DEVELOPMENT OF AN INSTRUMENT TO ASSESS INTEGRATED PROCESS SKILLS OF PRE-PRIMARY SCHOOL CHILDREN

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DECLARATION

I, Raheesa Farsana. N., do hereby declare that this dissertation **DEVELOPMENT OF AN INSTRUMENT TO ASSESS INTEGRATED PROCESS SKILLS OF PRE-PRIMARY SCHOOL CHILDREN** has not been submitted by me for the award of a Degree, Diploma, Title or Recognition before.

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CERTIFICATE

I, Dr. ANEES MOHAMMED. C., do hereby certify that the dissertation titled, **DEVELOPMENT OF AN INSTRUMENT TO ASSESS INTEGRATED PROCESS SKILLS OF PRE-PRIMARY SCHOOL CHILDREN**, is a record of bonafide study and research carried out by **RAHEESA FARSANA. N** under my supervision and guidance, has not been submitted by her for the award of any Degree, Diploma, Title or Recognition before.

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Within the child lies the fate of the future

/Maria Montessori/

The development of human resources is a basic prerequisite for national building. Children constitute the most vital base of human resource endowment. Children are the most valuable future citizens of the country; this realization has generated immense interest and creative thinking in the field of child development and education (Curtis, 1998). A healthy generation of children will lead to a healthy generation of young people, who can contribute substantially to the development of the country. But to achieve this, one must pay proper and adequate attention to the children of today. “Children not only learn to learn but also foundation set for the future productive and participative citizen” (Wah, 2012). Each stage of child development has its own complexities and significance. Even developmental psychologist unanimously agrees that early childhood learning is the crucial one.

Child development is a continuous process. Welfare measures given for the children of the early childhood period has begun to be accepted as it was meant for basic education and lifelong learning. So this period considered as the first step towards entering the world of knowledge as well as healthy and purposeful life and helps children become more independent and confidence as well as promoting the development of the children. In wider sense it implies not only the acquisition of knowledge but also getting opportunity to develop abilities, skills, and qualities of character.

The investigation about child development process started from early sixties. The famous work of Benjamin Bloom shows the crucial significance of the early years in child development; he gives stress on cognition and the nature of intelligence is mainly due to the influence of Jean Piaget. Froebel put forward the idea of kindergarten for helping children to develop their potential through play. The suggestion of Maria Montessori to start Montessori school put forward the importance of training and planning of class for the proper development of the child. Developmental psychologists like Piaget, Bruner, Erikson, etc made a revolution in the education of preschool children and their studies help to know the developmental stages and their specific characteristics of all human beings regarding their talent needs and abilities.

Under the influence of Maria Montessori, Gijubhai Badheka and Tarabai Modak introduce Montessori system of education in early 19th century. They made Maria Montessori to visit India and establish a preschool in Montessori Method of teaching. After independence the preschool educational institution flourished in the form of Balwadi, Anganwadi, Kindergarten, Montessori, Quranic School, and High Scope. These institutions provide desirable educational experience for children aged three to six. Those experiences lay the foundation for children to develop fully and contribute in ways that foster growth, social stability, and prosperity. If the foundation is firmly built, then it is a sound base to benefit both the individuals and society. An individual's achievement in life depends largely upon what he has learned before the age of five. During this stage, the foundation for sound physical, cognitive, social, personal, moral and emotional development is laid. And these

years the child is in constant interaction with the environment. The outcome of these interactions determines the readiness of the child for school and other learning opportunities. This, in turn, influences the child's success in primary schooling. So it means that preschool is 'A small step for a giant exposure in a child's life'.

Pre-school education helps in laying down a healthy foundation for the all-round development of the child. It is the platform on which the child extends his thinking to the new areas, exploring new learning, giving a platform to show his abilities and to solve simple practical problems. It also helps them identify their true potential abilities, explore innate skills so that the child develops his potential and utilize his inner desire in positive ways. In early-stage child need to have certain basic skills to get to know the nature, reach existing information; solve simple problems that they have in their daily life.

In this period the children engaged in different activities such as drawing, coloring, clay work, craftwork, singing, dancing, play different games and varieties of activities, rhymes, and storytelling and movement activities. Through these pleasurable childhood activities and games, a child is guided to learn simple skills like reading, writing, and numbers that will be a benefit for a child to cope up with the pre-primary level of learning. All these build a very colorful and engaging learning atmosphere for kids. In schools, children explore a new world that channels them, booming their school-age learning. Most of the activities of the kindergarten are provided for the purpose of induction and orientation of the child in the school. Edward Y., and Smith (1961) Therefore, the pre-primary education should not be considered as a luxury but a basic need to foster all-round development of the child.

More and more pre-primary schools are coming up nowadays. But due to qualitative differences among these schools, an increasing number of pre-primary schools do not justify that readiness to primary school. Hence, the problem of readiness gives a holistic development to the young child still remains unsolved. Every child's mental abilities, perception, skills, attitude may be different from one another. In order to identify these abilities or skills, there is a need for proper assessment instrument in the early education program.

The instrument has certain characteristics such as:

- Inclusion of the test items to measure Integrated Process Skills.
- Inclusion of items independent of school learning materials.
- Inclusion of items with a bearing on our culture, home, community and nature.
- Construction of design to test the children's abilities like powers of abstract reasoning, critical thinking, leadership, communication, initiative, teamwork, flexibility and adaptability, social responsibility and creativity.
- Inclusion of items based on the sense of a variety of basic skills and concepts that are used to manage and modify actions in the completion of daily living tasks.
- Multiple opportunities provided to demonstrate competence on each process skills and a wide range of items addressing each process skills.

In India, very few tests are available for pre-primary school children. And for this reason, our program of pre-primary education faces difficulty in fulfilling the

needs of the children. This study attempts to develop an instrument to assess integrated process skills among pre-primary students.

Need and significance

Early childhood is a period of life not just quantitatively different from that of an adult but also qualitatively different. Birth to six years in a child's life is formative years for his/her development. So this stage considered as a crucial period in a child's life. In India, the last three decades, developmental psychologist has studied the various aspects of the young child's development. Developmental research consistently links higher quality childcare with a child's well-being, developing skills and subsequently adjustment in life. It claims that the first six years after the birth of a child is the period of optimum growth in the child's life.

Children enter into preschool life with a significant background of the learning experience from their family and outside the home. Preschool children come to the early setting as an active, experienced learner with a natural curiosity. These children are unique and eager to make sense of their world, to develop the relationship and to extend their skills (Sood, 1995). This development and skills lead to the germination of readiness for intellectual activities that will help for later years. In order to understand their development and skills, the proper instrument is needed.

Researchers have shown that the most crucial years for learning are the preschool years when the child's brain is growing and developing. These are the years' child needs proper nurturing and appropriate stimulation will reap lifelong benefits as children develop self-worth and a host of new skills that will serve them

for a lifetime. The preschool education serves to fulfill all the needs of young children - physical, motor, emotional, psycho-social and cognitive/intellectual (Venkataraman, 1984; Mohanty, 1984).

In UNESCO reports (1972) have mentioned “the importance of early childhood education in the later developments of aptitudes and personality is beyond doubt. None- the- less current educational system very frequently operates as if this phase of life was of no concern to them. Their shortcomings in this respect may obviously be explained in many countries by the inadequacy of resources available to meet the demand for education, but they also result from a failure to recognize the importance to the individual development of educational conditions in early childhood”. The planning commission in their sixth plan stated that “the pre-school years of the child is a period of its maximum learning and intellectual development and hence of gross potential educational significance.” Though the need and importance of preschool education have been described by various committees and commissions, there is no much more improvement in this section even after decades.

In Kerala, there is a booming of the pre-primary institution. Pre-school education provide a strong barrier against illiteracy, it provides a strong background for building human capital through an early interest in education and there is a scarcity of research in the pre-primary education sector. Mainly researches have been carried out only on the infrastructure, child’s development, different programs and policies. But the researches rarely focus on the instrument for measuring the skills and talents. According to Sun, Rao and Engel 2012 “the gap identified was, there is no globally accepted test or instrument of early childhood development,

because of the concerns that assessments developed in one country may not be valid in other countries due to cultural and contextual differences. Appropriate early child assessment tests are most important to regulate and monitor early childhood services. It can be used to analyze the impact of early childhood policies and programs on children, and track child development over time. Therefore, the demands of assessment tools are very essential.

The present study has significance in many ways. It is the first attempt to develop an instrument of Integrated Process Skills of pre-primary education. Process skills are the skills of an individual that are used in daily life which can improve the quality and standard of life (Aktamis and Ergin 2008), so preschool education can have a significant positive effect on educational outcomes of students in later learning. The process skills have become a key competency to acquire in school, hence pre-school education will provide training to develop the intellectual skills or thinking ability of students and also used to solve the problem of everyday life in an objective and rational manner.

The integrated process skills that every individual could use in each step of her/his daily life by being scientifically literate and increasing the quality and standard of life. These skills affect personal, social and global life of individuals. This scientific literacy is regarded as a key learning outcome in education; process skills take an important role to inculcate this scientific literacy among preschool students.

The principal component of education should be to the development of scientific temper among students. Process skills have a prominent role to develop the

scientific temper. If a person is able to use the scientific method in their daily life decision-making process whether knowingly or unknowingly, then we can say that they have a scientific temper. Such type of ability or skill acquired through the process skills. The role of process skills is important one's life because these kinds of skills or ability enable the students to create a scientific attitude of logical and rational thinking, decision making power, spirit of enquiry, open-mindedness, feelings to meet with new facts, open to accepting that one's own experience, developing the ability to imagine, analyzing and trying alternatives. Therefore, we can say that the development of process skills among students is important for the overall scientific development of a child.

Preschool education in its wider sense implies not only the acquisition of knowledge but also the development of abilities, skills, and qualities of character. And assessing the cognitive and developmental performance of children is essential to their development. Effective assessment enables the teacher and parents to understand what the child knows in order to determine the best way to help them learn effectively. Assessment is the ongoing process of observing, recording and otherwise documenting the work children do and how they do it, to provide a basis for a variety of educational decisions that affect the child. This study emphasis on assessment of integrated process skills along with experience as well as activities which provide the essential copying successful in every life and at school.

The investigator is attempting to construct a tool to assess the integrated processing skills of students through specific activities, different testing strategies, observation and oral communication. The main components of the present study are

Emotional Stability, Digital Literacy, Social Responsibility, Creativity, Communication, Bodily-Kinesthetic, Self-care, Spatial Ability, Naturalistic Sense, and Aesthetic Sense.

The instrument developed will work as a helping hand for the teacher to identify the problems of children and helping the healthy development of the future generation.

Statement of the problem

Pre-primary education is widely recognized as having a significant impact on the subsequent performance of children in basic education programs. They lay the foundations for acquiring basic literacy, numeracy skills, and other skills they considerably enhance the child's development. This implies that all countries of the world should be needed to develop a proper instrument to assess the process skills.

The problem of the present study is entitled as DEVELOPMENT OF AN INSTRUMENT TO ASSESS INTEGRATED PROCESS SKILLS OF PRE-PRIMARY SCHOOL CHILDREN.

Definition of key terms

Development

Development adopted a three-stage approach. Stage 1 includes the identification of salient scales, stages 2 involve writing individual items within the scales and Stage 3 involves field testing items followed by item analysis and validation procedure (Walker and Farser, 2005).

Development means the process of developing or being developed on how to start constructing the items for the test. For the present study, development means preparation and validation of assessment instrument. It includes planning to prepare, designing and implementation of an instrument on integrated process skills.

Instrument

The instrument was used to collect data that was used for the determination of its test characteristics, and for the comparison of the performance of different groups of learners on the test (Monica, 2005). For the present study, the instrument is a collection of tools used to gather information about a child's development and skills. With the use of a tool, researchers can observe the child, to collect information about he knows and what he can do, documenting a child work and to accumulate the record of child skills.

Integrated process skills

It is the skills used to manage and modify actions in the completion of daily living tasks, such as pacing oneself, choosing and using appropriate tools to complete a task or organizing a task into a logical sequence for successful completion (medical dictionary). For the present study, these are the ability to manage basic processes such as observing, classifying and formulating an explanation that is commonly seen in children of 3 to 6 age groups.

Pre-primary School children

The children under the age group of 3 to 6 years are supposed to get growth and expansion in the field of school academic as preschoolers. For the present study,

pre-primary school children considered the children who are of 3 to 6 years of age who study in Kindergarten, Montessori, Anganwadi, and Quranic School.

Variable of the study

Integrated process skills of pre-primary school children are the variable for the present study.

Objectives

1. Identify the contribution of the psychologist in the field of developmental studies with respect to early childhood.
2. To list out the components of the integrated process skills of pre-primary education.
3. To explore the nature and features of developments of early childhood in ten dimensions.
4. To list out the activities at the pre-primary educational level in the identified ten dimensions.
5. To construct an instrument on integrated process skills for pre-primary school children.
6. To validate the developed instrument on integrated process skills for pre-primary school children.
7. To construct a scoring key for the instrument of integrated process skills.

Methodology

The main focus of the present investigation was to develop an instrument to assess integrated process skills among pre-primary students. The mixed research method is used in this research study. For assessing the validity of the instrument One Shot case study is the experimental method used to collect the data. Document analysis is the quantitative method used to resolve the first four objectives.

The sample selected for the study

In selecting the sample appropriate representation was given to each category. So as to enable the cross-checking of the data from different angles, the investigator collected data directly from the students and teachers of the sampled institution. To validate the tool, the data were collected from schools each from four types of Pre-primary education system viz Montessori, Anganwadi, Kindergarten and Quranic School. Total ninety students were selected from all the schools.

Tools employed for the collection of data

- Rubric (Anees & Raheesa, 2019)
- Performance test (Anees & Raheesa, 2019)
- Individual Test (Anees & Raheesa, 2019)

To measure the integrated process skills among the pre-primary school students the investigator prepares three Rubrics, three Performance Tests and three Individual Test with the help of supervising teacher.

Scope and limitation of the study

The study has been an attempt to develop and validate an instrument to assess the integrated process skills among pre-primary school students in Kerala. The study was conducted on a stratified sample of 90 students of pre-primary schools students from different programs like such as Kindergarten, Quranic School, Montessori, and Anganwadi. Due representation was given to the factors like age level and type of school.

The period of three to six years is crucial in human development. These are the formative years when the child builds a foundation for future learning, and are introduced values and behaviors of their culture. Experiences and learning during this period have an important influence on subsequent development on later achievement. So there is a wide scope to conduct the study at the early childhood stage. There exists a scope to check integrated process skills among pre-primary school students.

In Kerala, few attempts have been made to develop an instrument to measure the integrated process skills of the children. There is no valid tool to measure integrated process skills of the children of pre-primary schools of Kerala.

Considering research undertaken, it has been noted that no attempt has been made to study the role of integrated process skills of the pre-primary school children in relation to their basic skills and overall development for learning as well.

The test is designed with the following characteristics;

- It has a very nine sub-tests. So as to smoothen the administration of the test
- Due weight has been given to the daily living task in determining the integrated process skills of the children.

Even though precaution was undertaken to make the study as accurate as possible, certain limitations have crept to the study, the following are some limitations which the investigator could not consider due to the limitation of time, geographical differences and other practical reasons.

1. The study was conducted on the pre-primary schools in Kozhikode districts assuming that they are the representatives of pre-primary in Kerala. More general stable results obtained from the study of the sample if it were taken from all the districts of Kerala.
2. The sample study was limited to 90 pre-primary school students.
3. The study was conducted only a limited number of pre-primary schools only.
4. Only a few components of integrated process skills were considered

The organization of the report

The report of the study is presented. The study is presented in five chapters the details incorporated in each chapter as follows.

Chapter I Present a brief introduction of the studies, statement of the problem, the definition of key terms, variables of the study, objectives of the study, methodology, scope and limitation of the study and organization of the report.

Chapter II presents the review of related literature which includes a theoretical overview and review of related studies.

Chapter III presents the methodology of the study details of the variable, tool used, selection of the sampling procedure for data collection, scoring techniques used for analysis and statistical technique used.

Chapter IV brings out the details of the statistical analysis of the data and discussion of the results.

Chapter V deals with the summary of that study, major findings, the educational implications of the study and suggestions for the research in this area.

Chapter II

REVIEW OF RELATED LITERATURE

- *Theoretical Overview of Integrated Process Skills*
- *Review of Related Literature Studies on Integrated Process Skills*
- *Conclusion*

REVIEW OF RELATED LITERATURE

Review of related literature is an essential aspect of any research. The summary of related literature provides a better understanding of the problem which helps the researcher in involving new insight and to build new approaches to the problem that is selected. The review of related literature involves the systematic identification, location and analysis of documents containing information related to the research problem.

