s, sh, ch, y, v, z, th. These sounds may not be fully mastered until 7 or 8 years of age
- Uses consonants in the beginning, middle, and ends of words. Some of the more difficult consonants may be distorted, but attempts to say them.
- Strangers are able to understand much of what is said
- Able to describe the use of objects such as 'fork,' 'car,' etc.
- Has fun with language. Enjoys poems and recognizes language absurdities such as, `Is that an elephant on your head?'
- Expresses ideas and feelings rather than just talking about the world around him or her
Educational Activities to Promote Language Development in Children

Notes

- Uses verbs that end in ‘ing,’ such as ‘walking,’ ‘talking’
- Answers simple questions such as ‘What do you do when you are hungry?’
- Repeats sentences

4 - 5 years
- Understands spatial concepts such as ‘behind,’ ‘next to’
- Understands complex questions
- Speech is understandable but makes mistakes pronouncing long, difficult, or complex words such as ‘hippopotamus’
- Says about 200 - 300 different words
- Uses some irregular past tense verbs such as ‘ran,’ ‘fell’
- Describes how to do things such as painting a picture
- Defines words
- Lists items that belong in a category such as animals, vehicles, etc.
- Answers ‘why’ questions

3. Young Children

Table 6.3 Speech and Language Milestones for Young Children

<table>
<thead>
<tr>
<th>Age</th>
<th>Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 years</td>
<td></td>
</tr>
<tr>
<td>beyond</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Understands more than 2,000 words</td>
</tr>
<tr>
<td></td>
<td>Understands time sequences (what happened first, second, third, etc.)</td>
</tr>
<tr>
<td></td>
<td>Carries out a series of three directions</td>
</tr>
<tr>
<td></td>
<td>Understands rhyming</td>
</tr>
<tr>
<td></td>
<td>Engages in conversation</td>
</tr>
<tr>
<td></td>
<td>Sentences can be 8 or more words in length</td>
</tr>
<tr>
<td></td>
<td>Uses compound and complex sentences</td>
</tr>
<tr>
<td></td>
<td>Describes objects</td>
</tr>
<tr>
<td></td>
<td>Uses imagination to create stories</td>
</tr>
</tbody>
</table>

Activities related to storytelling at different levels

Table 6.4 Storytelling Activities

<table>
<thead>
<tr>
<th>Toddlers</th>
<th>Storytelling with toys: In this form of storytelling, teacher can provide stuffed toys to the students to depict the different characters so that the students can get familiar with them.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overhead projector stories: Storytelling props can be made from computer generated clip arts for the various characters can be reduced or enlarged to an appropriate size and can be projected on screen.</td>
</tr>
</tbody>
</table>
Educational Activities to Promote Language Development in Children

NOTES

Environmental Print Is Pre Reading

Make an environmental print book.
It is not as complicated as it sounds.
Environmental print refers to the signs, logos, symbols and words that children are every-day and recognize without being able to read them.
For example, few children need to be able to read to recognize that the Golden Arches means a McDonald’s is nearby or that the red octagon on the street corner is a stop sign.
Provide your child with newspapers, magazines, scissors, glue and a sheaf of blank paper stapled together.
She can then cut out the familiar logos and symbols, paste one of each page and read you her book.

Pre-schoolers

Storytelling with glove:
An old glove and pom-pom or felt characters that attach to each finger of the glove with Velcro can be used to tell a story with a simple sequence.

Story Chants:
Some stories have been converted into chants that can be recited by the teachers and gradually learned by the children.

Make a Rhyming Box
Make a rhyming box. Once you find small items that rhyme, such as a pan and a fan or a shell and a bell, place approximately ten sets of them in a shoebox and give it a shake.
Have your child open the box and match up the rhyming items.
To extend this activity, you can provide an item that does not have a rhyming match and have your child draw a picture of something that would rhyme with it.

Telling Stories About Pictures
Encourage your child to tell you stories about random pictures.
It does not matter whether you use a photo or turn to an advertisement in a magazine, simply ask your child to tell you who the characters are, what they are doing and why they are doing it.
Assure her there is no right answer, it is a story from her imagination.

Practice Sequencing as a Pre Reading Skill
Practice sequencing with your child.
Though you can buy sequencing cards, it is just as easy to print sets of them (and practice cutting at the same time).
Once the cards have been sequenced, ask to hear the story that goes with them.
It may not always be what you expect, but as long as the story and the pictures are in a coherent order, your child is learning that stories have a beginning, middle, and end.
Educational Activities to Promote Language Development in Children

Young Children

Draw and Tell/Fold and Cut: Some stories can be illustrated by the cut outs of simple objects with the help of paper folding.

Participatory telling: Children can participate in storytelling, both by speaking the words and through enactment.

Picture Books
Buy an inexpensive second copy of your child's favourite picture book and separate the pages from the binding. If you think he is up to the challenge and the text is underneath or above the pictures, you may even want to cut the text from the illustrations. Have your child recreate the story from memory and, if possible, place the text with the pictures. He may not be able to read it, but if you have read the book together enough times, he is bound to recognize the look of the words for each page.

Sentence Strips and Common Words
Use sentence strips or pieces of poster board to print the names of the common items of your home. Make two sets of these strips, taping one to the items and giving the other to your child to play with. Do not rush your child to match the two sets; the idea is to get him familiar with the look of the words for common items, eventually making the connection on his own. It won't be long before he is showing you that he recognizes his set of words from seeing them around the house.

Check Your Progress

1. Name the essential set of skills that develop between birth and five years of age.
2. How does storytelling enhance intercultural understanding and communication?

6.4 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. The essential set of skills that develop between birth and five years of age are the following:
   - Phonological awareness
   - Oral language
Educational Activities to Promote Language Development in Children

NOTES

- Beginning writing
- Letter knowledge

2. Storytelling enhances intercultural understanding and communication in the following ways:
  - Stories allow children to explore their own cultural roots.
  - Stories allow children to experience diverse cultures.
  - Stories enable children to empathize with unfamiliar people/places/situations.
  - Stories offer insights into different traditions and values.
  - Stories help children understand how wisdom is common to all peoples/all cultures.
  - Stories offer insights into universal life experiences.
  - Stories help children consider new ideas.
  - Stories reveal differences and commonalities of cultures around the world.
  - Stories enhance listening skills.

6.5 SUMMARY

- Before your child actually begins to read, he/she will develop a set of skills known as pre-reading skills.
- Every child is unique, with his or her own personality, interests, and developmental timetable. Not all babies speak, crawl, or walk at the same time.
- Most of us remember some favorite books from our own childhood that evoke happy feelings. We may remember listening to stories read to us with someone special, choosing a book from the book fair at our elementary school or receiving a book as a gift from our parents or grandparents.
- Children begin learning to read and write long before they pick up a book or a pencil. If a child is ready to start his language development journey, the pre-reading activities are a good starting point.
- Storytelling is a very old procedure which has been embedded in our culture since ages. It was the primary source of family entertainment before the television. It remains as one of the most effective ways to reach out to someone and move them with your message.
- Children have a natural love for stories. Stories create a magic and feeling of marvel of the world. Stories teach us about ourselves, about others and about life.
6.6 KEY WORDS

- **Oral language**: It is the system through which we use spoken words to express knowledge, ideas, and feelings.
- **Storytelling**: It is a technique of conveying events in words and images.
- **Overhead projector**: It is a machine that has a light inside it and can be used to make the writing or pictures on a sheet of plastic appear on a screen or wall.
- **Enactment**: It implies performing a story or play.

6.7 SELF ASSESSMENT QUESTIONS AND EXERCISES

**Short Answer Questions**

1. Prepare an introduction to pre-reading and pre-writing activities to promote language development.
2. Make a list of the essential guidelines to be followed while narrating a story.

**Long Answer Questions**

1. Analyse the significance of storytelling as a tool that promotes language development in children.
2. Give examples of activities related to storytelling at different levels, i.e., toddlers, pre-schoolers and young children.
3. How is the development of speech and language exhibited by toddlers, pre-schoolers and young children?

6.8 FURTHER READINGS


Indian Association for Pre-School Education. 2000. *Activity-Based Curriculum for Pre-School Education*. Dehradun, India.

Indian Association for Pre-School Education. 1999. *Strategies for Effective Pre-School Education*. Dehradun, India.
UNIT 7  EDUCATIONAL ACTIVITIES FOR CREATIVE SELF-EXPRESSION

Structure

7.0  Introduction
7.1  Objectives
7.2  Expression of Creative Instinct in Young Children
   7.2.1  Importance of the Creative Process
   7.2.2  Fostering the Creative Process
   7.2.3  Creative Drama for Young Children
   7.2.4  Use of Drama in Curriculum
7.3  Activities for Creative Self-Expression among Young Children
   7.3.1  Artistic Expression
   7.3.2  Playful Expression
   7.3.3  Building Expression
   7.3.4  Aesthetic Expression
7.4  Activities of Creative Expressions through Drama
7.5  Activities of Creative Expressions through Art Work
7.6  Activities of Creative Expressions through Music and Rhymes
7.7  Activities to Develop Creative Expressions through Dance
7.8  Answers to Check Your Progress questions
7.9  Summary
7.10  Key Words
7.11  Self Assessment Questions and Exercises
7.12  Further Readings

7.0  INTRODUCTION

Creative play and artistic activities have a central role to play in young children’s learning and development. They help nurture imagination, and also develop problem-solving, thinking and motor skills. Drama, music, dance and visual art foster creativity and imagination in young children. These activities also help young children develop their senses through exploration and discovery. They let young children express how they see the world and their place in it. Young children can use creative play to communicate their feelings. They might not always be able to say why they are feeling angry, depressed, happy or frightened. But in an encouraging environment, they might be able to use arts activities and experiences to express these feelings using paint, colour, movement, mime, dramatic gestures, singing or dancing. In fact, young children need to explore and express themselves through creative play as it lets them try out different ideas and ways of doing things.
is the most important thing, not the final result. Children learn and develop critical skills, and have fun when provided the opportunity for creative and artistic expression. Painting, colouring, writing, making music, and making crafts are all creative activities. Creative expression helps children articulate their feelings and thoughts. They think critically about their world and practice visual communication. Young children learn to identify colours, shapes, and sounds during creative play. They begin to understand cause and effect. When children dance, they get physical exercise and develop coordination and balance.

Encouraging creative expression is easy in both indoor and outdoor play spaces. Include designated spaces for creativity, such as a music room, area, or panel. Outdoor play spaces can include areas for chalk drawing and art panels, while indoor play spaces can have an art room for drawing and painting. Even better to invite artists to come and paint with the children as part of activities.

Children like to express themselves artistically! While walls and floors might not be the best surfaces for their talents, it is great to encourage children to freely explore making art. Provide space, time and tools for art, and watch their creativity flourish! Also, ask children about their artistic projects and support their efforts with an open mind and positive responses.

In outdoor play spaces, art and nature go hand-in-hand. Invite children to help choose flowers and plants for gardens, noting the colours and shapes of what they select. Leave designated spaces for chalk drawing, and provide chalk to them. Sand studios are great additions to outdoor play spaces. Make room for sheltered easels or install a clear plastic art panel.

Children can really let their artistic selves shine in indoor play spaces. Easels with paper, washable paints, and water colours are a great starting point. Children can make art out of all sorts of materials. Scraps of coloured paper, pictures from magazines, popsicle sticks, dried noodles, yarn, and cotton balls form fascinating collages. Let children reshape materials with safety scissors and glue. Play dough and clay turn into amazing shapes in their little hands! One can even use recycled materials like toilet paper rolls, fabric samples, and paper dining products!

As a teacher one should always include designated creative spaces in our classroom that invite children to engage their imagination, encourage their curiosity about life and express themselves.

These types of experiences can help develop meaningful connections in their developing minds as they move, touch, manipulate different materials and experiment. Therefore, we make a better path for them to express and understand themselves in a better way, which leads to a creative mind.

In this unit, you will study about the use of music drama and art as teaching methods for the overall development of young children.
7.1 OBJECTIVES

After going through this unit, you will be able to:

- Interpret the need for creative expression in young children
- Analyse the significance of creative drama for the development of young children
- Give examples of activities for creative self-expression among young children
- Prepare a list of activities for creative expression through drama, music and dance

7.2 EXPRESSION OF CREATIVE INSTINCT IN YOUNG CHILDREN

Creativity can be explored through a variety of artistic disciplines. Commonly identified methods include drama, dance, music, creative writing and the visual arts, including photography. This experience is part of the enchantment of creative expression.

There are many routes to self-expression. Creativity can be explored through a variety of artistic methods. Commonly identified methods include drama, dance, music, creative writing and the visual arts, including photography. All these activities engage the participant/artist in a process that uses a holistic healthy framework to develop and enhance physical, mental, spiritual and social well-being. The benefits of creative expression do not end at any particular age, but many people are not given the opportunity to be artistic as they move into adulthood. Children, youth, adults and the elderly can all participate in creative or artistic expression. It can be utilized to express thoughts and feelings that are too big or too difficult to put into words. This can be especially helpful with people who have linguistic or cognitive issues that make creating a written or spoken narrative daunting.

One of the most engaging features of the creative process is that it facilitates moments of vitality and connection for those who choose to participate in it. Sir Ken Robinson, an internationally recognized leader in the development of creativity, innovation and human resources, has described the experience in the following words: ‘The arts address the idea of an aesthetic experience. An aesthetic experience is one in which the senses are operating at their peak, when you are present in the current moment, when you are resonating with the excitement of this thing that you are experiencing, when you are fully alive.’ This experience is part of the enchantment that creative expression holds, the process connects us to our authentic self. Art can be the expression of our most inner selves, even of our souls.
7.2.1 Importance of the Creative Process

All children need to indulge in creative activities with full freedom which will thereby give full expression to their creative skills. What is important in any creative act is the process of self-expression. Creative experiences can help children express and cope with their feelings. A child’s creative activity can help teachers to learn more about what the child may be thinking or feeling. Creativity also fosters mental growth in children by providing opportunities for trying out new ideas, and new ways of thinking and problem solving. Creative activities help acknowledge and celebrate children’s uniqueness and diversity as well as offer excellent opportunities to personalize our teaching and focus on each child.

Opportunities for Creativity

Children need plenty of opportunities for creative play and creative thinking. Start by providing activities that are based on the children’s interests and ideas. This means learning how to listen intently to what children are saying. It is very helpful to tape record and transcribe children’s conversations as well as take notes and review them with your co-teachers.

Be sure to offer children a wide range of creative materials. Being creative is more than drawing or painting. There is also photography, music, field trips, working with wire, clay, paper, wood, water or shadows. The possibilities are endless. It is important to provide children lot of time to explore materials and pursue their ideas. This includes time to think about how to plan, design, construct, experiment and revise project ideas. Do not forget to find time to talk about these ideas over with other people - both teachers and children.

Varieties of Experience

Look for ways to provide multi-ethnic, multi-cultural and other community experiences for children. Activities such as field trips, celebrating holidays and activities with other ethnic groups, and encouraging children to bring visitors to school enhances the creative process. The more varied experiences children have in their lives, the wider is the range of creative expression. The more personal experiences children have with people and situations outside of their own environment, the more material they can draw on to incorporate in their play. Our challenge is to try not to be intimidated by the variety and diversity of artistic expression in our classroom.

7.2.2 Fostering the Creative Process

Encouraging children to make their own choices is important. Children should be permitted frequent opportunities - and lot of time - to experience and explore expressive materials. Put your emphasis on the process of creativity and not on the finished product. What children learn and discover about themselves is vital for their development. Show your support for the creative process by appreciating
and offering support for the efforts of the children. Independence and control are important components in the creative process. This is especially true when working with children with disabilities.

### 7.2.3 Creative Drama for Young Children

Drama is a story told in dialogue or through expressions by performers in front of an audience. When you think of drama, you might think of stage plays performed in theatres. However, drama is more than theatre.

A child’s pretend play in a drama classroom or at home is often considered fun and imaginative, but with limited educational value. The truth is, for example, in the midst of creating a restaurant together, space walking around the moon as astronauts, twirling around with friends in a fairy-tale land, or taking part in creative drama activities in general, children are learning many aspects such as the ability to solve problems, coordination, cooperation, taking directions, acting as a leader and ensuring flexibility in a fun and safe environment.

Through creative dramatic activities, children learn about themselves and the world. Dramatic play experiences are some of the first ways children learn about their likes and dislikes, their interests and their abilities. They experiment with role playing and work to make sense out of what they are observing in real life.

Children work out confusing, scary, or new life issues. Have you ever witnessed children pretending to visit the doctor? One child dutifully holds the mock stethoscope as the others line up for a check-up. Through these role plays, children become more comfortable and prepared for life events in a safe way. Children often use pretend play to work out more personal challenging life events too, whether it is coping with an illness in the family, or the absence of a parent or divorce.

The benefits of creative dramatics are numerous. These include the following:

**Cognitive development of the child:** Creative dramatics can be highly instrumental to the development of children’s awareness and sensitivity. With their dramatic roles expanding as their world broadens, children gain insight and experience and master realities around them. In mastering these realities, their sensitivities are sharpened alongside.

**Developing sound mental habit:** Creative dramatics encourages and fosters development of children’s imaginative and independent intelligence. The world of creative dramatics generates demand on the part of the child to exhibit his imaginative thinking. He is enabled to form his own impression about life and is encouraged to work out solution to his problems in the process.

**Development in socialization:** Creative dramatics engages the child in active role-taking situations. The child begins to develop a concept of his own role. This enables him a better understanding of both himself and others, and to
develop sensitivity towards them. In this sympathetic climate, he is allowed to open up to himself for a better cooperation with others.

**Play is the child’s natural medium for self-expression:** The child’s bursting emotions are released in a healthy manner in dramatic play. Among the range of feelings which burst to be released through child’s play are: joy, love, fear, rejection, anxiety, anger and so forth.

**Developing creativity and talent:** The child’s imagination and thought is stimulated in dramatic activity from which words and actions are so spontaneously expressed. The child is, therefore, led into a creative process which encourages him to work out solution by himself to that creative discovery.

### 7.2.4 Use of Drama in Curriculum

> ‘Tell me and I will forget.  
> Show me and I will remember.  
> Involve me and I will understand.’

Drama has been used over the course of history from the time of Aristotle, who believed that theatre provided people a way to release emotions, right to the beginning of the progressive movement in education, where emphasis was placed upon ‘doing’ rather than memorizing.

Integrating drama helps children in various ways.

- **Drama is part of real life and prepares students to deal with life’s problems.**
  
  It gives students the opportunity to rehearse roles, further giving shape to the individual and personal ideas and feelings they are naturally experiencing. Overall, this allows students to make sense of their ‘real’ life problems.

- **Drama develops verbal and non-verbal communication.** Through different characters; students have the opportunity to expand their problem-solving skills both verbally and non-verbally. Students practice and build upon various communication skills through the use of body language, facial expressions and different voices.

- **Drama develops empathy and new perspectives.** Taking on various roles in character allows students to use all senses and characteristics in order to understand the character, as well as, the scenario or story. Learning how to express oneself in different ways and through different means, helps build a strong character and personality.

- **Drama is an alternative way to assess by observing.** For some of the students to make sense of specific things is difficult, which is more simple with drama. Drama can be used to preview or review a lesson; further allowing teachers to assess what students already know or have learned.

National School of Drama (NSD) – one of the foremost theatre training institutions in the world, fully financed by the Ministry of Culture, Government of India. It was set-up as a Centre of excellence to provide training in dramatic arts.
It organizes Bharat Rang Mahotsav to stimulate the growth and development of theatre across the country. Originally, a national festival showcasing the work of the most creative theatre workers in India, it has evolved to international scope, hosting theatre companies from around the world, and is now the largest theatre festival of Asia. Organized ‘Jashnebachpan’ — national children theatre festival.

Other institutions – Sangeet Natak Academy—encouraging young artists in field of drama; Zonal Cultural Centres- Mati ke Rang, where international and local performing artists come together through this festival.

Check Your Progress
1. What are the various means of unleashing creativity in young children?
2. What are the benefits of creative dramatics for young children?
3. Name the essential components of the creative process.

7.3 ACTIVITIES FOR CREATIVE SELF-EXPRESSION AMONG YOUNG CHILDREN

There is nothing more important to childhood development than self-expression. A child must be able to express what he or she wants and how he or she feels with freedom and safety. Children that do not grow up in an environment of respect, love, and compassion often find difficult opening up to others as they grow up and often experience many different mental and emotional pitfalls. It is no secret that allowing your child to express his or her feelings, emotions, thoughts, and creativity in a safe environment is one of the most beneficial parts in the growth and development of a child.

Children who are encouraged to engage in self-expression gain self-confidence, demonstrate individuality, develop problem-solving skills, learn to cope with their feelings, and have less stress and anxiety than children who have problems with self-expression.

7.3.1 Artistic Expression

One of the best ways through which kids express themselves is using artistic methods. Painting, finger-painting, drawing, sketching, colouring, and writing all have been proven to provide a solid outlet for many of the strong emotions that children deal with. Many psychologists and therapists find stunning information about a child within the drawings or artwork of that child, thus, making creativity one of the most enlightening and though-provoking experiences of a child’s life.

Allowing a child to paint or draw with freedom and without restrictions is a critical component to childhood development because it opens the mind and frees the spirit. Within a few moments of colouring or drawing seemingly unrelated objects
or shapes on a page, a child can form thoughts and ideas that may be surprising to the parent. This process is incredibly important in the development of communication skills, emotional skills, and psychological awareness. Through art, children are able to take advantage of various artistic tools such as pens, pencils, markers, Sharpies, assorted papers, shapes, and more to create works of self-expression that define the child from a creative and artistic perspective.

Art nurtures the lively curiosity found in pre-school children and serves to motivate children to express and convey their interpretations of the world around them on paper through the ultimate form of free artistic interpretation.

Activity 1: Hanging CD Ornament

Use old CDs and clean up unwanted clutter by saving this item from the trash bin and letting young children make their own sparkly works of art from it!

This fun recycling project helps kids to learn the value of recycling and provides them with a fun and entertaining experience at little to no cost.

Activity 2: Sponge art

Simply cut sponges into familiar shapes like circles, hearts, stars, and squares and have children dip sponges into their favourite colours and dab away to create their own sponge paint masterpiece.

Activity 3: Blown art

This activity provides an innovative and fun new way for your toddler to perfect their artistic and painting skills. Blow painting will have your toddler giggling as he creates unique splodges and shapes in an array of vivid hues.

7.3.2 Playful Expression

Another great way to help kids express themselves is through playful expression. Allowing children to safely and securely play with one another, whether through sports or other recreational pursuits, is a great way to help teach cooperation, relationship skills, and respect for others. By setting up reasonable boundaries and rules for playtime, a parent can safely guide their children through the motions of responsible play and activity without interfering with their development.

There are many great board games and interactive games to play with children that enhance the creative energy and create positive influences. Parking the child in front of the television is a poor choice for a number of reasons, the least of which is that television is a one-way medium and does not encourage any creative or critical thinking on behalf of the child. If television is a must, the parent should watch television with the child so as to provide some sort of platform for genuine interaction.
Activity 1: Sand

Sand play is a fantastic opportunity for the foundation of scientific learning, and developing self-confidence and physical development. Scooping, digging, pouring and sifting, teach children how things work, whilst also building their muscles and coordination. Done alongside a little pal, and it becomes about teamwork, sharing and social skills.

Activity 2: Running, Jumping, Climbing, Swinging

Young children have a compulsion to move. Allowing them to do so, and providing safe and age-appropriate challenges, allows them to increase their confidence as well as develop their resilience through risk-taking. Of course, gross motor skills also receive a mighty boost.

Activity 3: Basic Board Games

There are so many board games available for even the youngest players, and these should be embraced – not only for their fun factor, but for their learning potential. In addition to the themes of numbers, colours, shapes, and early phonics, these games are vital for teaching children turn-taking and sharing.

7.3.3 Building Expression

A final example of a great way to promote self-expression in children is through the building of objects. Dollhouses, model cars, and other objects that require construction are great ways to promote natural progression and creativity within a certain set of boundaries. As the child learns to follow the instructions for putting together the dollhouse or model car, he or she becomes aware of the role of instructions and guidelines and is able to employ creative techniques to produce the end result.

Creativity through the guidelines of building an object, such as a dollhouse, is an important facet of life for children to learn, as many of the real-life situations they will find themselves in will call upon the skills learned through early childhood development.

Activity 1: Dramatic Play with Blocks

Dramatic play and creativity go hand in hand when playing with blocks. Challenge the children to become little contractors as they build a city with blocks. Place the blocks on the floor and invite them to build a town. Remember that blocks are open-ended materials and there is no ‘right or wrong’ way to use them. Think about adding props like toy people, cars, trees and so forth to make the town look realistic. Talking about the process while children are playing helps to learn. Making up a story about this town would be fun, so ask plenty of questions to help the children create the scene.
Activity 2: Jigsaws and Shape Sorters

Playing with blocks, jigsaws, and shape sorters all lay the foundations of spatial thinking, logical reasoning, ordering, and recognizing various shapes, sizes and colours.

7.3.4 Aesthetic Expression

The arts address the idea of an aesthetic experience. An aesthetic experience is one in which the senses are operating at their peak, when you are present in the current moment, when you are resonating with the excitement of this thing that you are experiencing, when you are fully alive. This experience is part of the enchantment that creative expression holds, the process connects us to our authentic self. Art can be the expression of our most inner selves, even of our souls.

Check Your Progress

4. How do activities of artistic expression assist in the development of young children?

5. State one activity of encouraging playful expression among young children.

7.4 ACTIVITIES OF CREATIVE EXPRESSIONS THROUGH DRAMA

Many young children enjoy taking an object and pretending that it is something else. Children love dramatic play. They often enjoy games about very familiar things they see as part of everyday life. Give children plenty of toys, clothes for dress-up, props and puppets to role-play or dramatize a familiar or original story. Sit down and watch their production and perhaps video it so you can share it with family and friends.

Creative drama activities offer an opportunity to children which helps in:

- Expand self-awareness
- Develop imagination
- Think independently
- Work cooperatively
- Improve communication skills
- Provide a vent to emotions
- Build social awareness

The activity for creative self-expressions through drama is:

- **If you’re something and you know it**

In this activity, children use voice, facial expression and movement to communicate emotion.
Educational Activities for Creative Self-Expression

NOTES

Fig. 7.1 Different Emotions in Drama

For example:
(a) If you are happy and you know it, smile wide.
(b) If you are excited and you know it, jump up high.
(c) If you are tired and you know it, time to yawn.
(d) If you are angry and you know it, stamp your feet.

The beauty of this drama activity is the ease with which the teacher can increase or decrease the complexity of the actions and emotions children enact. The teacher can also use a set of flashcards to help visually describe common feelings and emotions. Educational posters include Happy, Sad, Excited, Angry/frustrated, Nervous/anxious, Frightened/scared, Sleepy/tired, Sick, Surprised.

Other Activities can be:

Ribbon of Sound
- Sit in a circle. One person starts a sound. The next person picks it up and it travels around the circle so it becomes a ribbon of sound. Each person should pick it up and pass it on as quickly as possible. Transform it into another sound-with the person next to the one who started the first sound.

Cooperative Stand-Up
- Choose partners. Sit back to back on the floor, legs straight out in front. Interlock arms. Try to stand up together as a unit by pushing against each other’s backs.

7.5 ACTIVITIES OF CREATIVE EXPRESSIONS THROUGH ART WORK

Art nurtures the lively curiosity found in young children and serves to motivate children to express and convey their interpretations of the world around them on to paper through the ultimate form of free artistic interpretation.
Creative art activities can help children in all areas of development. When children work together in the art area, they learn to share, to interact with others, to observe, to be responsible for cleanup, and to put materials away. These are positive and important changes for social learning.

The activities for creative self-expressions through art are:

- **Sparkle Bottles**
  This activity lets children make their own glittery water bottle full of sparkles and fun! Within the bottle are alphabet letters jumbled up to provide immense fun for young children who are trying to learn their letters.
  