As Best and Khan (1995) “since effective research is based upon past knowledge, review of related literature helps to eliminate the duplication of what has been done and provide useful hypotheses and helpful suggestion for significant investigation.

Good, Barr and Scates (1957) have rightly said: “a survey of related literature helps to show whether the evidence already available solves the problem adequately without further investigation and thus avoid the risk of duplication”. It helps the researcher to save time and energy. In short, the knowledge acquired through the review of related literature helps the researcher to think creatively, tackle the problem in a scientific manner and proceed in the exact directions to find out the right solution for the problem.

The intention of the present study is to develop an instrument to assess the integrated process skills of preprimary school students. The review of the literature has been presented under the following heads.

a. Theoretical overview of integrated process skills

b. Review of related literature on integrated process skills

Theoretical overview of integrated process skills

Early childhood programs are seen as tools to foster the child's total growth and development, physical, sensory-perceptual-cognitive, intellectual, linguistic, social, emotional and academic. The major figures whose writing and works have directly influences the form and functions of current-day early childhood education program are- John Amos Comenius in the seventeenth century, Jean Jacques Rousseau and Pestalozzi in eighteenth, Friedrich Froebel in the nineteenth and Montessori in the twentieth century.

The development of preschool education in India was very slow. It was started in the late nineteenth century. Firstly Loreto convent school with a pre-primary section was established in 1874 after that, St. Hilda's nursery school was founded in Poona in 1885. Joint leadership of Annie Besant and Rabindranath Tagore influenced by the ideas of Maria Montessori, Mahatma Gandhi, and Sri Aurobindo flourished in the form of education and training centers. The contribution made by these prominent thinkers helped for developing a conceptual insight into this promising era. Many educational thinkers, philosophers, and psychologists from the west as well as east have done extensive research and experimental work in the area of early childhood education.

Psychological influence

Friedrich Wilhelm August Froebel (1782 – 1852): He is a German educator who invented the kindergarten. Where in children were tenderly cared for so as to develop a preordained developmental process and learned as a result of action and interaction with the world? He also said that the unfolding of the developmental process occurred through nurturance and protection. Froebel's kindergarten was designed to meet each child's need for physical activity, the development of sensory awareness and physical dexterity, creative expression, exploration of ideas and concepts, and the pleasure of singing, the experiences of living among others and satisfaction of the soul (early childhood editorial staff 2000).

Maria Montessori (1870 – 1952): she was an Italian physician; influenced by the work of two psychologists namely, Jean Itard and Edouard Seguin. She believed that children have innate capacities which unfolded as they developed. The environment was influenced very much in the child's developmental process at every stage. Activities are provided on the basis of the developmental level of the child; the teacher observes the children and then provides the activity material in accordance with the developmental level. She laid much stress on experience or self-activity as the basis for acquiring knowledge. Knowledge is obtained by the child mainly through his sensory experiences. The sensory activities included visual, auditory and tactile experience. She emphasized the freedom of the child. The teaching should be to help the child learns rather than acquire information through

formal studies. Preschool activities should develop readiness for reading, writing, and computation work.

McMillan sisters: In early 1990 a major contribution was made by McMillan sisters in England. The program aimed at providing opportunities for children from poverty to get adequate healthcare and developmental opportunities. The term 'nature' was coined by the Margaret and Rachel McMillan which advocated overall development of the child by focusing on physical and intellectual development, self-care activities, sense training, outdoor activities, child's health and creative activities.

Philosophical influences

Jean Jacques Rousseau (1712 -1798): Rousseau was a naturalist and believed that the child should be allowed to grow close to nature and he should be given the right to think in his own way. He believed that the child is a child and not a small adult hence, stressed that childhood is a crucial period in life. The child should learn from nature and the child should not be forced to do things. He further says that the "education" comes from nature, from men, and from things. He was the first to give the child his rightful place. And he was renowned as the liberator of the child.

He points out 4 stages in the pupil's development.

- Infancy characterized by habit and training of emotions.
- Childhood characterized by the necessity and the training of senses.
- Boyhood characterized by the utility and the training of the intellect.
- Adolescent in the stage of morality.

John Dewey (1859 – 1952): He Was an American philosopher who emphasized that education is a process of living society. According to him the process education begins with birth and continues throughout life. Child lives in the present and child need education for living in a socially desirable manner. The Preschool environment should cultivate such value and an attribute in the child which are necessary for leading a progressive life in the society. Dewey sees a child as an ever-growing individual who also takes an active part in the function of reconstruction and reorganization of the society and its culture. School considered as a place where the child learns by his own direct experiences.

Henry Pestalozzi (1746 – 1827): His works with the children of early childhood age convinced him that the task of educating a child inevitably began with the mother. In his point, the main purpose of education is the natural harmonious and progressive development of man's innate powers. Man is endowed with certain inborn powers and capacities and the task of education is to bring about the development of these. The child, not the subject matter, should be the center of the educational system. According to him, education was to be from within and not from outside.

Rabindranath Tagore (1861- 1941): His ideas regarding the individual and his development are similar to Rousseau. He believed that each person is different from the other and everyone is unique. This uniqueness is the manifestation of the creator in the individual who tries to realize the creator in his own way his point of view in early years the child should arrive at truth through natural process spontaneously by coming in contact with things and persons. This would pave the

way for the widest possible development of a child's interests. Learning for the child is essentially explorative, active and full of joy.

Mahatma Gandhi (1869 – 1948): Gandhiji had realized the importance of educating children below seven years of age, which in his opinion is an important stage in the growth and development of the individual. According to him, home is the first center of a child's education and learning. The teacher and parents should cooperate in carrying out the education of young children. And Preschool education must not be expensive so that it can reach the majority of the child population. He gives importance to play child has to be active, creative and playful and has to learn things through the medium of play.

Learner Development Theories

Numerous theories about learner's stages of development have been developed by theorists over the years. Theories that stand out include Urie Bronfenbrenner's ecological systems theory, Sigmund Freud's psychosexual theory, Erik Erikson's psychosocial developmental theory, Jean Piaget's cognitive development theory, Howard Gardner's multiple intelligence theory, Vygotsky's social development theory, and Lawrence Kohlberg's moral developmental theory. To develop a better understanding of the stages of development, it is necessary to investigate each theory and how the stages of development are described.

Psychosexual stages of development

Sigmund Freud: During the20th-century psychoanalytic theory of psychosocial behavior developed by Sigmund Freud in understanding the personality development of the child. Susun Isaacs also influences the psychoanalysis movement of Freud. He emphasized the importance of early childhood experiences in shaping our personality and behavior. During childhood, we begin to become social beings as we learn how to manage our instincts and transform them into socially acceptable behaviors. Early childhood education program practiced permissive child care approaches allowing for self-expression and outlet of feeling and emotion by the children through various creative and other activities.

Table 1

Description of the phallic stage

Psychosexual stage	Age	Description
Phallic	Three to six years	Sexual energy is focused on the genitals and the learner receives stimulation around genitals (Louw and Kail 2007; Gordon & Browne 2014). The learner tends to interact more with the parent from the (father to daughter and mother to son) opposite sex and because of the anxiety that is produced the learner identifies more with the parent from the same sex with regard to characteristics and values (Louw & Kail 2007). The learner becomes more conscious of gender

Psychosocial development

Eric Erickson: He recognizes that formative years provide the foundation for all later motivations and personal disposition. The physical, social and ideational

influences shape the individual personality development. Erikson assumes that emotional aspects of life permeate all human functions. The nature of emotional content or the quality of interpersonal relationships determines the basic core of man's make-up. Erikson's works suggest and even a more active role for early childhood education. He also emphasized play activity particularly important for the child's development (Spodek, Saracho and Davis, 1991).

Table 2

Description of Initiative versus guilt stage

Stages	Age	Description
Initiative vs guilt	Three to six	Learners become willing to develop and experience new things and how to deal with failure (Louw and Kail 2007). The goal of this stage is to develop a purpose. The learner will learn to take initiative when trying to complete tasks, which will develop a conscience to ensure that tasks get completed (Gordon & Browne 2014).

Erickson's impact on today's education:

- Social and emotional development is an important part of the curriculum.
- Parents and teachers shape social and emotional outcomes for children.
- Education should support children based on their psychosocial needs.

Cognitive development theory

Piaget: Piaget's (1972) cognitive-developmental theory has been described as one of the single most comprehensive and compelling theories of cognitive development in children. According to him, intellectual development occurred due to the interactive functions of assimilation and accommodation. In this process, the

individual learns something from the environment and internalize that information into an already existing schema. The understanding thoughts of a child are constructed through a number of channels, which include listening, reading, experiencing, and exploring the place they live in or the environment they grow up in. The stage-based theory of Piaget takes into consideration the process of maturation and interactions with the environment, which is reflected by experiences to be provided, and the role of a child as an active participant in the learning process. Program based on the cognitive theory of Piaget proliferated in the 1970s and still continue to influence early childhood curriculum. Intelligent is demonstrated through the uses of logic order.

Table 3

Description of Pre-operational stage

Stages	Age	Description
Pre-operational	Two to six years	Preoperational Learners begin to use language and symbols to represent ideas and objects. Learners realize that lifeless objects have emotions (Gordon & Browne 2014). The learner's thinking is still egocentric and the learner is unable to view the world from other people's viewpoints (Louw and Kail 2007).

Piaget's impact on today's education:

- The mental structure of the child is mainly focused on mastering the concrete objects.
- A focus on the process of children's thinking, not just its products.

- Recognition of the crucial role of children's self-initiated, active involvement in learning activities.

Social development theory

Vygotsky: He placed much more emphasis on the role of culture and social interaction in the development of children's cognition. Child's cultural development first occurs on a social level and later within the child. Play is an essential part of language development, it is considered as a prime tool for communication for understanding the external world. Being social is the first stage of development according to Vygotsky. Children that listen to parents socialize, listen to their speech and try to imitate them is the social interaction that is important for a child to develop. He stated that learning is culturally and socially mediated and that the support that adults provide as they guide children towards more sophisticated levels of knowledge and understanding is especially important (Fuggle et al., 2013; Vygotsky, 1986).

Vygotskian's impact on today's education:

- Play is an essential part of language development
- Through the social interaction child able to interact with the external world
- Cultural and social interaction guide cognitive development

Self-actualization theory

Abraham Maslow: He introduces self-actualization theory he emphasized that children must have basic needs met in order for learning to occur. These needs exist in a hierarchy that includes life essentials, safety, and security, belonging and

love, achievement and prestige, and aesthetic needs. Educational environments play an activist role in meeting children's basic needs.

Maslow's impact on education today:

- Nutritious foods are provided to children throughout the day.
- Social and emotional development is an essential part of the curriculum.
- Children need to have a sense of accomplishment.
- Children need to be in attractive and pleasant environments.

Multiple Intelligence theory

Howard Gardner: he changed the perception of intelligence and learning with his theory of multiple intelligences. He advocated that intelligence should not be reduced to a single overarching construct. The theory of multiple intelligences posits that children have differing levels of eight different types of intelligence. The eight multiple intelligences include was the following:

Verbal/linguistic, Math/logical, Spatial, Musical, Bodily-kinesthetic, Interpersonal, Intrapersonal intelligence, interpersonal intelligence and Naturalistic

Gardner's impact on education today:

- The awareness that children can be smart in many ways
- Education should focus on children's strengths and recognize varied types of intelligence
- Education should integrate various intelligence design, learning experiences, and assessment

Ecological systems theory

Urie Bronfenbrenner: He developed a model which portrays the developing learner as situated in complex and interactive systems (Louw&Kail 2007). The ecological theory states that a learner's development is greatly influenced by the learner's surroundings which can be divided into four levels: microsystem, mesosystem, exosystem and the macrosystem (Louw&Kail 2007). The first level, with the learner at the center, is where learners spend most of their time.

Table 4

Description of Ecological system stage

Ecological system	Description
Microsystem	People and objects in the learner's direct environment This system can have a very direct influence on the learner's development With the learner at the center, the learner is surrounded by their family, the school environment, peers and their religious setting
Mesosystem	It represents the influence of microsystems The mesosystem and microsystem are emotionally linked
Exosystem	It represents the social environments that won't influence the learner at first hand but can still influence their development It might influence the learner indirectly but can still have a strong effect on the learner This level includes family friends, social and legal systems and the community the learner lives in
Macrosystem	It includes cultures and subcultures and their identities and values This level includes economic conditions, political philosophies, and social conditions

Bronfenbrenner's impact on education today:

- The child's family is the first and most important teacher, and therefore is an essential partner in the educational process.
- Communities play an important role in children's education.
- To effectively support and educate children, attention to the context is critical.

Moral development theory

Lawrence Kohlberg: The moral development theory was developed by Lawrence Kohlberg. Kohlberg's theory involves social growth and intellectual reasoning. The moral development theory states that learners move from one stage to another by reasoning and realizing whether their beliefs are true or not. There are two stages in the moral developmental theory that relate to early childhood development (Gordon & Browne 2014).

Table 5

Description of Pre-conventional morality stage

Level	Description
Pre-conventional morality	Stage 1: Obedience and punishment Learners learn to obey authority and that by obeying authority, they avoid punishment
	Stage 2: Relativist and individualism Learners learn to look out for peers because if they are nice to others, others will be nice in return.

(Gordon & Browne 2014)

Process skills of Pre-primary School Children

Early childhood education has a long history. There are many scholars who have studied childhood learning such as Martin Luther, John Comenius, John Dewey, Maria Montessori, and Jean Piaget (Brewer, 1998). They proposed diverse ideas to explain how children learn. Their ideas made important contributions to contemporary early childhood education programs. Friedrich Froebel is known as a pioneer of the kindergarten movement (Bryant & Clifford, 1992). Preprimary education try to provide some opportunities for children to improve their social, emotional, and cognitive development and also to encourage young children to learn the basic skills and knowledge of diverse learning areas such as science, maths, and health (National Research Council, 1996). National Preschool Curriculum Standard is to inculcate critical thinking, creative and innovative and problem-solving skills in learning and everyday life of young learners. The curriculum focuses on six pillars namely Communication; Spirituality, Attitudes and Values, Humanity; Self-appearance; Physical and Aesthetic Development; and Science and Technology. The pillars support each other and are integrated with critical, creative and innovative thinking (National Preschool Curriculum Standards, 2010).

Development of integrated process skills has been the result of child's inquiry of puzzling natural phenomena and situations with a view to satisfy his basic skills, innate curiosity and to subdue the environment for enhancing his physical comforts. For this purpose, the child builds up a basic process by observing classifying explaining and formulating that are accrued in the learning process. Skills refer to specific activities or tasks that a student can proficiently do e.g. skills

in coloring, language skills. Skills can be clustered together to form specific competencies. De Guzman (2007) iterated that it is important to recognize a student's ability in order that the program of study can be so designed as to optimize his/her innate abilities. The Secondary Science Curriculum Review (SSCR, 1987) identifies the skills as being separate from processes. A skill is seen as a specific activity which a student can be trained to do. But a process is seen as a rational activity involving the application of a range of skills.

Rustaman (2003) stated that the process skill is the skill involving cognitive, intellectual, manual and social skills. Cognitive skills are involved in doing process skills, the student uses their mind. Manual skills are clearly involved in process skills because they involve the use of instruments and material, measurement, arrangement or assembling of tools. Social skill is also involved in process skills because they are interacted with their peers in doing their teaching and learning activities, for example discussing the observation result, experiment result, or in communicating process skill result is important to be developed through direct experience as a learning experience. Through direct experience, an individual can be more appreciated the process or activity as being done. Panoy (2013) cited that the goal of science education is to develop students' skills and enables individuals and to apply those skills in everyday lives. These skills affect the personal, social, and global life of individuals. Process Skills are a necessary tool to produce scientific information and to solve problems

Process abilities could influence learners' development. The development of process skills could support learners' thinking and function as support for other

cognitive skills like the skills of logical thinking, reasoning, investigating, and evaluating support for problem-solving ability, and support for creativity (Ozgelen, 2012). Process skills are also important for meaningful learning (Karamustafaoglu, 2011) with process skills, learners could feel the direct experience with objects and events that are around them (Osman, 2012). According to Karamustafaoglu (2011), science process skills is understanding of Science process usually refers to skills or abilities that must be owned by the scientists on the process of scientific discovery. These skills are divided into two groups: basic and integrated process skills. The basic process skills include observing, asking questions, classifying, measuring and predicting. Integrated process skills include identifying and defining variables, interpreting data, manipulating materials, recording data, formulating hypotheses, designing investigations, making inferences and generalizations.