  This activity will help children to develop observational and exploratory skills.

  ![Fig. 7.2 A Child with Sparkle Bottles](image)

- **Use small plastic bottles to make a family.**
  In this activity, draw faces on the bottles, stick on paper clothes, and use cotton wool for hair. When you have finished making the family, the child could use these new toys to make up stories.

  ![Fig. 7.3 Craft with Plastic Bottles](image)

  By using everyday objects, and making it up something from it, are great ways to encourage creative development in young children.

Other activities can be:

- **Play dough Modelling:** Play dough has been a mainstay in toy stores for ages, and there is a clear reason why—not only is it cheap, but it is also a highly fun and creative item to play with.
Educational Activities for Creative Self-Expression

NOTES

How to Perform

- Creative art activities for pre-schoolers, like this one, are simple. Just provide some play dough to your child, and let him be. Soon the child will be seen making shapes of increasing complexity, the item easily stimulates the brain and makes the child think hard. You can also add poke-ins, play dough mats or tell your child to make various letters if you want it to be more educational.

- Use empty kitchen paper rolls or small plastic bottles to make a puppet person or animal. Children can decorate it with markers, stickers, scrap papers, fabric and other crafty bits.

- Use natural material. For example, go on a nature walk to collect fallen leaves. Children can use these to draw, paste onto paper, or dip into paint.

- Find a very large cardboard box and let the kids decorate it using crayons, paints and other decorations. It could be a house, boat, cave and so on. We can help them to cut out windows or doors.

- Make binoculars by taping two empty toilet rolls together. Tape on a strap on either side. Then kids can explore the garden with their new binoculars.

- Thread small plastic lids, patty pan cases or pasta tubes onto string to make jewelleries. This might be a good activity for older toddlers.

- Open-Ended Crafting

Provide a wide range of materials for children to choose from (string, paper plates, Popsicle sticks, construction paper, etc.), allowing them to create imaginative crafts using the materials they select instead of objects pre-selected for them. This type of activity provides the opportunity to explore materials and how they work together, and lets children come up with a story behind what they have created.

- Free Drawing

While most child care art stations provide paper and markers for children to be creative, free drawing can sometimes take a little more encouragement. Create a space in the classroom wall to display students art on a regular basis to encourage them to create and show off their artwork. Clipboards can be used to display their latest masterpieces!

7.6 ACTIVITIES OF CREATIVE EXPRESSIONS THROUGH MUSIC AND RHYMES

Music and rhymes brings pleasure, calm, and satisfaction to the lives of children. Small babies respond to a soothing lullaby, toddlers have favorite songs, and pre-schoolers love to dance and sing. Older children idolize pop singers and plaster their room with posters. Songs and music play are good forms of self-expression. Singing encourages young children to use words and helps develop their memory.
As their memory is not fully developed, they are able to remember only a few words at a time. Children can put actions to the words teachers/parents sing to them and add in the words they remember.

The activity for creative self-expressions through music is:

- **Make a shaker by putting rice into a well-sealed plastic bottle**

  In this activity, the patterns and rhythms of music will enhance spatial reasoning. Rhymes and repitions sharpen memory and aid in the development of language and literacy.

  ![Fig. 7.4 Shaker Bottles](image)

Music is beneficial for children. Listening and playing music, singing songs and dancing help to develop important skills. The patterns and rhythms of music enhance spatial reasoning. Rhymes and repititions sharpen memory and aid in the development of language and literacy. Children can also learn about culture and history through the exploration of music.

Make music a part of play space with some simple steps. Include a CD player or radio so that children can choose background music for their play. Xylophones, triangles, and conga drums are fun for children to play. Choreograph the child’s day with silly songs and funny dances.

We can make music play part of other routines. We can also combine music, drama and dance. Here are some ideas to get you started:

- Encouraging the children to sing along with us, without expecting them to sing in tune or in time. We can sing the first line of a nursery rhyme and pause to let the children sing the rest.
- Let the children play, make noise and create music with homemade and bought instruments. Name the instruments that are being used and talk about the differences in sound and how they are played.
- Try songs that involve simple, repeated, rhythmical actions, like ‘bam bam bole’ and ‘chak dhum dhum’.
- Make a drum out of a plastic container and a wooden spoon, or put rice into a well-sealed plastic bottle to make a shaker. Put on some music and bang or shake fast or slow to match the music.
- Build Your Own Instrument
Provide materials to make elastic band guitars, empty container, coffee can drums. Or, let pre-schoolers use the materials available in the classroom to design their very own instrument with a totally unique sound. Ask children to use their instrument in a classroom sing-along.

7.7 ACTIVITIES TO DEVELOP CREATIVE EXPRESSIONS THROUGH DANCE

As with music, young children will often start moving and dancing without prompting them. Sometimes, it might even seem like they are in a trance while they are dancing as they are very self-absorbed. In fact, lots of things are going through the children’s mind while they are dancing. They are exploring fantasies, thoughts and feelings about music and their environment. Dance makes children aware of different patterns and qualities of movement. Dance helps children develop gross motor skills, as well as hand-eye coordination. Teachers can encourage this by getting the child to walk, balance, jump, gallop and hop in response to music or chanted words. It does not matter whether she/he keeps in time to the music or follows any set movements – the activity is the most important thing.

The activity for creative self-expressions through dance is:
- **Recreate scenes from a novel or short story in a dance**

In this activity, children can repeat movements made by someone else or build a sequence of movements based on previous movements. Alternatively, a child may “answer” another child’s movements by doing the opposite movement or stance. Teachers can work with different dimensions of space, such as: high low, right left, forward backward and diagonals.

![Fig. 7.5 Children in a Dance-Story Activity](image-url)
These creative play ideas can help toddlers to express themselves through movement and dance:

- Put on some music that will get children moving. Different styles of music or music from other cultures should also be tried.
- Join toddler for a ‘warm-up’. For example, crawl, roll, jump, skip or spin around together. Gradually, take a step back and let kids lead the dance.
- Give them some props for dancing. These could be ribbons on sticks, a spoon and a box to beat, a toy ukulele, a shaker or a home-made puppet that children enjoy.

**Dramatic play ideas**

Toddlers love dramatic play. We can use simple props like old clothes, bags, dolls, toys, buckets and balls to help them get started. They might:

- Pat the ‘baby’ to sleep
- Change ‘nappies’ on toys
- Dress up like a mum, dad, teacher, doctor or truck driver
- Pack some bags to go shopping, camping or to work
- Drive an imaginary train
- Wash a car or favourite toy
- Move like an animal

Create flashcards featuring ocean life, farm animals, zoo animals or any other types of animals popular in the classroom, asking children to show off their best moves. Give hints to guide their movements (i.e., dolphins like to jump in the water, horses love to gallop), but watch as pre-schoolers perform their own creative interpretation of each animal.

### Check Your Progress

6. Mention activities which assist in self-expression through art among young children.
7. Mention few dramatic play ideas.

### 7.8 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. Creativity can be explored through a variety of artistic methods. Commonly identified methods include drama, dance, music, creative writing and the visual arts, including photography.
2. The benefits of creative dramatics are numerous. These include the following:
   - Cognitive development of the child
   - Developing sound mental habit
   - Development in socialization
   - Play is the child’s natural medium for self-expression
   - Developing creativity and talent

3. Independence and control are important components in the creative process.

4. One of the best ways through which kids express themselves is using artistic methods. Painting, finger-painting, drawing, sketching, colouring, and writing all have been proven to provide a solid outlet for many of the strong emotions that children deal with. Art nurtures the lively curiosity found in pre-school children and serves to motivate children to express and convey their interpretations of the world around them on paper through the ultimate form of free artistic interpretation.

5. Sand play is one activity of encouraging playful expression among young children.

6. Activities which assist in self-expression through art among young children are the following:
   - Playdough Modelling: Play dough has been a mainstay in toy stores for ages, and there is a clear reason why- not only is it cheap, but it is also a highly fun and creative item to play with.
   - Thread small plastic lids, patty pan cases or pasta tubes onto string to make jewelleries. This might be a good activity for older toddlers.
   - Use empty kitchen paper rolls or small plastic bottles to make a puppet person or animal. Children can decorate it with markers, stickers, scrap papers, fabric and other crafty bits.

7. Toddlers love dramatic play. We can use simple props like old clothes, bags, dolls, toys, buckets and balls to help them get started. They might:
   - Pat the ‘baby’ to sleep
   - Change ‘nappies’ on toys
   - Dress up like a mum, dad, teacher, doctor or truck driver
   - Pack some bags to go shopping, camping or to work
   - Drive an imaginary train
   - Wash a car or favourite toy
   - Move like an animal
### 7.9 SUMMARY

- Creative play and artistic activities have a central role to play in young children’s learning and development. They help nurture imagination, and also develop problem-solving, thinking and motor skills.

- Creativity can be explored through a variety of artistic disciplines. Commonly identified methods include drama, dance, music, creative writing and the visual arts, including photography. This experience is part of the enchantment of creative expression.

- All children need to indulge in creative activities with full freedom which will thereby give full expression to their creative skills.

- Children need plenty of opportunities for creative play and creative thinking. Start by providing activities that are based on the children’s interests and ideas.

- Look for ways to provide multi-ethnic, multi-cultural and other community experiences for children.

- Encouraging children to make their own choices is important. Children should be permitted frequent opportunities - and lot of time - to experience and explore expressive materials.

- Drama is a story told in dialogue or through expressions by performers in front of an audience. When you think of drama, you might think of stage plays performed in theatres. However, drama is more than theatre.

- There is nothing more important to childhood development than self-expression. A child must be able to express what he or she wants and how he or she feels with freedom and safety.

- One of the best ways through which kids express themselves is using artistic methods. Painting, finger-painting, drawing, sketching, colouring, and writing all have been proven to provide a solid outlet for many of the strong emotions that children deal with.

- Another great way to help kids express themselves is through playful expression. Allowing children to safely and securely play with one another, whether through sports or other recreational pursuits, is a great way to help teach cooperation, relationship skills, and respect for others.

- A final example of a great way to promote self-expression in children is through the building of objects. Dollhouses, model cars, and other objects that require construction are great ways to promote natural progression and creativity within a certain set of boundaries.

- Many young children enjoy taking an object and pretending that it is something else. Children love dramatic play.
Educational Activities for Creative Self-Expression

NOTES

• Art nurtures the lively curiosity found in young children and serves to motivate children to express and convey their interpretations of the world around them on to paper through the ultimate form of free artistic interpretation.

• Music brings pleasure, calm, and satisfaction to the lives of children. Small babies respond to a soothing lullaby, toddlers have favorite songs, and preschoolers love to dance and sing.

• As with music, young children will often start moving and dancing without prompting them. Sometimes, it might even seem like they are in a trance while they are dancing as they are very self-absorbed.

7.10 KEY WORDS

• Pretend play: It is a form of symbolic play where children use objects, actions or ideas to represent other objects, actions, or ideas using their imaginations to assign roles to inanimate objects or people.

• Phonics: It is a way of teaching children how to read and write.

• Flashcards: It is a card with words or numbers or pictures that is flashed to a class by the teacher.

• Spatial reasoning: It is a category of reasoning skills that refers to the capacity to think about objects in three dimensions and to draw conclusions about those objects from limited information.

• Ukulele: It is a four-stringed musical instrument made from wood that resembles a small classical guitar.

7.11 SELF ASSESSMENT QUESTIONS AND EXERCISES

Short Answer Questions

1. What is the importance of creative process among young children?
2. How is the creative process fostered among children?
3. Give examples of activities for self-expression through art work.

Long Answer Questions

1. Analyse the significance of incorporating drama in the educational activities for young children.
2. Discuss the activities for self-expression among young children.
3. Examine the application of music in the activities of self-expression for young children.
4. ‘Dance helps children develop gross motor skills, as well as hand-eye coordination.’ Explain the statement.

7.12 FURTHER READINGS


Indian Association for Pre-School Education. 2000. *Activity-Based Curriculum for Pre-School Education*. Dehradun, India.

Indian Association for Pre-School Education. 1999. *Strategies for Effective Pre-School Education*. Dehradun, India.
UNIT 8  EDUCATIONAL ACTIVITIES TO PROMOTE COGNITIVE ABILITIES FOR TODDLERS AND PRE-SCHOOLERS

Structure
8.0  Introduction
8.1  Objectives
8.2  Piaget’s Theory of Cognitive Development
  8.2.1  Activities to Develop Cognitive Abilities in Infant
  8.2.2  Activities to Develop Cognitive Activities in Toddlers and Pre-Schoolers
  8.2.3  Simple Science Experiments for Pre-Schoolers
8.3  Answers to Check Your Progress
8.4  Summary
8.5  Key Words
8.6  Self Assessment Questions and Exercises
8.7  Further Readings

8.0  INTRODUCTION

As you have learnt before, cognitive development means development in thought process or mental thinking and it completely depends upon the age factor and the time which is well explained by the stages of Piaget’s theory of Cognitive Development.

These educational activities should somehow incorporate the various artistic forms either in visual or performing art form so as to promote the cognitive abilities in these young children.

Hence, in brief, the teacher is seen imparting the essential knowledge or the content knowledge to the students and side by side imparting the skill of acting, painting, drawing, reading and so forth.

It is the set of mental abilities or processes that are part of nearly every human action while we are awake. Cognitive abilities are brain-based skills we need to carry out any task from the simplest to the most complex one. They have more to do with the mechanisms of how we learn, remember, problem-solve, and pay attention, rather than with any actual knowledge.

For instance, answering the telephone involves perception (hearing the ring tone), decision taking (answering or not), motor skill (lifting the receiver), language skills (talking and understanding language), social skills (interpreting tone of voice and interacting properly with another human being).
In this unit, you will study about educational activities to promote cognitive abilities for toddlers and pre-schoolers and providing simple science experience activities.

8.1 OBJECTIVES

After going through this unit, you will be able to:

- Explain Piaget’s theory of Cognitive Development
- Give example of educational activities to promote cognitive abilities for toddlers and pre-schoolers
- State the simple science experience activities organized by teachers in the classroom

8.2 PIAGET’S THEORY OF COGNITIVE DEVELOPMENT

Cognitive ability is the construction of thought processes, including remembering, problem-solving, and decision-making right from childhood through adolescence to adulthood. It refers to how a person perceives, thinks and gains understanding of his or her world through the interaction of genetic and learned factors. Among the areas of cognitive development are information processing, intelligence, reasoning, language development and memory.

In contrast to the emphasis placed on a child’s native abilities by intelligence testing, learning theory developed from the works of behaviourist researchers such as John Watson (1878–1958) and B. F. Skinner (1904–1990), who argued that children are completely malleable. Learning theory focuses on the role of environmental factors in shaping the intelligence of children, especially on a child’s ability to learn by having certain behaviour rewarded and others discouraged.

Having introduced you to the significance of cognitive development in children; we will now begin discussing Piaget’s theory of Cognitive Development.

Table 8.1 Periods of Cognitive Development by Piaget

<table>
<thead>
<tr>
<th>Piaget’s Periods of Cognitive Development</th>
<th>Birth to 2 years</th>
<th>2-6 yrs</th>
<th>7-11 yrs</th>
<th>12 yrs to adulthood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensori-motor</td>
<td>Pre-operational</td>
<td>Concrete operational</td>
<td>Formal operational</td>
<td></td>
</tr>
<tr>
<td>Uses sense and motor skills, items known by use</td>
<td>Symbolic thinking, language used, egocentric thinking</td>
<td>Logic, applied, has objective/rational interpretations</td>
<td>Thinks abstractly, hypothetical ideals (broader issues)</td>
<td></td>
</tr>
<tr>
<td>Object permanence learned</td>
<td>Imagination/experience, grows, child ascentir</td>
<td>Conservation, numbers, ideas, classification</td>
<td>Ethics, politics, social/moral issues explored</td>
<td></td>
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NOTES

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Types of Cognitive Development Found in Young Children

Let’s now discuss each of these types in detail:

1. Infancy

As soon as infants are born, they begin learning to use their senses to explore the world around them. Most newborns can focus on and follow moving objects, distinguish the pitch and volume of sound, see all colours and distinguish their hue and brightness, and start anticipating events, such as sucking at the sight of a nipple. By three months old, infants can recognize faces; imitate the facial expressions of others, such as smiling and frowning; and respond to familiar sounds.

At six months of age, babies are just beginning to understand how the world around them works. They imitate sounds, enjoy hearing their own voice, recognize parents, fear strangers, distinguish between animate and inanimate objects, and base distance on the size of an object. They also realize that if they drop an object, they can pick it up again. At four to seven months, babies can recognize their names.

By nine months, infants can imitate gestures and actions, experiment with the physical properties of objects, understand simple words such as ‘no’, and understand that an object still exists even when they cannot see it. They also begin to test parental responses to their behaviour, such as throwing food on the floor. They remember the reaction and test the parents again to see if they get the same reaction.

At 12 months of age, babies can follow a fast moving object; can speak two to four words, including ‘mama’ and ‘papa’; imitate animal sounds; associate names with objects; develop attachments to objects, such as a toy or blanket; and experience separation anxiety when away from their parents. By 18 months of age, babies are able to understand about 10–50 words; identify body parts; feel a sense of ownership by using the word ‘my’ with certain people or objects; and can follow directions that involve two different tasks, such as picking up toys and putting them in a box.

2. Toddlerhood

Between 18 months to three years of age, toddlers have reached the ‘sensorimotor’ stage of Piaget’s theory of Cognitive Development that involves rudimentary thought. For instance, they understand the permanence of objects and people, visually follow the displacement of objects, and begin to use instruments and tools. Toddlers start to strive for more independence, which can present challenges to parents concerned for their safety. They also understand discipline and what behaviour is appropriate and inappropriate, and they understand the concepts of words like ‘please’ and ‘thank you.’

Two-year-olds should be able to understand 100 to 150 words and start adding about ten new words per day. Toddlers also have a better understanding
of emotions, such as love, trust and fear. They begin to understand some of the ordinary aspects of everyday life, such as shopping for food, telling time and being read to.

### 8.2.1 Activities to Develop Cognitive Abilities in Infant

1. **Use of Repetitive Play:** This is an activity for toddlers who are just learning their language skills, motor responses and rhythm. Ideal repetitive cognitive activities include clapping their hands, repeating names of objects, verbs, and singing along to music and other activities.

2. **Introducing Sing-Alongs:** Songs are some of the best ways to engage kids and grasp their attention. You can introduce sing-alongs to your child and encourage them to sing with you. Introduce songs in the car and at home and replay them as often as possible. Eventually, the child will start singing along them. This is an activity that helps with your child’s word identification and memory.

3. **Movement of Objects:** Allowing your child to play with toys and objects helps them understand how different behaviour affects them and the environment around them. Moving and manipulating objects teaches them cause and effect. Therefore, allow your toddler to move objects and kick them around. This helps promote their motor skills.

4. **Feeling, Touching and Grasping:** When you introduce cognitive activities to toddlers, they will largely learn through reflex activities. For a toddler, introducing toys that they can grasp helps them to develop their grasping, feeling and touching reflexes, as well as learning about different textures.

5. **Identifying Noises:** From birds singing to car horns and even water running down streams, all these can be used to develop your child’s cognitive abilities. Allow your child to be conscious of the noises around them. This helps them to understand the relation of different sounds to objects around them.

6. **Learning the Alphabet:** You can help your toddler to learn their alphabet by introducing alphabet songs to their everyday life. You can also read books on the alphabet to them often. Alphabet puzzles can also work to help them with this activity.

   Create your own cutouts of the alphabet using bright colours since kids are more attracted to them. Randomly arrange the letters and encourage your child to try and arrange them correctly. This will help enhance your child’s memory.

7. **Playing with Blocks:** Cognitive activities for toddlers such as stacking play blocks or even filling and emptying objects are a good way of promoting their spatial awareness, motor learning and also understanding cause and effect. By playing with blocks, children learn how to be intentional when it comes to motor actions.
8. Using Obstacles: You can create mini obstacles around the house for your toddler. These obstacles help your child to learn other ways to get things done. They learn to go round, over, under or through obstacles to achieve their goals. This is an activity that improves their coordination, balance as well as motor skills.

9. Counting Activities: You can incorporate counting in the child’s everyday life by looking for opportunities throughout the day. You can count the number of toys the child has, the shoes at the door, number of slides at the park or number of people around. Start with teaching them how to count from one to ten. Once they grasp that, you can teach them to count to 20 and progress as you go.

8.2.2 Activities to Develop Cognitive Activities in Toddlers and Pre-Schoolers

1. Learning Colours and Shapes: When interacting with your child, identifying shapes and colours means a lot. You can make a habit of describing items based on their shape and colour. You can introduce the simple shapes and a number of colours. As you go about your day, point out similar shapes and colours and see if they can recall. Ask them to describe objects whenever you come across a colour or shape you had previously learned.

2. Give Them Choices: Make a habit of giving your child choices to make. For example, involve them when picking their clothes. Let them know the difference in colours by speaking them out as you help them choose. This way, you will not only build their confidence but also their decision-making abilities.

3. Asking Questions: This is an important point when it comes to result-oriented cognitive activities. Instead of making every decision for your child, ask them questions based on the things you have taught them. Questions like ‘what do you say when asking for something?’ or ‘what should you do before bedtime?’ can go a long way in training the child’s memory and also helping them to think for themselves. Ask them questions that make them independent problem solvers as they understand how the environment around them works.

4. Visiting Places that Intrigue them: Travel is an important part of child development. You can boost your child’s learning ability by taking them to places where they can learn visually. Trips to the local museum or even the market are good cognitive activities for toddlers as it gives them hands-on experience. Teach them what different things are as you look for opportunities to pick their brain on familiar objects. This helps to broaden their perception and knowledge of things and also helps them to learn new things.
What to expect after consistently introducing cognitive activities?

With time and consistent practice, your child will be able to do a lot of things for themselves. They will be way ahead of the pack by the time they start going to school.

Long-term practice will yield results such as the following:

- The ability of the child to read on their own at a young age.
- The child’s artistic side will develop at an early age.
- It helps in ascertaining the primary interests of the child.
- The child is able to express his emotions and thoughts easily.
- The child is able to follow instructions.
- Their concentration span increases.

Any activity organized in the field of education to impart knowledge and skill to the learners should be with the maximum involvement of learners.

Example: If a science teacher organizes an activity by telling the students to create something related to science using paper, pencil, rubber, geometry box or any other stationary material which they have.

So, here the teacher is organizing an educational activity where the students are given maximum time and the teachers can only guide in between, hence, in this way the students can come to know the scientific knowledge associated with that activity as well as the basic practical or technical skills associated in that activity.

Types of Educational Activities

Basically, the educational activities can be bifurcated into inside the classroom and outside the classroom educational activities.

Inside the Classroom:

- Debate
- Presentation by students
- Drama
- Role play
- Poster making
- Essay writing
- Drawing/Painting
- Collage making
- Slogan writing
Educational Activities to Promote Cognitive Abilities for Toddlers and Pre-Schoolers

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Outside the Classroom:
- Excursions
- Visiting to museums, science centres
- Participating in various clubs like science club and so forth and then writing the report based on their visit or participation.

How teacher can promote the cognitive abilities in young children through educational activities:
Now keeping in mind the type of cognitive abilities found in young children, teachers need to choose the educational activities according to that so that these activities can be appropriate for them as well as can promote their cognitive abilities as well.

Basically it is found that young children’s mental thinking is more enhanced if educational activities incorporate various artistic forms which is held within the classroom most of the time and these artistic forms can be in the visual or performing art forms.

Visual forms like drawing, painting and in performing art form like poem recitation, role play.

Even a 2002 report by the Arts Education Partnership revealed that young children when exposed to the various artistic forms are often more proficient at reading, writing and solving mathematical problems. Hence, this helps them to acquire the knowledge as well as the requisite essential skills.

(a) For Toddlers
As for them there are no specific subjects or books like science, social science, maths, English and other subjects; hence, teachers teach them or organize the educational activities using interdisciplinary approach incorporating various art forms mentioned earlier.

Interdisciplinary approach which is bringing together of separate disciplines around common themes. For example, a teacher using the interdisciplinary approach can organize the educational activity such as making them to draw an apple, a banana, a mango and colour them using water colours or crayons.

Or can provide the books to students which already consists of these figures and they has to just colour it and then can teach them the concept of counting of numbers in Maths such as how many fruits are there in a particular row; concept of science that these are called fruits or the food items which we eat, concept of English like the spelling of these fruits.

Another example can be while teaching the sense organs using performing arts, i.e., explaining the sense organs by singing and this can also be explained by the teacher using interdisciplinary approach such as by singing.
Educational Activities to Promote Cognitive Abilities for Toddlers and Pre-Schoolers

**Self-Instructional Material**

we have five sense organs…….

eyes, ears, nose, skin, tongue…..

So, one, two, three, four, five…..

(b) For Young Children

Here exists the specific subjects like Science, Maths, Social Science, English and according to these subjects, the teacher can organize the educational activities **subject wise**.

Like in Maths while teaching the geometrical figures like square, rectangle, where they can draw the figures with the pencil and then using the sketch pens can draw the sides of these figures in such a way so that they can differentiate between these two figures by using one coloured sketch pen to outline the sides of square and another two different coloured sketch pens for outlining the opposite sides of rectangle.

Also role play can be organized in Maths while teaching the concept of unitary method where the students can participate where they are going to the market and buying something using the concept of unitary method.

In **English** role play can be organized of any story which is mentioned in their texts, poem recitation.

In **Science** while teaching them about the parts of plants where the students can colour the roots in brown colour, the stem, the leaves in green colour.

Also, while teaching them atomic models given by various scientists like while explaining the atomic model of J.J. Thomson using the watermelon concept where they can draw the red edible part and the seeds of watermelon to tell about the concept of protons and electrons respectively.

Even a role play can be organized while teaching the phenomena of photosynthesis where one of the student can be a leaf where he can say 'I am the main site of photosynthesis’, the other student can be the sun saying ‘I am the ultimate source of energy and provides energy to the plants by photosynthesis.’

Or teaching the concept of water cycle where one of the student can become the clouds, others as water resources and then developing a story and side by side explaining the concept behind it.

In **Social science**, while teaching the maps where they can colour the states in political maps for easy memorization.

Like they can colour the state Jammu and Kashmir in yellow colour where they can memorize keeping in mind that the yellow coloured state was at the top of the map which was Jammu and Kashmir.

Also while explaining the concept of latitudes and longitudes the teacher can tell the students to draw the 2D globe in their notebook and then through
Educational Activities to Promote Cognitive Abilities for Toddlers and Pre-Schoolers

*NOTES*

Self-Instructional Material

various coloured sketch pens can outline the latitudes, longitudes and the equator in order to differentiate each one of them.

Cognitive abilities or skills are supported by specific neural networks. For instance, memory skills rely mainly on parts of the temporal lobes and parts of the frontal lobes.

**Table 8.2 Cognitive Abilities and Skills Involved**

<table>
<thead>
<tr>
<th>Cognitive Abilities</th>
<th>Skills involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception</td>
<td>Recognition and interpretation of sensory stimuli (smell, touch, hearing, etc.)</td>
</tr>
<tr>
<td>Attention</td>
<td>Ability to sustain concentration on a particular object, action, or thought, and ability to manage competing demands in our environment.</td>
</tr>
<tr>
<td>Memory</td>
<td>Short-term working memory (limited storage), and Long-term memory (unlimited storage).</td>
</tr>
<tr>
<td>Motor skills</td>
<td>Ability to mobilize our muscles and bodies, and ability to manipulate objects.</td>
</tr>
<tr>
<td>Language</td>
<td>Skills allowing us to translate sounds into words and generate verbal output.</td>
</tr>
<tr>
<td>Visual and Spatial Processing</td>
<td>Ability to process incoming visual stimuli, to understand spatial relationship between objects and to visualize.</td>
</tr>
</tbody>
</table>
| Executive Functions | Abilities that enable goal-oriented behaviour, such as the ability to plan, and execute a goal. These include the following:  
  - **Flexibility:** The capacity for quickly switching to the appropriate mental mode.  
  - **Theory of mind:** Insight into other people’s inner world, their plans, their likes and dislikes.  
  - **Anticipation:** Prediction based on pattern recognition.  
  - **Problem-solving:** Defining the problem in the right way to then generate solutions and pick the right one.  
  - **Decision -making:** The ability to make decisions based on problem-solving, on incomplete information and on emotions (ours and others’).  
  - **Working Memory:** The capacity to hold and manipulate information ‘on-line’ in real time.  
  - **Emotional self-regulation:** The ability to identify and manage one’s own emotions for good performance.  
  - **Sequencing:** The ability to break down complex actions into manageable units and prioritize them in the right order.  
  - **Inhibition:** The ability to withstand distraction, and internal urges. |
## Table 8.3 Activities for Different Age-Groups

<table>
<thead>
<tr>
<th>AGE-GROUP</th>
<th>ACTIVITIES</th>
</tr>
</thead>
</table>
| **TODDLER** | Sing-alongs: Sing songs with your child and encourage him to sing along with you. Play his favorite songs and music in the house and car regularly and he may eventually start singing along by himself. This activity helps promote memory and word identification.  
Identify Noises: Have your child identify noises that he hears throughout the day (i.e. a bird singing, a car horn, running water or the dishwasher). He will begin to understand how sounds relate to objects in his everyday environment.  
Practice Shapes and Colours: Identify shapes and colours when interacting with your child. You can say, ‘That is a round, blue ball,’ when playing in the yard or ‘That sign is a red octagon’ when pulling up to a stop sign. As he gets older, you can ask him to describe objects to you.  
Offer Choices: When you can, offer your child choices: ‘Would you like to wear the brown shorts or the blue shorts?’ or ‘Would you like string cheese or yogurt with your lunch?’ This will help him to feel more independent and learn to make confident decisions that affect his day.  
Ask Questions: Another way to help your child learn to think for himself is to ask him questions: ‘Which toy should we pick up first when we clean up the living room? Or ‘Why is it important to walk down the stairs slowly?’ Asking him questions helps him learn how to problem solve and better understand how his environment works.  
Play with Everyday Items: Playing with everyday household items is educational, fun and cost effective. Encourage your child to match various-sized lids to their accompanying pots or have him look in a mirror and point to his nose, mouth, eyes and so forth. |
| **PRE-SCHOOL** | Sensory play is advocated by many child psychologists. By using various medium, sensory play helps the child to gain interest and increases learning by adopting the senses as part of learning.  
Practice the Alphabet: Help your child identify letters by singing along to the ‘Alphabet Song,’ reading books about the alphabet and playing with alphabet puzzles.  
Pour the salt into a zip-lock bag and add a few drops of food colouring and essence, secure the bag and shake it until the colour mixes evenly. If you find that the salt has become lumpy or too moist then pour it out on a plate and let it dry in the sun a couple of hours. Pour the coloured salt into a tray.  
Now to help your child learn his alphabets make him practice the shapes in the tray by using his finger to make the pattern in the coloured salt. He can also draw or make random patterns if he wants to. |
Educational Activities to Promote Cognitive Abilities for Toddlers and Pre-Schoolers

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Practice Counting
Identify opportunities throughout the day to practice counting. Count the number of shoes in your child’s closet when he gets dressed or the number of slides on the playground when you go to the park.

To help your pre-schoolers improve their counting skills. Take some blocks and with a marker write a sequential order of numbers on each one. Your child can vertically stack together the blocks in the correct number sequence, or measure things like books (by stacking the blocks) and generally learn his numbers in a fun way.

Memory Matching
Memory matching games or simple card games allows pre-schoolers to intellectually work through a problem to find the answer or a solution. There are hundreds of memory matching activities to choose from, but no matter which one you choose, they all involve developing the same skills.

- Identify an item or several items
- Remember the items
- Look for a matching item
- Identify when a match is found

Finding a match can be incredibly gratifying and make a child very proud of his discovery, which is why many pre-schoolers love memory matching activities.

Puzzles
Puzzles provide children with opportunities to hone their problem-solving skills as they figure out where pieces fit or don’t. It teaches pre-schoolers to solve problems and think in a more logical way. Since there is only one way to solve a puzzle (a piece either fits or it doesn’t), they also teach children how to be more patient. As an educator, pay extra attention and encourage children to continue searching for the right piece if they begin to get impatient.

Sorting and Classifying
Categorizing plays a large role in a pre-schooler’s cognitive development. Through sorting, children begin to understand that certain things have similarities and differences. This type of logical thinking forms the foundation for future mathematical concepts and even everyday tasks. Choose activities that encourage sorting and classifying items, such as sorting toys by colour, type or size.
### Sequencing

Pre-schoolers typically use their own routines to understand events and recall sequence. They understand time in a general way (for example, ‘yesterday’ could mean something that happened anytime in the past), but can work on their sequencing skills to develop a better sense of time. For example, you could ask your pre-schoolers to draw you a sequence of their morning routine in the correct order. As an educator, remember to emphasize sequencing words like, first, start, finish, next, last, then, before, after and others, so they become a part of a pre-schooler’s vocabulary.

### Pictures of famous people

- Increases cognition, communication skills, problem solving and pragmatics.
  - One picture is picked to be the first person to guess. Everyone else is shown the famous face. The guesser must then ask questions to find out the name of the famous person in the picture.
  - Is the face that of a man or woman?
  - Is the individual alive or dead?
  - Is the person an entertainer?
  - Is he a politician?

### Missing Item

In this game, place common things, such as pencil, key, marble, fork, penny and so forth on a tray. Cover the tray with a cloth or paper. Display pencil, key, button, marble, fork and other items on a tray or for one minute (or whatever time is age-appropriate for the players). Cover the tray again and have the players write a list of the items on the tray. The player with the most correct items wins the game. You can also take away one thing and ask what has been removed, a good way to break a tie.

### Memory Master

Memory Master quizzes players on what they see. Players stare at a picture in a magazine, catalogue, or child’s book for sixty seconds. After the time is up, quiz the player about what they can remember. For example, if the picture was an ad for food, you might ask:
- What foods are in the picture?
- How many of each type?
- What colours did they see? (give a point for each one they name)

The winner is the player with the best memory – the Memory Master.

### The Coin Game

A game that parents can use to help their children improve memory and sequencing, kids love this game because it is fun and fast-paced. All you need for this game is a handful of coins, a cloth to cover them, and something to time the players. Choose five coins from the pile and put them into a sequence. Have the players look at the coins and then cover them up. Instruct the players to take coins from the pile and arrange them in the same order. Use the stopwatch to time their effort. The winner is the one who can complete the sequence in the shortest amount of time.
### Educational Activities to Promote Cognitive Abilities for Toddlers and Pre-Schoolers

#### Story Telling Memory Game

Players sit in a circle and one person begins a story using any sentence they wish. The players take turns repeating the sentences and adding a new one. If someone misses a word, they are out. The kid able to tell the story without a mistake is the winner.

#### Mismatch Memory Game

A team memory game, one team leaves the room and the other team changes things in the room to make mismatches—the placement of furniture, lamps, rugs, and so forth. When the second team returns to the room, they find the mismatches and get a point for each. Then the second team takes a turn finding the mismatches. The team with the highest score wins the game.

#### The Magic Cup Game

A game frequently seen at carnivals, you will need three plastic cups and a small item such as a coin. Invert the three cups and place the items under a cup, making sure those watching know which cup it is under. Move the cups around and ask under which cup is the item. An excellent test of memory and concentration, take turns moving the magic cups and see which player does the best at finding the coin.

#### The Category Game

For this easy memory game suitable for all ages, participants are required to list words that fit into a particular category. For example:

- List all the colours that you know in one minute or two minutes.
- List all the words that you know that mean small (tiny, little, petite, miniature, nano, micro, elfin).
- List all the breeds of dogs you know.
- List all the words that you know that mean red (scarlet, auburn, crimson, brick, lipstick, cherry).

For an extra challenge, have players clip paperclips together while saying the words in the chosen category.

### 8.2.3 Simple Science Experiments for Pre-Schoolers

The following activities can be given to pre-schoolers are science experiments. Not only are these easy to carry out but also gauge the interest of young children.

- Water and oil science exploration showing how they don’t mix together
- Dying flowers with different colours
- Density Towers
- Bubbles
- Walking water (absorption activities)
- Ice-cream melting
- Lettuce growing
- Mirrors and reflections
- Seed science
- Shadow science
Educational Activities to Promote Cognitive Abilities for Toddlers and Pre-Schoolers

Check Your Progress
1. What are the activities which help to develop cognitive abilities in infants?
2. What are the benefits of introducing activities developing cognitive abilities in toddlers?

8.3 ANSWERS TO CHECK YOUR PROGRESS

1. The activities which help to develop cognitive abilities in infants are the following:
   - Introducing Sing-Alongs
   - Movement of objects
   - Feeling, Touching and Grasping
   - Identifying Noises

2. The benefits of introducing activities developing cognitive abilities in toddlers are the following:
   - The ability of the child to read on their own at a young age.
   - The child’s artistic side will develop at an early age.
   - It helps in ascertaining the primary interests of the child.
   - The child is able to express his emotions and thoughts easily.
   - The child is able to follow instructions.
   - Their concentration span increases.

8.4 SUMMARY

- Cognitive ability is the construction of thought processes, including remembering, problem-solving, and decision-making right from childhood through adolescence to adulthood.
- Learning theory focuses on the role of environmental factors in shaping the intelligence of children, especially on a child’s ability to learn by having certain behaviour rewarded and others discouraged.
- Between 18 months to three years of age, toddlers have reached the ‘sensorimotor’ stage of Piaget’s theory of Cognitive Development that involves rudimentary thought.
- When interacting with your child, identifying shapes and colours means a lot. You can make a habit of describing items based on their shape and colour.
Educational Activities to Promote Cognitive Abilities for Toddlers and Pre-Schoolers

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- Interdisciplinary approach which is bringing together of separate disciplines around common themes. For example, a teacher using the interdisciplinary approach can organize the educational activity such as making them to draw an apple, a banana, a mango and colour them using water colours or crayons.
- Sing songs with your child and encourage him to sing along with you. Play his favorite songs and music in the house and car regularly and he may eventually start singing along by himself. This activity helps promote memory and word identification.
- Memory Master quizzes players on what they see. Players stare at a picture in a magazine, catalogue, or child’s book for sixty seconds. After the time is up, quiz the player about what they can remember.

8.5 KEY WORDS

- Malleable: It is the quality of something that can be shaped into something else without breaking.
- Reflex: It is a physical reaction to something that you cannot control.
- Interdisciplinary approach: It implies bringing together of separate disciplines around common themes.
- Sense organ: It is a part of the body that makes it possible to experience the physical characteristics of a situation.

8.6 SELF ASSESSMENT QUESTIONS AND EXERCISES

Short Answer Questions

1. Mention the activities which help to develop cognitive abilities in toddlers.
2. How do teachers promote cognitive abilities in young children through educational activities?
3. What is the significance of development of cognitive abilities in young children?

Long Answer Questions

1. Explain Piaget’s theory of Cognitive Development.
2. Give example of simple science activities organized by teachers for the development of cognitive abilities in young children.
8.7 FURTHER READINGS


Indian Association for Pre-School Education. 2000. *Activity-Based Curriculum for Pre-School Education.* Dehradun, India.

Indian Association for Pre-School Education. 1999. *Strategies for Effective Pre-School Education.* Dehradun, India.
Cognition has to do with how a person understands the world and acts in it. It is the set of mental abilities or processes that are part of nearly every human action while the individual is awake.

Cognitive functioning is a term referring to an individual’s ability to process information. It is defined as the ability of an individual to perform the various mental activities most closely associated with learning and problem solving. In this unit, you will study about the concept of cognitive abilities and the strategies used to promote cognitive abilities in pre-school children.

9.1 OBJECTIVES

After going through this unit, you will be able to:

- State the significance of cognitive abilities
- Discuss the strategies which assist in improving cognitive abilities among kids
- Prepare an overview of prenumber concept

### 9.2 COGNITIVE ABILITIES

Cognitive abilities are brain-based skills we need to carry out any task from the simplest to the most complex. They have more to do with the mechanisms of how we learn, remember, solve problems, and pay attention, rather than with any actual knowledge.

Cognitive skills are the core skills your brain uses to think, read, learn, remember, reason, and pay attention. Working together, they take the incoming information and move it into the bank of knowledge you use every day at school, at work and in life.

Table 9.1 shows the main brain functions involved in cognition.

#### Table 9.1 Various Brain Functions

<table>
<thead>
<tr>
<th>Cognitive Ability/Brain Function</th>
<th>Skills involved</th>
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<td>Ability to mobilize our muscles and bodies, and ability to manipulate objects.</td>
</tr>
<tr>
<td>Motor skills</td>
<td>Brain challenges: Tapp your right hand on the table. At the same time, make a circular movement with your left hand (as if you were cleaning the table)</td>
</tr>
<tr>
<td>Motor skills</td>
<td>Do the same, switching hands</td>
</tr>
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<td>Language</td>
<td>Skills allowing us to translate sounds into words and generate verbal output.</td>
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<td>Language</td>
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<td>Visual and Spatial Processing</td>
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<tr>
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<td>Brain teaser: How are your mental rotation skills</td>
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<td>Executive Functions</td>
<td>9. Inhibition: It is the ability to withstand distraction and internal urges.</td>
</tr>
</tbody>
</table>

(Source: https://sharpbrains.com/blog/2006/12/18/what-are-cognitive-abilities/)
Cognitive abilities are not fixed — we can improve them via lifestyle and targeted practice. With age, some cognitive abilities tend to decline, especially the so-called executive functions, and those cognitive abilities that are not used regularly. Fortunately, increasing evidence shows that decline can be delayed with appropriate lifestyle options and practices. Also, preschool helps promote cognitive development and prepare young children for the challenges ahead — math, reading, critical thinking and problem-solving. In pre-school, children begin the basics for learning numbers, letters, vocabulary, speech — the skills necessary to learn to read in elementary school. Cognitive development in early childhood can indicate success in the later school years, as children who develop strong cognitive development skills in the young age are often better readers in high school.

Before, we learn about educational activities for promoting cognitive abilities in children, let’s thoroughly read about the problems of cognition which affects adults in their lives.

9.2.1 Need of Cognitive Abilities

The key to solving a persistent learning challenge is to strengthen the person’s basic processing or cognitive skill set. Remember, cognitive skills are not all the same as the subjects taught in the classroom at school. Academic skills consist of knowledge about different subjects like math, history and science.

People are often surprised that there is difference between cognitive and academic skills. Actually, there is a big difference. Cognitive skills are the mental capabilities we need to successfully learn academic subjects. Underlying cognitive skills must function well for us to efficiently and easily read, think, prioritize, understand, plan, remember and solve problems. Essentially, cognitive skills are the individual mental skills used to learn.

When Cognitive Skills are WEAK, Academic Learning is at best, a struggle. When Cognitive Skills are STRONG, Academic Learning is fast, easy, efficient and fun!

Mental or cognitive skills may seem mysterious because they are not easy to see or recognize by themselves, but without the underlying cognitive skills, we would not be able to process the information we receive from sources around us through our senses of sound, touch, sight, taste, and smell.

When we understand where cognitive skills fit into everyone’s learning process, we can see how truly important they are — which leads to another critically important truth: cognitive skills can change! That’s right, cognitive skills, learning skills, underlying skills, and learning tools can be improved, strengthened, and enhanced, regardless of a person’s age.

It is about how much we know as well as how effectively we process the information that we receive. Cognitive skills determine how easy, fast and well a person learns.

In other words, cognitive skills are the learning skills used to:

- Retain information;
• Process, analyse, store facts and feelings; and
• Create mental pictures, read words and understand concepts.

9.2.2 Tips for the Classroom

Teachers who help students grow their cognitive skill levels as well as learn new tasks will have better learning outcomes in the classroom. Here are three tips for better learning while incorporating cognitive skills in the classroom:

1. Assess the cognitive stages of your students in order to adapt your future teaching.
2. Provide differentiated learning strategies based on the cognitive skill levels of the students in the classroom.
3. Teach students not only new information, but how to learn for a lifetime of learning.

Each of the cognitive skills plays an important part in processing new information. That means if even one of these skills is weak, no matter what kind of information is coming one’s way, grasping, retaining, or using that information is impacted. In fact, most learning challenges are caused by one or more weak cognitive skills.

9.2.3 Improving Your Ability to Handle Stress

The stress response is the body’s way of protecting oneself. When working properly, it helps you stay focused, energetic and alert. In emergency situations, stress can save your life—giving you extra strength to defend yourself.

Stress can also help you rise to meet challenges. When you feel threatened, your nervous system responds by releasing a flood of stress hormones, and including adrenaline and cortisol, which rouse the body for emergency action. Your heart pounds faster, muscles tighten, blood pressure rises, breath quickens and your senses become sharper. These physical changes increase your strength and stamina, speed your reaction time, and enhance your focus—preparing you to either fight or flee from the danger at hand.

Your nervous system is not very good at distinguishing between emotional and physical threats. If you are super stressed your body can react just as strongly as if you are facing a true life-or-death situation. And the more your emergency stress system is activated, the easier it becomes to trigger and the harder it becomes to shut off. If you tend to get stressed out frequently—as many of us do in today’s demanding world—your body may be in a heightened state of stress most of the time. And that can lead to serious health problems. Chronic stress disrupts nearly every system in your body. It can suppress your immune system, upset your digestive and reproductive systems, increase the risk of heart attack and stroke and speed up the aging process. It can even rewire the brain, leaving you more vulnerable to anxiety, depression and other mental health problems.
Cognitive symptoms of stress overload:

- Memory problems
- Inability to concentrate
- Poor judgment
- Seeing only the negative aspects
- Anxious thoughts
- Constant worrying

**Cognitive Behavioral Therapy (CBT)**

The point is that stress is not caused by reality but our *perception* of reality. Fortunately, though, the cognitive nature of stress can also be a good thing because it means that you can remove that stress by changing the way you think about it. This is the entire idea behind ‘cognitive behavioural therapy’ which is a form of therapy designed to change the way you think. It involves two processes. The first is identifying the thought patterns or cognitive distortions that are causing you to be stressed. Second, ‘thought challenging’ which means you challenge yourself on just how accurate or useful is that thought. By constantly repeating negative ruminations as you think about all the things that could go wrong, you will end up actually making yourself stressed for no reason. Instead then, you should try to replace those thoughts with more constructive thought patterns. The fact of the matter is that most of us worry far more than we need to. You have survived this long, so as long as you keep on doing what you are doing; you will probably be okay. Stop putting yourself through cognitive stress and try restructure your thoughts in a positive and optimistic manner. The techniques discussed in this section are mostly applicable for adults.

*Essential CBT Techniques and Tools*

There are many tools and techniques used in Cognitive Behavioural therapy. Some of the most common and effective CBT practices are the following:

**Cognitive Restructuring Therapy (CR Therapy)**

Cognitive Restructuring (CR) is a popular form of therapy used to identify and reject maladaptive cognitive distortions and is typically used with individuals diagnosed with depression. In CR, the therapist and client first examine a stressful event or situation reported by the client. CR therapies are designed to eliminate ‘automatic thoughts’ that include clients dysfunctional or negative views. According to Beck, doing so reduces feelings of worthlessness, anxiety, and anhedonia that are symptomatological of several forms of mental illness. CR is the main component of Aaron Beck and David Burns’ cognitive behavioural therapy.

1. **Journaling**

This technique is a way of ‘gathering data’ about our moods and our thoughts. This *journal* can include the time of the mood or thought, the source of it, the
extent or intensity, and how we responded to it, among other factors. This technique can help us to identify our thought patterns and emotional tendencies, describe them and find out how to change, adapt, or cope with them.

2. Unravelling Cognitive Distortions
This is the main goal of CBT and can be practiced with or without the help of a therapist. In order to unravel the cognitive distortions you hold, you must first become aware of which distortions you are most vulnerable. Part of this involves identifying and challenging our harmful automatic thoughts.

3. Exposure and Response Prevention
This technique is specifically effective for those who suffer from Obsessive Compulsive Disorder (OCD). You can practice this technique by exposing yourself to whatever it is that normally elicits a compulsive behaviour, but doing your best to refrain from the behaviour and writing about it. You can combine journaling with this technique, or use journaling to understand how this technique makes you feel.

4. Interceptive Exposure
This technique is intended to treat panic and anxiety. It involves exposure to feared bodily sensations in order to elicit the response, activates any unhelpful beliefs associated with the sensations, maintains the sensations without distraction or avoidance, and allow new learning about the sensations to take place. It is intended to help the sufferer see that symptoms of panic are not dangerous, although they may be uncomfortable.

5. Nightmare Exposure and Re-scripting
Nightmare exposure and re-scripting are intended specifically for those suffering from nightmares. This technique is similar to interceptive exposure, in that the nightmare is elicited, which brings up the relevant emotion. Once the emotion has arisen, the client and therapist work together to identify the desired emotion and develop a new image to accompany the desired emotion.

6. Play the Script until the End
This technique is especially useful for those suffering from fear and anxiety. In this technique, the individual who is vulnerable to crippling fear or anxiety conducts a sort of thought experiment, where they imagine the outcome of the worst case scenario. Letting this scenario play out can help the individual to recognize that even if everything they fear comes to pass, it is likely to turn out okay.

7. Progressive Muscle Relaxation (PMR)
This is a familiar technique for those who practice mindfulness. Similar to the body scan, this technique instructs you to relax one muscle group at a time until your
whole body is in a state of relaxation and it can be especially helpful for calming nerves and for soothing a busy and unfocused mind.

8. Relaxed Breathing

This is another technique that is not specific to CBT but is familiar to practitioners of mindfulness. There are many ways to relax and bring regularity to your breath, including guided and unguided imagery, audio recordings, YouTube videos, and scripts. Bringing regularity and calmness to your breath will allow you to approach your problems from a place of balance, facilitating more effective and rational decision making (Megan, 2016).

These techniques can help those suffering from a range of mental illnesses and afflictions, including anxiety, depression, OCD, and panic disorder, and they can be practiced with or without the guidance of a therapist. To try some of these techniques without the help of a therapist, see the next section for worksheets and handouts to assist with your practice.

Cognitive Behavioural Activities

Few more Cognitive Behavioral Therapy activities and exercises that may be helpful for people carrying cognitive distortions are:

Mindfulness Meditation

Mindfulness can have a wide range of positive impacts, including helping with depression, anxiety, addiction, and many other mental illnesses or difficulties. Mindfulness can help those suffering from harmful automatic thoughts to disengage from rumination and obsession over these thoughts by helping them stay firmly grounded in the present.

Successive Approximation

This is somewhat breaking up large tasks into small steps to make it easier to accomplish.

This is true in mental health treatment as well, since the goal to overcome depression or anxiety and achieve mental wellness can seem like a monumental task to those who are suffering from severe symptoms. By breaking the large goal into small, easy to accomplish steps, we can map out the path to success and make the journey seem a little less overwhelming.

Writing Self-Statements to Counteract Negative Thoughts

When you (or your client) are being plagued by negative thoughts, it can be hard to confront them, especially if your belief in these thoughts is strong. To counteract these negative thoughts, it can be helpful to write down a positive, opposite thought. For example, if the thought that you are worthless keeps popping into your head, try writing down a statement like ‘I am a person with worth’ or ‘I am a person with potential’. In the beginning, it can be difficult to accept these replacement
thoughts, but the more you bring out these positive thoughts to counteract the negative ones, the stronger the association will be.

Visualize the Good in your Life

When you are feeling depressed or negative, it is difficult to recognize that there is good in your life as well. This simple technique of bringing to mind the good parts of your day can be a small step in the direction of recognizing the positive (Anderson, 2014).

All you need to do is write down the things in your life that you are most thankful for or the things that are most positive in your day. The simple act of writing down these good things can forge new associations in your mind which make it easier to see the positive, even when there is plenty of negativity as well.

Reframe Your Negative Thoughts

It can be all too easy to succumb to negative thoughts as a default setting. If you find yourself immediately thinking a negative thought when you see something new, such as entering an unfamiliar room and thinking 'I hate the colour of that wall,' give reframing a try (Anderson, 2014).

Reframing involves countering the negative thought(s) by noticing things you feel positive about as quickly as possible. For instance, in the example where you immediately think of how much you hate the colour of that wall, you would push yourself to notice five things in the room that you feel positively about (for example, the carpet looks comfortable, the lampshade is pretty, the windows let in a lot of sunshine).

You can set your phone to remind you throughout the day to stop what you are doing and think of the positive things around you. This can help you to push your thoughts back into the realm of the positive instead of the negative.

Research over the past 20 years has shown that certain regions of the adult brain can generate new neurons and new synapses. In essence, whenever we learn something new, engage in new activities, or even ponder a new concept, the brain will rewire itself in response to these activities. Just like babies, adults can keep growing their brain and protect cognitive functioning as they age.

There are many positive ways to build better cognition and to lessen the chances of developing diminished cognitive ability in life, all of which make us act old and feel old. Let us study about them briefly here.

1. Exercise to improve cognitive function: Exercise increases blood flow to the hippocampus, which is the part of the brain responsible for memory. One recent study found that the loss of tissue density in the brain was less in those who were aerobically fit, which is another way of saying fit people have better cognitive functioning. Many other studies have highlighted that exercise increases one’s ability to learn, handle stressful situations, make clear decisions and recall facts and memories.
2. **Take up a new hobby**: Increase cognitive enrichment by taking on a new active pursuit that requires learning, as opposed to merely attending a baseball game or concert. Some examples include gardening, antiquing, taking up an instrument, raising chickens, learning a foreign language or selling items on the Internet. Read books, talk to experts, take classes, attend conferences or join organizations related to your hobby. All of this learning activity develops new connections between neurons, which helps offset cell loss due to aging or disease.

3. **Reduce stress**: People with high amounts of stress are more likely to suffer from cognitive problems than those who are free of stress. While medications can reduce the symptoms of stress, they do not cure the problem or help you understand the root cause of the stress, which is essential to know. Since many medications require ever-increasing dosages to be effective, and many have side-effects, it is important to consider reducing stress in more natural ways, including exercise, naps, individual counselling, meditation, relaxing hobbies, spiritual growth and other means.

4. **Address depression**: Depressed individuals are more likely to suffer from cognitive problems later in life than those who are free of depression. As with stress, many people who are depressed merely run to their family doctor and say, ‘Can you give me something for being depressed?’ and walk away with a prescription. No attempt is made to find out what is causing the depression in the first place, let alone cure it. As with stress, there are ways to bring about a long-lasting solution to depression besides medication, including individual counselling, exercise, spiritual growth, career rejuvenation, goal setting, and other techniques.

### Check Your Progress

1. What are cognitive skills mainly used for?
2. Mention the two processes of the Cognitive Behavioural Therapy.

### 9.3 **STRATEGIES TO PROMOTE COGNITIVE ABILITIES**

Children are immersed in a highly social world from the moment they are born. This social world includes not only people such as parents, siblings, teachers and classmates, but also objects and values that are part of their culture. All of these things provide a context for a child’s cognitive growth and development. Cognitive development is characterized by the way a child learns, acquires knowledge and interacts with his surrounding environment. Different cognitive skills are acquired as a child meets certain developmental milestones, but a child of any ability will benefit from activities that promote active learning.
In the age group of 3 to 5 years, pre-schoolers thinking skills undergo tremendous change. Their ability to use representational thought and symbols to stand for objects, people and events, which began in toddlerhood, becomes even more complex. Pre-schoolers also begin to use logic to think about how and why things work in the world around them. However, despite exhibiting cognitive skills in the pre-school years, they still display many cognitive limitations. As part of their social environment, teachers play an important role in the cognitive development of pre-schoolers. By understanding their advances and limitations in thinking, teachers can best support pre-schoolers in their cognitive growth.

Outlined below are activities that can be used to encourage cognitive development in each of these areas.