Mathematical process skills are capabilities that are applied to mathematics in various situations. The mathematical process skills are contributed by these factors; 1) problem-solving skills 2) reasoning skills 3) communication and presentation skills 4) connection knowledge skills and 5) creativity skills (NCTM, 2000 and Lyon, 2001).

UNESCO (1992) summaries the process skill of primary school children as:

a. Observing

b. Raising questions

c. Hypothesizing

d. Predicting

e. Finding patterns and relationship

f. Communicating effectively

g. Designing and making

h. Devising and planning investigations

i. Manipulating materials and equipment effectively

j. Measuring and calculating

Children aged four to six years old have to be developed the physical, emotional, spiritual, intellectual and social learning environment that is safe and nourishing, as well as educational activities that are fun, creative and meaningful, can help to develop children in a holistic and integrated way (National Preschool Curriculum Standards, 2010). These are essential to develop the skills, instill confidence and create a positive self- concept among children so that they are ready to face further learning and challenges.

Components of Integrated Process Skills

Before constructing an instrument it is important to have background information about integrated process skills of early childhood development selecting an appropriate dimension for measuring the skills of pre-primary students based upon the document analyses and theoretical overview. Following are the major components selected for this study.

Creativity

The Guidebook of Creativity (Ministry of Education, 2011) defines creativity as the ability of individuals to use the power of imagination, creative ideas and creative thinking to produce something authentic, original or something of new

value, use and meet certain needs. Creativity can be gifted or acquired through learning. Therefore, the definition of creativity is very broad and is not limited by place, space and time to interpret. Many researchers (Guilford, 1980; Kirton, 1976) believe that cognitive styles have an impact on thinking, problem-solving, and decision making and creating. School practice requires multidimensional development of teacher professional competencies including creativity.

According to R. J. Sternberg (2006), our creativity is largely determined by our will. He defined 12 basic processes that give rise to creativity:

1. The ability to define a problem differently
2. Analysis of our own ideas
3. Presentation of ideas
4. Understanding of knowledge in the context
5. Overcoming barriers
6. Acceptance of acceptable risks
7. Desire to improve our Science Education International 10
8. Belief in ourselves
9. Toleration of ambiguity
10. Search for our own interests
11. Finding time to work
12. Error tolerance

Communication

The learners' language development includes their ability to communicate verbally, as well as their emerging literacy level. Verbal communication consists of learners' listening skills, communication skills, and vocabulary. Emergent literacy consists of the learners' letter-sound connection, understanding of stories, and writing skills (Emig 2000). These are determined by the learners' prior exposure to reading and writing. Learners are interested in letters and writing from a young age and with sufficient stimulation, it helps them to succeed in formal schooling.

Digital literacy

There is growing evidence that many children are immersed in a digital landscape from birth. Studies indicate that young children use smartphones and tablets to play games, watch catch-up television on tablets and replay their favorite films on YouTube, amongst other things (Chaudron Et al., 2015). Digital literacy is a term frequently used to refer to the digital skills competencies children and adults may acquire through the use of digital technologies (JISC, 2O14). It has, according to Barton (2007), becomes a metaphorical term, as is the case with other phrases in which literacy is used to signify skills and competence, such as computer literacy, information literacy and so on.

Kazakoff (2015) has developed a model that identifies six components of digital literacy in early childhood: understanding and utilizing digital interfaces; non-linear navigation; critical-thinking and problem-solving skills in digital

domains; co-operative learning and play afforded by digital tools in early childhood and creative design afforded by digital tools in early childhood.

Spatial Ability

"Spatial ability is the ability to recognize and use the patterns of wide space and more confined areas" (Gardner, 1999). " The ability to calculate adequate space for moving his own body, his car, his bus when driving, between two things or along the road, reading maps, charts and diagrams, thinking in images and pictures are the favorites of the students who have spatial intelligence". According to Armstrong (1994), "these students have highly developed senses for color, line, shape, form, space. They also have the ability to visualize ideas"

Aesthetic Sense

Aesthetic sense is the ability or skill in the performance in musical activities. "Those who possess musical intelligence may have composition, and appreciation of musical patterns. It covers the capacity to recognize and compose musical tones, pitches, and rhythms. According to Howard Gardner, musical intelligence runs in an almost structural parallel to linguistic intelligence" (Gardner, 1999).

Bodily-Kinesthetic

"Bodily-kinesthetic involves the ability to use one's whole body or parts of the body effectively. It is the ability to use mental abilities to coordinate bodily movements. Howard Gardner considers mental and physical activity as related". (Gardner, 1999).According to Laughlin (1999), a person with well- developed Bodily-kinesthetic Intelligence usually explores the environment and objects

through touch and movement. Direct involvement and participation and remembers most clearly what was done, rather than what was said or observed. Enjoys concrete learning experiences such as field trips, model building, or participating in role-play, games. Sensitive and responsive to physical environments and physical systems demonstrates skill in acting, athletics, dancing, sewing, etc.

Naturalistic sense

Naturalistic Intelligence is an essential dimension of Multiple Intelligences for a student to be a successful learner. It helps to engage students deeply in their education and increase student achievement because learning is embedded in innovative, practical, flexible experiences that connect to the real world. It is based on science instruction and challenges and helps students to develop a meaningful understanding of the world around them and create connections between their lives and interests. The famous philosopher Aristotle says, “Nature does nothing uselessly”. Individuals with Naturalistic Intelligence have the ability to distinguish among, identify and classify patterns in nature, and use the features of the environment. Learners with Naturalistic Intelligence "love the outdoors, animals, field trips," and finally, they "love to pick up on subtle differences in meanings” (McKenzie, 1999). The Naturalistic Intelligence begins at the early stages of childhood development; it is an effort to discover the elements around them, and finding ways of how to cope with the surrounding natural environment.

Emotional Stability

According to Denham and Brown (2010), there are three aspects of emotional learning: self-awareness, self-management, and social awareness. Self-awareness entails the learner's own emotions and ability to identify them. Self-awareness includes the learner's interests, values, and strengths. Self-management includes the learner's ability to acknowledge own emotions and the ability to regulate emotions and feelings to help them through different situations. Self-management includes the learner's ability to cope with stressful situations and overcome difficult tasks. All of these self-management factors enable the learner to behave socially appropriate. Social awareness includes the learner's ability to understand other people's emotions and to take their emotions into account.

Social Responsibility

According to Denham and Brown (2010), there are two aspects of social learning: responsible decision making and relationship skills. Responsible decision making includes the learner's ability to solve problems, understand consequences, and take responsibility. Relationship skills include the learner's ability to develop positive relationship skills such as playing appropriately with peers, good conversation skills, interaction skills, listening skills, and interacting with friends.

Review of Related Literature Studies on Integrated Process Skills

Yilmaz (2019). Examine the relationship between primary school student's environmental awareness and basic science process skills based on various variances. The study was conducted with 332 grade 3rd and 4th students. Primary

school environmental awareness scale and basic process skills scale were used to collect data. The result of the study shows that the significant relationship between their different skills and environmental awareness was detected. A significant difference between the total scores of life in nature and environmental awareness dimension and total score of life in nature and environmental awareness scale was observed in favor of female students. A significant difference was found sub-dimensions and total scores of environmental awareness over class level.

Duda, Susilo and Newcombe (2019) examined Problem-Based Learning (PBL) is constructivist learning with the potential to enhance students' science process skills. This research aimed to investigate the effect of PBL through practicum supported by authentic assessment, PBL and conventional learning on science process skills of Dayak and Malay students in Animal physiology lectures. The population consisted of 500 active students who were within their first eight semesters in Biology Education Study Programm ranges from 19 to 22 years. The research used a quasi-experimental research design with a pretest-posttest nonequivalent control group design with 3 x 2 factorial designs. Science process skill test is used for data collection. The result showed that the learning model influenced students' science process skills. The PBL model implemented through a practicum and supported with authentic assessment was the most influential being significantly different to both PBM the model and conventional learning. Ethnicity did not significantly affect the students' science process skills. There was no interaction between the learning model and ethnicity toward students' science process skills.

Adhiya, EkoLaksono and W(2018). The research focuses on the development and validation of an integrated assessment instrument to assess students' analytical thinking skills and chemical literacy in chemical equilibrium. The research consists of 5 phases ie analysis, design, development, implementation, and evaluation. The participants were 174 students of 12th grade senior high schools in Yogyakarta, Indonesia. The participants were selected using stratified random sampling. It consists of 20 open-ended multiple-choice questions developed from 12 integrated indicators. The result shows that 20 questions are declared valid with Aiken's V value greater than 0.86. The result was collated and coded for analysis with Rasch model approach. This instrument is capable to measure students' analytical thinking skill and chemical literacy.

Jalil, Herman, and Ali (2018) are to develop a valid and accessible of Science Process Skills Instrument (I-KPS). The step of this research is the theoretical construction, determination of assessment objectives, construction of items indicator, items construction, and expert’s judgment, revising of an instrument, the instrument trial, revising instrument, the second field trial, and finalization of the instrument. The sample of the study consists of 46 students of grade 10 of High School of Bajeng, Gowa Regency. The instrument (I-KPS) specification are: the type of item is essay test completed by scoring rubrics, asses science process skills for high school students and cognitive test of science process skills. It is developed for measuring 6 indicators of science process skills that are identification variable, hypothesizing, planning the experiment, predicting, communicating, and interpreting data. The content validity coefficient of I-KPS is

0.96. The result of empirical validation is 45 items are valid in topics of Newton law, gravitational force, work and energy, momentum and impulse, and harmonic motion. The reliability coefficient of I-KPS is 0.935. The study states that I-KPS as a valid and reliable instrument both theoretically and empirically.

Hardianti and Kuswanto (2017) conducted a study to discover the difference in effectiveness among Levels 2, 3, and 4 of inquiry learning in improving students' process skills. The research was a quasi-experimental study using the pre-test post-test non-equivalent control group research design. Three sample groups were selected by means of cluster random sampling. They were three SMA (sekolahmenengahatas, Indonesian senior high school) classes were selected for the study. The results indicate that there is a significant difference in effectiveness among Levels 2, 3, and 4 of inquiry learning in improving students' process skills. Inquiry learning of Level 3 (ILL-3) is more effective than inquiry learning of Level 2 (ILL-2) and Level 4 (ILL-4) in improving students' process skills, as shown by the gain scores. It, therefore, indicates that, in improving students' process skills, experience and competence, which are then to be raised to higher levels.

Bannik , J R J, Indro , van Hove (2016) investigated the cognitive ability of preschool children with spina bifida in Uganda. Qualitative semi-structured interview and quantitative functioning scale measurement were combined and conducted with 133 parents, 133 children, and 35 siblings. ANCOVA was used to test for differences in cognitive scores between the children and siblings. Logistic regression analysis was used to study the predictive demographic, impairment specific and environmental factors of cognitive functioning. Cognitive outcomes

were predicted by age, household income, motor functioning, and school. The study reveals that children of parents' supports had a better effect on cognitive functioning and continence management.

Havigerova, Smetanova and Moravcova (2016) examine the relationship between overall giftedness and two types of creativity in preschool-age children. The overall amount of talent was measured on the characteristic of giftedness scale, verbal creativity through storytelling, and figural creativity with the test for Creative Thinking-Drawing Production. The data was obtained on a sample of 32 preschool-aged children obtained through convenience sampling. The results suggest a moderate correlation between the two types of creativity and a not significant weak correlation between creativity and giftedness.

Kristen, Churchill and Lippman (2016) attempted to measure social and emotional development in early childhood. This study was to describe the relationship of social and emotional development to child functioning and overall well-being and then present major measurement and challenges associated with this domain, and the issue tied to quality and ease of use for extent measures. In describing multiple purposes of early childhood assessment more broadly, the reciprocal dynamic between programs, policymakers, researchers, and developers in generating knowledge, guidance for practitioners, and policy is highlighted. This study concludes that the tools would classify the subdomain of social and emotional development and their corresponding construct within a clearly articulated framework and then map each classification on to psychometrically strong measures appropriate for each child from a diverse background.

Raikes (2016) executed study on issues and approaches to the measurement of in the light of the education target on early childhood development. Item were selected to correspond to the Early Learning Development Standards, which included several domains such as: approaches to learning; social/emotional development; cognitive development; cultural participation and knowledge; language and emergent literacy; motor development; and health, hygiene and safety. The sample consists of over 7000 children in Cambodia, China, Mongolia, Timor-Leste, Vanuatu, and Vietnam. The result showed expected pattern across participating countries with higher for children who were older; female; with more educated mothers; and who had participated in pre-primary education. Results may vary by country with some countries showing especially high scores in some areas (e.g children in China has math's course that was significantly higher than children in other countries). As well, effect size estimates indicated that maternal education; age; and gender had different impacts on child development and learning in a different place.

Marsh (2016) conducted a study on the digital literacy skills and competences of children of pre-school. A survey was completed by 2000 parents of children aged 0-5 on children's tablet use, and case studies were undertaken of six children in whom their use of tablets in the home was explored. The findings indicate that parents identify a range of skills and knowledge that they perceive their children acquire using tablets. In addition, the researchers were also able to identify many of the skills reported by parents through extensive analysis of over 20 hours of video data of children using tablets. The paper examines the skills and competencies

identified in these data in greater depth. It is argued that the majority of skills and competencies relate to the reception, design and production of texts and that dissemination of texts is the least well-developed area for children of this age group.

Sukiniarti (2016) conducted a study on Improving Science Pedagogic Quality in Elementary School Using Process Skill Approach can Motivate Students to be Active in Learning. This study was survey research. The sample was determined by using sampling technique with 240 teachers of Elementary School. The descriptive method was used. The result showed that (1) 81,17% of Elementary School Teacher in Java have implemented the process skill approach within their science learning. (2) 97,92% of Elementary School Teacher in Java stated that the process skill can motivate the student to be active in their science learning. (3) 97,17% of Elementary School Teacher in Java stated that the students are very happy or enthusiastic if teacher using a process skill approach in science learning. (4) 82,67% of Elementary School Teacher in Java stated that the student seems active doing the assignment from the teacher through the process skill activity. (5) There is still about 31 % of Elementary School Teacher in Java stated the doubt at our facilities easiness which supports process skill approach activity. (6)76,67% of Elementary School Teacher in Java stated that the process skill approach to science learning is still difficult to implement in Elementary School. (7) 37% of Elementary School Teacher in Java stated that there are still some restrictions in implementing the process skill approach to science learning in Elementary School.

Kaosa-ard, Erawan, Damrongpanit and Suksawang (2015) Analyze a study on the difference between the students' mathematical process skills. These skills are

problem-solving skills, reasoning skills, communication and presentation skills, connection knowledge skills, and creativity skills. Samples were 2,485 seventh-grade students obtained from Multi-stage Random Sampling. Each student was measured by the mathematical process skills test which consists of 44 items in total. The results indicated that the students can be categorized into three groups: the high mathematical process skills students (2.74%), the moderate thematically process skills students (40.48%), and the low mathematical process skills students (56.78%). Moreover, from the research results, it also shows that creativity skills seem to be a problem in every group of students.

Alkuş & Olgan (2014) conducted studies regarding creativity are conducted in Turkey. This qualitative study involved 10 pre-service teachers who enrolled in a Bachelor Degree in Early Childhood Education program and 11 teachers who had been teaching Early Childhood Education for 1-9 years in Ankara, Turkey. The findings of a study showed that the development of children's creativity is not only supported by certain groups of people, but it also depends on effective cooperation between teachers, parents and school administrators. This study revealed different definitions of creativity by teachers. Some of them define creativity as originality or authenticity. Some define creativity as 'thinking outside the box' and produce original ideas according to the situation.

Rao, N., Sun, J., Ng, S.S.N. et al (2013) reports on the development and validation of the Hong Kong Early Child Development Scale (HKEDS), a holistic measure of child development designed specifically for preschool children in Hong Kong. Scale development was an iterative process and the first version of the scale

contained 190 items whereas the final version includes only 95. Children ranging in age from three to six years were administered in this study. The final version of the HKECDS includes the following eight subscales: Personal, Social and Self-Care, Language Development, Pre-academic Learning, Cognitive Development, Gross Motor, Fine Motor, Physical Fitness, Health and Safety, and Self and Society. The HKEDS is the first early child development scale which considers both the holistic development of preschool children and incorporates current expectations of early child development in Hong Kong. Both tools can be used to evaluate the efficacy of targeted interventions and broader child-related public policies on early child development in Hong Kong

Ip, Li, Rao, Ng, Lau, and Chow (2013). Develop a comprehensive instrument used to assess school readiness in preschool children. This study was carried out to evaluate the psychometric properties of the Chinese version of the EDI (CEDI) in Hong Kong. One hundred and sixty-seven children were purposefully sampled from kindergartens in two districts with very different socioeconomic statuses. The CEDI was assessed for concurrent validity, internal consistency and test-retest reliability. The result of instrument displayed adequate internal consistency, with Cronbach's alphas ranging from 0.70 to 0.95 on its five domains. Concurrent validity was supported by moderate and significant correlations (0.25 to 0.49) on the relevant domains between the CEDI and a comparable measure. The level of test-retest reliability was good, with a kappa statistic of 0.89. In general, girls outperformed boys, particularly in the social, emotional and communication/ general knowledge domains.

Senocak, Aksoy, Samarapungavan, and Tosun (2013) conduct a study to develop a valid and reliable instrument to measure Turkish kindergarten students' understandings of some science concepts and scientific inquiry processes. The sample of the study was 371 kindergarten students, 12 Subject Area Experts (SAE), and 7 Turkish Language Experts (TLE). Six stages were followed in the development process of the instrument: (i) item formulation, (ii) content validity, (iii) language validity, (iv) item difficulty and discrimination index, (v) factor analysis, and (vi) reliability. The aim of this study was to develop a valid and reliable instrument to measure Turkish kindergarten students' understandings of some science concepts and scientific inquiry processes which are grounded in the Turkish Preschool Curriculum. The sample of the study was 371 kindergarten students, 12 Subject Area Experts (SAE), and 7 Turkish Language Experts (TLE). Six stages were followed in the development process of the instrument: (i) item formulation, (ii) content validity, (iii) language validity, (iv)item difficulty and discrimination index, (v) factor analysis, and (vi) reliability. Results revealed that the instrument had a two-factor structure and acceptable reliability.

Anjali (2013) investigated the role of playschools with regard to the behavioral profile, creativity, problem-solving ability and social cognition of preschoolers. The sample selected for the study was 300 preschoolers of whom 150 who had attended playschool and the remaining 150 who had not attended playschool. The evaluation of the study gives a positive indication of the influence of playschool on the behavioral profile creativity, problem-solving ability and social cognition of preschoolers.

Shahali and Halim (2010) describe the development and validation of a Test of Integrated Process skill, a paper-and-pencil objective test that has been developed specifically to the science content defined in the Malaysian primary school science curriculum. The test is used to measure acquisition in the processes of science. The Test of Integrated Science Process (TISP) consisted of 30 multiple-choice items. Evidence of content validity, construct validity, and reliability are presented. This test with sound psychometric properties will be useful in evaluating the progress in the learning of integrated science process skills in primary school level in Malaysia.

Mashburn, Pianta, Hamre, Jason, Barbarin, Bryant,...Diane(2008) examined the development of academic, language, and social skills among 4-year-olds in publicly supported prekindergarten (pre-K) programs in relation to 3 methods of measuring pre-K quality, which are as follows: (a) adherence to 9 standards of quality related to program infrastructure and design, (b) observations of the overall quality of classroom environments, and (c) observations of teachers' emotional and instructional interactions with children in classrooms. Participants were 2,439 children enrolled in 671 pre-K classrooms in 11 states. Adjusting for prior skill levels, child and family characteristics, program characteristics, and state, teachers' instructional interactions predicted academic and language skills and teachers' emotional interactions predicted teacher-reported social skills. Findings suggest that policies, program development, and professional development efforts that improve teacher – child interactions can facilitate children's school readiness.

Capie (2006) conducted a study was to explore whether valid Multiple Intelligence profiles could be created for preschool children. This study was

conducted over a three month period and included 16 preschool- aged participants. Research strategies included surveys, naturalistic observation, observation, and participant interviews. The result of the study shows that participants appear to have multiple, equally dominant for each participant and to have self-awareness related to dominant intelligence.

Arthur and Reynold (2004) A study was carried out to find the effect of preschool education on children's cognitive skills, literacy and social skills which are necessary for school success as well as promoting school achievement in the elementary grades, grade retention and increasing level of education attainment. The preschool education was found to have positive effect on cognitive development when the children enter at formal school. It also helps to promote scholastic development and commitment and facilitate improved developmental outcomes in children. It also helps to nurture language abilities, literacy skills, knowledge of qualitative concept, oral communication, school readiness and general cognitive skills which would contribute in better scholastic development.

Monica (2005) conducted a study to attempt to develop and validate a test of integrated science process skills, referenced to a specific set of objectives, for use in the further education and training band (grades 10 – 12). The science process skills tested for were: identifying and controlling variables, stating hypotheses, experimental design, graphing and interpreting data, and operational definitions. Thirty multiple-choice items, designed to be content independent; and gender, race, school type, and location neutral, were developed and administered to a total of 1043 grade 9th , 10th , and 11th learners from ten schools, in the Limpopo province of

South Africa. Results show that the test is valid, and that its test characteristics fall within the acceptable range of values for discrimination index, index of difficulty, reliability, and readability levels. Comparison of the performance of different groups of learners who wrote the test showed that the test is gender and race neutral.

Anvari, Trainor, Woodside and Levy (2002) examined the relations among phonological awareness, music perception skills, and early reading skills. Sample of this study was 100 (4- and 5-year-old) children. Music skills were found to correlate significantly with both phonological awareness and reading development. Regression analyses indicated that music perception skills contributed unique variance in predicting reading ability, even when variance due to phonological awareness and other cognitive abilities (math, digit span, and vocabulary) had been accounted for. The study revealed that music perception appears to tap auditory mechanisms related to reading that only partially overlap with those related to phonological awareness, suggesting that both linguistic and nonlinguistic general auditory mechanisms are involved in reading.

Miller, Gouley, Shield, Seifer, Dickstein, Fox, and Radtke (2002) executed a study to describe children's emotional and social behavior in the classrooms and to examine the association among observed behavior, social-cognitive skills, and teacher-rated child functioning. The sample consists of 31 head starts preschoolers. Children were interviewed to assess emotional understanding and verbal skills and the teacher reported on children's social and emotional competence and early school adjustment. Finding of the study reveals that children's observed emotion displays were related to observed social engagement, and emotions displays and social

engagement were related to social-cognitive skills such as emotional knowledge and verbal abilities.

Lonigan, Burgess and Anthony (2000) examined a study on the Development of Emergent Literacy and Early Reading Skills in Preschool Children: Evidence from a Latent-Variable Longitudinal Study. Investigator has identified oral language, print knowledge, and phonological sensitivity as important emergent literacy skills for the development of reading. This study examined the joint and unique predictive significance of emergent literacy skills for both later emergent literacy skills and reading in two samples of preschoolers. Ninety-six children (mean age = 41 months, SD = 9.41) were followed from early to late preschool, and 97 children (mean age = 60 months, SD = 5.41) were followed from late preschool to kindergarten or first graded. Finding of the study revealed that significant developmental continuity of these skills, particularly for letter knowledge and phonological sensitivity from late preschool to early grade school, both of which were the only unique predictors of decoding.

Ngaruiya (1991) conducted a comparative study explored the influence of different preschool models on school readiness among preschool children from different urban socio-economic status neighborhoods. The study sampled 207 preschool students in Kenya. The major finding of the study were preschool children who attended private preschool models outperformed their peers from public preschools in school readiness scores and children from low neighborhoods. The study recommends a paradigm shift from an academically oriented preschool model

to one that embraced a holistic approach in program and assessment of children's school readiness.

Opper (1996) study is to evaluate the relationship between early academic activities and the development of myopia. 28 children randomly selected from 51 pre-schools completed an education and vision assessment study. At the end of the period, the children were 8.5 years old. Data were collected on developmental performance in the areas of cognition, language, social, academic and motor skills. The result of the study shows that there was no difference in the changes of refraction in relation to the type of pre-school or primary school. The change of refraction was also not related to the educational scores. However, there was a statistically significant difference in the academic scores, in particular the reading scores, between the activity and conventional primary schools. There was also a gender difference in language scores between the girls and the boys of the activity schools. There was no difference in scores between the myopes and non-myopes.

Burns, Okey and Wise (1985) the purpose of this project was to develop a valid and reliable science process skills test for middle and high school students. The test was administered to middle and high school students in the northeastern United States. The 36-item test can be completed in a normal class period. Results yielded a mean score of 19.14 and a total test reliability of 0.86. Mean difficulty and discrimination indices were 0.53 and 0.35, respectively. Split-test correlations coefficients between TIPS II and the original TIPS items were 0.86 and 0.90. TIPS II provides another reliable instrument for measuring process skill achievement. Additionally, it increases the available item pool for measuring these skills.

Conclusion

The review of related literature helped the investigator to know about various studies conducted in the area of integrated process skills. It helps the investigator to know various tools and techniques used to measure the constructs and different components included in the preparation of tools. The number of studies was conducted on the process skills of children. Studies related to integrated process skills are very less when compared to basic process skills. No more studies are done in integrated process skills among pre-primary stage. The investigator was interested to know the integrated process skills among the pre-primary students with respect to their day to day dealings. The investigator identified that the study is relevant in the modern era and decided to proceed with the study. The procedure adopted for the present study is explained in chapter III.

Chapter III

METHODOLOGY

- *Variable of the Study*
- *Design of the Study*
- *Sample Selected for the Study*
- *Tools Used for Data Collection*
- *Data Collection Procedure*
- *Scoring and Consolidation of Data*

METHODOLOGY

The research methodology is a science of studying how will search is done scientifically. It is a systematic way to solve the research problem. It is also defined as the study of methods by which knowledge is gained. Research methodology aims to give the work plan of research. The process of any research work depends largely upon the suitability of the methods, tools, and techniques followed by the researcher in collecting and processing data.

The study is an attempt to develop an assessment instrument to measure the integrated processing skills of pre-primary school students.

The methodology adopted for the study is described under the following major headings:

1. Variable
2. The sample used for the study
3. Tools used for the study
4. Data collection procedure, scoring, and consolidation of data
5. Overview of the stages in the development of the Integrated Process Skills Assessment Instruments (IPSA)

The details of each of the above are given below.

Variable

The major variable of the study is integrated process skills among pre-primary school students.

Sample Selected for the Study

The importance of sampling is that you can determine the adequate respondents from the total number of the target population. Effective sampling, therefore, gives room to the generalization of the findings to the targeted population making the research very practical and economical to conduct yielding more comprehensive information.

A sample is a small portion of the population that is selected for observation and analysis; one can make certain inferences about the characteristics of the population from which it was drawn (Best & Kahn, 2012).

The population of the present study encompassed of pre-primary school students in Kerala. The sample of the study constituted 90 pre-primary school students from the age group of 3 to 6 years from three types of pre-primary education system viz Montessori, Kindergarten Anganwadi and Quranic schools. A stratified sampling procedure was used to select the sample children for this study. The factors or strata taken into consideration while selecting the sample are the following.

a) Type of preschool

b) Age level.

Type of preschool

There are many types of the pre-primary education system in Kerala such as kindergarten, Montessori Anganwadi, Quranic schools High Scope, BYFS, etc. First four are much popular in Kerala and are considered for my study. All types of programme regulated by the different educational department, fall within the scope of education ordinance and have primarily educational functions. Kindergartens are preschools that follow government national curriculum guidelines but are owned and managed by private individuals, firms, faith-based organizations or companies. Montessori pre-schools - these are preschools that follow the Montessori curriculum. They are established and managed by private individuals or organizations. Quranic pre-schools - these are learning institutions established by Muslim organizations and communities, which combine Quranic teachings and secular pre-school activities.

Age level

The sample children for the developmental outcomes range from three years to six years. During this three year period, tremendous changes occur in the development of competency and skills. The children are relatively immature, taking their first steps away from infancy that is 3-6, and they are very dependent upon the adults around them. But six-year-olds are relatively complex, sophisticated, and independent persons who have acquired a large number of physical, personal, social, moral, intellectual and linguistic skills.

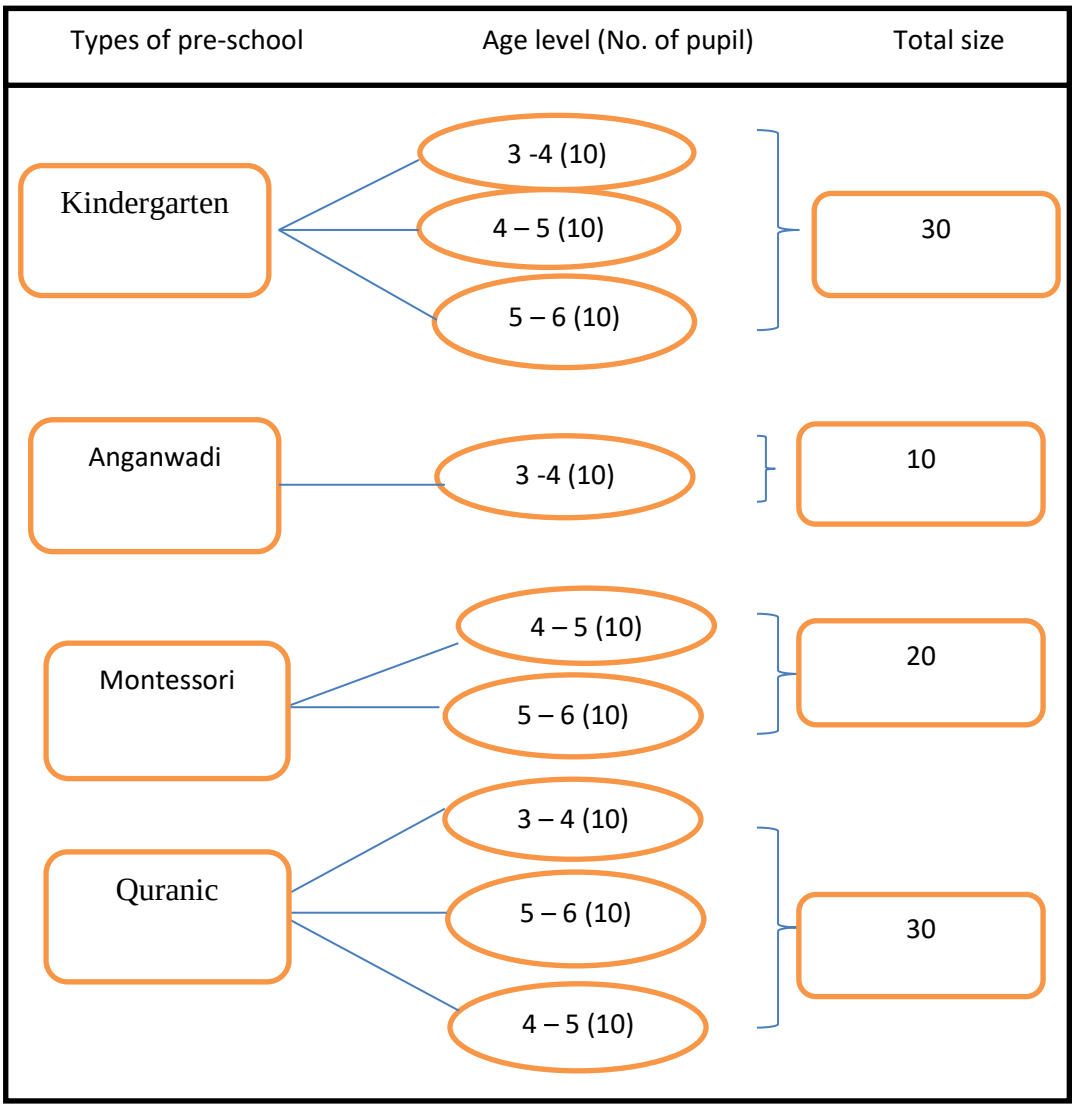

Figure 1: Details of the final sample

Table 6

List of selected pre-primary education centers

Sl. no	Name of the school	Type of school	Sample size
1	Al bir pre-school	Quaranic schools, Kinassery.	20
2	Al FithraIslamic preschool	Quaranic schools, Cheruvannor.	10
3	Olive English school	Kindergarten, Kinassery.	10
4	Mahlara preschool	Kindergarten, Mavoor.	5
5	Olive play school	Kindergarten, Kinassery.	5
6	Beeline pubic school	Kindergarten, Kuttikatoor.	10
7	Hidaya public school	Montessori, Manakadavu	20
8	Navodaya Anganwadi	Mannurvalavu	5
9	Anganwadi	Beypore	5

Tools used for Data Collection

The selection of a suitable tool is an important aspect of any successful research work. The accurate tool can only measure accurate data. Accurate data is the backbone of any successful research.

For the purpose of collecting data, the investigator used the following instrument for the study;

- **Rubrics (Anees & Raheesa, 2019)**
- **Performance tests (Anees & Raheesa, 2019)**
- **Individual tests (Anees & Raheesa, 2019)**

Description of the tool

A detailed description of the tool is given below.