9.3.1 Activities for Observation

Children with keen observation skills collect information and form questions. This is the basis of inquiry and it leads to discovery and learning. Observation involves the senses of sight, hearing, touch, smell and taste. Teachers, parents and caregivers should engage children in activities designed to sharpen their competence in observation. These endeavours boost memory, calm restless children and serve as ice-breakers for social gatherings or the first day of school.

### Table 9.2 Various Activities for Observation

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<thead>
<tr>
<th>S.No</th>
<th>Activity</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Identify Noises</td>
<td>Have your child identify noises that he hears throughout the day (i.e. a bird singing, a car horn, running water or the dishwasher). He will begin to understand how sounds relate to objects in his everyday environment.</td>
</tr>
<tr>
<td>2.</td>
<td>Identify Shapes and Colours</td>
<td>Identify shapes and colours when interacting with your child. You can say, ‘That is a round, blue ball,’ when playing in the yard or ‘That sign is a red octagon’ when pulling up to a stop sign. As he gets older, you can ask him to describe objects to you.</td>
</tr>
<tr>
<td>3.</td>
<td>Offer Choices</td>
<td>When you can, offer your child choices: ‘Would you like to wear the brown shorts or the blue shorts?’ or ‘Would you like string cheese or yogurt with your lunch?’ This will help him to feel more independent and learn to make confident decisions that affect his day.</td>
</tr>
<tr>
<td>4.</td>
<td>Take Trips</td>
<td>Take trips to your local children’s museum, library or farms to stimulate his curiosity and provide him with ‘hand on’ experiences. Ask him questions while you explore and listen to his responses and reactions. These adventures can provide a learning experience for both of you.</td>
</tr>
<tr>
<td>5.</td>
<td>What’s in the Bag?</td>
<td>Divide the children into groups and distribute an identical bag of objects, including pencils, paper clips, flashlights, candles, marbles and erasers, to each group. Have the group members sit one behind the other on the floor or at desks. The first person in line takes an object from the bag, observes it and without turning around passes it backward. When the object reaches the last person, he hides it in an empty bag. When finished, the group records a list of remembered items. The team listing the most objects wins. In case of a tie, the faster group prevails.</td>
</tr>
<tr>
<td>6.</td>
<td>Leaf Observation</td>
<td>Take your children outside to gather leaves. When back inside, have them create leaf picture booklets. Provide magnifying glasses so they can have a closer look at the leaves. You should first model the process on an overhead projector. Say, ‘I am drawing an oval for my leaf because of its shape. I am making a dark line down the centre to represent the vein of the leaf.’ Direct the students to draw and colour their pictures to match the original leaves. Adapt this concept to other science activities.</td>
</tr>
</tbody>
</table>

Table 9.2 Various Activities for Observation

NOTES
Educational Activities for Promoting Self-Instructional Material

7. The Invisible Gorilla
   During a selective attention test administered to students at Harvard University, psychology researchers, Daniel Simons and Christopher Chabris showed an 82 second video of six students passing a basketball. They asked observers to count the total number of basketball passes. Although many students counted the passes correctly, 50 per cent did not notice that a gorilla appeared on the screen for nine seconds, looking at the camera and pounding his chest. Try this experiment with older children. Use it as a discussion springboard about how grown-up children do not always notice what is in front of them.

8. Quick Change
   Have the children form two lines with each child facing a partner. Instruct them to carefully observe their partner. When given a predetermined signal, the children turn back-to-back and change three things. They might remove headbands or untie shoes. After a minute, tell the children to turn back around, observe their partner and state the changes that they saw.

9. Fruit and the Senses
   This activity works well for parents at home with younger children. Place three fruits, such as an orange, peach and pear, on a plate. Blindfold the child and tell her to pick up the fruit, describe its texture, and tell how each piece of fruit feels and smells. Tell her to taste the fruit and make a guess before removing the blindfold to see the types of fruit.

10. Critter Cam
    An animated interactive on the National Geographic site that lets the child see habitats from the perspective of the selected animal (Leopard Seal, Sperm Whale, or Bearded Seal), which has a camera affixed atop its head. Scroll down to check out the other virtual critter cams.

11. Wild Dolphins app:
    This app tells the story behind the movie *Dolphin Tale* with factual and scientific interviews, videos, graphics, sounds, and interactive elements. These series of true animal tales would lend the children wonderful perspective taking, emotional development, literacy skills, schema building, and so many other cognitive and academic skills.

9.3.2 Activities for Seriation/Sequencing

Seriation/sequencing is one of the first activities early learners participate that assists them in developing comparison and contrast skills essential for grade school. Seriation/sequencing is particularly important at the early learning stage because it may be one of the last opportunities children have to develop oral skills in comparison and contrast to learning to write fluently.

There are has some great (and easy!) sorting and classifying activities that can take place at home in addition to your child’s early learning centre. They even include letter sorting activities!

Sequencing and ordering are essential cognitive skills for early learners, as they are skills that are needed in both the real world and in school. Sequencing and ordering is probably the first concentrated exposure that early learners have to transition words like ‘first,’ ‘second,’ ‘then,’ and ‘last’. Children can participate in story sequencing with pictures, or guessing games with well-known stories like fairy tales. Check out this great resource for sequencing and ordering activities:
Table 9.3 Various Activities for Seriation/Sequencing

<table>
<thead>
<tr>
<th>S.No</th>
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<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Sing-along</td>
<td>Sing songs with your child and encourage him to sing along with you. Play his favourite songs and music in the house and car regularly and he may eventually start singing along by himself. This activity helps promote memory and word identification.</td>
</tr>
<tr>
<td>2</td>
<td>Play with Everyday Items</td>
<td>Playing with everyday household items is educational, fun and cost effective. Encourage your child to match various-sized lids to their accompanying pots or have him look in a mirror and point to his nose, mouth, eyes and so forth.</td>
</tr>
</tbody>
</table>

9.3.3 Enhancing Memory

Memory is the process by which knowledge is encoded, stored, and later retrieved. The main categories of memory are short-term memory (or working memory) and long-term memory, based on the amount of time the memory is stored. The distinction between short-term memory and working memory is an ongoing debate, and the terms are often used interchangeably. There are scholars who claim that some kind of manipulation of remembered information is needed in order to qualify the task as one of working memory. Repeating digits in the same order they were presented would, thus, be a short-term memory task, while repeating them backward would be a working memory task. When it comes to memory, one’s senses are involved too.

Visual memory involves the ability to store and retrieve previously experienced visual sensations and perceptions when the stimuli that originally evoked them, are no longer present. Various researchers have stated that as much as 80 per cent of all learning takes place through the eye – with visual memory existing as a crucial aspect of learning. Sensory memory is the shortest-term element of memory. It is the ability to retain impressions of sensory information after the original stimuli have ended. It acts as a kind of buffer for stimuli received through the five senses of sight, hearing, smell, taste and touch, which are retained accurately, but very briefly. For example, the ability to look at something and remember what it looked like with just a second of observation is an example of sensory memory. The sensory memory for visual stimuli is sometimes known as the iconic memory.

Auditory memory involves being able to take in information that is presented orally, to process that information, store it in one’s mind and then recall what one has heard. Basically, it involves the skills of attending, listening, processing, storing and recalling. The sensory memory for aural stimuli is known as the echoic memory.

Sequential memory requires items to be recalled in a specific order. In saying the days of the week, months of the year, a telephone number, the alphabet, and in counting, the order of the elements is of paramount importance.

- Visual sequential memory is the ability to remember things seen in sequence
- Auditory sequential memory is the ability to remember things heard in sequence.
Role of Visual Memory in Learning

Research has also confirmed that visual memory, often considered to be a subset of visual perception rather than a separate skill, plays a crucial role in literacy, especially math.

One hundred seventy-one children with a mean age of 10.08 years participated in a study by Marjean Kulp et al. The study, conducted at the Ohio State University College of Optometry, was designed to determine whether or not performance on tests of visual perception could predict the children with poor current achievement in mathematics. Scholars have argued that a relation between visual perception—a non-verbal cognitive skill—and math achievement are merely due to the confounding effects of verbal cognitive ability/intelligence. Kulp et al. concluded: ‘Poor visual perceptual ability is significantly related to poor achievement in mathematics, even when controlling for verbal cognitive ability. Therefore, visual perceptual ability, and particularly visual memory, should be considered to be amongst the skills that are significantly related to mathematics achievement.’

An investigation of the relation between visual memory and academics was performed in 155 second- through fourth-grade children; the results were published in the journal *Optometry and Vision Science*. Visual memory ability was assessed with the Test of Visual Perceptual Skills visual memory subtest. The school administered the Otis-Lennon School Ability Test and Stanford Achievement Test. Age and verbal ability were controlled in all regression analyses. The researchers concluded that poor visual memory ability is significantly related to below-average reading decoding, math, and overall academic achievement (as measured by the Stanford Achievement Test) in second- through fourth-grade children.

Role of Auditory Memory in Learning

Research has confirmed that auditory memory plays a crucial role in literacy; it is one area of auditory processing that directly impacts reading, spelling, writing and math skills. Kurdek and team measured auditory memory in kindergartners and found readiness in auditory memory predicted later reading achievement as well as mathematics achievement in fourth grade. Children who have poor auditory memory skills may struggle to recognize sounds and match them to letters—a common symptom of a reading disability or dyslexia.

Strategies to Enhance Memory among kids

Cognitive development, or brain development, in the pre-school year is incredibly important for early learners as they proceed from grade to grade. Pre-schoolers’ memories are affected by their prior knowledge. A child at this age remembers new concepts and ideas more easily than when he has already acquired immense knowledge about the subject at hand. Children of age 3 to 5 will also better remember new concepts; if they are put into a meaningful context, or if they are learned through hands-on experiences.
Some activities that teachers can do while reading aloud to help aid students memory formation are the following:

1. Make connections from the story to the children’s everyday lives or personal experiences. For example, while reading The Big Red Barn by Margaret Wise Brown, teachers should ask students to recall and discuss a time when they might have visited a farm.

2. Ask questions that require children to recall an earlier part of the story. What occurred at the beginning of the story?

3. Repeat important concepts. Children learn through repetition, so hearing new information more than once will help them learn and remember it.

Teachers might also read books on a particular topic prior to introducing new concepts related to it. For example, if the class is doing a fall activity involving the dissection of a pumpkin, teachers might first read a book such as Pumpkin Pumpkin by Jeanne Titherington to teach the parts of the pumpkin and its life cycle. This story will provide the children with a knowledge base so that as they complete the hands-on pumpkin activity, their new learning and experiences will be organized into their current understanding of pumpkin.

Memory games like ‘Go fish’ or ‘Concentration’ help to develop neuron connections in early learners’ brains and also help to increase working memory. Additionally, memory games naturally lend themselves to quiet concentration in early learners, which assists in the development of focus and increased attention span. Other memory activities can be games like ‘I Packed My Suitcase,’ or ‘Simon Says’. Games that involve strategy are excellent for the brain, especially those that involve puzzle solving or new learning of some sort, such as Scrabble, Wheel of Fortune, Jeopardy, Trivial Pursuit, and Who Wants to Be a Millionaire — all available in digital form as well. Chess and checkers are excellent games because almost every game is unique, requiring a different set of strategies each time. Card games can similarly help preserve cognitive functioning because the player continues to perfect the most effective strategies according to the opponent’s playing style.

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<thead>
<tr>
<th>S.No</th>
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<tbody>
<tr>
<td>1.</td>
<td>Alphabet Song</td>
<td>Help your child identify letters by singing along to the ‘Alphabet Song,’ reading books about the alphabet and playing with alphabet puzzles.</td>
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<tr>
<td></td>
<td></td>
<td>Steps:</td>
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<td></td>
<td></td>
<td>1. Cut out individual squares that feature each letter of the alphabet written in bright colours.</td>
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<td></td>
<td>2. Mix them up and tape them on various surfaces in the house.</td>
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<tr>
<td></td>
<td></td>
<td>3. Go through the alphabet with your child and encourage him to search around the house to find the next letter and tape it to the wall in order.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. When finished, leave the alphabet letters in order up on the wall until you are ready to play the game again.</td>
</tr>
</tbody>
</table>
Educational Activities for Promoting Self-Instructional Material

2. Countless Counting

Identify opportunities throughout the day to practice counting. Count the number of shoes in your child’s closet when he gets dressed or the number of slides on the playground when you go to the park. You may soon find that you are counting everything!

3. Watch TV and read “actively.”

The difference between watching ‘The Bachelor’ and watching an educational science show is how active your brain has to be. Watching TV is cognitively enriching when it takes effort to understand what you are watching, or sparks questions, ideas or ‘aha’ moments. The same is true for reading. A celebrity tabloid magazine takes less brain power to flip through than, say, a magazine such as Smithsonian. Develop new connections in your brain by reading something that is instructive instead of merely entertaining. After reading or watching TV, make yourself recall what you have just learned. This exercise boosts retention.

4. Be a Puzzle Solver

Puzzles are an outstanding way to build new connections in the brain. There are many types of puzzles other than crossword. These include acrostics, cryptograms, syllacrostics and many other word-oriented brain teasers. Some brain teasers do not involve words at all, such as Sudoku. It is particularly good for your brain to seek out a variety. Or start with one type, and as you get better, switch to another type of puzzle. Your brain will be challenged anew with each particular type of puzzle. Switching from a puzzle that is easy to a more difficult or unfamiliar type stimulates new brain activity, or learning, as your brain now has to generate new memories in order to master the new challenge.

5. Visit museums, zoos and historical sites

There are many specialty museums, zoos and historical sites that will help you build better cognition. To get the most out of the visit from a cognitive standpoint, do not be a passive visitor. Read the signage next to the exhibits, try to repeat the key information to yourself and then do it again once or twice during or after your visit. Not only will you retain what the exhibits were about, but with some occasional recall attempts, you increase the odds of being able to recall the information months or even years later.

6. Concentration

Use matching games to enhance a child’s observational skills. Children can compete against parents, peers or the computer using online matching games. For hands-on play, provide a standard deck of cards or make your own set to suit the age group. Children turn over matching pairs, including the ace of hearts and the ace of spades, and collect them in a ‘win’ pile. When all cards are taken, the person accumulating the most matches wins the game.

9.3.4 Cognitive Development through Simple Problem Solving

The more problems your child encounters and works out, the smarter she will ultimately become. This is because little children learn a lot by memory and routine. When something is thwarted, however, the routine is interrupted and they are forced to think about new options. They are also forced to consider outside information like house rules or consequences. Try to stage ‘problems’ sometimes to make things into learning opportunities. For example: (“Uh-oh. The power went out. Why did it go out? What could we do?…” or “Uh-oh. I can’t reach the game I want. And Daddy’s not here to help me. What do I do?”)

That said, here are some more ways to encourage problem-solving around the house.

• Simple chores and house projects are great teachers.
• Reason through their own situations with them—ask the right questions and wait for them to respond, do not just fix everything or tell them the right conclusion.
• Be prepared to ‘be in the moment’. Learning opportunities come up frequently with pre-school children where they are open to your guidance/moralizing.
• Allow your child to make harmless mistakes and learn from them.
• Pre-schoolers often want their own way but are capable of realizing that adult advice makes more sense when shown. So work with their initiative. For example, they do not want to wear a coat so let them outside in the cold and see. They want a certain game that is too hard without supervision and you do not want them to play, so let them see that they cannot do it on their own and change their minds. Do not be cruel or unsafe. Just let their brains figure it out. Sometimes, you will be the one who is surprised at their ingenuity!
• Work on a project from beginning to end. This can teach a child so much. But it can also take a long time. For example, talk about needing enough food, go to the pantry to see, make a list of what you want to serve, what is in those things, go to the store to get them, take them home and put them away, start cooking the food, then eat it. Whew! (Try this with just one item or one easy meal first, like pizza.)
• Always, always, always ask questions like, ‘What do we do next?’ ‘What should you do?’ ‘What do we need?’ … This teaches children to think before they act, cry, or seek help. Most 3-5 year old children verbalize their thinking aloud rather than silently, so you can figure out what is making them upset or stuck. Older children may be able to answer Why? or What If? scenarios, which gives you a chance to understand their thinking process and embellish or refine it as necessary.

In the pre-school years, children attempt to explain how things work and why things occur. While their explanations can often seem far-fetched to adults, their stream of how and why questions display a real desire to reason and solve problems about the causes of events.

To refine the natural curiosity of 3-5-year-old children, teachers should pose thought-provoking questions as they read aloud to their students. For example, Eric Carle’s ‘The Very Hungry Caterpillar’ is a perfect opportunity to ask children how and why animals or people might change. Teachers should try to help children understand the natural causes of phenomena to push their cognitive development beyond merely seeing superficial changes in the appearance of things, a cognitive limitation often displayed at this age.

Another technique that teachers can use to promote reasoning and problem solving is to use children’s books as an introduction to a problem-solving activity. For instance, after reading such books as Byron Barton’s Building a House,
Educational Activities

for Promoting

NOTES

Houses and Homes Around the World by Ann Morris or How a House is Built by Gail Gibbons, teachers could present students with ‘building materials’ such as craft sticks, glue, paper and straws and ask them to figure out how to build a house of their own using only what is given to them.

Table 9.5 Various Activities for Simple Problem Solving

<table>
<thead>
<tr>
<th>S.No</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Play ‘WHY’</td>
<td>Another way to help your child learn to think for himself is to ask him questions: “Which toy should we pick up first when we clean up the living room?” Or “Why is it important to walk down the stairs slowly?” Asking him questions helps him learn how to solve problems and better understand how his environment works.</td>
</tr>
</tbody>
</table>
| 2    | Peek-a-Boo   | Play a variety of games with your child to encourage problem solving and creativity. If your child is younger, the two of you can build with blocks and play ‘Peek-a-Boo’. As he gets older, you can engage him in board games, puzzles and play ‘Hide and Seek’.

9.4 INTRODUCING PRE-NUMBER CONCEPTS: PRE-SCHOOL NUMBER ACTIVITIES

Pre-school number activities often involve counting, but merely reciting the number words is not enough. Children also need to develop ‘number sense’, an intuitive feeling for the actual quantity associated with a given number.

That is where these activities can help. Inspired by research, the following games encourage kids to think about several key concepts, including the following:

- The one-to-one principle of numerosity (two sets are equal if and only if their items can be placed in perfect, one-to-one correspondence)
- The principle of increasing magnitudes (the later number words refer to greater numerosities)
- The one-to-one principle of counting (each item is to be counted is counted once and only once)
- The stable order principle (number words must be recited in the same order)
- The cardinal principle (the last word counted represents the numerosity of the set)

As your child engages in these pre-school number activities, always start small, keep it fun and be patient.

Start small: It is important to adjust the game to your child’s attention span and developmental level. For beginners, this means counting tasks that focus on very small numbers (up to 3 or 4).

Keep it fun: If it is not playful and fun, it is time to stop.

Be patient: It takes young children about a year to learn how the counting system works.
### Table 9.6 Six Evidence-Based Pre-school Number Activities

<table>
<thead>
<tr>
<th>S.No</th>
<th>Activity</th>
<th>Description</th>
</tr>
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</table>
| 1.   | Matching sets: Teaching the one-to-one principle of numerosity | **First**, present kids with a small set of tokens arranged on a table or floor: Ask them to create an identical copy of the set using additional tokens. When finished, make a count of the items in each set -- the original and the copy.  
**Second**, you can present kids with two sets at once: In this case, make sure each set contains the same number of tokens, but arrange the tokens in different spatial patterns. Then have your child reproduce both of these sets, and do an end count to confirm that all sets are equal.  
Use printed cards, each with a picture depicting a set of dots or other small items: The child views the card and creates a matching set of items using tokens. You can make the cards yourself, or buy some ready-made.  
**Sharing at the tea party: Dividing up tokens into equal portions** - Choose three toy creatures to play the part of party attendees, and have your child set the table for them. Then give your child a set of ‘goodies’ (tokens or real edibles) to share with the party guests. The total number of goodies should be a multiple of 3, so your child can distribute all the items equally and have no leftovers.  
If your child makes a mistake and gives one creature too many tokens, you can play the part of another creature and complain. You can also play the part of tea party host and deliberately make a mistake. Ask for your child’s help: Did someone get too many tokens? Or not enough? Have your child fix it. Once your child gets the hang of things, try providing him with one token too many and discuss what to do about this leftover. One solution is to divide the remainder into three equal bits. But your child may come up with other, non-mathematical solutions, like eating the extra bit himself.  
• Challenge them to a greater number of tokens as their skills grow.  
• Type of Tokens to be used for activity: Researchers have found that young children tend to get distracted by use of different animal shapes or other such type of details. They learn more from pre-school number activities when they manipulate simpler, more abstract items (Petersen and McNeil 2012). Plastic chips like those used for poker or bingo are a good choice for kids of age 3 and above. |
| 2.   | Sorting By Quantity: Teaching the Principle of Increasing Magnitudes | **First**, shuffle the cards, and then ask your child to place them, side by side, in a sequence of increasing magnitude.  
For children who have not yet learned to count, use cards that vary by a substantial amount, for example, 3, 6, 10, and 15. Experiments show that even babies can spot differences this large, and practising these tasks may help children hone their estimation abilities -- abilities which are essential for future mathematics achievement.  
**Second**, select two cards, each displaying a different number of dots, and show them to your child. Which card has more dots? To play this game, make sure you start with cards that differ by a ratio of at least 2:1. For instance, try 1 vs. 2, 2 vs. 4, and 2 vs. 5. You can also try larger numbers, like 6 vs. 12. As your child gets practice with these easy-to-discriminate differences, you can present her with increasingly difficult choices (like 6 versus 8, or even 9 versus 10). |
### Educational Activities for Promoting Self-Instructional Material

1. To play, use your cards, as well as three soft animal toys or dolls of varying size — small, medium, and large. Pretend the toys are party guests, and the items on the cards treats. Then:
   - line up the three toys in order of size,
   - present your child with three cards, each card depicting a different number of dots, and
   - ask your child to give the greatest number of treats to the largest toy, the second-greatest number to the second-largest toy, and the smallest number to the smallest toy.

Tell your child when he responds correctly (“That’s right!”), and, if he makes a mistake, guide him to make another attempt (“That’s not right — try again!”). If you prefer, you can play the game with tokens instead of cards. And once your child learns to read and understand number symbols, you can use cards that display only Arabic numerals.

2. Be sure to give your child feedback about the correct answer.

3. **Spot the goof:**
   - Teaching the one-to-one principle of counting and the principle of cardinality. Kids need to learn that each item in a series is counted once and only once. And they also need to learn the principle of cardinality; the idea that the last word in our count represents the numerosity of a set.
   - Ask pre-schoolers to watch and help a rather incompetent puppet count a set of objects (Gelman et al 1986). The puppet would occasionally violate the one-to-one principle by double-counting (for example, one, two, three, three, four...). He also sometimes skipped an object or repeated the wrong cardinal value. Kids ranging in age from 3 to 5 years were pretty good at detecting these violations. So your child might have fun correcting your own goofball at home.
   - What if your child does not notice an error? Correct the goofball yourself. And either way, **ask your child to explain what went wrong.** As pre-schoolers did not make conceptual progress unless they were asked to explain the puppet’s mistakes (Muldoon et al 2007).

4. **One less / one more:**
   - Helping pre-schoolers develop intuitions about addition and subtraction.
   - Have a puppet or other toy character ‘bake cakes’ (a set of tokens) and ask a child to count the treats. (You can count together if your child needs help.) Next, have the puppet bake one more cake and add it to the set.
   - Are there more cakes or fewer cakes now? Ask your child, and provide him with correct feedback afterwards.
   - Try the same thing with subtraction by having the puppet ‘eat’ a cake. And vary the game by adding or subtracting other small amounts, like two or three.
   - Should we expect children to come up with accurate answers? Not necessary — especially not if they are under the age of three years (Izard et al 2014). But the experience of predicting and checking is valuable, and even when kids get the precise number wrong, they do a good job coming up with reasonable guesses. When researchers asked 3-, 4- and 5-year-olds to perform these tasks, they found that 90 per cent of the guesses were in the right direction (Zur and Gelman 2004).
Researchers in their studies have tested 5-year olds with computer-based versions of these pre-school number activities. The children were not given enough time to count; they simply took a quick look and answered based on their intuitive, visual impression. Kids who practised making progressively more difficult discriminations — getting accurate feedback after each attempt — experienced subsequent improvements in their ability to solve problems using symbolic numbers (Wang et al 2016). When researchers tested these pre-school number activities, they found that both dot-based and numeral-based games helped children develop better intuitions about quantity. But kids who played the Arabic numeral version of the game experienced greater growth in basic arithmetic skills (Honoré and Noël 2016).

Check Your Progress

4. Name the two main categories of memory.
5. Mention two activities which help to enhance the seriation/sequencing ability in pre-school children.
6. Define auditory memory.
7. What are pre-school number activities?

9.5 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. Cognitive skills are the learning skills used to:
   - Retain information;
   - Process, analyse, store facts and feelings; and
   - Create mental pictures, read words and understand concepts.

2. Cognitive behavioural therapy involves two processes. The first is identifying the thought patterns or cognitive distortions that are causing you to be stressed. Secondly, ‘thought challenging’ which means you challenge yourself on just how accurate or useful is that thought.

3. Cognitive Restructuring (CR) is a popular form of therapy used to identify and reject maladaptive cognitive distortions and is typically used with individuals diagnosed with depression. In CR, the therapist and client first examine a stressful event or situation reported by the client.

4. The main categories of memory are short-term memory (or working memory) and long-term memory, based on the amount of time the memory is stored.

5. Two activities which help to enhance the seriation/sequencing ability in pre-school children are sing-along and play with everyday items. Children can
participate in story sequencing with pictures, or guessing games with well-known stories like fairy tales.

6. Auditory memory, involves being able to take in information that is presented orally, to process that information, store it in one’s mind and then recall what one has heard. Basically, it involves the skills of attending, listening, processing, storing and recalling.

7. Pre-school number activities often involve counting, but merely reciting the number words is not enough. Children also need to develop ‘number sense’, an intuitive feeling for the actual quantity associated with a given number.

9.6 SUMMARY

- Cognition has to do with how a person understands the world and acts in it. It is the set of mental abilities or processes that are part of nearly every human action while the individual is awake.

- Cognitive abilities are brain-based skills we need to carry out any task from the simplest to the most complex.

- Cognitive abilities are not fixed — we can improve them via lifestyle and targeted practice. With age, some cognitive abilities tend to decline, especially the so-called executive functions, and those cognitive abilities that are not used regularly.

- The key to solving a persistent learning challenge is to strengthen the person’s basic processing or cognitive skill set. Remember, cognitive skills are not all the same as the subjects taught in the classroom at school.

- Mental or cognitive skills may seem mysterious because they are not easy to see or recognize by themselves, but without the underlying cognitive skills, we would not be able to process the information we receive from sources around us through our senses of sound, touch, sight, taste, and smell.

- Cognitive Restructuring (CR) is a popular form of therapy used to identify and reject maladaptive cognitive distortions and is typically used with individuals diagnosed with depression.

- Children are immersed in a highly social world from the moment they are born. This social world includes not only people such as parents, siblings, teachers and classmates, but also objects and values that are part of their culture. All of these things provide a context for a child’s cognitive growth and development.

- Seriation/sequencing is one of the first activities early learners participate that assists them in developing comparison and contrast skills essential for grade school.
• Memory is the process by which knowledge is encoded, stored, and later retrieved. The main categories of memory are short-term memory (or working memory) and long-term memory, based on the amount of time the memory is stored.
• Research has confirmed that auditory memory plays a crucial role in literacy; it is one area of auditory processing that directly impacts reading, spelling, writing, and math skills.
• The more problems your child encounters and works out, the smarter she will ultimately become. This is because little children learn a lot by memory and routine.
• Pre-school number activities often involve counting, but merely reciting the number words is not enough. Children also need to develop ‘number sense’, an intuitive feeling for the actual quantity associated with a given number.

9.7 KEY WORDS
- **Perception**: It is the process by which individuals translate sensory impressions into a coherent and unified view of the world around them.
- **Hippocampus**: It is a small curved formation in the brain. It is involved in the formation of new memories and is also associated with learning and emotions.
- **Regression analysis**: It is a powerful statistical method that allows you to examine the relationship between two or more variables of interest.
- **Dyslexia**: It is a specific learning disability in reading among kids.
- **Visual memory**: It involves the ability to store and retrieve previously experienced visual sensations and perceptions when the stimuli that originally evoked them are no longer present.

9.8 SELF ASSESSMENT QUESTIONS AND EXERCISES

**Short Answer Questions**
1. What is the significance of cognitive abilities?
2. Mention the tips for better learning while incorporating cognitive skills in the classroom.
3. What is the role of visual memory in learning in children?
4. Write a short note on strategies which assist in enhancing memory among kids.
Long Answer Questions

1. Discuss the importance of Cognitive Behavioural therapy.

2. Describe the various activities performed under Cognitive Restructuring therapy.

3. Explain the strategies to promote cognitive abilities.

4. Give examples of pre-school number activities.

9.9 FURTHER READINGS


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UNIT 10 EDUCATIONAL ACTIVITIES FOR SOCIO-EMOTIONAL DEVELOPMENT

Structure

10.0 Introduction
10.1 Introduction
10.2 Concept Formation
   10.2.1 Essential Social and Emotional Skills for Pre-Schoolers
   10.2.2 Role of Adults in Socio-Emotional Development of a Child
10.3 Socio-Emotional Games
   10.3.1 Benefits of Social-Emotional Activities and Social-Emotional Games for Kids
10.4 Answers to Check Your Progress Questions
10.5 Summary
10.6 Key Words
10.7 Self Assessment Questions and Exercises
10.8 Further Readings

10.0 INTRODUCTION

Social skills activities for pre-schoolers help teach young children valuable social skills. There are many benefits of developing pro-social skills among children. For instance, research indicates that academic success in the first few years of school is significantly based on the development of children’s social and emotional skills. When kids lack crucial social skills, it makes it difficult for them to learn. For example, if a child struggles with listening and controlling his negative behaviour, focussing during class and retaining the information he is taught can be challenging for him.

Traditionally, social emotional learning (SEL) has been considered a part of the realm of parents. But as kids spend increasing time in child care and preschool, care providers and teachers are also accountable for a child’s SEL needs, too. In truth, all adults actively provide a model for social and emotional competencies, and the more closely parents and caregivers align in their modeling, the more consistent the lessons they convey will be. SEL develops crucial life skills that go beyond academics. In this unit, you will study the educational activities which assist in socio-emotional development of kids.
10.1 INTRODUCTION

After going through this unit you will be able to:

- Analyse the significance of socio-emotional development of children
- Discuss the various games which facilitate the socio-emotional development of children
- Identify the benefits of social-emotional activities and social-emotional games for kids

10.2 CONCEPT FORMATION

The first step to intentionally embed opportunities for social-emotional development is to get to know all the children in your care. This involves observing them. You may want to write a few notes about their interests, their interactions with peers, their ability to express emotions. As you learn about the children, you can use this information to think about activities they may enjoy and how to facilitate the development of social skills and friendships. Think about:

- What experiences do you want to provide to support the children’s abilities to learn to self-regulate?
- How can you incorporate social-emotional learning into your daily schedule and routines?
- How can you make snack times and lunchtime routines that support social development?

Learning socially appropriate ways to interact may be difficult for some young children as they are just learning to regulate their emotions. Young children learn how to ask for help, comfort a friend, and express their anger by watching and listening to trusted adults. You serve as a model for children in how you express your own feelings.

10.2.1 Essential Social and Emotional Skills for Pre-Schoolers

Many kindergarten teachers report that in order for pre-schoolers to make a smooth transition to school, they need to have certain social and emotional skills. They need to be able to:

- have positive relationships with peers
- listen and follow directions
- effectively communicate emotions
- work well with others
- display good manners
Here are 21 simple ways you can support social-emotional learning for your students every day:

**Table 10.1 Activities for Social-Emotional Learning**

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<tr>
<th>S.No</th>
<th>Activity Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Start the day with a check-in: Make it a goal to start each day with a personal connection. It does not need to be a time-consuming or elaborate procedure. It could be as simple as giving a warm greeting to welcome each person as they arrive in the morning.</td>
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<tr>
<td>2.</td>
<td>Use story time for teachable moments: Read-alouds are the perfect tool for exploring social-emotional themes with your class. They are not just for little kids. There are numerous gorgeous picture books with complex themes and vocabulary that older kids will love too.</td>
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<tr>
<td>3.</td>
<td>Work in partnerships: Give kids lots of opportunities to work with partners. Working with a partner helps kids learn to cooperate and builds community in his classroom. Alternate between strategically assigning partnerships and allowing kids to make their own choices.</td>
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<tr>
<td>4.</td>
<td>Teach them how to work in a group: Being able to work in a group setting is an important life skill. Students will learn how to negotiate with others, develop leadership skills and figure out their own strengths so they can best contribute to the group.</td>
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<td>5.</td>
<td>Nurture a culture of kindness: At the beginning of the year, read <em>Have You Filled a Bucket Today?</em>, a story about the power of kind words. Then create your own bucket for the classroom. Get a small tin bucket from a craft store and cut 3-by-3-inch pieces out of card stock. Kids can write messages of kindness, appreciation and love on the cards throughout the week to fill up the bucket. At the end of each week, spend a few minutes sharing these notes of encouragement to end the week on a positive note.</td>
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<tr>
<td>6.</td>
<td>Give them new words to say: Give students positive phrases they can use to foster their resilience and overcome failure. Hang a large copy on the wall, or give them their own smaller version for their journals or planners.</td>
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<td>7.</td>
<td>Set up a Peace Place: Create a special place in your classroom for kids to take a break when they are upset or angry or need to calm themselves. This space should have a peaceful atmosphere and might include comfortable pillows to sit on, noise-canceling headphones, a fish tank, journaling materials, calming images and/or books about peace.</td>
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<td>8.</td>
<td>Teach your kids how to manage conflict with peer mediation: Peer mediation is a problem-solving process that helps students involved in a dispute meet in a private, safe and confidential setting to work out problems with the help of a student mediator.</td>
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<tr>
<td>9.</td>
<td>Use anchor charts to teach social-emotional skills: You can create anchor charts with your class about many different topics, from ‘Owning Your Learning’ to ‘What Does Respect Look Like?’ and ‘Be a Problem-Solver’.</td>
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<tr>
<td>10.</td>
<td>Practice lots of role-play: Sometimes, you have to put yourself in someone else’s shoes to truly understand a situation. Taking time to role-play tricky or troubling situations that show up in your classroom helps kids develop empathy and understand other people’s feelings.</td>
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<tr>
<td>Educational Activities for Socio-Emotional Development</td>
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<td><strong>NOTES</strong></td>
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| 11 | Allow for talk time | Give kids a lot of opportunities—both structured and unstructured—to talk to one another during the course of the day. Bouncing ideas off one another or figuring out problems with a little give-and-take will help your students build understanding and confidence. When your class is cracking up and getting wiggly, taking a five-minute chat break is a great way to hit the reset button. |
| 12 | Play games to build community | Cooperative-learning games can promote social and relationship skills. There are numerous resources out there for activities to play in your classroom. |
| 13 | Buddy up with an older or younger class | Having a special connection with another class is a great way to build positive ongoing relationships in your school community. Kids are always amazed at how easy it is to find common ground with younger or older students. The big kids feel important and the little kids feel special. |
| 14 | Build community with teams | Consider an alternative seating arrangement that allows kids to sit in teams. Let each team create an original name, motto and flag. This is a great way for students to feel a sense of belonging, and it encourages collaboration and cooperation. Change teams every 6 to 12 weeks. |
| 15 | Teach them to monitor their own progress | Make personal goal-setting (academic, emotional, social, etc.) a regular activity with your students. It will strengthen their interpersonal skills and give them ownership of their own learning. Help them develop the habit of revisiting and adjusting their goals often to monitor progress. Am I meeting my goals? What do I need to work on next? How do I want to grow? |
| 16 | Hold class meetings | Check in frequently to celebrate what is working and address things that need tweaking within your classroom community. Empower all the students with a voice and a vote to give them ownership of their environment. |
| 17 | Make space for reflective writing | Give the student time to journal and free-write. Put on quiet music. Dim the lights. Make writing time a quiet, soothing break for the students which they will look forward to. For stubborn starters, you can provide a menu of optional prompts. |
| 18 | Encourage expression through art | Sometimes, students think and feel things that they cannot quite put into words. Art is a great tool to allow them to explore topics from a different perspective. Sketch your thoughts and feelings out as a prewriting activity. Create a painting as an interpretation of a piece of music or poetry. |
| 19 | Assign interview projects | Make the students interview each other throughout the year about topics such as cultural background, family traditions or opinions about a current event. Conducting a formal interview is different than a casual conversation and teaches skills such as focused listening and conversational skills. In addition, learning about their classmates will broaden their perspective as they consider that everyone’s background and experience is not necessarily the same as their own. |
| 20 | Put them to work | Classroom jobs teach responsibility and give kids ownership of their classroom. Pride in a job well done is a great confidence-builder. |
| 21 | End each day with a checkout | Circle up for just a few minutes at the end of each day to reflect on your day together. Check in with how the students... |
10.2.2 Role of Adults in Socio-Emotional Development of a Child

The children you care for, need daily opportunities to participate in activities that help them learn new skills, and practice existing skills, in a fun, stimulating, and supportive environment (home). Children develop social-emotional skills in the context of their relationships with their primary caregivers—including you as their child care provider—and within their family and culture. Children’s social-emotional development affects their ability to have successful school and life outcomes. During daily activities and routines, one can embed opportunities to enhance children’s social-emotional learning.

Some of the ways in which adults can support children’s understanding of emotions and engagement in competent social interactions are the following:

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<th>S.No</th>
<th>Act</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Give explicit instructions</td>
<td>Display of pictures showing children making different facial expressions and asking students to point toward the image that represents how they are feeling that day. This may occur in the context of an SEL curriculum, or as a stand-alone lesson, such as during story time at school or at home. The lesson can be as simple as saying, ‘When I make this face, it means I’m feeling.’</td>
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<tr>
<td>2.</td>
<td>Provide scaffolding</td>
<td>Scaffolding describes progressive supports that build upon what children already know, such as the names of basic emotions, so that they can learn new skills, like how to identify when a playmate is sad. You can guide a child to notice the feelings of an affronted peer and suggest possible solutions. For example, ‘Serena is crying. She seems sad that no one has invited her to play. I bet she would feel better if you would be willing to share your trucks with her.’</td>
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<tr>
<td>3.</td>
<td>Practice through books</td>
<td>You can read a book and prompt children to think of times when they have felt the same as the main character. Encourage children to think of times they have been mad and what they do to feel better.</td>
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<td>4.</td>
<td>Model rules and expectations</td>
<td>Articulate the rules you set about expressing emotions in the classroom or at home. This includes providing specific rules — no hitting, share your toys, and so on — but also means following the rules yourself. Children learn a great deal by observing and imitating others, especially their parents and teachers. As such, adults can promote SEL by conscientiously modelling ways in which emotions are expressed and regulated in social situations. This can be through elaborate role-playing activities, or just by expressing emotions and narrating to children how you feel and what you are going to do about your feelings.</td>
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<tr>
<td>5.</td>
<td>Validate and encourage the expression of feelings</td>
<td>Respond to a child’s emotions by validating her feelings as opposed to dismissing them. For instance, this means asking, ‘What’s wrong?’ rather than saying, ‘Stop crying.’ Teachers and parents can encourage a child’s emotional expressions by responding constructively to them. Only when an adult understands why a child is upset can the adult help the child cope with his emotions and what has caused them. Minimizing, punishing, or dismissing a child’s emotions does not give the child the opportunity to learn how to respond constructively to those emotions.</td>
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Educational Activities for Socio-Emotional Development


It is important for children to associate social and emotional competence with some relief from strong emotions, either on their part or that of others. This is key to their development of traits such as altruism and empathy later in life. You can point out moments at which these occur to help your child understand them. For example, you might say, "I like how you noticed Johnny was upset and gave him a hug. How did that make you feel?"

As a family child care provider, you have the wonderful opportunity to communicate with each child’s family on a daily basis. Families are a wonderful resource when you are planning activities that promote social-emotional development. Parents know their children best and can inform you about their child’s interests, family outings, pets, and other news that can enhance your relationship with each child. Posting family pictures of your own family and the families of the children you care for helps make your home warm and nurturing.

As a family child care provider, you have the wonderful opportunity to communicate with each child’s family on a daily basis. Families are a wonderful resource when you are planning activities that promote social-emotional development. Parents know their children best and can inform you about their child’s interests, family outings, pets, and other news that can enhance your relationship with each child. Posting family pictures of your own family and the families of the children you care for helps make your home warm and nurturing.

Take time each day to speak positively to the families of the children in your care. Your relationship with a family helps enhance their child’s social-emotional development. You are an important adult in their child’s life. Children need to see the important adults in their lives (parents and caregivers) talking and treating each other respectfully.

Families may want to arrange play dates with other families and get to know one another. It is important to ask families if they want you to share their contact information with another family.

10.3 SOCIO-EMOTIONAL GAMES

Many schools have started teaching kids how to do things like cope with feelings, set goals and get along with others. Self-regulation helps kids manage their emotions and their body movements during a tough situation. It also helps them pay attention and learn. The pre-school classroom is a busy, emotionally-charged place. Children are observing and absorbing lessons about emotions throughout the day, even when those lessons are unintentional. Children are learning social and emotional competencies through nearly all their regular interactions with teachers and classmates. These lessons continue on the playground and at home, where parents can continue to teach social and emotional competencies to their young children—and in the process, better prepare them for kindergarten and beyond.

Here are a handful of social-emotional learning activities that can help child manage emotions and work on social skills—and have some fun with peers along the way. These social-emotional learning games are very low-tech. And all are designed to fit easily into your daily routines.

Self-Instructional Material
Table 10.3 Socio-Emotional Learning Games

<table>
<thead>
<tr>
<th>S.No</th>
<th>Activity</th>
<th>Goal</th>
<th>How To Play</th>
<th>Keep in Mind</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Starfish and Tornadoes</td>
<td>To help kids notice how much energy they are feeling inside. Self-awareness can help kids start to self-regulate. When they know they have too much energy, they can either use their own calming skills or ask for help from a trusted adult.</td>
<td>Make a picture of a thermometer. Draw a starfish at the bottom and a tornado at the top. Ask if your child feels calm and peaceful like a starfish or revved up like a tornado. When your child is feeling over-energized, brainstorm together about ways to feel more like a starfish. For example, bouncing a ball could help release some of that energy. Try playing this game at different times of the day and help your child describe the energy levels. For example, if you play first thing in the morning, you might say, ‘You like to snuggle and watch cartoons.’ Or, ‘I bet you could run up and down the stairs five times before I finish making breakfast!’ Self-regulation is really about managing your internal energy. This skill helps kids manage their emotions and their body movements during a tough situation. It also helps them pay attention and learn.</td>
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<td>2</td>
<td>Turtle Time</td>
<td>To help kids practice observing what is going on around them. Picking up on social cues helps kids get their needs met and understand the perspective of others.</td>
<td>When you and your child get to the playground and other places, look around like a turtle in a slow, exaggerated fashion. Take turns sharing details about what you see: ‘All the swings are taken!’ ‘There’s a short line for the slide!’ Help your child connect these observations with choosing how to behave. For example, when the swings are crowded, your child may decide to go on the slide first. You do not have to pretend to be turtles. You could pull out your pretend binoculars or a special pair of glasses to help you see well. You could also play ‘I spy with my little eye.’ In this game you and your child can take turns spotting a social interaction and describing it until the other player finds what you are looking at.</td>
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</table>
3  **‘Who Am I Right Now?’**
To build self-awareness and help identify your child’s strengths. These skills can also help with good decision making and understanding the perspective of others.
Get some index cards. Use them to draw pictures of your child doing something positive, like being a good helper or being a good teacher. Brainstorm about other cards your child could make. To help your child come up with ideas, comment whenever you notice your child’s positive behaviour. You might say, ‘You just offered to teach your sister a nursery rhyme. Let’s talk for a second about what kind of person you’re being right now.’
Many parents try to teach social-emotional skills by commenting on negative behaviour. But do not forget to catch your child doing something good. Praising good behaviour often leads to more of it! Also, you can buy these kinds of cards or find templates online. But kids might be more engaged in this activity if they create the cards themselves.

4  **Let’s Make a Deal**
To help kids learn to compromise. Practising how to see things from another person’s perspective can help your child find a solution that meets everyone’s needs.
When you and your child do not agree, use the tune of ‘This Old Man’ to sing these lines: ‘You want this. I want that. How can we both get what we want?’ Then brainstorm as many solutions as you can think of and choose the best idea for right now. For example, if your child is demanding to bake cookies at eight in the morning, the best solution may be to wait two hours so you can bake when the baby is napping.
Your child may have trouble letting go of a particular idea. Together you can pick the best of the runner-up ideas and put them in a special container. The next time you have a conflict, suggest reading through all of these ideas to help find the best solution for the present moment.

5  **Taking Turns Taking Charge**
To help develop self-awareness, make decisions and see another’s perspective.
Start a tradition where one night a week you (and your child or the whole family) take turns planning a fun night. You could stick to a theme, such as choosing which foods to eat, movie to watch or game to play. Or you leave things wide open, and let the person in charge pick any of those activities or more.
It might help to make a chart with categories like ‘Waiting my turn’ and ‘Staying calm when doing something I don’t like.’ After the activity, get everyone to rate themselves. Then talk about what has been working well and what they want to improve on.
<table>
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<tr>
<th>S.No</th>
<th>Game</th>
<th>Description</th>
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<tr>
<td>1</td>
<td>Feelings Playing Cards</td>
<td>Ages 4 months and above: Playing with these cards is a great way to get kids to talk about feelings and get to know other ways to express their emotions. Each feeling has two cards, so you can also play memory.</td>
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<tr>
<td>2</td>
<td>Feelings and Faces</td>
<td>Ages 3 and above: Feelings and Faces is a craft and game where children get to explore their feelings and the feelings of others through various everyday situations. A pretend play craft and game to encourage emotional development and introduce self-regulation while building social skills through play.</td>
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<tr>
<td>3</td>
<td>Friends and Neighbors</td>
<td>Ages 3 and above: Friends and Neighbors is a matching game that focuses on emotions. Parents and educators can help their children recognize feelings in others while playing the game and reading about the feelings and needs of the characters.</td>
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<tr>
<td>4</td>
<td>Feelings in a Jar</td>
<td>Ages 3 and above: Everyone needs to know how to name and express feelings. Each jar holds 365 little slips printed with ‘feelings words’—gleeful, insecure, grateful, angry, cranky, courageous, hopeful, and many more. Pull a slip and act out the feeling, or invite someone else to act out the emotion. Use as discussion starters, journaling prompts, or icebreakers for groups.</td>
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<tr>
<td>5</td>
<td>Feelings Matching Memory Card Game</td>
<td>Ages 3 and above: The classic game of picture matching. Flip over two cards and discover various facial expressions. Collect the most pairs to win! As they play, children will discover how to recognize feelings in themselves and in others. They’ll have way too much fun to realize that they’re developing the ability to understand emotions.</td>
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<tr>
<td>6</td>
<td>My Feelings</td>
<td>Ages 4 and above: This game encourages you and your child to explore emotions in a fun, active, and very silly way. You will gain insight while your child learns to recognize and manage his or her feelings in ways that are positive, calming and socially appropriate.</td>
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<td>#</td>
<td>Educational Activities for Socio-Emotional Development</td>
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<td>7</td>
<td>What do I Feel? Ages 4 and above: A great game to get children to express, discuss and recognize their feelings and the feelings of others. There are four cards in each category and each person starts with four cards. The goal is to collect four cards with the same emotion, by explaining the emotion you have on your card.</td>
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<tr>
<td>8</td>
<td>Photo Feelings Fun Deck Cards Ages 4 and above: This feeling-filled, multicultural deck has 28 pairs of high-quality cards demonstrating seven basic emotions (four different pairs each for happy, sad, surprised, scared, thoughtful, tired, and angry). Since the cards have no words on them, you can use them to show a wide range of emotions. Game ideas are included.</td>
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<tr>
<td>9</td>
<td>The Talking Feeling and Doing Game Ages 4 and above: This social-emotional development game is a popular tool used in child psychotherapy. The child’s responses to the feeling questions and directions help reveal the psychological issues that are most important and serves as a point of departure for meaningful psychotherapeutic discussion</td>
<td></td>
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<tr>
<td>10</td>
<td>Pocket Ungame for Kids Ages 5 and above: This kids version of the popular communication game is a perfect way for children to get together and talk about their emotions, feelings, and values. Designed for use in a variety of settings from the home to the classroom, the Ungame is a social game for developing communication skills that promote a non-competitive environment for self-expression.</td>
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<tr>
<td>11</td>
<td>Mad Dragon Ages 6 and above: This social-emotional game is really simple yet surprisingly effective in helping kids learn about their emotions and basic anger management strategies. If your kids like playing Uno, they will love this mad Dragon Uno with anger control tips to learn as they play.</td>
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<tr>
<td>12</td>
<td>Stop Relax and Think Ages 6 and above: A game to help impulsive children think before they act. Active children learn motor control, relaxation skills, how to express their feelings and how to problem-solve.</td>
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<tr>
<td>13</td>
<td>Mixed Emotions Ages 7 and above: This game is a lovely way to start the process of helping children to identify and expand upon their feelings vocabulary. Playing this game can also help kids identify the feelings they have in response to certain situations.</td>
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### Educational Activities for Socio-Emotional Development

#### NOTES

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</tr>
<tr>
<td>14</td>
<td>Social Skills Board Games</td>
<td><strong>Ages 7 and above:</strong> There are no right or wrong answers in these six unique social emotional development games. Each social game has players discuss the solutions to socially challenging situations. Together the Group decides upon the best action encouraging all players to communicate, listen and participate in the game. These games will encourage your students to work together as they learn to improve their social skills.</td>
</tr>
<tr>
<td>15</td>
<td>Temper Tamers in a Jar</td>
<td><strong>Ages 8 and above:</strong> Playing this social skills game is a great way to engage kids in a discussion about anger and help them adopt new self-regulation strategies to deal with their angry thoughts and feelings. The cards each offer tips, open-ended questions, and social scenarios to act out.</td>
</tr>
<tr>
<td>16</td>
<td>Mindfulness Matters</td>
<td><strong>Ages 9 and above:</strong> Mindfulness Matters teaches and engages children and teens in critical mindfulness skills. Players learn different mindfulness techniques and how to apply them in their everyday lives. Gameplay is cooperative to enhance social skills, social learning and social development.</td>
</tr>
<tr>
<td>17</td>
<td>Chill Skills in a Jar</td>
<td><strong>Ages 12 and above:</strong> Play this game to help kids learn healthy ways to manage anger and control their rage. Playing this game can help children and teens deal positively with anger and maintain respectful relationships.</td>
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</tbody>
</table>

#### Role-play

Role play as you have seen in earlier units is an extremely beneficial educational activity for pre-schoolers. This is more relevant when learning about socio-emotional development of these children. These skills develop in the brain's limbic system and for a child, who does not have any experience of social and emotional interactions, the skills get better only with constant practice and feedback on these interactions. Social interactions when facilitated through role-playing allow children to get an idea of how they would pan out in real life, what type of reaction they may expect, as well as what are the actions considered acceptable or non-acceptable. Role play allows the development of higher thinking concepts of analysis, prediction, comparison, and synthesis.
One of the easiest ways to conduct role-play activities is through putting on a show. The teachers must be careful to make it seem as real as possible, with maximum clarity and assign specific roles to each child taking part in the activity. The problem, solution and target for conducting the activity must be clear. The activity may be replayed with different set of children to arrive at different solutions.

Social-emotional development games for kids can help children learn about their feelings and emotions. When toddlers, pre-schoolers, kids, and teens learn to understand their emotions they can begin to regulate their feelings and manage their anger. This collection of social-emotional activities and games for social-emotional learning can help children develop healthy social skills.

10.3.1 Benefits of Social-Emotional Activities and Social-Emotional Games for Kids

Activities for emotional development can make all the difference to a child’s social and emotional health. Social-emotional activities can help children understand their feelings and learn how to express emotions in healthy ways. Children can learn to cope with their feelings and emotions much more effectively through social games and play. When toddlers, pre-schoolers, kids, and teens play social-emotional activities and social development games they are less likely to explode into tantrums and fits of rage. They will still get frustrated and angry, but the intensity and duration will decrease over time as they learn effective self-regulation skills and coping strategies to manage their anger. Playing social-emotional development games for kids is an effective way to help children understand their feelings and learn the social skills needed to regulate their emotions. When children understand their feelings they experience less stress and can begin to spend more time focusing on learning and academics.

Check Your Progress
1. What are the essential social and emotional skills for pre-schoolers?
2. Mention few activities which help in social-emotional learning of pre-schoolers.
3. What are the benefits of socio-emotional activities for kids?

10.4 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. Many kindergarten teachers report that in order for pre-schoolers to make a smooth transition to school, they need to have certain social and emotional skills. They need to be able to:
   • have positive relationships with peers
   • listen and follow directions
Educational Activities for Socio-Emotional Development

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Self-Instructional Material

- effectively communicate emotions
- work well with others
- display good manners

2. Few activities which help in social-emotional learning of pre-schoolers include the following:
   - Working in partnerships
   - Teaching them how to work in a group
   - Nurturing a culture of kindness

3. Activities for emotional development can make all the difference to a child’s social and emotional health. Social-emotional activities can help children understand their feelings and learn how to express emotions in healthy ways. Children can learn to cope with their feelings and emotions much more effectively through social games and play. When toddlers, pre-schoolers, kids, and teens play social-emotional activities and social development games they are less likely to explode into tantrums and fits of rage.

10.5 SUMMARY

- Social skills activities for pre-schoolers help teach young children valuable social skills. There are many benefits of developing pro-social skills among children.
- Traditionally, social emotional learning (SEL) has been considered a part of the parents realm. But as kids spend increasing time in child care and pre-school, care providers and teachers are also accountable for a child’s SEL needs, too.
- The first step to intentionally embed opportunities for social-emotional development is to get to know all the children in your care. This involves observing them. You may want to write a few notes about their interests, their interactions with peers, their ability to express emotions.
- The children you care for, need daily opportunities to participate in activities that help them learn new skills, and practice existing skills, in a fun, stimulating, and supportive environment (home).
- Parents know their children best and can inform you about their child’s interests, family outings, pets, and other news that can enhance your relationship with each child. Posting family pictures of your own family and the families of the children you care for helps make your home warm and nurturing.
- Many schools have started teaching kids how to do things like cope with feelings, set goals and get along with others. Self-regulation helps kids manage their emotions and their body movements during a tough situation.
• Social-emotional development games for kids can help children learn about their feelings and emotions. When toddlers, pre-schoolers, kids, and teens learn to understand their emotions they can begin to regulate their feelings and manage their anger.

• When children understand their feelings they experience less stress and can begin to spend more time focusing on learning and academics.

10.6 KEY WORDS

• **Empathy:** It is the ability to sense other people’s emotions, coupled with the ability to imagine what someone else might be thinking or feeling.

• **Altruism:** It is an act of helping others even if it results in risk or loss to oneself.

• **Psychotherapy:** It is a treatment process to help people deal with psychological issues, such as depression, anxiety, and posttraumatic stress disorder.

• **Stress:** It is the body’s reaction to any change that requires an adjustment or response.