Integrated Process Skills Assessment Instrument (IPSAI)

The first step in developing the Integrated Process Skills Assessment Instrument (IPSAI) involved reviewing relevant literature that cited numerous instruments that were already being used for assessing integrated process skills in education settings. Most of these instruments focused on the construct development and education for the young child. While developing this instrument, the purpose remained clear that the items included would measure the ability to manage basic processes such as observing, classifying, formulating and explaining that are commonly seen in children. Table 7 shows the name of each component, the type of curriculum (Montessori, Kindergarten, Anganwadi, and Quranic preschool), and the age level (3-4, 4-5, 5-6).

Table 7

Overview of instrument contained in IPSI

Instrument	Type of curriculum	Age level	No. of items	Components
Integrated Process Skill Instrument (IPSI-1) Rubrics	Kindergarten Quranic Anganwadi	3-4	45	Communication, Creativity, Spatial Ability, Emotional Stability, Digital Literacy, Self-care, Social Responsibility, Bodily Kinesthetic, Naturalistic Sense and Aesthetic Sense

Instrument	Type of curriculum	Age level	No. of items	Components
Integrated Process Skill Instrument (IPSI-2) Rubrics	Montessori Quranic Kindergarten	4-5	50	Communication, Creativity, Spatial Ability, Emotional Stability, Digital Literacy, Self-care, Social Responsibility, Bodily Kinesthetic, Naturalistic Sense and Aesthetic Sense
Integrated Process Skill Instrument (IPSI-3) Rubrics	Montessori Quranic Kindergarten	5-6	51	Communication, Creativity, Spatial Ability, Emotional Stability, Digital Literacy, Self-care, Social Responsibility, Bodily Kinesthetic, Naturalistic Sense and Aesthetic Sense
Integrated Process Skill Instrument (IPSI-4) performance test	Kindergarten Quranic Anganwadi	3-4	32	Communication, Emotional Stability, Digital Literacy, Self-care, Social Responsibility, Bodily Kinesthetic, Naturalistic Sense and Aesthetic Sense
Integrated Process Skill Instrument (IPSI-5) performance test	Montessori Quranic Kindergarten	4-5	32	Communication, Emotional Stability, Digital Literacy, Self-care, Social Responsibility, Bodily Kinesthetic, Naturalistic Sense and Aesthetic Sense
Integrated Process Skill Instrument (IPSI-6) performance test	Montessori Quranic Kindergarten	5-6	32	Communication, Emotional Stability, Digital Literacy, Self-care, Social Responsibility, Bodily Kinesthetic, Naturalistic Sense and Aesthetic Sense
Integrated Process Skill Instrument (IPSI-7) individual test	Kindergarten Quranic Anganwadi	3-4	14	Creativity and Spatial Ability

Instrument	Type of curriculum	Age level	No. of items	Components
Integrated Process Skill Instrument (IPSI-8) Individual test	Montessori Quranic Kindergarten	4-5	14	Creativity and Spatial Ability
Integrated Process Skill Instrument (IPSI-9) Individual test	Montessori Quranic Kindergarten	5-6	14	Creativity and Spatial Ability

Selection of instruments

Prior to selecting the tools for the assessment of process skills, the investigator carried out an extensive search of the literature on the development of an assessment instrument and testing. The ten components selected for assessing the process skills are: Creativity, Spatial Ability, Communication, Emotional Stability, Digital Literacy, Social Responsibility, Bodily-Kinesthetic, Self-Care, Naturalistic Sense, and Aesthetic Sense.

For developing the instrument the three phases are covered and are diagrammatically represented as below.

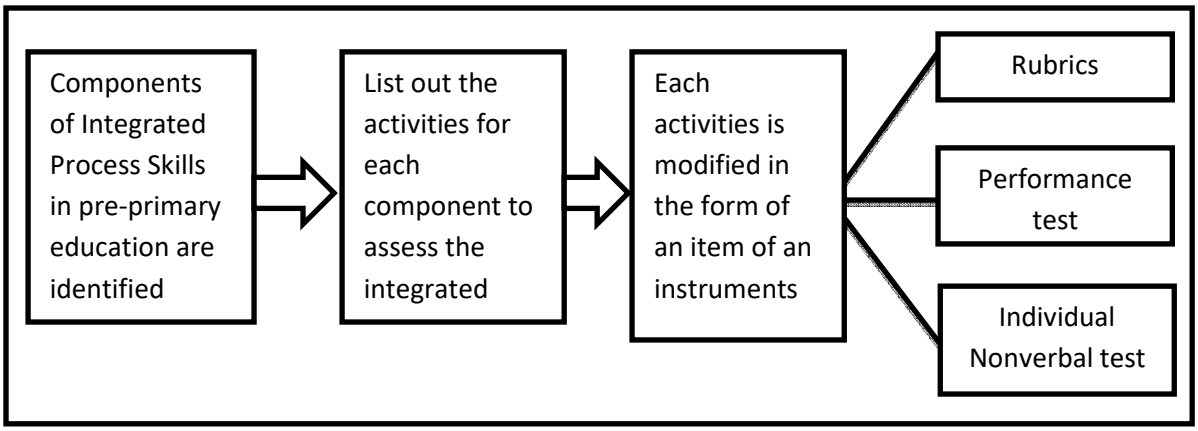

Figure 2: Phases for the construction of an instrument

Rubrics on IPSI

A 'rubric' is defined as a "document that articulates expectations for an assignment by listing the criteria, or what counts and describing levels of quality from excellent to poor" (Andrade and Du, 2005). It holds as being direct assessment measures which help to answer the key questions driving outcomes assessment, i.e. "how students learn; what students learn; how is student learning assessed; and how are assessment results used. The rubric was constructed by the investigator on discussion with the supervising teacher before constructing a detailed review has been carried out. According to these studies, the investigator prepared rubrics for assessing integrated process skills consist of ten dimensions such as Creativity, Spatial Ability, Communication, Emotional Stability, Digital Literacy, Social Responsibility, Bodily-Kinesthetic, Self-Care, Naturalistic Sense, and Aesthetic Sense.

a) Planning of Rubric on IPSI

Three types of rubrics were designed to cover to identify integrated process skills among preschool students at three age levels. The first step in the development and validation of a rubric was planning of the rubric. After selecting the topic, the investigator had gone through the theoretical background and analyzed related studies. It is found that integrated process skills have a major role in the young child's learning process. In this study firstly the investigator pooled a list of components of the term IPSI, which would comprehensively represent it as per their operational definition is given by the investigator. After the discussion with the supervising teacher, the investigator developed a final list of components for the preparation of the tool. On that basis, the investigator prepared a rubric to measure the integrated process skills of pre-primary school students. Detailed descriptions of the components are given below.

Creativity

Items of the rubrics on this particular dimension include the major creativity skills that children are acquiring during the period from three to six years such as: imagine and exploring ideas, novelty, fluency, flexibility, risk-taking, internal motivation, collaboration, communication and self-expression, and decision making.

Eg:

Draw the picture	Able to draw the neat and complete picture	Draw incomplete picture	Just attend

Spatial ability

Items of the rubrics on this particular dimension include the major spatial ability skills that children are acquiring during the period from three to six years such as orientation in space, the ability of figurative and abstract visualization, thinking via imagery conception, and the capability of thinking in the third dimension, redefining and decomposition of existing art compositions into new ones.

Eg:-

Sudoku level 1	Independently solve the puzzle within the time limit	Solve puzzles but take More time	Not interested to solve the puzzles

Social responsibility

Items of the rubrics on this particular dimension include the major social responsibility skills that children are acquiring during the period from three to six years such as initiation, completing the task, sharing borrowing and returning property, following instructions and rules, social interaction with peers and adults.

Eg:

Greeting others	Great another person appropriately to speak to them and spoke clearly and made himself understood	Made a physical gesture to acknowledge the other person rather than speak	From given situation would not communicate verbally or by gesture

Self-care

Items of the rubrics on the particular dimension include the major self-care skills that children are acquiring during the period from three to six years such as washing and grooming, caring of belongings, cleaning, eating and drinking.

Eg:

Care for belonging	Take care of their own personal belongings and respecting others	Show some effort to care for their own personal belongings	Does not take care of their personal belongings

Communication

Items of the rubrics on the particular dimension include the major communication skills that children are acquiring during the period from three to six years such as it involves the acquisition of linguistic forms and procedures for acts of expression, interpretation and verbal language.

Eg:

Story completion	The logical sequence with many vocabulary	Attempted to complete it, But is not able to convey what was it	Poor vocabulary. Hesitated to say the story

Bodily-kinesthetic

Items of the rubrics on the particular dimension include the major bodily-kinesthetic skills that children are acquiring during the period from three to six years such as fine and gross motor skills, including children's coordination with walking, jumping, and throwing, pick up small objects and use of their fingers successfully.

Eg:

Dancing	They focused on the performance and locomotive are memorized. The enjoyment is observable	Locomotive moments are most often memorized and is seldom focused on the performance	Not memorized the movement and not focused or concentrated on the performance

Naturalistic sense

Items of the rubrics on the particular dimension include the major naturalistic sense skills that children are acquiring during the period from three to six years such as: recognition and naming of what are natural things, discriminating and identifying sounds living things and form the relationship by matching, sorting, and classifying blocks and props such as animals, cars and people.

Eg:

Planting and gardening	Always maintain the garden and observe the plants carefully and curious to know about it	Maintaining the garden only when it is required and is in the group	Never maintain the garden and did not show interest in the world

Emotional stability

Items of the rubrics on the particular dimension include the major emotional ability skills that children are acquiring during the period from three to six years such as reaction to frustration, helping adults and peers, empathy, inhibition control, self-confidence, work emotional expression and management and the ability to develop and support relationships with others.

Eg:

Expressing the feelings	Deals feeling in a very healthy way	Make some effort to handle frustration	Express his feelings in unhealthy unsafe or disrespectful ways

Aesthetic Sense

Items of the rubrics on the particular dimension include the major aesthetic skills that children acquire during the period from three to six years such as: identify musical instruments, recognize the sounds, responding to auditory patterns in poems and stories, song.

Eg:

Play music by using household gadgets	Make varieties of sound. Able to identify the difference	Make similar songs only	Make only one sound

Digital literacy

Items of the rubrics on the particular dimension include the major digital literacy skills that children are acquiring during the period from three to six years such as: take photos, enlarge or decrease the size of objects by pinching and dragging, open apps, exit and enter other apps, turn the device on and off, and swipe the screen.

Eg:

Ability to do some video games	Fully articulated all rules and knows where to verify rules and operate the games	Understood few rules and operate simple tasks	Simply playing something without knowing the rules and correct steps

b) Preparation of Rubric on IPSI

Based upon the above-mentioned components, the investigator developed three rubrics on integrated process skills for the age group 3-4, 4-5and5-6. The draft rubrics consist of 45, 50 and 51 items respectively related to integrated process skills.

The component wise distribution of items on rubrics on integrated process skills in preschool students are given below.

Table 8

Component wise items of rubrics on IPSI

Sl. No	Components	Rubrics on IPSI 1 (3-4)	Rubrics on IPSI 2(4-5)	Rubrics on IPSI 3(5-6)
1	Creativity	1,2,3,4,5	1,2,3,4,5,6,7	1,2,3,4,5,6,7
2	Spatial ability	6,7,8,9,10	8,9,10,11,12,13,14, 15	8,9,10,11,12,13,14,15
3	Social responsibility	16,17,18,19,20	20,21,22,23,24,25	16,17,18,19,20,21
4	Self-care	30,31,32,33,34	35,36,37,38,39	32,33,34,35,36,37
5	Communication	21,22,23,24,25	26,27,28,29,30	22,23,24,25
6	Bodily kinesthetic	26,27,28,29	31,32,33,34	26,27,28,29,30,31
7	Naturalistic sense	35,36,37,38	40,41,42,43	38,39,40
8	Emotional stability	39,40,41	44,45,46,47	49,50,51
9	Aesthetic sense	11,12,13,14,15	16,17,18,19	41,42,43,44
10	Digital literacy	42,43,44,45	48,49,50	45,46,47,48

Data collection Procedure, Scoring and consolidation of data

c) Administration of tool

After selecting the sample, the investigator contacted the head of the institution and sought permission to administer the tool. The tools were distributed among the teachers they have to give the responses based on the keen observation made on the students. It has no time limit but all items have to be fixed by the teachers there is no particular right and wrong answer.

d) Scoring and consolidation of data

Rubrics 1, 2, and 3 are developed based on ten dimensions and consist of 45, 50 and 51 items respectively. The total score for each items calculated separately. Every item has three responses such as exemplary, proficient and emerging, first response carry three marks and the last response carry one mark.

Performance Test on IPSI

The performance test is a test for measuring students skills based on the pre-determined activity. It is constructed by the investigator on discussion with the supervising teacher before constructing a detailed review has been carried out. The investigator prepared performance tests for assessing integrated process skills consist of eight dimensions such as Communication, Emotional Stability, Digital Literacy, Social Responsibility, Bodily-Kinesthetic, Self-Care, Naturalistic Sense, and Aesthetic Sense.

a) Planning of performance tests on IPSI

Three types of performance tests were designed to identify integrated process skills among preschool students at three age levels. The first step in the development and validation of a nonverbal test was planning of the test. After selecting the topic, the investigator had gone through the theoretical background and analyzed related studies. It is found that integrated process skills have a major role in the young child's learning process. In this study firstly the investigator pooled a list of components of the term IPSI, which would comprehensively represent it as per their operational definition is given by the investigator. After the discussion with the

supervising teacher, the investigator developed a final list of components for the preparation of the tool. On that basis, the investigator prepared a nonverbal test to measure the integrated process skills of preprimary school students. Detailed descriptions of the components are given below.

Social responsibility

Items of the performance test on this particular dimension include the major social responsibility skills that children are acquiring during the period from three to six years such as initiation, completing the task, sharing borrowing and returning property, following instructions and rules, social interaction with peers and adults.

Eg: Intervention of children when any of their friends suffers from disease

a) Helping the friend by enquiring about everything

b) Providing necessary help to the friend and reporting the problem to the teacher

c) Showing no interest in understanding the problem of his friend and engaging in his own business

Self-care

Items of the performance test on the particular dimension include the major self-care skills that children are acquiring during the period from three to six years such as washing and grooming, caring of belongings, cleaning, eating and drinking.

Eg: Attention to the hetero-surroundings while travelling with the family Teacher explains the situation. “How will you cross the road along with family?”

a) Crossing the road carefully by holding the hands of parents

b) Though he holds the hands of parents, he crosses the road by looking at the toys in the nearby shop

c) Crossing the road carelessly without minding the parents

Communication

Items of the performance test on the particular dimension include the major communication skills that children are acquiring during the period from three to six years such as it involves the acquisition of linguistic forms and procedures for acts of expression, interpretation and verbal language.

Eg: Story context familiar to the children are given. Children tell the story by observing the picture. Creativity of the children can be examined

a) A child carefully concentrates in the picture. By relating the pictures they tells the story well

b) Though they go through the picture, don't get the clear idea, but they tried to tell the story with the help of teacher

c) The child couldn't even grab the familiar context and perform according to the idea

Bodily-kinesthetic

Items of the performance test on the particular dimension include the major bodily-kinesthetic skills that children are acquiring during the period from three to six years such as fine and gross motor skills, including children's coordination with walking, jumping, and throwing, pick up small objects and use of their fingers successfully.

Eg: Idea formation. Teacher asks the students to create objects using clay

a) Making different objects using his own imagination

b) Imitating others objects in order to bring out his talent

c) Trying to make circles or rollers

Naturalistic sense

Items of the performance test on the particular dimension include the major naturalistic sense skills that children are acquiring during the period from three to six years such as: recognition and naming of what are natural things, discriminating and identifying sounds living things and form the relationship by matching, sorting, and classifying blocks and props such as animals, cars and people.

Eg: Teacher gives the pictures of birds, grasses and twigs and asks them to build a habitual diorama

a) Making it very beautiful and attractive, and bring variety in the objects

b) Even though has an idea about the object in the mind, but couldn't make it correctly

c) According to the teacher's instructions, trying to make it without any interest

Emotional stability

Items of the performance test on the particular dimension include the major emotional ability skills that children are acquiring during the period from three to six years such as reaction to frustration, helping adult and peers, empathy, inhibition control, self-confidence, work emotional expression and management and the ability to develop and support relationships with others.

Eg: Intervention to the children in an unfamiliar class

Teacher explains the situation, "How will you receive a student who is a newcomer in the class?"

a) Happily receives him and forcing him to sit near and enquiring whether he is fine
b) Smiling to the newcomer but isn't trying to interact with him
c) Showing disinterest to mingle with the newcomer and keeping distance from him

Aesthetic Sense

` Items of the performance test on the particular dimension include the major aesthetic skills that children are acquiring during the period from three to six years such as: identify musical instruments, recognize the sounds, responding to auditory patterns in poems and stories, song.

Eg: Examining they could identify the musical instruments

Teacher plays the sound of the musical instrument and identifying the children's music sense through their response

a) Understanding from which instrument the sound comes while hearing the sound

b) Identifying some sounds

c) He couldn't identify the instrument, even though hears the sound

Digital literacy

Items of the performance test on the particular dimension include the major digital literacy skills that children are acquiring during the period from three to six years such as: take photos, enlarge or decrease the size of objects by pinching and dragging, open apps, exit and enter other apps, turn the device on and off, and swipe the screen.

Eg: Teacher asks children to play video games

a) Playing the game according to the instructions

b) Needs someone's help during playing

c) Playing according to others instructions

b) Preparation of performance test on IPSI

Based upon the above-mentioned components, the investigator developed three performance tests on integrated process skills for the age group 3-4, 4-5 and 5-6. In each draft, tests consist of 32 items related to integrated process skills.

The component wise distribution of items on the nonverbal test on integrated process skill in preschool students is given below.

Table 9

Component wise items of performance test on IPSI

Sl. No.	Components	Rubrics on IPSI 1 (3-4)	Rubrics on IPSI 2(4-5)	Rubrics on IPSI 3(5-6)
1	Social responsibility	5,6,7,8	5,6,7,8	5,6,7,8
2	Self-care	13,14,15,16	13,14,15,16	13,14,15,16
3	Communication	1,2,3,4	1,2,3,4	1,2,3,4
4	Bodily kinesthetic	21,22,23,24	21,22,23,24	21,22,23,24
5	Naturalistic sense	17,18,19,20	17,18,19,20	17,18,19,20
6	Emotional stability	9,10,11,12	9,10,11,12	9,10,11,12
7	Aesthetic sense	25,26,27,28	25,26,27,28	25,26,27,28
10	Digital literacy	29,30,31,32	29,30,31,32	29,30,31,32

Data collection Procedure, Scoring, and consolidation of data

c) Administration of tool

After selecting the sample, the investigator contacted the head of the institution and sought permission to administer the tool. The tools were administered

by the investigator himself they have to give the responses based on the keen observation made on the students. It has no time limit but all items have to be fixed by the investigator and there is no particular right and wrong answer.

d) **Scoring and consolidation of data**

Performance test 1, 2, and 3 are developed based on eight dimensions and consists of 32 items in the test. The total score for each dimension calculated separately. Every item has three responses namely A, B and C, investigator or teacher has to fill the response based students performances. The first response carries three marks and the last response carry one mark.

Individual Test on IPSI

The individual tests consist of both verbal and non-verbal items. It is constructed by the investigator on discussion with the supervising teacher before constructing a detailed review has been carried out. The investigator prepared individual nonverbal tests for assessing integrated process skills consist of two dimensions such as Creativity and Spatial Ability.

a) Planning of individual tests on IPSI

Three types of individual tests were designed to identify integrated process skills among preschool students at three age levels. The first step in the development and validation of a nonverbal test was planning of the test. After selecting the topic, the investigator had gone through the theoretical background and analyzed related studies. It is found that integrated process skills have a major role in a young child's learning process. In this study firstly the investigator pooled a list of components of

the term IPSI, which would comprehensively represent it as per their operational definition is given by the investigator. After the discussion with the supervising teacher, the investigator developed a final list of components for the preparation of the tool. On that basis, the investigator prepared a nonverbal test to measure the integrated process skills of preprimary school students. Detailed descriptions of the components are given below.

Creativity

Items of the individual tests on this particular dimension include the major creativity skills that children acquire during the period from three to six years such as: imagine and exploring ideas, novelty, fluency, flexibility, risk taking, internal motivation, collaboration, communication and self-expression and decision making.

Eg: Draw the pictures using below figures

Spatial ability

Items of the individual tests on this particular dimension include the major spatial ability skills that children acquire during the period from three to six years such as: orientation in space, ability of figurative and abstract visualization, thinking via imagery conception, and capability of thinking in the third dimension, redefining and decomposition of existing art compositions into new ones.

Eg: Which objects below rolls best?

b) Preparation of individual nonverbal test on IPSI

Based upon the above mentioned components, the investigator developed three individual nonverbal tests on integrated process skills for the age group 3-4, 4-5 and 5-6. In each draft tests consist of 14 items related to integrated process skills.

The component wise distribution of items on nonverbal test on integrated process skills in preschool students is given below.

Table 10

Component wise items of individual test on IPSI

Sl. no	Components	Individual test on IPSI 7 (3-4)	Individual test On IPSI 8 (4-5)	Individual test on IPSI 9 (5-6)
1	Creativity	6,7,8,11,12,13,14	2,3,5,8,11,12,13	1,6,7,8,13,14
2	Spatial ability	1,2,3,4,5,9,10	1,4,6,7,9,10,14	2,3,4,9,10,11,12

Data collection Procedure, Scoring, and consolidation of data

c) Administration of tool

After selecting the sample, the investigator contacted the head of the institution and sought permission to administer the tool. The tools were distributed among the students with proper instruction, there is no time limit and all questions were compulsory. The researcher clarified the doubts of students during the time of administration of tools.

d) Scoring and consolidation of data

Individual test 1, 2, and 3 are developed based on two dimensions and consists of 14 items in each test. The score of the subject for each test is calculated and profile obtained. The calculation of the scores can be done by using a scoring key.

In this chapter research design has been presented. Use of rubrics, performance test and individual test methodology has been extensively used for this research. The details of research methodology, instrument design, its scoring and administration are discussed. The construction phases, validation and standardization process for the present study is explained in chapter IV.

Chapter IV

ANALYSIS AND INTERPRETATION

- *Phases for Construction of the Instrument*
- *Standardization Procedure*

ANALYSIS AND INTERPRETATION

The instrument for assessing the skills of preschool students is necessary for recent years. Development of a good instrument is every investor's goal. Investigators are engaged in blending of multiple phases like planning, designing, and constructing and validation process. In the present chapter, an analysis of data is made by the researcher to fulfill the first five objectives of the study. The instrument was designed to identify integrated process skills.

Phases for construction of the instrument

In order to construct and validate instrument on integrated process skills of pre-primary school students, the investigator goes through three phases the detailed description of data is presented under the following three heads.

Part A: - Deals with identification of dimensions and list out the different activities based on the identified dimension.

Part B: - Deals with the phase of constructing of integrated process skill instrument. This section deals with how to measure the integrated process skills using the developed instrument and identified questions to assess the dimensions.

Part C: - Deals with the standardization process of the developed instrument.

PART A

Identification of dimensions of integrated process skills

For constructing any tool, the constructor has to identify major components to be included in the tool. The first and foremost objective of the study is to identify the components of integrated process skills that are commonly seen in early periods. There has been a plethora of research in identifying the abilities and developmental aspects of preschool students but the studies focus primarily on the integrated process skills where the research is conducted. An attempt has been made in the present study, to consolidate these studies by identifying components and list out the activities based on the listed components. A list of top ten dimensions has been selected for identification of activities through literature review and document analysis.

The researchers conducted by Opper (1996), Rao., Sun., ng(2013) have been used for the identification of components in integrated process skills. These studies have been selected on the basis of the in-depth analysis of integrated process skills-based on the research paper, theoretical overview of the psychologist, and major theories regarding early childhood development.

For identifying and to list out the components of integrated process skills, the research has gone through document analysis. The first step is to pool the integrated process skills components that are commonly seen in the early childhood period. On the basis of extensive literature and theoretical background, a total of 22 components were chosen for the study. That is given below.

Table 11

List of 22 components identified for IPSI

• Leadership	• Linguistic
• · Communication	• Digital literacy
• Emotional intelligence	• Bodily kinesthetic
• Intra personal	• Interpersonal
• Team work	• Musical
• Problem solving	• Mathematical and logical
• Spatial	• Entrepreneurship
• Naturalistic	• Flexibility and adaptability
• Global citizenship	• Social responsibility
• Creativity	• Initiativeness
• Existential	• Critical thinking

After the detailed discussion and suggestions with the supervising teacher, these 22 items were further subdivided into 15 items. Leadership, entrepreneurship, and teamwork were clubbed into flexibility and adaptability, global citizenship and interpersonal were clubbed into social responsibility, intra personal was clubbed into self-care, mathematical, logical and problem solving were clubbed into creativity, linguistic was clubbed into communication.

Table 12

Draft of 15 component wise list of integrated process skills

• Flexibility and adaptability	• Communication
• Emotional intelligence	• Bodily-kinesthetic
• Digital literacy	• Self-care
• Social responsibility	• Spatial intelligence
• Initiativeness	• Naturalistic
• Creativity	• Musical
• Reading and writing	• Attention span
• Fine motor skills	

Based on the theoretical overview made by Opper (1996), Monica(2005), Ahmad,Yahaya, Bahrom, San, Taha…..Yassin(2018) and Rao(2013) we finalize components into ten dimensions that commonly seen in the preschool children. The final list was given below.

Table 13

Final list of components used for the study

Sl. No	Components
1	Creativity
2	Spatial ability
3	Social responsibility
4	Self-care
5	Naturalistic Sense
6	Communication
7	Aesthetic sense
8	Digital literacy
9	Emotional stability
10	Bodily kinesthetic

The researcher had undertaken an in-depth study of all major components which indicates to gain knowledge about that and framed some activities to which encompasses integrated process skills. All the items are manifested in student action, performance, and reaction response. The first step was to list out all the major activities in the particular area and advice from the supervising teacher helped to sort each activity under each dimension, therefore, this selection and sorting process of the items helped the researcher for the construction of instruments to measure the process skills of preschool students.

Let us take an example of an integrated process skills, one of the components of creativity, involves imagining and exploring ideas, novelty, fluency, flexibility, risk-taking, internal motivation, collaboration, communication and self-expression, and decision making. So to know the creativity skills among preschool children we have using the following activities.

- Puzzles
- Why questions
- Predict outcomes
- Story completion

Based on these activities the items used to assess creativity are developed. Likewise, several items were generated related to each dimension.

Part B

Construction of Integrated Process Skills

This phase deals with the construction of the instrument. The instrument was developed in order to assess the ten dimensions of integrated process skills. It leads to prepare a comprehensive instrument in the age range from three to six years. This instrument consists of nine tests, which is IPSI 1, IPSI 2, and IPSI 3 (rubrics), IPSI 4, IPSI 5, and IPSI 6 (performance test) IPSI 7, IPSI 8, and IPSI 9(individual non-verbal test).

A total of 146 items were selected for all the three rubrics. Three types of the rubric were constructed for each age group and it consists of 45, 50, and 51 items respectively. It involves three categories of responses for each item on the student's

performance level, labeled as exemplary, proficient, and emerging. IPSI involves three performance tests, which includes 96 items altogether. It involves three categories of responses for each item on the student's performance level, labeled as a, b, and c. There are three Individual non-verbal tests which altogether consist of 42 items. Each test consists of 14 items respectively. Based on the scoring key the score of each component was assessed. The separate scoring key was prepared for all the nine tools. The above all test covered a variety of integrated process skills that are important for children's early development.

Part C

Standardization process

Validation of the tool

An index of validity shows the degree to which a test measures what it intends to measure when compared with the accepted criterion. Validity is that quality of a data gathering instrument or procedure that enables it to measure what it is supposed to measure (Best & Kahn, 2012). The validity of the nine tools is ensured through face validity and content validity.

Validity is a true joy of any research tool. Validity is a basic essential feature of educational evaluations whether an instrument is standard or defective; it should be valid when an instrument is constructed to measure certain skills which the researcher wants to measure. It should measure only those process skills and no other skills, and then only the instrument can be considered standardized or valid.

A test is said to have face validity when it appears to measure whatever the author had in mind, namely what he thought he was measuring (Garret 2012). Content validity can be defined as 'the degree to which the test items actually measure or related to the traits for which the test was designed and to be used'. This includes the issues, the actual wording, the design of the items and how adequately the test samples the universe of knowledge (Best & Kahn, 2012).

All the items were constructed by the investigator himself under the guidance of supervising teacher. So it is likely that there might be several defective items, i.e., some items which do not measure integrated process skills might have been included. In order to step forward to make the instrument perfect, we decided to have an expert opinion on the items. So to ensure content validity of the IPSI was inspected by checking whether the items in the instrument represented the purpose for which the test was meant to be. To incorporate their suggestions we made necessary modifications, some of the items were excluded and some of them were added before developing the final draft. It was considered as proof of content validity.

Reliability

A measurement procedure is reliable to the extent, to which it provides consistent results on repeated measurements. Consistency of result means that we get the same score on repeated measurement. Test reliability tells that to what extent individual differences of scores can be assigned to chance errors. It tells us the extent to which true differences of traits can be attributed to these individual differences. According to Garrett (2005), "The reliability of a test or of any

measuring instrument depends upon the consistency with which it gauges the ability to which it is applied."

To measure the reliability of the present instrument Cronbach alpha is a statistical technique used to determine internal consistency. For estimates of reliability, SPSS produces both an unstandardized Cronbach's alpha and a standardized alpha. Standardized alphas assume similar variances (equal to 1), so if variances are similar across items, the two alphas will be approximately the same. Unstandardized alphas reflect actual item variances so if variances are widely dissimilar, the two alphas will be quite different. Cronbach's alpha is used as a measure of the internal consistency of the instrument and is based on the average correlation among the items on an instrument. Cronbach's alpha is expressed as a correlation coefficient, ranging in value from 0 to +1. An estimate of 0.60 or higher is desired for judging an instrument to be reliable. In this study, Cronbach alpha coefficients of each instrument are shown in the table

Table 14

Cronbach alpha score of the instruments

Instrument	Cronbach alpha	Cronbach alpha based on standardized item
Rubrics on IPSI 1	0.963	0.962
Rubrics on IPSI 2	0.955	0.955
Rubrics on IPSI 3	0.870	0.862
Performance test on IPSI 4	0.924	0.925
Performance test on IPSI 5	0.843	0.842
Performance test on IPSI 6	0.650	0.650

Cronbach alpha coefficients of rubrics on IPSI 1, IPSI 2 and IPSI 3, performance test on IPSI 4, IPSI 5, and IPSI 6 were 0.963, 0.955, 0.870, 0.924, 0.843 and 0.650 respectively. A value of 0.60 is seen as an acceptable value for Cronbach's alpha; a value substantially lower indicates an unreliable scale. In this study, the Cronbach alpha coefficients of the six scales were over 0.65 that were seen as a good indicator of their reliability and high acceptability.

The second column represents the Cronbach's alpha coefficient of internal consistency when all scale items have been standardized. As per the item statistics in reliability analysis was carried out on the rubrics on IPSI 1 the Cronbach's alpha showed all the items to reach high reliability, $\alpha = 0.963$. IPSI 2 Cronbach's alpha showed all the items to reach high reliability, $\alpha = 0.955$.IPSI 3 Cronbach's alpha showed all the items to reach high reliability, $\alpha = 0.870$. The performance tests on IPSI 4Cronbach's alpha showed all the items to reach high reliability, $\alpha = 0.924$. IPSI 5 Cronbach's alpha showed all the items to reach high reliability, $\alpha = 0.843$. IPSI 5 Cronbach's alpha showed all the items to reach acceptable reliability, $\alpha = 0.650$.

The reliability coefficient may vary where some of the items were excluded. The Cronbach alpha score of the tool when particular items were deleted is statistically analyzed. The detailed list of Cronbach alpha score for each item is given below.