10.7 SELF ASSESSMENT QUESTIONS AND EXERCISES

**Short Answer Questions**

1. Prepare a list of activities which support social-emotional learning for kids.

2. What is the role of adults in socio-emotional development of children?

**Long Answer Questions**

1. Give examples of socio-emotional games which facilitate the development of socio-emotional learning among children.

2. How are socio-emotional activities and games beneficial in the growth of children?

10.8 FURTHER READINGS


Educational Activities for Socio-Emotional Development

NOTES

Indian Association for Pre-School Education. 2000. *Activity-Based Curriculum for Pre-School Education*. Dehradun, India.

Indian Association for Pre-School Education. 1999. *Strategies for Effective Pre-School Education*. Dehradun, India.
UNIT 11 EDUCATIONAL ACTIVITIES TO CHANNALIZE EMOTIONS

Structure

11.0 Introduction
11.1 Objectives
11.2 Simple Science Experience Activities
11.3 Imaginative Play Activities/Pretend Play Activities
11.4 Activities for Channelization of Emotions
11.5 Answers to Check Your Progress Questions
11.6 Summary
11.7 Key Words
11.8 Self Assessment Questions and Exercises
11.9 Further Readings

11.0 INTRODUCTION

The learning of emotions is a continuous process which continues till adulthood. However, there are numerous activities which undertaken during childhood help the children in identifying not only their own emotions but that of others including their surrounding environment. This unit, will familiarize you with the numerous simple science experience activities, imaginative play activities and activities for channelization of emotions.

11.1 OBJECTIVES

After going through this unit you will be able to:

- Discuss the various simple science experience activities for pre-schoolers
- Analyse the significance of imaginative play and role play in the growth and development of pre-schoolers
- Give examples of activities for channelization of emotions in pre-schoolers

11.2 SIMPLE SCIENCE EXPERIENCE ACTIVITIES

Children are inquisitive by nature. They are always experimenting with something, whether they are throwing a plate of spaghetti on the wall, blowing bubbles in the bath water or stacking blocks into an intricate tower only to destroy it in one big swipe. As they grow they try their hands on using smart phones. However, children
can actually do some pretty mind-blowing, hands-on science experiments at home using stuff you probably have lying around the house.

Science experience activities performed at home accomplish two things:

- They are very simple.
- They use ingredients you already have in your own home.

These science activities are super-easy and a lot of fun to boot, as kids are exposed to a wide variety of scientific concepts. It is a great way to spend quality time together as a family and who knows, mother and father may end up learning a new thing or two, too.

The activities enhance observation and experimentation which are the cornerstones for developing a scientific mindset. You can help kids in developing their abilities to ask questions and the ability to solve problems with simple science experiments and activities. We have briefly mentioned such activities in Unit 8.

<table>
<thead>
<tr>
<th>Table 11.1 Simple Science Experience Activities</th>
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<tbody>
<tr>
<td>1 Blow bubbles outside when temperatures dip to the single digits and watch them freeze.</td>
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<tr>
<td>2 Grow a bean in a clear cup to watch the roots grow down and the stem grow up.</td>
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<td>3 Drop Pop Rocks into a bottle of soda and then place a balloon onto the opening to watch it inflate.</td>
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<td>4 Make homemade ice cream in a bag: shake salt, ice, cream, and sugar vigorously until the consistency is right, then enjoy.</td>
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<td>5 Build a container for an egg that protects it from breaking and then test it out by dropping it from on high.</td>
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<td>6 Place white flowers in coloured water and watch how they soak up the hues.</td>
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<td>7 Learn about the crystallization process by growing rock candy in a glass.</td>
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<td>8 Use lemon juice to make invisible ink that can only be seen when held up to a heat source.</td>
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<td>9 Fold a paper airplane and then bend a corner to see how that changes its flightpath.</td>
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<td>10 Set up a row of bottles with varying amounts of liquid and then blow across the openings to hear the different tones.</td>
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<tr>
<td>11 Learn about surface tension by dropping food colouring into milk and watch as the colours move when you add some soup.</td>
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<tr>
<td>12 Create a tornado in a bottle by taping two plastic bottles together neck to neck—one filled, the other empty—and swirling it quickly.</td>
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<tr>
<td>13 Force an egg to fit into a bottle by creating a suction using heat.</td>
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<td>14 Change how an egg floats or sinks in a glass by adding salt to the water.</td>
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<td>15 Plop oil into water to see that they really do not mix; try it with a variety of liquids to make a rainbow of stripes.</td>
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</table>
11.3 IMAGINATIVE PLAY ACTIVITIES/PRETEND PLAY ACTIVITIES

We as adults can often undervalue imaginative play. Play is a child’s way of engaging and making sense of the world. Role play may appear to be a very simple activity, yet within it, young children learn practical life skills such as dressing themselves, how to cooperate and share with others.

Pretend play is one of the essential pre-school activities for children. When one meets a new student who does not know how to engage in pretend play, then one should run through all ideas to see which would spark their interest and open the door to a world of limitless possibilities. That is what pretend play is, but that is not the reason for its importance. Kids are not just living in what many adults would call a fantasy world, instead most of their play has deep roots in reality, and it offers them a chance to practice social situations, adult roles and even play out fears and anxiety in a safe place.

How to encourage and support imaginative play with our children?

Imaginative play is essentially when children are role playing and are acting out various experiences they may have had or something that is of some interest to them. They are experimenting with decision making on how to behave and are also practising their social skills. Children learn from experience; from what happens around them, from what they see, hear, smell, taste and touch. To absorb those experiences and make sense of the world, they need to be engaged in imaginary play.

Place to Play

- Provide your child with a space in your home for imaginative play. It could be a separate room or even just the corner of a room. Fixed or build-in wardrobes are great places for imaginative play.
- A great place for imaginative play is the dinner table, remove all the chairs and cover the table with sheets, it becomes an instant cubby house or even a castle where a beautiful princess is kept captive by an evil dragon.
- Couches are another great place to begin imaginative play; again a sheet thrown over the couch can become a tunnel or a cave that an explorer needs to investigate. Canopies and play tents can create a great place to begin the imaginary world.
- The play corner or imaginative play area should be changed regularly with different props and toys to keep children stimulated by it.
Educational Activities to Channalize Emotions

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Providing Props and Toys

This does not mean that you have to go out and spend a lot of money on toys to help promote imaginary play. You will find that the most simple of items found in the home will act as perfect props to spark the imagination. Card board boxes can become anything in the imaginary world, they can become computers, cash registers and beds for sick animals. The plastics cupboard or drawer in the kitchen is filled with props that kids can re-invent them into other things.

![Fig. 11.1 A Pre-Schooler with Cooking Props](image1)

Provide a dress ups box full of clothes, scarves, hats, handbags, shoes and wigs. Dress ups are irresistible to young children to spark the imagination. Consider creating a props box filled with toys, objects and props to encourage your child’s fantasy world. You might include washing baskets, old telephones, stuffed animals and dolls, blankets, plastic crockery and cutlery.

**Be Your Child’s Playmate**

Kids love to play with their parents! When your child brings you a pretend cup of tea, play along and ask for a tea spoon of sugar. Ring them up on their pretend phone asking to put in an order for 2 large pizzas for delivery. Show an interest in what they are doing as this helps to develop the story and encourage the imagination but let your child be in charge. Arrange play dates with children of a similar age so they can support each other’s imaginative play.

![Fig. 11.2 A Young Child engaged on a Play-phone](image2)
Provide Them with Experiences to Role Play

Reading to your children will expose them to different scenarios, stories and experiences. Taking your children to many interesting places such as the zoo is also another way of exploring new experiences. This does happen naturally anyway, such as visiting the doctor and the supermarket. These will provide them with more experiences and more ideas for their imaginative play.

**Imaginative Play Vet Hospital:** Imaginative play would have to be one of my most favourite kinds of play.

**Imaginative Play Wet Washing:** Imaginative play washing line is so simple to put together but yet so effective for kids to pretend, engage and make sense of their world. Practising and experimenting with the various skills they will take into adulthood.
Educational Activities to Channalize Emotions

NOTES

Washing a Toy Baby: Watching mother and father washing a baby sibling is an example of an experience that children copy and re-enact. Watching and learning from this experience then practising, imitating and experimenting this through imaginary play.

Fig. 11.6 A Toy Baby Care Kit

Kid Car Wash Tunnel: I truly believe that the simplest things bring the most fun! We have been making a homemade Car Wash Tunnel for the kids using simple items you will find around the house. This is such a fantastic activity to do with toddlers, older babies and pre-schoolers to help build up gross motor skills and have lots of fun inside when it is raining outside.

Fig. 11.7 A Child Enjoying a Pretend Car Wash Tunnel

Imaginative Play Ice Cream Shop: The fun and joy of exploring the imaginary world of an ice cream shop.

Fig. 11.8 A Child in an Imaginary Ice-cream Shop
Imaginative Play Baby Care Corner: Encourage imaginative play by setting up a Babies Care Corner. This would be a fabulous imaginative play area to set up for families who are expecting or have a new baby and for children who have a younger sibling.

![Children Playing Pretend Baby Care](Fig. 11.9)

Imaginative Places to play at Home: There are so many wonderful places in the home where children can play imaginatively, creatively and get active indoors. Kids will create imaginary worlds to explore and play using the most inexpensive and simple things you can find right at home. Here are a few ideas for you to try.

The Washing Basket (or a cardboard box)

Do you remember riding in the washing basket as a kid? Was it a plane? A boat? A car? A train? With a little imagination and a cheerful song our washing basket transforms into whichever vehicle we wish it to be.

![A Toddler in a Washing Basket](Fig. 11.10)
Learning Benefits of Imaginative Play

- It provides opportunities for children to identify with the adult world. Practice and role play their understanding and interpretation.
- Develop social skills: This involves practising negotiation skills, turn taking and sharing. This provides opportunities for working out problems and experimenting with solutions.
- Emotional development: This involves understanding and expressing their feelings through the re-enactment of certain experiences. Taking on roles that encourage discipline and empathy.
- Encourages imagination: Children can be anyone and do anything in the pretend world.
- Develop language skills: This involves practising listening, looking and talking. Being spoken to and talking with other people, also developing an understanding of what is being communicated through body language such as smiles and nodding.

Do you look at a box of puzzles or a ball and think of it as ‘toy’? What if you come to know that for your child, it is more than that? That it is an important tool for learning and growing. Yes, this is how children learn the skills they will need to interact with their environment, peers and parents. Social interaction, communication and other aspects help them make a smoother transition during their growing years. Experts also suggest that pre-schoolers should participate in both free play and structured physical activity.

Cognitive Development for pre-schoolers

Cognitive development milestones for pre-school-age children include learning to write some letters and draw circles, identifying some colours. Other milestones include better understanding of abstract concepts, such as the difference between morning, noon and night. Play is crucial for cognitive development. Pre-school provides opportunities for structured and free play to stimulate cognitive development. Play promotes healthy brain development and helps children build confidence, slowly develop the ability to solve problems and work with others. These skills help children build leadership skills, group skills and become more creative — important skills that a child needs to succeed in his life. Children in pre-school typically begin participating in more imaginative play with more complex plots.

Table 11.2 shows seven pre-school activities that will help your child develop important cognitive skills.
Table 11.2: Seven pre-school activities to develop Cognitive Skills

<table>
<thead>
<tr>
<th>S. No</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Musical Chairs</td>
<td>The fun game of musical chairs helps kids improve listening skill and discern between sound and silence. It also teaches them self-regulation, preparedness and improves reflexes.</td>
</tr>
<tr>
<td>2.</td>
<td>Hopped Up Hide And Seek</td>
<td>In this game you hide a small object in the room and then give specific instruction such as 'move three steps forward' or 'look next to something red', in order to lead the child to the hidden object. It reinforces verbal instructions and listening skills. It also teaches the child about positional words, colours, shapes etc.</td>
</tr>
<tr>
<td>3.</td>
<td>Art And Craft</td>
<td>Drawing, colouring, finger painting, using glue, scissors etc helps develop fine motor skills in pre-schoolers.</td>
</tr>
<tr>
<td>4.</td>
<td>Playing Outside</td>
<td>Riding swings and playing on jungle gym helps children gain strength, coordination and dexterity.</td>
</tr>
<tr>
<td>5.</td>
<td>Sock Puppets Show</td>
<td>Kids can make hand puppets out of socks and put a show with other kids. Creating the puppets develops fine motor skills, while the show which involves talking to others using the puppet helps develop language and communication skills. It also teaches kids to resolve conflicts using their words.</td>
</tr>
<tr>
<td>6.</td>
<td>Playing House</td>
<td>Playing games like House, where kids pretend to be grownups - going to office, cooking, setting dining table – teach them life-skills they will need later in life. It also makes them more social.</td>
</tr>
<tr>
<td>7.</td>
<td>String Games</td>
<td>Another activity that can provide hours of fun are the string games. Children hold strings between their thumbs and fingers and make simple things and animals etc. These games help improve hand-eye coordination.</td>
</tr>
</tbody>
</table>

Pretend or imaginary play (sometimes known as symbolic play), is essential for early learners cognitive development of imagination, curiosity, and problem-solving skills. Additionally, imaginary play assists early learners in developing focus and concentration skills through working with material and thoughts in which they are interested. One of the hallmarks of pre-schoolers thinking is the ability to engage in symbolic representation. A block may become a telephone, or a box may become a car. Pre-schoolers, unlike toddlers, begin to show an understanding of the difference between what is real and what is not. Make-believe play should be encouraged by teachers in the pre-school years. Since children often identify with characters in books, reading stories that show children or other characters engaging in symbolic play is a good method to inspire children to participate in pretend play in new or unique ways.

Social Cognition

Social cognition refers to thinking about others and social situations. As children gain new cognitive skills, their understanding of how the social world works increases. By the pre-school years children begin to understand the mind as an entity of thought and are therefore better able to grasp why others behave or feel the way that they do. While pre-schoolers do begin to show ‘theory of mind’, as this ability is often referred to, they are limited in their ability to understand the perspectives of others; however, this ‘egocentric thought’ declines throughout the pre-school years as children’s communicative abilities begin to increase.
Educational Activities to Channalize Emotions

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Reading children’s books about feelings and how they relate to thoughts and behaviours is a great way for teachers to promote social cognition. Examples include ‘Alexander and the Terrible, Horrible, No Good, Very Bad Day’ by Judith Viorst and ‘Stand in My Shoes: Kids Learning About Empathy’ by Bob Sornson, Ph.D.

Advances in cognitive development during the pre-school years allow children to communicate, play and logic in ways that were not possible in toddlerhood. With careful planning and knowledge of cognitive development during the pre-school years, teachers can promote cognitive growth through everyday activities such as story time. Enhancing a child’s thinking can be as easy as opening up a book and using these methods and ideas!

Play and Social development

Pre-schoolers want to learn how things work, and they learn best through play. Children at play are solving problems, engaging in creating, experimenting, thinking and learning all the time.

This is why play supports your pre-schoolers cognitive development – that is, your child’s ability to think, understand, communicate, remember, imagine and work out what might happen next.

Your child’s relationships also support his cognitive development, especially his relationship with you. And play is a great relationship builder. Spending time playing with your child sends a simple message – that parents value their kids. This message helps your child learn about who he is and where he fits in the world.

The early years are the time to build a strong foundation in all developmental areas. Meeting specific milestones in all five domains of development and learning helps pre-schoolers establish behaviour and skills that will make them successful.

Play encourages all areas of proper development, from cognitive and physical to social and emotional. Here are some facts about the benefits of play in social development of a child:

- Play builds self-esteem and confidence.
- Play teaches children to collaborate.
- Play teaches children to be alone and independent.
- Play allows children to release their emotions.
- Play encourages planning and thinking ahead.

These are developmental skills, too!

Social development for pre-schoolers covers a wide range of skills, such as the following:

- Regulating one’s own behaviour and emotions.
- Developing friendships with other children and healthy relationships with adults.
• Creating a positive personal identity (for example, liking oneself and building confidence).
• Developing a working memory, curiosity for the world and persistence.
• Participating and engaging in learning.
• Children are naturally social and curious. They are also extremely emotional and need help navigating their feelings and learning how to react and respond to social situations.
• It is an important part of growing up around other kids. It is also under this domain that children need to feel safe, nurtured, respected and loved.

Most cognitive development occurs in tandem with language so that your talking to your child with more reasoning-based or refined analysis will teach the child how to reason/analyse. But do not confuse this with your child’s talking (expressive) ability, which may not match their cognitive ability. Three year old boys are ready to learn this stuff, even if they cannot talk. This is easy to forget. Talk through the Who/What/Where/When/Why/How as if they understood it all. You will be amazed how much it will start coming back to you by the time they are four and five years of age.

11.4 ACTIVITIES FOR CHANNELIZATION OF EMOTIONS

Social-emotional learning is a key component in teaching young children. You will find that a good part of your day is spent educating your students about how to recognize, manage and express feelings. Students learn healthy emotional habits and ways of expressing their feelings several ways. They learn at home as well as in their interactions with their family and friends. Children tend to pick these things up naturally. They learn by watching how others respond and mimicking their behaviour. Many kids are active in their community centres, sports and hobbies. In those places, they learn how to interact with friends and neighbours as well.

It is up to us, as educators, to model, teach, and encourage them to practice healthy emotional responses to everyday situations and events! Helping children to express their feelings and handle difficult situations with calm is our ultimate goal. We first need to teach children the words to express their feelings before we require them to ‘use their words’. Young children can be taught basic emotions such as happy, mad, sad, and scared as early as two years old. As they get older, one can explain emotions such as feeling frustrated, nervous, shy and so forth to them.

Identifying Different Emotions

• Children should be taught the language necessary to label and identify the different emotions they may experience. The reason is, we need to let them know that feeling different emotion is normal. By giving them the vocabulary
Educational Activities to Channalize Emotions

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Self-Instructional Material

needed to describe how they are feeling, you are encouraging them to express themselves appropriately.

- **Recognizing facial expressions and body language**: Children need to learn how to identify their own emotions, as well as that of others. One way to do this is by learning to pay attention to their own body signals, such as a frown and queasy stomach when nervous, or balled fists and tight shoulders when angry. Once they can recognize it in themselves, they can pick up on facial expressions and body language of others and then learn to react accordingly. The teacher should spend five minutes modelling and discussing different emotional states with kids.

- **Clip chart**: One way to encourage recognition of feelings is to provide a visual reference for them to use. A clip chart helps students to recognize and identify how they are feeling. They simply place a clip on the chart in the space that shows how they are feeling.

- **Play games**: One fun way to introduce, teach and practice the names of emotions is to play an engaging game with students, such as emoji card games, matching games and board game.

Teach Healthy Emotions

We all feel the full range of emotions. Wherever they are on the happy or sad, engaged or bored, proud or embarrassed, ends of the spectrum, we can help them express those emotions in a safe and healthy way. The classroom is a great place to learn and practice!

- **‘I Feel…’ Statements**: To learn how to express their feelings appropriately, students need to be taught how to use ‘I feel…’ statements. Instead of screaming insults at another child who broke his crayon, little Johnny can say ‘I feel sad that you broke my crayon’, opening up the communication between the two students. This allows for healthy conflict resolution.

- **Coping with extreme emotions**: Sometimes, we must step in and help kids deal with the emotional roller coasters they sometimes find themselves on. Their extreme emotions get out of control and they need help finding their way back to calmness. We must realize that addressing the whole brain is key to understanding how to help them best.

- **Teaching emotional rights**: It is important for children to understand and assert their rights when it comes to emotions. This helps them maintain healthy boundaries with their friends and peers, and be respectful to teachers and adults.

Connect Experiences with Emotions

Children learn to embrace their emotional state by realizing that it is normal and ok to feel the way they do. It is our job to give them opportunities to label their feelings correctly. Emotional memory is strong! We can harness that power by
helping students connect their experiences in the classroom with their emotions. By recognizing and acknowledging their feelings during a learning activity or classroom event, we can increase the chances of it sticking in our students long-term memory.

- **Journaling:** Encouraging students to journal about their feelings is helpful. They express their feelings through writing about learning tasks, field trips, or school events.
- **Emotion sort:** Have students sort pictures of children experiencing different emotions. By doing so, they will gain practice recognizing facial expressions and body language and, therefore, feel more confident about understanding their own feelings as well as that of others.

**Teach students about brain biology**

The human brain is a fascinating subject even for the youngest learners. Teach them what the parts of the brain are called, and talk about how different parts of the brain control their emotions and feelings.

- **Brain crafts and activities:** Teach children about the parts of the brain that control the emotions. To try to explain how the parts of our brain work together, and how the emotions part can sometimes take over, try explaining it in terms they can understand, such as the ‘upstairs and downstairs’.

**Encourage students to have a positive mindset**

Additionally, add in self-talk and self-motivation skills. Positive and encouraging self-talk will help your students succeed, and create a more positive classroom environment overall. For example, you can teach them ways to feel good and focus on positivity. Here are ways to influence them to have a good attitude at school and teach emotions for kids.

- **Create a vision board:** Vision boards are used in all types of professions, from business to graphic design. They can be used in the classroom too! Help children visualize what they desire and what makes them happy. Precisely, when they have an image in their mind of what makes them thrive, they are more likely to reach their own goals and ultimately succeed in the classroom.
- **My heart map:** This creative activity encourages children to thoughtfully consider what makes them happy and depict it on paper. It is a great way to help them own and recognize their emotions and focus more on having a positive outlook.

Pre-schoolers need guidance to help them interpret their own feelings and emotions and to interact appropriately with others. When you help children learn how to communicate their feelings and emotions effectively, you give them the social and emotional tools they need to deflate tense situations and to understand themselves better. By teaching pre-schoolers how to express their feelings and...
Educational Activities to Channalize Emotions

how to respond to the emotions of their peers, you help them recognize and deal with their own feelings and emotions, as well as those of others.

Table 11.3 Steps to Help Pre-Schoolers Identify and Deal with their Feelings

<table>
<thead>
<tr>
<th>S. No</th>
<th>STEPS Description</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>STEP I Give pre-schoolers words for their feelings and emotions. Start with simple language, such as angry, sad, happy or frightened, but move beyond these initial ‘feeling’ words to more descriptive ones, such as lonely, excited, hungry, frustrated and thankful. Emotional literacy helps children to be socially competent and enables them to recognize and respond to social cues appropriately.</td>
</tr>
<tr>
<td>2.</td>
<td>STEP II Introduce emotion concepts during story time or activity time, using pictures and facial expressions to help children better understand the connection between feelings and self-expression. Help your pre-schooler put feeling words into context when he is experiencing a heightened emotional moment. For example, you might say, ‘You are really excited about that puppy,’ or ‘You feel frustrated with this puzzle right now.’</td>
</tr>
<tr>
<td>3.</td>
<td>STEP III Give your pre-schooler permission to express emotions and feelings without inducing shame or guilt. Learning to understand and manage feelings and emotions is a social and emotional developmental milestone. Encourage children to express feelings appropriately rather than to repress them or express them without regard for others. If your pre-schooler wants to hit when she is angry, for example, find an appropriate way for her to express her anger. Teach that hitting hurts people but that anger and frustration is normal. Give her a pillow that she can hit when she is feeling mad or angry, allowing her to express her feelings without endangering herself or others.</td>
</tr>
<tr>
<td>4.</td>
<td>STEP IV Model self-control by using calm, descriptive language to voice your own feelings and emotions. Children learn about feelings and emotions not only through their own experiences, but also through observation. Look for teaching opportunities to show your pre-schooler how to express strong feelings and emotions in appropriate ways.</td>
</tr>
<tr>
<td>5.</td>
<td>STEP V Mediate tense emotional conflicts involving pre-schoolers without trying to control the situation. Encourage and allow pre-schoolers to communicate their feelings and emotions to both peers and adults. Social and emotional development is a primary factor in school readiness, according to child care educator and author Lisa Murphy. Give your pre-schooler opportunities to interact with peers and to work through social situations involving sharing and taking turns. When conflict arises, ask your pre-schooler how he feels and why he feels this way. When he responds, ask him what he thinks will help the situation. Encourage him to communicate this to his companion. Help the conversation along until feelings have been effectively communicated, worked through and dealt with. This process will give your child the tools he needs to handle social situations when you are not around to mediate.</td>
</tr>
<tr>
<td>6.</td>
<td>STEP VI Give your pre-schooler the space she needs to explore her feelings. If a pre-schooler needs time to calm down, give her a book or a soothing toy and help her find a quiet place to be by herself. Refrain from associating quiet time with punishment or time out. A child needs to know that needing space to experience and work through feelings is natural and not a consequence of wrong behavior.</td>
</tr>
</tbody>
</table>

Pre-schoolers, emotions and play

Pre-schoolers are learning more about emotions all the time, especially during play. Play is the natural way children learn and develop. Play gives pre-schoolers a chance to express their feelings and practice managing them.

What to expect from pre-schoolers and emotions

At around 3-4 years, the pre-schooler will probably:

- use words to describe basic feelings like sadness, happiness, anger and excitement
- feel sorry and understand she should apologize when she has done something wrong – although you will probably need to give plenty of reminders
feel generous and show that she understands the idea of sharing – but do not expect her to share all the time.

At 4-5 years, the pre-schooler will probably

- use words to describe more complex feelings like frustration, annoyance and embarrassment, particularly if you have been encouraging him to do this
- Hide the truth about something if he feels guilty, embarrassed or frightened. He might even say ‘I didn’t do it’ even when he did
- be better at managing strong emotions like anger, frustration and disappointment and have fewer tantrums.
- be very attached to you – for example, your child might feel anxious about going somewhere unfamiliar, like a birthday party.

By the time, the pre-schooler reaches the age of 5-years, your child will probably

- use words to describe complex feelings like disappointment, guilt and jealousy
- be more aware of her feelings towards others and act on them – for example, your child might be kind to friends and family and want to help you more
- try hard to follow the rules to avoid getting in trouble
- have more patience when she is waiting for things.

Play ideas to encourage pre-schooler emotions

Playing with you and with other children helps pre-schoolers explore and understand their feelings. Here are some play tips for your child:

- Give your child opportunities for messy play, like playing with sand, mud or paints. This is a great way for children to express feelings like happiness or sadness.
- Your child could act out feelings with puppets or toys, or use old clothes for dress-ups and pretend play. For example, your pre-schooler could pretend to be kind and concerned like a teacher or a doctor.
- Make your child play in an open area with lots of space for running, tumbling and rolling. This can help your child let out emotions.
- Encourage your child to paint and draw as a way of expressing himself. Painting and drawing can soothe and calm your child if he is frustrated or sad.
- Encourage your child to jump around and ‘act out’ music or make music with simple instruments.
- Read stories that feature characters who are experiencing similar situations and emotions to your child. This can really help your child understand
Educational Activities to Channalize Emotions

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new emotions like grief about the death of a pet or worry about starting school.

- Give your child chances to play with children of all ages. By playing with other children, your child can learn how to recognize, manage and respond to emotions.

Your child might find it easier to express feelings if she/he feels in charge. Letting your child choose what and how to play can help with this.

Drama

We have already discussed the importance of drama for pre-schoolers in Unit 7. To recapitulate the idea, drama is a great educational activity for channelizing emotions in children of such young age. The drama creation may involve children to create their own simple plot and cast. While presenting the drama for children, the teachers can choose from options like narrating the story, asking the children to recite, play a recorded cassette or use cue-cards. The drama might also be unstructured or simply enactment of situations. Drama helps pre-schoolers to about self-regulation, maths and counting skills, language development, conflict resolution, emotional intelligence, etc.

Check Your Progress

1. Name one essential pre-school activities for children.
2. What do you understand by the term ‘imaginative play’?
3. Mention the benefits of play in social development of a child.
4. What are the various ways for children to help identify different emotions?

11.5 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. Pretend play is one of the essential pre-school activities for children.
2. Imaginative play is essentially when children are role playing and are acting out various experiences they may have had or something that is of some interest to them.
3. The benefits of play in social development of a child are the following:
   - Play builds self-esteem and confidence.
   - Play teaches children to collaborate.
   - Play teaches children to be alone and independent.
   - Play allows children to release their emotions.
   - Play encourages planning and thinking ahead.
4. Pre-schoolers are able to identify different emotions through the following ways:
   - Recognizing facial expressions and body language
   - Clip chart
   - Play games

11.6 SUMMARY

- Science experience activities performed at home accomplish two things:
  - They are very simple.
  - They use ingredients you already have in your own home.
- Role play may appear to be a very simple activity, yet within it, young children learn practical life skills such as dressing themselves, how to cooperate and share with others.
- Pretend play is one of the essential pre-school activities for children. When one meets a new student who did not know how to engage in pretend play, then one should run through all ideas to see which would spark their interest and open the door to a world of limitless possibilities.
- Imaginative play is essentially when children are role playing and are acting out various experiences they may have had or something that is of some interest to them.
- Play is crucial for cognitive development. Pre-school provides opportunities for structured and free play to stimulate cognitive development.
- Pretend or imaginary play (sometimes known as symbolic play), is essential for early learners cognitive development of imagination, curiosity, and problem-solving skills.
- Social cognition refers to thinking about others and social situations. As children gain new cognitive skills, their understanding of how the social world works increases.
- Advances in cognitive development during the pre-school years allow children to communicate, play and logic in ways that were not possible in toddlerhood.
- The early years are the time to build a strong foundation in all developmental areas. Meeting specific milestones in all five domains of development and learning helps pre-schoolers establish behaviour and skills that will make them successful.
- Social-emotional learning is a key component in teaching young children. You will find that a good part of your day is spent educating your students about how to recognize, manage and express feelings.
Children learn to embrace their emotional state by realizing that it is normal and ok to feel the way they do. It is our job to give them opportunities to label their feelings correctly.

Pre-schoolers need guidance to help them interpret their own feelings and emotions and to interact appropriately with others.

11.7 KEY WORDS

- **Social cognition**: It refers to thinking about others and social situations.
- **Emotion sorting activity**: This activity helps in recognition of emotions.
- **Role play**: It is the act of imitating the character and behaviour of someone who is different from yourself.

11.8 SELF ASSESSMENT QUESTIONS AND EXERCISES

**Short Answer Questions**

1. Prepare a list of simple science experience activities for pre-schoolers.
2. What is the significance of role play in the upbringing of pre-schoolers?
3. Mention the learning benefits of imaginative play.

**Long Answer Questions**

1. Suggest activities which encourage and support imaginative play in pre-schoolers.
2. Analyse the role of play in the social development of pre-schoolers.
3. Give examples of activities which facilitate channelization of emotions in pre-schoolers.

11.9 FURTHER READINGS


Indian Association for Pre-School Education. 2000. *Activity-Based Curriculum for Pre-School Education*. Dehradun, India.

Indian Association for Pre-School Education. 1999. *Strategies for Effective Pre-School Education*. Dehradun, India.
UNIT 12 EDUCATIONAL ACTIVITIES IN THE INDOOR AND OUTDOOR ENVIRONMENT

12.0 INTRODUCTION

The mental, physical and emotional development and other aspects of the personality are incorporated in the harmonious development of the personality. But it is seen that the whole endeavour of the teacher is aimed at mental development of the learner only. The teacher now-a-days teach mainly through lectures in which the students linger and become passive addressees. The students, thus, barely participate in the teaching-learning activity in the classroom. The teacher has to sort out a number of learning activities to inculcate appropriate attitudes, social, scientific and moral values in the students and to ensure the complete development of their personality.

The two significant elements in the process of education are teaching and learning. When the most sought-after learning outcome occurs the objective of the education is achieved. This occurs only when the novice clearly comprehends the content taught in the class then only can he become a master. So for successful classroom teaching, the teacher has to prepare and put in order the learning activities. The teacher not only serves as a facilitator but also works as an organizer in the field of learning. The teacher must keep in his mind the learning abilities of the
students while putting in order the learning activities. The learning activities can be
categorized as self-learning method, individual learning, peer-group learning, small
group learning or whole class-learning. All the activities should be well thought-
out and student oriented. An affable classroom environment should be created
while preparing the activities for the students. It is vital to provide opportunities for
the student to apply his judgment and opinion because the student learns according
to his ability. The learning activities in the classroom must comprise of reading,
writing, drawing, expression of thoughts, speaking, discussions and so forth.

12.1 OBJECTIVES

After going through this unit, you will be able to:

- Explain the need of planning and organizing educational activities
- Describe the importance of learning activities
- Evaluate the effective use of indoor and outdoor space for learning activities

12.2 PLANNING AND ORGANIZING EDUCATIONAL
ACTIVITIES

Education is an incessant process. The progression of education starts from the
womb. The infant acquires numerous habits from the mother and other elements
of the family and also learns to laugh, weep and speak. As the infant grows, he
learns through various organized and unorganized learning experiences like painting,
reading, writing, recording, observing, computing, reporting, designing, singing,
discussing, drawing, dancing, problem solving leading a work group or squad and
others.

Educational process consists of many informal and formal learning activities.
At the primary stage, the child gains almost all the know-how through informal
learning activities. The organized activity is called the formal one in that it is an
activity with an educational purpose. The formal learning activities are designed,
planned and executed by the school for particular objectives guided by some
pedagogical principles.

12.2.1 Need and Importance of Educational Activities

For the all-round development of the child, the teaching should be linked with real
experiences through various learning activities. The learning activities should be
meaningful and be organized as an integral part of teaching-learning process resulting
in effective learning on the part of children. For this purpose, it is necessary to give
the details of all such activities so that these can be performed meaningfully and
effectively. These activities prove meaningful when they are related to the needs
and problems of the learner and the society.
Psychologists say that if the child wants to do something, he tries to imitate the behaviour pattern of language and habits from his environment. But the present system of education barely provides any such opportunity because the learning occurrences are mostly provided through books. The learning activities which are selected on the basis of age, interests, attitudes and needs of the students satisfy their inherent curiosity and, thus, they get the feeling of success. Learning activities cannot be scrutinized in seclusion. Rather they are a vital part of the teaching-learning process. They offer a useful channel to utilize the surplus energy of the students. Besides, these throw in immense experiences to the normal academic growth and improvement of students. Learning activities meet the terms of many psychological needs of the students and, therefore, facilitate learning. Moreover, these activities provide ample opportunities for practical know-how through active participation and help the children enjoy learning.

Children learn more in small amount of time through various learning activities. The teacher becomes more mindful about the content whilst using such activities.

12.2.2 Classification of Educational Activities

Learning activities vary on the basis of circumstances and conditions. Activities in the classroom conditions will not be same as the actions outside the classroom situation. Activities can be categorized on the basis of the need of teaching-learning situation.

The activity which a child does inside the classroom can be extended to the outside environment and vice-versa. For example, children are asked to amass different types of flowers and leaves from outside and catalogue them according to the size, colour and shapes inside the classroom/laboratory for demonstration.

Educational Activities in the Classroom

A child carries out many activities in the classroom. He executes his activity as an active listener, does reading and writing in the classroom, maintains the class notes, participates in teacher/taught interaction, i.e., he is asked to answer the question by the teacher, does the blackboard work and so forth. Sometimes, students connect within themselves in doing experimental work in the science laboratory and work and so forth. Besides these activities, they also perform many other activities which include recalling, recognizing things, discriminating between objects, generalizing, analysing, formulating interpreting and evaluating.

Educational Activities outside the Classroom

Children participate in many dynamic activities like school gardening and plantation. Sometimes, they are asked to sanitize and clean the playground as well. Children connect within themselves in a lot of other creative activities performed in the external environment of the classroom, for example, singing, painting, puppet show and dramatization.
Selection of Learning Activities

Children exhibit interest in many activities outside the school. For example, they take interest in exhibitions, excursions, campaigns for the welfare and awareness of society and do social work. It helps them to learn a lot of things from outside the school environment.

The teacher can take the students to a near-by post office so as to find out about its operation.

This kind of activity needs to be organized in different steps:
(i) Teacher groundwork
(ii) Pupil preparation
(iii) Execution of the activity
(iv) Evaluation

Education takes place through the five senses. The five senses are the gateways of learning. It is also considered as a mind level registration. Motivation and pertinent opportunities serve as a way of learning. The outcome or the consequence of learning can be demonstrated with the help of appropriate inspiration. Inspiration not only registers internalized learning but also facilitates to identify it externally. The facilitating features and opportunities which bring about education are called teaching. Still learning is not a performing activity but an internal activity in the brain.

Many teaching activities are functional for learning episodes, if the activities are more appropriate, learning is reinforced. On the other hand, inapt activities cause momentary learning occurrences which are likely to disappear in due course of time.

Let us analyse some of the modus operandi which provides teaching activities to make learning occurrences simple and reinforce education.

Relevant Learning Activities

The learning activities should attract the attention of children. The learning activities which influence the learners, the apt openings which do not hamper the brains of the children and the learning preparations which support the attention and the requirements of the children would unquestionably serve as pertinent teaching activities to accomplish the objectivities of learning. The concept of “we are taught” estranges the children from the child approach of learning. The recent researches on the children’s relevant education activities define thus: “We play, we wish to be as we are, and there is no thrust, interference and compulsion in our joyful group learning activities”.

The most apt activities attract the attention of the children by means of instructions sufficiently and bring out the sought-after learning outcome. It is significant that the children recognize and carry out the activities provided to them.
The activities are organized in such a way so as to:

- Enhance the span of attention.
- Develop children into extroverts.
- Reduce negative attitude and despair.
- Provide opportunities for self-expression.
- Eliminate the hesitation in participation.
- Expected learning product takes place easily.
- Increase blissful experiences.

**Child Centered Approach and Learning Activities**

While developing the learning activities, the children’s interest, longings, attitudes, intrinsic motivation, attraction, desire, feelings and emotions are to be considered. The concern and the longing causing factors must be the nucleus of learning-teaching aids and materials. Its components, colors and shapes must boost the learning effects of the learners.

Some learning experiences easily overlay the way for the learning activities. For example, singing, storytelling, playing, story listening, dancing, running, searching, making animal sounds, connecting, dismantling filling, tapping, rotating, drawing, deranging, colouring, dolls collection are some of the activities that can be provided as learning experiences. These activities would help learning to set on its personal course tailored for that child. In each lesson, one or more learning objectives are to be achieved. To accomplish the learning activities, learning objectives or experiences are created. These activities have to be developed on top of the foundation of the ability of the students and multi grade environment. Let us see below the learning activities which make learning easy and joyful.

1. **Individual Learning**
2. **Peer group Learning**
3. **Small group Learning**
4. **Whole class Learning**

**1. Individual Learning**

The learning abilities of the children are not identical and they vary from one another. Each child is distinct in nature. No two children have the same outlook. Therefore, the training method must focus on the personality difference of the learners. Thereby, in the Individual Learning Method, a learner’s needs, individual motivation, intelligence, pace of learning, abilities and the aim of life must be taken into contemplation to help gain knowledge on his own pace. It takes into consideration the strengths and weaknesses of the pre-schoolers and the use of this information helps to plan education activities to maximize his knowledge.
Educational Activities in the Indoor and Outdoor Environment

NOTES

Benefits of Individual Learning
- In this method, teaching method is based on the individual learning differences.
- There is a chance for the learner and the teacher to interact with each other.
- This method gives chance to a student to learn on his own pace.
- The individual may be a member in a group or a class and his learning needs are served in this method by the teacher.
- It is a very expensive method.
- No necessity for individual teaching in this method.

2. Peer Group Learning
Peer group learning is done by students who are having identical or similar levels of talents, interests, age, desire and character. They are involved in learning activities. This technique gives full freedom, creates analytical functioning and develops involvement in the learning activities. The individual learning distinctions are considered before emerging into a multimember of learning activities of peer group learning.

It emphasizes its objectives and strengthens learning. It creates a constructive learning environment. It is based on the standards of child psychology. Peer group learning offers a rare prospect to share and learn with the other students properly.

When the students engage in the learning process, the dissemination of ideas and information takes place among the members of the group. It is a form of co-operative learning that clears comparable types of doubts in their learning. The one-to-one discussion augments the results in learning. Students prefer to discuss, to raise questions in order to gather information with their individuals of their age group rather than elders or teachers. This move of peer group education is based on the principles of a student’s curiosity.

The student is able to exhibit the feelings of acceptance, ignorance, confession, more freely only amongst the peer group or friends. So, the teachers must make use of this psychological teaching activity to improve their learning skills.

Benefits of Peer Group Learning
- It promotes interest in studies and increases the span of attention among the students.
- These activities help the learners understand the school environment and other children.
- It reinforces the learning skill of the helper and also the listener’s skill.
- It develops helping attitude and creates interest in problem solving. It also develops knowledge-sharing.
• It develops interest in acquiring new knowledge and in doing new things.
• Peer group learning advances the skills of communication and children become independent.
• It improves the student’s achievements and the quality of school education.
• It develops constructive cooperation and friendship.

3. Small Group Learning

Man is a social animal. The important motto of education is to make a man affable. It is noticed that there exist erratic behavioural differences in the activities of man among his peers, the elders and with the children.

Benefits of the Group Learning Method

Cooperative attitude is seen in the sharing of ideas with the other members in a group. It helps in the clear transformation of data by the learners. It provides the opportunity of thoughtful and efficient relationship. It gives exposure to leadership quality training and problem-solving method. It provides an independent and fearless learning environment. The small group learning offers sufficient explanations, clarity of intellect and activity skills. Therefore, it is certain that the quality of one’s activities depends upon the additional learners and his communications with them.

Children prefer group involvement to individual learning for their learning activities. In a group their participation, interaction with others takes place in a desirable manner. As a member, his mentality, thought, feelings and activities functions in a different way.

A group consists of affiliates having similar common objectives. It is vital that the thoughts, feeling and acts of the affiliates are similar in the group.

A small group may comprise of four or five members. It can also be a big group with several members. The learning activities in a small group are discussed in detail below.

The class students are divided into small groups comprising four to five members and each group has its own group leader. It is known as small group learning. The subsequent points should be kept in mind while forming small groups in the school:

• In all small groups, the talented learners, the average students and the help seeking students for learning are equally distributed.
• The group leader warmly leads the other students to achieve learning objectives.
• The group members should be forthcoming with each other and also they should be flexible.
• Groups should be comparable and equally distributed in all aspects.
The same group cannot be kept for all subjects. Different groups for different subjects are formed because of the variations of the learning abilities among the students.

4. Whole Class Learning Activity

Whole class learning involves multiple activities like getting ready for learning, understanding the teacher’s explanation, asking for additional information, following the teacher’s principles and values, questioning, argument, conversation, clarifying doubts, self-expression of concept, conference, seminar, symposium, demonstration, workshop and so forth.

In the whole class learning, the education activities are more than teaching activities, i.e., student’s participation is more. Some of the activities like symposium, seminar, debate, conversation, and workshop are discussed below. No individual achievement is focused but it adds to the whole class group objectives. The quality of actions in a group develops in this method among the learners.

It gives way to self-expression and brings out the inner aptitude of the learners naturally. The teacher must be well-off in his resources, he should give significance to the learner-centred approach, involve in the teaching-learning process for the best outcome, set up necessary and relevant tools and tricks for the contents. If the teacher possesses and fulfills the above given qualities, it is evident that the entire class learning method will strengthen the desirable behavioural changes in a short period. Some of the following topics are more suitable for older children.

Group Discussion

The students assemble in one place in order to achieve the educational objectives through listening, speech and other activities. This is called a group discussion.

Role of Teacher in Group Discussion

The teacher regulates the group discussion of the students. The teacher chooses and gives the title for discussion. Generally, the title involves asking particular types of such as answering What? Why? How? The students respond to the topic by providing constructive ideas, suggestions and solutions. Further, they are discussed in the group.

Conducting the group discussion

The teacher and the students collect in a particular place at a particular time.

Every member is allotted a time slot and he has the right to address his ideas about the particular topic to the other members in the group. If the selected topic for discussion is not as per the learning objectives, it becomes an overall personal opinion of members in the group discussion. The learning objectives like complete comprehension, change of attitude, problem solving, moral development, language proficiency are the main focus areas of the teacher to make the group discussion more appropriate and effective.
Debate

A problem can be solved from the beginning till the end by a group discussion. Also, some complicated topics cannot be solved in the discussion. In this form of situation, debate helps to find a solution for it.

(1) Which is to be given priority in the school curriculum? Arts or Science?
(2) Who is more accountable for a child’s moral behaviour? Teachers or Parents?

A debate on the above topic will find a suitable answer.

Conducting Debate

There are two groups in debate. Each group consists of four or five orators. There is a leader in each group. The leader in both the groups begins the argument and concludes the points favourable to both the groups respectively. The members of both the groups argue and counter argue by speaking about the pros and cons of the topic.

One group will support for more arts subjects in the school curriculum. This group will present the advantages of arts topic and the disadvantages of science subjects while the other group will disagree and favour more science subjects to be incorporated in the school curriculum. This group will further highlight the demerits of arts curriculum in school. Normally, each member is allotted five minutes to express his views.

When the members finish their speech, the leaders of both the groups will conclude their talk by presenting all the favourable points. The group leader of each group is allotted seven minutes. The time duration in debate is flexible, and it can be changed according to the programme.

Role of Teacher in Debate

The teacher serves as the arbitrator. He gives judgment after listening to the arguments of both the groups and supporting facts without any prejudice. The non-participants in the debate behave as spectators and enjoy the debate. They also take down notes.

Uses of Debate

- Arguments and counter arguments in debate pave the means for sound thinking.
- It eliminates stage fear and develops presentation skills.
- Irrelevant concepts are rejected in debate.
- Clarity in thinking.
- It enhances imaginative skills and sense of humour amid the students.
- It develops the skill in mastery, briefing in language skill and decision making.
Seminar

The classroom seminar is an opportunity for the students to participate and discuss on the stage. The teacher acts as the chief guest of the seminar.

Aim: The aim of seminar is to provide opportunities to the contributors to speak on particular topics. Simultaneously, the non-participants come to know the common concepts concerning the topic.

Role of Teacher in the Seminar

The teacher informs about the topic ten days prior to the seminar. He gives opportunities to five or six students to speak in the seminar. The teacher conducts the seminar as the chief guest. The teacher begins the seminar by giving an introduction on the topic, its relevance and its significance in brief. Then he calls upon the members one by one to speak on the topic.

The orators in the seminar present their views on the given topic within the stipulated time. After their speech, five to ten minutes are allotted to the spectators to clarify their queries by asking questions. The orators reply to the queries. After the question hour is over, the seminar draws closer to an end when the teacher correlates and sums up all the relevant views of the topic.

Symposium

A symposium provides opportunities to the students to analyse and speak on a topic deeply and broadly.

The teacher announces the date of the symposium ten days before the symposium. He declares the topic and its sub topics to the orators in advance and also guides them in the kind of approach to be taken. He authorize five or six members to speak in the symposium.

The teacher as the head of the symposium speaks briefly about the objective and importance of the topic. Then he invites the orators one by one to give their speech.

Each orator broadly, deeply and vividly approaches the topic or sub topic and expresses his different views. He is allowed either to speak or read the material. The non-participant spectators gather information while attending the symposium. There is no question hour in the symposium. The teacher at the end sums up the speeches of the orator.

The manuscript / paper presentation of the orator can be accumulated and published as a book.

For example, if the Objectives of Education are declared as the topic for symposium, the sub topics like the Nation’s progress, divine consciousness, individual welfare, communal harmony, trade and industry enhancement and development of moral values can be given to the orators to analyse broadly and deeply.
**Workshop**

A workshop is a mixed type of teaching method; a kind of combination of discussion and action plan. Workshop encourages the students to conduct activities. Unlike seminar which gives priority to communication and reading, symposium gives more importance to competency training; workshop develops the skills of analysing the content based activities. The major objective of workshop is to develop the individual’s competency.

### 12.3 EFFECTIVE USE OF INDOOR AND OUTDOOR SPACE

What is the concept of “learning surrounding”? Where are the outdoor learning surroundings? There are two main action categories of a learning surrounding. One of them is the formal actions managed by teachers within the confines of the school curriculum, and the second one is the informal action realized primarily by children according to their own preferences. Both types contribute to physical, cognitive, social and emotional development of children (Loebach, 2004). In this section, we will focus more on the learning surrounding realized outdoors by children’s play action. Amongst such spaces are the activity areas which advance children’s physical development and skills according to their abilities; observation, exploration and quest areas which contribute to their cognitive development; areas that improve their creative potential and help them set up new products; areas which hold up their social development and which provide them the opportunity to be with others in the society; and areas where they will get information about living things, environmental events and life cycle. We have briefly discussed this topic in Unit 5.

**Indoor Environment**

Rich surrounding indoors have an immediate consequence on the quality of children’s learning and development. What is a rich environment? It is attractive, interesting, comfortable and appropriate for the child or children who use it. For some children, it becomes like a different home where they eat and sometimes sleep. Suitable surroundings for a young baby will be very different from a suitable environment for a four or five year old though some features will be the same. The surrounding should be attractive and make children feel safe and secure and happy to be there and they should also be places where children can confidently play and learn.

Indoor space needs careful preparation as it needs to be flexible to accommodate children’s changing interests and needs. Resources should be of the highest quality. Books need to be well maintained and reflect the fascination of children. Resources such as blocks for building, chalks, felt pens or pencils for mark-making, clothes for dressing up in and small items such as dolls, cars and jigsaws should be accessible by children.
Outdoor Environment

Children gain enormous payoff from learning outdoors. Ideally, they should have access to outdoor space on a daily basis. Being outdoors allows them freedom of movement. Primarily, they get to breathe clean air and come across various colours as well. Being outdoors enhances confidence and allows opportunities for big scale play, problem-solving and creativity in the companionship of other children. Physical activity gets improved. So is calculated risk taking. In outdoors, children’s use of language is five times greater than indoors. Resources do not need to be expensive. Some logs, Old tires and crates will stimulate imagination and can be used in a number of ways. A sheet can become a den. Flower pots and hanging baskets and a ‘wild area’ can give the feel of the natural world. The outdoors supports active wisdom and when balanced with quiet areas for reflection can really enhance learning of children.

Check Your Progress

1. What are the educational activities conducted inside the classroom by children?
2. What are the benefits of learning activities for children?
3. List two benefits of individual learning.
4. What is the main objective of conducting a workshop among children?
5. Name the two main types of learning surroundings for the children.

12.4 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. A child carries out many activities in the classroom. He executes his activity as an active listener, does reading and writing in the classroom, maintains the class notes, participates in teacher/taught interaction, i.e., he is asked to answer the question by the teacher, does the blackboard work and so forth.

2. The benefits of learning activities for children are the following:
   - They enhance the span of attention.
   - The children develop into extroverts.
   - Negative attitude and despair is reduced.
   - Provide opportunities for self-expression.
   - They eliminate the hesitation in participation.
   - Expected learning product takes place easily.
   - Increases blissful experiences.
3. Two benefits of individual learning are the following:
   (i) In this method, teaching method is based on the individual learning
       differences.
   (ii) There is a chance for the learner and the teacher to interact with each
       other.

4. Workshop encourages the children to conduct activities. Unlike seminar
   which gives priority to communication and reading, symposium gives more
   importance to competency training; workshop develops the skills of analysing
   the content based activities. The major objective of workshop is to develop
   the individual’s competency.

5. Indoor surrounding and outdoor surrounding are the two main types of
   learning surroundings for children.

12.5 SUMMARY

- Educational process consists of many informal and formal learning activities.
  At the primary stage, the child gains almost all the know-how through informal
  learning activities.
- For the all-round development of the child, the teaching should be linked
  with real experiences through various learning activities.
- Psychologists say that if the child wants to do something, he tries to imitate
  the behaviour pattern of language and habits from his environment.
- Children learn more in small amount of time through various learning activities.
  The teacher becomes more mindful about the content whilst using such
  activities.
- Learning activities vary on the basis of circumstances and conditions.
  Activities in the classroom conditions will not be same as the actions outside
  the classroom situation.
- Children exhibit interest in many activities outside the school. For example,
  they take interest in exhibitions, excursions, campaigns for the welfare and
  awareness of society and do social work.
- Some learning experiences easily overlay the way for the learning activities.
  For example, singing, storytelling, playing, story listening, dancing, running,
  searching, making animal sounds, connecting, dismantling filling, tapping,
  rotating, drawing, deranging, colouring, dolls collection are some of the
  activities that can be provided as learning experiences.
- Peer group learning is done by students who are having identical or similar
  levels of talents, interests, age, desire and character. They are involved in
  learning activities.
Cooperative attitude is seen in the sharing of ideas with the other members in a group. It helps in the clear transformation of data by the learners. It provides the opportunity of thoughtful and efficient relationship.

A group consists of affiliates having similar common objectives. It is vital that the thoughts, feeling and acts of the affiliates are similar in the group.

Whole class learning involves multiple activities like getting ready for learning, understanding the teacher's explanation, asking for additional information, following the teacher's principles and values, questioning, argument, conversation, clarifying doubts, self-expression of concept, conference, seminar, symposium, demonstration, workshop and so forth.

A workshop is a mixed type of teaching method; a kind of combination of discussion and action plan. Workshop encourages the students to conduct activities.

Rich surrounding indoors have an immediate consequence on the quality of children's learning and development.

Children gain enormous payoff from learning outdoors. Ideally, they should have access to outdoor space on a daily basis. Being outdoors allows them freedom of movement.

### 12.6 KEY WORDS

- **Pedagogical**: It is related to the methods and theory of teaching.
- **Symposium**: It is a formal gathering in which experts express their views on a particular topic with minimal participation of audience.
- **Seminar**: It is an occasion when a teacher or expert and a group of people meet to study and discuss a particular topic.
- **Debate**: It is a discussion about a subject on which people have different views.

### 12.7 SELF ASSESSMENT QUESTIONS AND EXERCISES

#### Short Answer Questions

1. Why is it necessary to plan and organize educational activities for children?
2. Write short notes on the following:
   (a) Small group learning
   (b) Whole class learning.
3. Write four learning activities which can be executed inside the classroom and outside classroom.
4. List four formal and non-formal learning activities which can be used by you while teaching students at the primary level.
5. What is the difference between individual learning and peer group learning?
6. Mention the role of teacher in a group discussion.

**Long Answer Questions**

1. Analyse the importance of educational activities.
2. Explain the process of conducting a debate.
3. How does the teacher assist in conducting a seminar among students?
4. Examine the effective use of indoor and outdoor space for conducting learning activities.
5. Discuss the steps to be followed in organizing a learning activity in the school.

**12.8 FURTHER READINGS**


Indian Association for Pre-School Education. 2000. *Activity-Based Curriculum for Pre-School Education*. Dehradun, India.

Indian Association for Pre-School Education. 1999. *Strategies for Effective Pre-School Education*. Dehradun, India.
UNIT 13 TEACHING AIDS AND GAMES FOR YOUNG CHILDREN

Structure
13.0 Introduction
13.1 Objectives
13.2 Improvised Teaching Aids using Rural and Urban Waste Materials
13.3 Organizing Simple Traditional Games for Young Children
13.4 Answers to Check Your Progress Questions
13.5 Summary
13.6 Key Words
13.7 Self Assessment Questions and Exercises
13.8 Further Readings

13.0 INTRODUCTION

All of us have memories of our teachers who had educated us during school or college years. A few of them were good, whereas others were not so good. You will often find that apart from being caring, sympathetic, pleasant as well as helpful in their teaching they had one thing in common among them. They used new methods, techniques and teaching learning materials to make teaching interesting, thus, helpful. Teaching Learning Materials (TLMs) also known as instructional aids, assist a teacher in accomplishing the learning objectives formulated by her/him prior to teaching-learning activities start. In this unit, we will introduce you to a range of teaching-learning resources, which are used to make classroom teaching and education interesting and successful.

We will also give details on how to prepare low or no cost TLMs from nearby available resources. Involving students in this enterprise will be experiential learning for them.

India is developing a country, in our country most of the population lives below the poverty line. Due to this economic problem the government is not in a position to supply the requisite expensive teaching materials to all schools. Lack of teaching materials may create some learning disability. To develop a solution, teachers can use less costly or no cost teaching material in pedagogy of science and technology.