Table 15

Item wise scores of Cronbach alpha

Sl. No.	IPSI-1 Rubrics	IPSI-2 Rubrics	IPSI-3 Rubrics	IPSI-4 Performance test	IPSI-5 Performance test	IPSI-6 Performance test
1	0.963	0.955	0.866	0.920	0.839	0.624
2	0.962	0.956	0.867	0.919	0.838	0.624
3	0.961	0.954	0.869	0.921	0.835	0.631
4	0.962	0.955	0.867	0.920	0.837	0.629
5	0.962	0.956	0.871	0.920	0.841	0.637
6	0.961	0.955	0.864	0.921	0.843	0.629
7	0.962	0.954	0.869	0.921	0.844	0.640
8	0.961	0.953	0.863	0.921	0.840	0.641
9	0.961	0.955	0.862	0.920	0.839	0.650
10	0.962	0.956	0.870	0.922	0.839	0.670
11	0.962	0.956	0.870	0.920	0.836	0.672
12	0.962	0.954	0.870	0.922	0.845	0.669
13	0.962	0.954	0.871	0.926	0.839	0.646
14	0.963	0.954	0.869	0.923	0.849	0.635
15	0.963	0.954	0.870	0.921	0.837	0.661
16	0.962	0.957	0.864	0.920	0.844	0.624
17	0.962	0.954	0.860	0.922	0.845	0.667
18	0.962	0.956	0.868	0.923	0.840	0.653
19	0.962	0.954	0.861	0.922	0.840	0.641

Sl. No.	IPSI-1 Rubrics	IPSI-2 Rubrics	IPSI-3 Rubrics	IPSI-4 Performance test	IPSI-5 Performance test	IPSI-6 Performance test
20	0.962	0.952	0.864	0.924	0.840	0.663
21	0.961	0.955	0.867	0.921	0.840	0.637
22	0.961	0.954	0.866	0.921	0.830	0.619
23	0.962	0.954	0.870	0.920	0.836	0.649
24	0.961	0.954	0.870	0.921	0.841	0.663
25	0.962	0.953	0.859	0.921	0.836	0.648
26	0.962	0.955	0.876	0.922	0.838	0.645
27	0.961	0.954	0.869	0.922	0.836	0.633
28	0.962	0.955	0.866	0.920	0.834	0.640
29	0.962	0.956	0.870	0.919	0.832	0.637
30	0.962	0.953	0. 872	0.919	0.832	0.640
31	0.961	0.954	0.868	0.923	0.829	0.613
32	0.961	0.954	0.867	0.923	0.828	0.622
33	0.961	0.954	0.871			
34	0.962	0.955	0.869			
35	0.962	0.954	0.869			
36	0.962	0.954	0.867			
37	0.962	0.953	0.863			
38	0.962	0.953	0.860			
39	0.963	0.956	0.862			

Sl. No.	IPSI-1 Rubrics	IPSI-2 Rubrics	IPSI-3 Rubrics	IPSI-4 Performance test	IPSI-5 Performance test	IPSI-6 Performance test
40	0.962	0.954	0.862			
41	0.962	0.955	0.871			
42	0.962	0.954	0.868			
43	0.961	0.955	0.862			
44	0.962	0.955	0.865			
45	0.962	0.954	0.868			
46		0.955	0.872			
47		0.955	0.872			
48		0.954	0.876			
49		0.955	0.868			
50		0.954	0.870			
51			0.871			

Each column in the table shows Cronbach's Alpha scores of deleted items in six tools. The Cronbach alpha score would get modified if removed each item from the instrument. If the obtained score goes down, we need to keep the item as such. But if the score goes up if we delete an item, we need to delete it as it would make our instrument more reliable. In IPSI 1, obtained Cronbach alpha score is 0.963 all the score goes down if we deleted an item and all items appeared to be worthy of retaining.

The maximum Cronbach alpha score of the tool when particular items were deleted, and the number of items of the score which goes up after the item is deleted was given below.

Table 16

Maximum Cronbach alpha score of particular item were deleted

Instrument	Cronbach alpha's score for the tool	items	Maximum cronbach's alpha score
Rubrics on IPSI 1	0.963	Nill	
Rubrics on IPSI 2	0.955	2, 5, 10, 11, 16, 29, 39	0.957
Rubrics on IPSI 3	0.870	5, 13, 26, 30, 33, 41, 46, 47, 48, 51	0.876
performance test on IPSI 4	0.924	13	0.926
performance test on IPSI 5	0.843	12, 14, 16, 17	0.849
performance test on IPSI 6	0.650	10, 11, 12, 15, 17, 18, 20	0.670

Obtained Cronbach alpha scores of IPSI 1 is 0.963 and all the item of the scores goes down if we delete an item, so all the item should be retained. In IPSI 2 Cronbach alpha score are 0.955 and the maximum Cronbach alpha scores if we delete an item is 0.957 it shows only feasible changes among the result so there is no need to delete that item. In IPSI 3 Cronbach alpha score is 0.870 and the maximum Cronbach alpha score if we delete an item is .876 it shows only feasible changes

among the result so there is no need to delete that item. In IPSI 4 Cronbach alpha score is 0.924 and the maximum Cronbach alpha score if we delete an item is 0.926 it shows only feasible changes among the result so there is no need to delete that item. In IPSI 4 Cronbach alpha score is 0.843 and the maximum Cronbach alpha score if we delete an item is 0.849 it shows only feasible changes among the result so there is no need to delete that item. In IPSI 6 Cronbach alpha score is 0.650 and the maximum Cronbach alpha score if we delete an item is 0.670 it shows only feasible changes among the result so there is no need to delete that item.

The reliability analysis was carried out on components wise in each age level that are given below.

Table17

Component wise analysis of Cronbach alpha coefficient is in show table

Components	Age level 3-4		Age level 4-5		Age level 5-6	
	No of questions	Cronbach alpha	No of questions	Cronbach alpha	No of questions	Cronbach alpha
Creativity	5	0.858	7	0.522	7	0.520
Spatial Ability	5	0.862	8	0.827	8	0.608
Social responsibility	9	0.841	10	0.823	10	0.760
Communication	9	0.858	9	0.765	8	0.638
Emotional stability	7	0.816	8	0.752	7	0.591
Bodily kinesthetic	8	0.824	8	0.800	10	0.651
Aesthetic sense	9	0.823	8	0.772	8	0.763
Naturalistic Sense	8	0.758	8	0.773	7	0.528
Digital literacy	8	0.861	7	0.866	8	0.697
Self-care	9	0.825	9	0.785	10	0.611

As per the item statistics in reliability analysis was carried out on component wise in each age level 3-4. Creativity involves five items. Cronbach's alpha showed all the items to reach high reliability, α = 0.858. Spatial ability involves five items. Cronbach's alpha showed all the items to reach high reliability, α = 0.862. Social responsibility involves nine items. Cronbach's alpha showed all the items to reach high reliability, α = 0.841. Communication involves nine items. Cronbach's alpha showed all the items to reach high reliability, α = 0.858. Emotional stability involves seven items. Cronbach's alpha showed all the items to reach high reliability, α = 0.816. Bodily-kinesthetic involves eight items. Cronbach's alpha showed all the items to reach high reliability, α = 0.824. Aesthetic sense involves nine items. Cronbach's alpha showed all the items to reach high reliability, α = 0.823. Naturalistic Sense involves eight items. Cronbach's alpha showed all the items to reach reliable, α = 0.758. Digital literacy involves eight items. Cronbach's alpha showed all the items to reach high reliability, α = 0.861. Self-care involves nine items. Cronbach's alpha showed all the items to reach high reliability, α = 0.861.

At the age group, 4-5 Creativity involves seven items. Cronbach's alpha showed all the items to reach acceptable reliability, α = 0.522. Spatial ability involves eight items. Cronbach's alpha showed all the items to reach high reliability, α = 0.827. Social responsibility involves ten items. Cronbach's alpha showed all the items to reach high reliability, α = 0.823. Communication involves nine items. Cronbach's alpha showed all the items to reach reliability, α = 0.765. Emotional stability involves eight items. Cronbach's alpha showed all the items to reach reliability, α = 0.752. Bodily-kinesthetic involves eight items. Cronbach's alpha

showed all the items to reach high reliability, α = 0.800. Aesthetic sense involves eight items. Cronbach's alpha showed all the items to reach reliability, α = 0.772. Naturalistic Sense involves eight items. Cronbach's alpha showed all the items to reach reliable, α = 0.758. Digital literacy involves seven items. Cronbach's alpha showed all the items to reach high reliability, α = 0.866. Self-care involves nine items. Cronbach's alpha showed all the items to reach reliability, α = 0.785.

At the age group, 5-6 Creativity involves seven items. Cronbach's alpha showed all the items to reach acceptable reliability, α = 0.520. Spatial ability involves eight items. Cronbach's alpha showed all the items to reach acceptable reliability, α = 0.608. Social responsibility involves ten items. Cronbach's alpha showed all the items to reach reliability, α = 0.760. Communication involves eight items. Cronbach's alpha showed all the items to reach reliability, α = 0.638. Emotional stability involves seven items. Cronbach's alpha showed all the items to reach reliability, α = 0.591. Bodily-kinesthetic involves ten items. Cronbach's alpha showed all the items to reach reliability, α = 0.651. Aesthetic sense involves eight items. Cronbach's alpha showed all the items to reach reliability, α = 0.763. Naturalistic Sense involves seven items. Cronbach's alpha showed all the items to reach reliable, α = 0.528. Digital literacy involves eight items. Cronbach's alpha showed all the items to reach reliability, α = 0.697. Self-care involves ten items. Cronbach's alpha showed all the items to reach reliability, α = 0.611.

Conclusion

Based on the outcome of Cronbach alpha test used for the analysis. The results lead the investigator to arrive at the conclusion that the IPSI is helpful for the students to acquire the essential integrated process skills and for the teachers to understand the student's progress and level of acquired skills among pre-primary school students. Moreover, the investigator is satisfied to notice that the result shows that the test was performed and it resulted in an overall score of 0.65 indicating internal consistency.

The analysis and interpretation of data made here helped the investigator to draw conclusions and put forward some suggestions for further study.

Chapter V

SUMMARY, FINDINGS AND SUGGESTIONS

- *Study in Retrospect*
- *Objectives of the Study*
- *Major Findings*
- *Educational Implications*
- *Suggestions for Further Study*

SUMMARY, FINDINGS AND SUGGESTIONS

This chapter presents a summary of the results and the conclusions made from them, as well as their implications for the educational system. The chapter further highlights the major findings based on the objectives, and the area for further research.

The main aim of this study was to develop and validate a reliable test for measuring integrated process skills of pre-primary school children. The integrated process skills tested were; Emotional Stability, Digital Literacy, Social Responsibility, Creativity, Communication, Bodily-Kinesthetic, Self-care, Spatial Ability, Naturalistic Sense, and Aesthetic Sense.

In order to achieve the above stated aim, an integrated process skill instrument was used in this study. The instrument consists of nine tools. Three rubrics on IPSI (see Appendix I,II,III) three performance tests (see Appendix IV,V,VI), and three individual test (see Appendix VII,VIII,IX), were developed and validated, after a series of item analysis, reviews and modifications. The items were administered to ninety pre-primary school students from Kozhikode district.

The present investigation entitled as “development of an instrument to assess integrated process skills of pre-primary school children.”

Objective 1: Identify the contribution of psychologists in the field of developmental studies with respect to early childhood.

There are many psychologists give importance to the field of early childhood. Based upon the document analysis and theoretical overview the researcher found the following are the major psychologists.

- Friedrich Froebel
- McMillan sisters
- Maria Montessori
- John Dewey
- Johann Heinrich Pestalozzi
- Sigmund Freud
- Eric Erickson
- Jean Piaget
- Vygotsky
- Abraham Maslow
- Howard Gardner
- UrieBronfenbrenner
- Lawrence Kohlberg

Implication of psychologist about the early childhood helps the investigator to understand skills, abilities and developmental stages. Following are the major contribution in this study.

- Childhood is seen as valid in itself, as part of life and not simply as a preparation for adulthood. Thus education is seen as something for the present and not just preparation and training for later.

- The whole child is considered to be important. Health – physical and mental is emphasized, as well as importance was given to the feelings, thought process and spiritual aspects.
- Learning is not compartmentalized, for everything links together.
- Intrinsic motivation, resulting in child-initiated, self-directed activity, is valued.
- Self- discipline is emphasized.
- ·There are especially receptive periods of learning at different stages of development.
- What children can do (rather than what they cannot do) is the starting point in the child's education.
- There is an inner life in the child, which emerges especially under favorable conditions.
- The people including both adults and children with whom the child interacts are of prime consideration in the learning process.
- Quality education is about three things: the child, the context in which learning takes place, and the knowledge and understanding which the child develops and learns.

- There is a balance between the quantity of freedom and obedience of children is experienced. The teacher's control should be exercised with love and care.
- Nature has its fullest expression in play which should be means of child education.
- Social significance enables the child to discover his own individuality and to develop his personality.
- Overall development of child by focusing on physical and intellectual development as well as self-care activities.
- Early childhood education program practiced permissive child care approaches allowing for self-expression and outlet of feeling and emotion by the children through various creative and other activities.
- Playing to Learn/Learning to Play High-quality early childhood programs teach children to think creatively so they may succeed in a complex and ever-changing world.
- A child has to be active, creative and playful and has to learn things through the medium of play.
- Teaching should focus on assisting children in the completion of tasks they cannot complete on their own
- Education should support children's happiness, spontaneity, and inquisitiveness.

- Children's development occurs over time and in accordance with the child's own innate ability.
- Education should follow the child's nature, and mothers are children's most important teachers.
- Formal education within a school is needed for children to integrate knowledge of home life, vocational education, and reading and writing.
- All education is based on sensory impressions.
- Object lessons that focused on learning through manipulative are a critical tool in early child education.
- An attempt should be made to develop self-efficiency among children.
- Emphasized on the wonderful learning opportunities, varieties of life everyday experiences provided and believed that the child's own instincts, activities, and interests should be the starting point of education
- Children begin to think symbolically and learn to use words and pictures to represent objects.
- Children at this stage tend to be egocentric and struggle to see things from the perspective of others.
- While they are getting better with language and thinking, they still tend to think about things in very concrete terms.

- Encourage children to make and act on choices, such as allowing free choice time when the children can select an activity or game.
- Knowledge is constructed through direct, active interaction with the environment.
- The physical environment plays a critical role in children's development.
- Children's development proceeds through a series of predictable stages—although the rate of development may vary, the sequence does not.
- Preprimary education should be experiential and focused on the needs and interests of children, i.e., children's interests should be springboards for involvement, skills, and subject matter
- Schools should prepare students for the realities of today
- To promote an interest in solving problems, discovering new things, and figuring out how things work, teachers should provide children opportunities for inquiry and discovery
- Be tolerant towards mistakes done by the children especially when they are attempting to do something on their own.

Objectives 2: List out the components of integrated process skills of preprimary education

Firstly 24 components were identified, close supervision , guidance and assistance of supervising teacher helped to select most widely appropriate ten dimensions for the present study.

Description of the components are given below

1. Creativity: - creativity as the ability of individuals to use the power of imagination, creative ideas and creative thinking to produce something authentic, original or something of new value, use and meet certain needs.

2. Spatial ability: - spatial ability is the ability to interpret and make drawing, from mental image and visualize movement or change in those images. It stands for mental skills connect with spatial relationship.

3. Communication:- It is the process of sending and receiving messages through verbal or nonverbal means, including speech, or oral communication; writing and graphical representations such as graphics, maps, and charts; and signs, signals, and behavior.

4. Social responsibility: - It is the idea that our actions affect others and that we should strive to impact individuals and society positively .It facilitate children's successful interactions with others, including peers, teachers and family members

5. Self-care:- It is the actions and cares an individual take for themselves and others to stay fit and maintain good physical and to mental health; meet social and psychological needs; prevent illness or accidents; care for minor ailments and long term conditions; and maintain health and wellbeing.

6. Aesthetic sense: - Those who possess aesthetic sense may have composition, and appreciation of musical patterns. It covers the capacity to recognize and compose musical tones, pitches and rhythms.

7. Naturalistic sense: - The naturalistic sense involves the full range of knowing that occurs in and through our encounters with the natural world, including our recognition, appreciation, and understanding of the natural environment. It involves the skills to observe, classify flora and fauna listen and hear environmental sounds. Sensitive to the nature and be able to live in harmony with nature.

8. Bodily kinesthetic:- Bodily kinesthetic is the ability to control one's body movements and to handle objects skillfully and involves the ability of using one's whole body or parts of the body effectively. It is the ability to use mental abilities to coordinate bodily movements.

9. Emotional stability: - Emotional stability is the accurate appraisal and expression of emotions in oneself and others and the regulation of emotion in a way that enhances living.

10. Digital literacy: - Digital literacy is a term frequently used to refer to digital awareness the children may acquire through the use of digital technologies. It involves the acquisition of skills related to accessing and using digital technologies and other technical devices.

Objective 3: To explore the nature of developments of early childhood in ten dimensions

Table 18

Age wise developmental characteristics

Communication		
3-4	4-5	5-6
• Able to talk in full sentences • To express their ideas and feelings in a simple and correct way • Using simple words while talking to a peer group members • Began to use plurals, present and past tense • Know the difference between I, we and you • Began to ask 'what' and 'where' question • Able to sing rhymes with action • Able to retell the stories and pay attention when hearing • Able to use appropriate polite phrases when reminded by adults	• Able to talking in sequence • To express their feelings and ideas with correct pronunciation • They use sentences with an average of 4 to 5 words may be declarative, negative, interrogative • Use complex, multi-clause sentences • Began to carry out a command • Began to ask with 'how', 'why', 'when','how', etc. questions • Able to read pictures • Able to use polite expressions, and never use dirty or rude words.	• Began to use of complex sentences • To express themselves spontaneously without any inhibition • Start to speak like an adult • Began to speak in longer and more complicated sentences • Starts to use more polite language • Able to express feelings with an appropriate words • Express fluency and clarity while talking to family or peers • Use more vocabulary • Able to discriminate visuals • Able to use language appropriate to different situations, such as comforting others who feel sad.