Elementary education in India means eight years of teaching from 6 to 14 years of age. The government has made elementary education obligatory and free of charge. During ‘Sarve Sikhsa Abhiyan’ primary schools were improved and they were named as elementary schools. The National Policy of Education
(NPE), 1992 policy recommended, ‘Every effort will be made to extend science education to the vast numbers who have remained outside the pace of formal education.’

There is a shift in classroom pedagogies from the usual archetype used by teachers over the world. Conventional teaching-learning methodologies are rapidly giving way to new, innovative and efficient pedagogies. Chalk-and-talk though not fully abandoned, has become somewhat outdated and is considered pitiably insufficient in the contemporary educational scenario. All over the world, teachers are innovating new instructional aids to make teaching-learning processes more interesting and helpful. Learning takes place when the environment is exciting and active. Making and using teaching and learning materials is a key part of teaching in many sections of the developing world. Import of teaching materials from new countries at a given level is a heavy monetary burden for developing countries like India. Cheap teaching aid is that which fashioned by the factories of neighboring areas in the vicinity. Its auxiliary parts are also easily accessible and its price is always low than trade in apparatus from other countries. Low-cost teaching aids entail negligible or nil input costs as they are made from domestic waste and useless items or from resources readily obtainable in our immediate environment and natural surroundings. Cheap teaching aids can be used in any class from nursery to senior secondary schools. Of course, the type as well as number of aids to be used in a given topic would vary from one class to another. However, broadly speaking, primary and middle school students can be engaged in building simple items with basic materials such as bits of paper, cardboard and so forth. Whereas senior school students could build up teaching aids using metal, wood and others. Appropriate use of available waste materials as low cost-no cost experimental collection, model activity lead to development of creative skill and through the creative skills the child gets hold of the basic objective of learning science-viz. knowledge, application and understanding. It will be achievement for the teacher, if he can use low cost-no cost teaching material.

13.1 OBJECTIVES

After going through this unit, you will be able to:

- Explain the importance of teaching aids in enhancing students’ learning
- Prepare low cost teaching aids using locally available materials

13.2 IMPROVISED TEACHING AIDS USING RURAL AND URBAN WASTE MATERIALS

Teaching aids are used to expand the education of students in classrooms. A teacher uses it to make teaching-learning helpful. Teaching aids also help learners achieve
the learning outcomes after classroom teaching and learning. Some of reasons to use teaching aids in classroom are described as follows:

(i) **Motivate learners**: Capturing interest is the first step to any education and teaching aids help in getting the attention of learners in the classroom. Once motivated to look at teaching-learning materials, the children are curious to learn new things. Teaching-learning materials provide a range of stimuli, which assists in making classroom teaching most helpful.

(ii) **Help in longer retention of information**: The more the number of sensory conduit involved in interacting with teaching-learning materials, the longer will be the withholding of information. Therefore, the learning will be helpful and will last long.

(iii) **Facilitate holistic learning**: Learning objectives to be attained through classroom teaching are in all domains-affective, psychomotor and cognitive. Therefore, to realize varied objectives, numerous education experiences need to be granted, which can be done through the use of teaching-learning materials.

(iv) **Help in organizing classroom teaching**: As a teacher, you need to ensure that the activities are presented in a sequential manner to facilitate the learning of learners. You can use visual or verbal teaching-learning materials to present precise data in sequentially organized manner. The teacher can make use of verbal communication to organize teaching in the classroom.

(v) **Facilitate change in attitude**: Teaching aids also help in altering attitude of learners towards learning in general and subject content in particular.

(vi) **Practical applications**: Teaching aids show application of theoretical knowledge in day-to-day activities. The theoretical knowledge studied in class is shown in tangible form through teaching aids for learning.

(vii) **Making learning fun**: Teaching aids help in making learning activity fun in the classroom. Students enjoy handling new objects and learn new notions in the classroom.

(viii) **Concept formation**: Teaching aids facilitate the arrangement and achievement of concepts among children. They concretize the non-figurative concepts; thus, children are able to appreciate them and not route to just rote learning.

Therefore, utilization of teaching aids in classroom teaching is an essential feature which should be emphasized upon by the teacher while designing and creating lesson.

There are a range of teaching aids to choose from depending on the circumstance, level of learners and accessibility.
Teaching – Learning Materials

Let us discuss how to make teaching-learning material using local resources with some examples.

(A) Making a Neighbourhood Map: You want to educate children about their neighbourhood and imagine using a map for teaching. You can make the map of the neighbourhood with the help of the students nearby.

Steps

- Find and get a large sheet of papers to draw the map.
- Sit in groups and identify important and most frequented places in the neighbourhood.
- Make a catalogue of places.
- Start from your school.
- Then you can move around in maps.
- You will get a neighbourhood map to teach your learners.
- The map will help you in teaching.

(B) Flannel Board: Flannel boards can be used in classes in variety of situations.

Benefit of using a flannel board is that it gives flexibility of using material to teach students.

Steps in making the flannel board:

- A plywood board of desired dimension should be obtained;
- Cloth like Velvet, Wool blanket any other hard textured cloth can be used. The cloth needs to be long-drawn-out and set on the board with the help of nails.
- Flannel boards are used to messages, display pictures. You can add, move the pictures easily on flannel board
- For pictures to attach on flannel board a little piece of sand paper or two way tape ought to be used on the back of the pictures.

(C) Low Cost Experimental Aids

(i) Expansion of Gases: A simple experiment to show this can be made from a fused bulb, a candle, a balloon and a match stick. The steps involved are described briefly here.

- Remove inner content of fused bulb. Ensure that no sharp edges are left.
- Fix a balloon on the open end of the bulb
- Heat the bulb.
- The gases expand and, thus, the balloon will blow up.
(ii) Expansion of Liquid can also be demonstrated. You will need in addition, to earlier experiment with gases, an empty ball point refill and a cork. The steps involved are described briefly here.

- Empty fused bulb.
- Fix a vacate ball point refill inside the cork.
- Fill the bulb with coloured water as spreading out will be more evident in coloured water.
- Fix the cork on the bulb.
- Heat the bulb.
- You will see the water over flowing through the replenish. This shows that gases get bigger on heating.

(iii) Use of Cardboards: Cardboards may be supportive in teaching concepts in math. Shapes, subtraction, addition, sizes, fraction, multiplication and other concepts can be taught using cardboards.

(iv) Use of Match Sticks: Match sticks can also be used for teaching geometrics to children. Two sticks may be connected by a bicycle valve tube or any other thin tube material.

The above examples provide a suggestive list of low and no cost teaching and learning materials. You can try to make a large number of teaching aids at home at very little cost. You only have to let your imagination run free and you will realize that you have a basket full of teaching aids to choose and use.

Educational resources are also available as open resources on Internet for teachers to use. It is known as Open Educational Resources (OER). As a teacher, we may not reinvent the wheel again but use the teaching-learning materials available on Internet and re-use for others to adapt, modify, reuse and distribute with proper acknowledgement to the original author or the creator.

**Advantage of Low cost- No cost teaching aids:** The major concerns of developing countries are food supply, nutrition, health, livelihood and economy and growth. At the level of the student and his family, food, health, and livelihood are primary concerns. In developing countries, the requirement is great for self-reliance in (science) teaching at country level and more importantly at teacher level. The use of cheap/No-cost teaching material for science tutoring has certain great advantages in developing countries like India:

- **Cheapness:** Investments in apparatus for all students at a given level are a heavy financial burden for a developing country. Essential follow-up procedures like teacher training in the pedagogical and technical use of the apparatus, provision of maintenance, and replenishment are sometimes not accomplished because of lack of funds.
- **No fear of loss:** There is another risk in connection with the high cost of apparatus. It is sometimes safely locked up in the school and not used at all, because the teacher is afraid that he/she or the students might break it.
• **Proper use:** The costs of locally produced tools are often low but not always, lower than the imported apparatus. When calculating the cost of the apparatus some factors should be kept in mind. These include durability of the apparatus, additional installation costs, service costs, cost of teacher and technician training.

• **Same principles:** Low cost apparatus illustrates the same principles as imported expensive apparatus.

• **Maintenance and repair:** If apparatus is simpler in design, teachers, laboratory technicians and local craftsmen are more likely to be able to carry out small repair.

• **Relevance to the curriculum:** In practice, creation of low cost apparatus is often a little time dependent in curriculum design.

• **Higher school content:** Apparatus made of parts and bits and pieces familiar to the students is more likely to help the students.

• **Self-reliance:** It enhances the confidence and expertise of the educator in the emerging economy.

• **Related to real life:** Teacher need to understand the importance of practical work in science education as well as the use of common resources in lab activities.

• **Economic:** It is very difficult to establish science laboratories and demonstration rooms due to financial constraints. Many science apparatus for more than quite a few experiments can be produced by low cost variety.

• **Helpful for teacher:** As the classroom is completely filled with no space, the teacher cannot provide personal attention to students.

• **Active method, Group work, Fun:** Creation and subsequent using of low cost apparatus encourages the active method and faction work can be great fun, each pupil can make his or her own apparatus and even take it home. It is the active method of learning.

• **Strength:** Cheap teaching aids can be used for added and illustrative education in teaching sciences as well as humanities. However, they are most suitable for subjects like science, mathematics, geography and art & crafts. In a resource-starved economy, where the number of individuals to be educated is huge; it becomes essential to understand how the household waste items and trash can be used in preparing cheap teaching aids for teaching-learning methods.

With creativity and imagination, scraps of metal, plastic, wood, paper, rubber and other items can be used to prepare utility items, which can be used as useful teaching tools. The wide use of cheap teaching aids will not only boost teacher/student creativity and involvement, but also help the educational institutions.
13.3 ORGANIZING SIMPLE TRADITIONAL GAMES
FOR YOUNG CHILDREN

A lot of learning takes place through games and much of it occurs on its own, with relatively little way or monitoring by the teacher. Learning is an incidental product of the game, incidental because the players do not engage in recreation in the game with the intention of learning rather their purpose is to have fun.

Since games are played by children themselves, they excite more interest than most of the other types of preschool activities. Because of this, the education of a child that takes place through the medium of games is more significant and lasting. In a game every child is occupied. Each has to do a little and they get an immediate feedback which motivates reflection like ‘I could not strike the ball into the net. Next time I will do it like this.’ In this manner, children analyse their actions, think of a substitute and test it at the next opening. This is the commencement of hypothesis testing - the basis of scientific thinking. This exercise helps their muscles to develop strength, develop coordination and refine gross and fine motor skills.

Common playground activities ensure a variety of muscular movements and exercise. Consider a slide. Children run up to a slide, they also climb on to the ladder to get to the top which involves a change in visual viewpoint and, therefore, synchronization of the eyes, hand and feet, they adjust themselves on the top of the slide and balance. Change their breathing and visualization at the new height, let go themselves and experience motion and pace and finally come to sudden rolled stop. The children are able to carry out eight different gross motor movements in a span of 3-4 minutes. This sequence is repeated again and again. Each time children’s movements become a little better synchronized, a little more improved and their gross motor development is fostered.

Enhancing Confidence and Self-Esteem

The mastery and control over one’s body that is a consequence of outdoor and indoor play activities creates confidence and contentment in children and gives them a feeling of sufficiency, a feelings that they can handle challenges. You know that the basics of self-esteem and confidence are laid throughout the early years of childhood and it is significant that children go through meaningful and positive experiences. Next time you are in a playground, notice the joy and the pride on children’s faces as they successfully negotiate a difficult turn on their tricycles or balance them on the tricky seesaw.

Games have the potential to teach children many societal values. Through games children discover about taking turns, sharing with a slower player, to be modest about one’s skills, to abide by the decision of the greater part even if it is not to one’s individual liking to be helpful and friendly, losing cheerfully, to comfort the ones who have lost, to encourage those who are shy, to share apparatus in short supply, to be able to argue points without ill will, to give the first turn to
somebody else, to be fair and honest. Therefore, making sure competition does not dominate the play. Instead cooperation should be stressed. Team games where children have to participate together and pool in their labours to win, tend to generate cooperation. In a board game, where each child is an individual player if you help each one to increase his or her score then everyone wins, rather than highlighting that only highest score is victory. In a race if each child gets a reward, coming first becomes less important. Hence, it can be said that games stimulate enhancement of cognitive skills of children.

Check Your Progress
1. State any two significant reasons for using teaching aids in classrooms.
2. Mention three advantages of using cheap/no-cost teaching material in classrooms.

13.4 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. Two significant reasons for using teaching aids in classrooms are the following:
   (i) Motivate learners
   (ii) Facilitate holistic learning

2. Three advantages of using cheap/no-cost teaching material in classrooms are the following:
   (i) Inexpensive
   (ii) Proper use
   (iii) Self-reliance

13.5 SUMMARY

- Teaching aids are used to expand the education of students in classrooms. A teacher uses it to make teaching-learning helpful.
- Utilization of teaching aids in classroom teaching is an essential feature which should be emphasized upon by the teacher while designing and creating lesson.
- Flannel boards can be used in classes in variety of situations. Benefit of using a flannel board is that it gives flexibility of using material to teach students.
- Educational resources are also available as open resources on Internet for teachers to use. It is known as Open Educational Resources (OER).
A lot of learning takes place through games and much of it occurs on its own, with relatively little way or monitoring by the teacher. Learning is an incidental product of the game - incidental because the players do not engage in recreation in the game with the intention of learning; rather their purpose is to have fun.

Common playground activities ensure a variety of muscular movements and exercise.

The mastery and control over one’s body that is a consequence of outdoor and indoor play activities creates confidence and contentment in children and gives them a feeling of sufficiency, a feelings that they can handle challenges.

Games have the potential to teach children many societal values. It can be said that games stimulate enhancement of cognitive skills of children.

**13.6 KEY WORDS**

- **Elementary education:** It is also known as primary education. It covers the first 6 to 8 years of a child’s education.
- **Teaching aid:** It is the material used by teacher to supplement classroom instruction or to stimulate the interest of students.
- **Rote learning:** It is the memorization of information based on repetition.
- **Flannel board:** It is a board covered with flannel to which paper or cloth cut-outs will stick, used as a toy or a teaching aid.
- **Open Educational Resources:** These are any type of educational materials that are in the public domain or introduced with an open license.
- **Hypothesis:** In science, a hypothesis is an idea or explanation that you then test through study and experimentation.

**13.7 SELF ASSESSMENT QUESTIONS AND EXERCISES**

**Short Answer Questions**

1. Give examples of using local resources to prepare teaching-learning materials.
2. What are the advantages of using cheap/no-cost teaching material in classrooms?

**Long Answer Questions**

1. Examine the use of teaching aids in classrooms.
2. Analyse the significance of organizing simple traditional games for young children.
13.8 FURTHER READINGS


Indian Association for Pre-School Education. 2000. *Activity-Based Curriculum for Pre-School Education*. Dehradun, India.

Indian Association for Pre-School Education. 1999. *Strategies for Effective Pre-School Education*. Dehradun, India.
UNIT 14 ROLE OF ASSESSMENT IN EDUCATIONAL ACTIVITIES

Structure
14.0 Introduction
14.1 Objectives
14.2 Monitoring Child’s Progress in Educational Activities
   14.2.1 Methods of Child Assessment
   14.2.2 Some General Guidelines for Implementing Assessment
14.3 Assessment Schedule for Child’s Progress in Educational Activities
   14.3.1 Assessment Strategies
   14.3.2 Teacher’s Role in Monitoring the Progress of Students
14.4 Answers to Check Your Progress Questions
14.5 Summary
14.6 Key Words
14.7 Self Assessment Questions and Exercises
14.8 Further Readings

14.0 INTRODUCTION

Assessment plays an important role in education. It is one of the important components of education. The teacher is able to grasp information about a child’s progress only after regular assessment. In this manner, the teacher is also able to comprehend whether the child needs further support or assistance in understanding the concepts being taught in the classroom. Assessment gives the direction about the type of instruction that is needed to best serve their students. At the same time, assessment also provides feedback concerning the teaching methods and teaching strategies which should be used to achieve the goals set by the teacher. The effectiveness of teaching gains momentum by assessment. Childhood assessment is a process of gathering information about a child, reviewing the information, and then using that information to plan educational activities that are at a level, which the child can understand and is able to learn.

Assessment helps the educators in knowing about the child, i.e., what he knows and what are his abilities. The teacher can prepare the record of the child’s growth and development by observing and documenting a child’s work and performance over a specific time period. This can help the teacher in planning the appropriate instruction and curriculum for each child. The parents also come to know about the strengths and challenges of their child, and understand the progress of their children at school with the help of the assessment tool. Accordingly, they are able to plan for the learning activities of their child at the home.
14.1 OBJECTIVES

After going through this unit, you will be able to:

- Analyse the use of assessment tool in monitoring the progress of children’s learning
- Prepare the assessment schedule for child’s progress in educational activities

14.2 MONITORING CHILD’S PROGRESS IN EDUCATIONAL ACTIVITIES

Assessment is a tool which provides all the critical information about a child’s growth and development to teachers and parents.

- Assessment provides a record of the child’s growth in all development areas: cognitive, physical/motor, language, social-emotional and approaches to learning.
- It helps identify the children who may need additional support and determine if there is a need for intervention or support services.
- It is helpful to the educators in planning individualized instruction for a child or for a group of children that are at the same stage of development.
- It identifies the strengths and weaknesses within a programme and information on how well the programme meets the goals and needs of the children.
- It provides help to educators and parents or families to use a strategy to support their child.

14.2.1 Methods of Child Assessment

Informal child assessment methods are as follows:

(i) Observations
(ii) Collecting data and children’s work
(iii) Teacher ratings

Formal child assessment methods are as follows:

(i) Questionnaires
(ii) Standardized testing

Both methods help inform educators and parents about a child’s progress and are, thus, effective.

- Observations

On a regular basis, the educators can observe all features of development, comprising academic, language, social-emotional and physical development of the children.
• **Teachers Ratings**
  
  For assessing children’s cognitive and language abilities as well as their social-emotional development teacher rating are useful.

• **Portfolios**
  
  The record of data that is collected through the work children have produced over a period of time is known as portfolio. The portfolio clearly displays the growth of a child’s progress. Portfolios play an important role in helping facilitate a partnership between teachers and parents.

• **Parent Ratings**
  
  Parents can also observe and detect the child’s behaviour and can help in the child’s development in all arenas.

• **Standardized Tests**
  
  Standardized tests are tests that are administered and scored in a standard manner and are often used to assess the performance of children in a programme.

**14.2.2 Some General Guidelines for Implementing Assessment**

Let us go through the general guidelines for implementing assessment of children in classrooms.

**Assessment depends on instructional goals and approaches:** Different types of assessments have different purposes. It is important to first determine what should be measured; then find the assessment programme that best assesses those goals.

  * **Assessor knows the child:** The adult conducting the assessment should have a pre-existing association with the child. Preferably the evaluator should be the educator— the teacher.
  * **Assessment is reliable:** Assessment should take place in a child’s normal setting. The assessment should reflect everyday relationships and experiences. It should be conducted in familiar contexts and settings (such as the classroom).
  * **Observations are continuing and varied:** For a comprehensive assessment, observations should be made at a variety of children’s activities and be ongoing in order to fully comprehend the progress of a child.
  * **Assessment is a cycle process:** Although specific methods for assessment tools vary, the process is cyclical. The cycle allows educators to make changes in their curriculum to better serve children in their programme.
14.3 ASSESSMENT SCHEDULE FOR CHILD’S PROGRESS IN EDUCATIONAL ACTIVITIES

Assessment has many functions to play in the child’s progress which are as follows:

- Recognize current knowledge and skills of students
- Address and plan for the strengths and needs of students
- Evaluate student’s progress over time
- Stimulate student motivation and objectivity
- Evaluate programme efficiency
- Impart information to parents about the progress of their child

Components of Assessment

Early childhood assessment is composed of three essential, interrelated components:

(i) Documentation (data collection)
(ii) Evaluation (comparison to a standard)
(iii) Communication with family (sharing both progress and performance)

1. Documentation

Early childhood educators have traditionally cherished and promoted child observation and programme assessment as being essential for high quality programmes for children. Assessment is the process of collecting information about students in order to make judgements about their education. To get a well-rounded picture of the student’s understanding and progress, the plans used for assessment must be complete. Exceptional talents, interests, knowledge, skills and progress—all this information is documented by observing, collecting and reviewing children’s work over time. Teachers identify that uneven growth is normal and expected, allowing them to assess children fairly. Assessment must involve observing children regularly and collecting samples of their work. The physical products formed can become part of a student portfolio, providing many examples of a child’s thinking over time.

In documentation, emphasis is laid on identifying what a child already knows and is able to do. Recognizing the student’s understanding promotes his competence and provides teachers with hints about what and how to teach. It gives a much more precise picture than evaluating them in an artificial setting. For example, asking a child to write an answer to a math problem may not show whether or not the child has problem-solving skills or can add digits. The child may not understand the meaning of the problem, may have stayed up too late, or may be coming down with the infection. In contrast, daily observation as the child explains many types
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2. Evaluation

The next step in assessment is comparing the gathered information of each student up to the standard. This step enables teachers to guide training, evaluate teaching strategies, track student progress and identify students with special needs that require additional interventions or services. Although standards are designed to provide regular expectations for all children, instruction must be molded to be suitable to each child’s individual strengths and needs. The perception gained from early assessment can serve as the basis for instruction. As teachers observe students at work, they can modify the learning experiences offered to meet the individual needs of their students.

3. Family Communication

Families want to know how their child is doing in school, and family members appreciate specific examples of student’s progress as well. Giving examples from their child’s schedule spent in the school provides several insights to the parents about the growth and development of their child. The teacher might tell some anecdote about the child to the parents which gives realistic analysis of the child’s performance in school. For example, a first grade teacher may report that a first grade student made excellent progress in learning the letter sounds. Although this may be true, it can give misleading impression to parents. At the beginning of second grade, the new teacher might inform the parents that the child is reading far below the grade level. Talking with families about standards, sharing student’s work samples, using rubrics in conferences, and differentiating between performance and progress are some ways to ensure that families are given an accurate picture of their students learning.

14.3.1 Assessment Strategies

1. Performance Assessment: Performance assessment assesses the children as they participate in day-to-day activities, write stories, solve problems, draw illustrations and so forth. Teachers observe and write short notes about the student’s thoughts and interactions. Teachers review the work of the students, determine their strengths and weaknesses, and keep track of their progress over time.

2. Comprehensive assessment: In comprehensive assessment, the range and scope of information and the type of data collected are based on the child’s social, emotional, cognitive and physical development. When a child exhibits the ability to write well in first grade, this reflects his fine motor development. A second grade student’s ability of learning in a cooperative learning group is dependent on both social and cognitive skills. Teachers
want information about the student’s strengths and weaknesses in all areas to enhance their decision-making and guide their instruction strategies.

3. **Standardized tests**: Criterion Reference Tests compare students with the fixed standard or set criteria for measurement. Teachers design programmes as to how to prepare children to handle standardized tests successfully. Teachers identify that the Criterion Reference Tests are based upon the core curriculum and confirm that what they teach is in alignment with (but is not limited to) the curriculum aims evaluated by the tests. Teachers provide opportunities to children to practice and gain familiarity with the test format. Teachers develop a curriculum timetable for the year, making sure crucial concepts are sequenced developmentally and allotted appropriate time slots. Hence, many standardized tests are now required in school settings for the assessment process.

4. **Self-assessment**: Self-assessment allows children to reflect on their progress. Teachers can help students assess their understanding by asking questions such as ‘What can I do very well? What are my individual strengths and interests? What skills can I improve? What is one thing on which I really want to work?’ Teachers help model self-directed learning as they help each student learn the language and process of setting, recording, and evaluating goals.

5. **Rubrics**: Rubrics permit teachers and students to share a clear understanding of performance expectations that represent quality work. Motivation and objectivity are enhanced as students understand the criteria for the evaluation of their work. Children can reflect on and evaluate their own work with a clear understanding of the standards. It is helpful to provide models to children showing examples of each level of the rubric. Children benefit from occasionally participating in the creation of a rubric for a class.

14.3.2 **Teacher’s Role in Monitoring the Progress of Students**

The teacher plays an indispensable role in monitoring the progress of the students.

- The teacher comes to know what the students need to know and be able to do in order to have a clear learning target.
- The teacher can plan formative assessments that will elicit data about the student’s growth towards accomplishment of the learning objective.
- The teacher is able to select an appropriate tool to track the student progress, for example, learning trackers, checklist, recording observations and so forth.
- The teacher shares with students how this progress check will take place. It helps the teacher to determine which students he will monitor for the day.
- The teacher helps in data collection.
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• The teachers interpret the data and make instructional decisions based on the data.
• The teacher provides students with feedback concerning their learning progress.

Check Your Progress

1. How does assessment as a tool assist in monitoring the learning of students?
2. Name the formal methods of child assessment.
3. Mention the functions of assessment in monitoring the child’s progress.
4. How does the teacher assist in monitoring the progress of a child’s learning?

14.4 ANSWERS TO CHECK YOUR PROGRESS QUESTIONS

1. Assessment as a tool assist in monitoring the learning of students in the following ways:
   • Assessment provides a record of the child’s growth in all development areas: cognitive, physical/motor, language, social-emotional and approaches to learning.
   • It helps identify the children who may need additional support and determine if there is a need for intervention or support services.
   • It is helpful to the educators in planning individualized instruction for a child or for a group of children that are at the same stage of development.
   • It identifies the strengths and weaknesses within a programme and information on how well the programme meets the goals and needs of the children.

2. The formal methods of child assessment are questionnaires and standardized tests.

3. Assessment has many functions to play in the child’s progress which are as follows:
   • Recognize current knowledge and skills of students
   • Address and plan for the strengths and needs of students
   • Evaluate student’s progress over time
   • Stimulate student motivation and objectivity
   • Evaluate programme efficiency
   • Impart information to parents about the progress of their child
4. The teacher plays an indispensable role in monitoring the progress of the students.
   - The teacher comes to know what the students need to know and be able to do in order to have a clear learning target.
   - The teacher can plan formative assessments that will elicit data about the student’s growth towards accomplishment of the learning objective.
   - The teacher is able to select an appropriate tool to track the student progress, for example, learning trackers, checklist, recording observations and so forth.

14.5 SUMMARY
   - Assessment plays an important role in education. It is one of the important components of education.
   - Assessment helps the educators in knowing about the child, i.e., what he knows and what are his abilities. The teacher can prepare the record of the child’s growth and development by observing and documenting a child’s work and performance over a specific time period.
   - Assessment is a tool which provides all the critical information about a child’s growth and development to teachers and parents.
   - For a comprehensive assessment, observations should be made at a variety of children’s activities and be ongoing in order to fully comprehend the progress of a child.
   - In documentation, emphasis is laid on identifying what a child already knows and is able to do. Recognizing the student’s understanding promotes his competence and provides teachers with hints about what and how to teach.
   - Families want to know how their child is doing in school, and family members appreciate specific examples of student’s progress as well. Giving examples from their child’s schedule spent in the school provides several insights to the parents about the growth and development of their child.

14.6 KEY WORDS
   - Rubrics: It is a set of instructions or rules.
   - Motivation: It is the process of stimulating people to actions to accomplish the goals.
   - Assessment: In education, the term refers to the variety of methods that educators use to evaluate, measure, and document the academic progress, skill acquisition, or educational needs of students.
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14.7 SELF ASSESSMENT QUESTIONS AND EXERCISES

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Short Answer Questions
1. What are the methods of informal child assessment?
2. Briefly mention the various assessment strategies used for monitoring the child’s progress.
3. Write a short note on the significance of assessment in monitoring the child’s educational activities.

Long Answer Questions
1. Mention the general guidelines to be followed for implementing assessment.
2. Discuss the components of a child’s assessment.

14.8 FURTHER READINGS


Indian Association for Pre-School Education. 2000. *Activity-Based Curriculum for Pre-School Education*. Dehradun, India.

Indian Association for Pre-School Education. 1999. *Strategies for Effective Pre-School Education*. Dehradun, India.