Bodily-Kinesthetic		
3-4	4-5	5-6
• Cannot turn or stop suddenly or quickly • Can jump a distance of 15 to 24 inches	• Have more effective control of stopping, standing and turning • Can jump a distance of	• Can start, turn, and stop effectively in the game • Can make a running,

• Can hop, using largely an irregular series of jump with some variation • Able to ride a tricycle • Able to slide and climb • Able to walk along a straight line on the ground or on top of a narrow object. • Able to walk upstairs and downstairs with alternating feet. • Able to steadily hop forward using both feet • Use scissors to cut paper strips • Able to avoid bumping into others when running. • Able to throw balls upwards with both hands. • Begin to hold a pencil properly • Hold things by using hands and belly	24 to 33 inches • Can descend a long stairway altering feet if supported • Can hop 4 to 5 steps on one foot • Able to maintain balance while walking on top of a narrow object. • Able to crawl on the belly and creep without knees touching the ground. • Able to leap over an object with some initial assistance. • Able to play catching and dodging games with peers. • Able to repeatedly toss and catch balls. • Able to cut paper in a simple pattern • Able to fold a piece of paper along an inclined line •	jump of 28 to 36 inches • Can descend long stairway unaided, altering feet • Can easily hop a distance of 16 feets • Able to walk steadily on a slope, suspension bridge, and over disconnected objects. • Able to climb up structures and nets using hands and feet. • Able to play jump rope continuously. • Able to dodge incoming balls. • Able to bounce a ball continuously.

Creativity		
3-4	4-5	5-6
• Able to recall two things from memory • Able to draw a person • Able to use simple	• Able to use drawings and collage to express the things that have been observed or imagined.	• Able to create and act out stories • Able to decorate the environment and beautify the life with

lines and colors to sketch people or things of personal interest. • Able to look at a picture and tell what are there or what happened on the picture.	• Able to recall four things in a picture just seen • Have the courage to try activities and tasks with some difficulty • Able to describe the general plot in a set of progressive pictures.	their artworks. • Take the initiative to assume tasks, and when there is a difficult, show persistence and not quickly seek for help • Able to do more than one thing at a time • Able to predict the development of the plot, extend the storyline, or create a story based on given plots or clues in the stories or in the books • Able to make paper boat and airplanes
Spatial Ability		
3-4	4-5	5-6
• Able to identify shape features of objects, and describe them using own words. • Able to perceive basic positions and locations of objects, and understand such as up and down, front and back, and inside and outside. • Able to distinguish between two objects by their sizes, length, texture, and hardness • Able to assemble puzzles of six pieces • Able to arrange the thing in accordance with the sequence of their size • Able to make simple patterns using toy	• Able to perceive the shape and structural features of objects, and draw or construct the models. • Able to perceive and discover basic features of common geometric forms, and classify them. • Able to point out missing part of in the picture • Able to describe locations and directions of motions of objects with such as up and down, front and back, inside and outside, middle, and besides. • Able to assemble puzzles of eight pieces	• Able to use common geometric forms to build and draw the models of objects. • Able to correctly take and place objects or things based on verbal instruction or a simple sketch map. • Able to distinguish the left from the right of themselves. • Able to play simple puzzle games • Able to understand half of a piece and one full piece

bricks

Emotional Stability		
3-4	4-5	5-6
• Emotionally stable and rarely cries unless something is wrong. • Can be calmed down by adults when upset or having a temper tantrum. • Feel proud of one's good behaviors or activity performance. • Willing to do things at one's ability. • Like to assume the responsibility for small tasks. • Show sympathy to people who are sick or sad. • Becoming more independent	• Often in a joyous mood and is easy to cheer up. • Can be calmed down by adults when having a temper tantrum. Able to tell adults what the problem is • Tells feelings to adults and children close to them, shares joys and seeks comfort. • Able to engage in play and other activities based on personal ideas. • No one's own merits and strengths, and feel satisfied. • Try best to help one and feel reluctant to rely on others. • Able to take notice of the moods of others, and show care and consideration • Shows dominant behavior • Exhibits their own feelings • Get upset with changes in plans and routine	• Often in a joyous mood, understands the cause of different emotional reactions, and easily cheers up. • Knows appropriate ways to express feelings and communicate anger and frustration. • Adapts to changing activity and situations, maintaining emotional stability. • Want to be better after showing a good deed or achieving success. • Help one if possible, and willing to learn new things. • Able to take notice of others' moods and needs, and offer help as much as possible. • Sensitive to criticism, doesn't accept failure well. • Strong desire for affection and adult • Cooperative and helpful
Social Responsibility		
3-4	4-5	5-6
• Able to adapt to a group care situation	• Able to quickly adapt to changes in a new	• Able to join with ease in a new social

with the help of caregivers. • Like to play with other children. • Like to participate in activities with familiar adults. • Begins to share and take turns • Express talkative in nature • Begins to Interact with peers • Starts to takes part in group play	social situation such as getting a new teacher • Like to play with other children, and have playmates. • Enjoy talking with adults, and inform them of events and issues. • Able to Cooperates and takes part in group • activities, but can be impatient • Begins to share and likes to play with other children • Can take turns • Begins to show feelings in socially acceptable ways • Asking permission to borrow property	environment such as the transition to a new kindergarten class. • Have friends and like making new friends. • Like to ask for advice when there is a need. • Like to share pleasant or interesting things with others. • Can engage in group discussions. • begin to pair up to have a best friend; however, the best friend may change frequently • begins tasks promptly requested by the adult • respond to unfamiliar adults
Naturalistic Sense		
3-4	4-5	5-6
• Know frequently seen animals and plants, and notice and discover that surrounding plants and animals are diverse. • Beginning of an understanding of the relationship between animals and plants and human life. • Able to sort common parts of the plants • To know common plants • Began to play with pet animals	• Able to perceive and discover the basic habits of frequently seen animals and plants, as well as their growth and changes. • Able to perceive and discover the characteristics of different seasons and experience the influence of it on animals, plants, and humans. • Able to imitate the voice of animals • To know the medicinal plants	• Able to perceive external characteristics and habits of animals and plants and their adaptive relationships with the environments. • Perceive and understand the pattern of seasonal change and the sequence of the change. • Begin to understand the close relationship between human beings and nature. • To know how plants grow and what it needs.

		• Identify different parts of plants
Aesthetic sense		
3-4	4-5	5-6
• Enjoy chatting nursery rhymes • Able to imitate and sing short songs. • Able to make body movements along with familiar music. • Able to use voice, movements, and postures to imitate the things in nature and living situations • Able to understand short nursery rhymes or stories • Being happy on seeing colorful pictures	• Able to sing songs in a natural voice and appropriate pitch with basic accuracy. • Able to express emotions through humming, improvising creating lyric for familiar songs. • Able to create basic rhythms with hands, feet, other body movements, or objects that can be tapped. • Able to describe the general ideas of the poem • Know the parts of the song	• Able to sing songs with basically accurate rhythms and tones. • Able to use rhythms or simple dance movements to express emotions or scenarios in nature. • Able to describe the main contents of the poem. • Appropriate the keenly of a work done by his/her classmates • Feel happy when dancing or singing in group
Digital Literacy		
3-4	4-5	5-6
• Able to manipulate toys independently. • Able to receive call and do some simple works on it • Able to identify the common electronic items. • Awareness of games in mobile phone • Switch ‘ON’ and ‘OFF’ the electric bulbs and fan • Operating side glasses in the vehicles	• Able to identify and differentiate common electronic items. • Able to use mobile phones and tabs • Able to know about games and its role. • Able to handle with single click and double click objects • Begin to use the keyboard	• Able to identify and differentiate all electronic items. • Well known on using mobile phone and tabs • Manipulate and repair toys independently • Able to operate games based on the rules • Able to control the cursor on screen by moving the mouse. • Begin to use drawing packages or text editors to

		communicate ideas
Self-Care		
3-4	4-5	5-6
• Able to put on and take off clothes as well as shoes and socks with others' help. • Able to return toys and books to their original places. • Knows not to eat food offered by a stranger and will not leave with a stranger. • Is aware of threats to safety and does not engage in activities that could be dangerous. • Able to know their name, parents' names, and home places.	• Able to put on and take off clothes, shoes and socks, and button up clothes by themselves • Able to sort out belongings. • Knows the importance of staying within sight of parents or teachers in public places. • Understands common safety warnings and obeys safety rules. • Able to avoid dangers during outdoor play and sports activities. • Knows how to get help when needed	• Know they need to add or take off clothes based on changes in outdoor temperature. • Able to tie shoes. • Able to sort out belongings according to specific categories such as socks. • Knows not to open the door for strangers without the permission of parents or teachers. • Consciously observes basic safety regulations and traffic rules. • Able to pay attention to safety while engaging in sports activities and does not pose a danger to others. • Has basic knowledge about accident prevention.

Objective 4: To list out the different activities at pre-primary educational level on ten dimensions

Table 19

List of activities based on components

Components	Activities
Creativity	Jigsaw Puzzle
	'Why' questions
	Story completion
	Identify the missing objects
	Fill in the gaps
	Image a picture
	Odd one out
	Draw picture using the letters
	Cooking – by following a recipe (without using fire)
	Identify different shapes
	Sequential order
Naturalistic sense	Garden beatifications
	Planting seeds
	Care for pet animals
	Visit zoo, park, aquarium and beach
	Vivarium
	Terrarium
	Nature walk
	Bird feeding
	Nature selfie
	Sculpture – mud or sand
	Observing clouds
	Rain dance
	Categorizing plants, and animals
	Nature songs
	Experience in different weather
Spatial ability	Dictate (letter, numbers, body parts)
	Role play
	Puppet
	Count the numbers

Components	Activities
	Letter hunt – search for letters in a magazine or newspaper
	Picture hunt
	Labeling objects
	Fill in the blanks
	Match the following
	Sudoku
	Map reading
	Identify the location
	Visit art gallery, museum, park, etc.
	Identify different colours
	Letter songs
	Colour songs
Communication	Talking to teacher
	Listening others
	Story telling
	Completion of stories
	Reading books
	Making a speech to the class
	Interacting with friends/ peer groups
	Sharing of feelings
	Tell a story after seeing a pictures
Bodily kinesthetic	Brain gym
	Dancing
	Exercise
	Cleaning – school, home and classroom
	Riding cycle
	Games like musical chair, and ball passing
	Measuring using foot, and hand span
	Action song
Aesthetic sense	Play music by using household gadgets
	Parade with band instruments
	Familiarize with different types of sounds
	Vibration experimentation – fill glasses with different amount of water
	Nursery rhymes
	Telling a story by using a music
	Varieties of clapping

Components	Activities
	Dance and song in harmony
Self-care	Brushing teeth and bathing
	Eating and drinking
	Toileting
	Be the part of a group
	Keeping in his/ her belongings be ready – bag, bottle etc.
	Expressing the emotions of others
	Searching for a missing object
	Breaking balloon
	More shake hands within a stipulated time
	Asking questions
	Expressing the feelings
	Prayer song
Social responsibility	Serve grand parents
	Visiting family
	Helping parents for selecting items in a supermarket
	Teach something to sibling or classmates
	Project work in a group
	Imaging another person's feelings and talking about it
	Create a role play in a group
	Create a situation to thank others
Digital literacy	Able to do some games
	Using remote control toys
	Identify the difference of mobile and laptop
	Identify different emotions in mobile phone
	Phone call to parents
	Attending the phone cell
	Able to use electronic toys
Emotional stability	Fear of danger
	Be alone – feeling
	Light off – what to do next
	Analyzing dreams and their response to it
	Sharing of favorite things
	Response after showing emotional videos
	Exaggerated emotions to an explained situation
	Shows inappropriate emotional response
	Imaging another person's feelings and talking about it

Components	Activities
	Expressing the feelings

Objective 5: To construct an instrument on integrated process skills for pre-primary school children.

Table 20

Description about the construction of the instrument

Name of the tool	Purpose	Dimensions	Response	Administration	No. of items	Age groupe
Integrated Process Skills Instrument (IPSI-1) rubrics	It is used to assess the performance of the preprimary school students in the process of doing some activity. It is the indicates learning outcome, process skills and gives a undertaken structure to observation of students	Communication, Creativity, Spatial Ability, Emotional Stability, Digital Literacy, Self-care, Social Responsibility, Bodily Kinesthetic, Naturalistic Sense, and Aesthetic Sense	Preprimary school children	Directly given to the teacher. They have filled and given back	45	3-4
Integrated Process Skills Instrument (IPSI-2) rubrics					50	4-5
Integrated Process Skills Instrument (IPSI-3) rubrics					51	5-6
Integrated Process Skills Instrument (IPSI-4) Performance test	It measures students skills based on tasks such as activities, or problems that require students to show what they can do.	Emotional Stability, Digital Literacy, Self-care, Social Responsibility, Bodily Kinesthetic, Naturalistic Sense,	By the investigator	Activities are given by the investigator. Then they have been observed and filled observed and filled the response sheet by the investigator	32	3-4
Integrated Process Skills Instrument						4-5

(IPSI- 5) Performanc e test Integrated Process Skills Instrument (IPSI- 6) Performanc e test		communicatio n and Aesthetic Sense		itself		5-6
Integrated Process Skills Instrument (IPSI- 7) Individual test Integrated Process Skills Instrument (IPSI- 8) Individual test Integrated Process Skills Instrument (IPSI- 9) Individual test	It involves the ability to understand and analyze information presented visually and solve problems logically.	Creativity, and Spatial Ability	Preprimary school children	The test is provided by the investigator. Students are directed to respond to it and are collected back	14	3-4 4-5 5-6

Objective 6: To validate the developed instrument on integrated process skills for pre-primary school children

Table 21

Validation of developed instrument

Tools		Validity	Reliability Cronbach alpha
IPSI-1	Rubrics	Face validity and content validity	0.963
IPSI-2	Rubrics	Face validity and content validity	0.955
IPSI-3	Rubrics	Face validity and content validity	0.870

IPSI-4 Performance test	Face validity and content validity	0.925
IPSI-5 Performance test	Face validity and content validity	0.842
IPSI-6 Performance test	Face validity and content validity	0.650
IPSI-7 Individual test	Face validity and content validity	
IPSI-8 Individual test	Face validity and content validity	
IPSI-9 Individual test	Face validity and content validity	

Objective 7: To construct a scoring key for the instrument of integrated process skills.

Table 22

Scoring procedure of instruments

Instrument	Scoring procedure
Rubrics	The rubric can be used as tool to determine the appropriate score for each criterion. In the rubric, which has the form of a table, each line discusses one aspect for assessment, each column gives a level for the grading, and each cell contains the descriptor of the level for that criterion. The assessing criteria in the rubric follow the order such as Exemplary, Proficient, and Emerging. The mark for the criterion should in such a case consist of the 3, 2, and 1 respectively. Individual teacher determine and assign weightage on the basis of student's performance and they may use circle or ✓ mark in the cell to emphasize the performance of students in the specified aspects. The maximum mark for the rubrics was 135 score in IPSI- 1, 150 in IPSI-2, and 153 in IPSI-3. The minimum mark awarded for rubrics was 51, 50, and 45 respectively.
Performance test	The performance test can be used as an instrument to determine the appropriate mark for student's performance through direct observation. In the performance test, this has the form of multiple choice questions. Each test consists of 32 questions. Each item has three responses namely A, B, and C. Individual teacher or investigator determine and assign weightage for each item on the basis of student's performance and they may use ✓ mark in the response sheet as per the performance. If the student shows excellent

Instrument	Scoring procedure
	performance in an activity mentioned in item. Individual teacher use ✓ mark in A column, for average performance it is B and in poor performance it is C. The mark for the performance should in such a case consists of the 3, 2 and1 respectively. The maximum mark for the test was 96 score in IPSI- 4, IPSI-5, and IPSI-6. The minimum mark awarded for rubrics was 32 in each test.
Individual test	The individual test can be used as tool to determine the appropriate score for student's performance. Each test for the three age groups consists of 14 questions, the items in the test represent in two forms ie, subjective as well as objective types. The calculation of the scores can be done by using an answer key.

The development of Integrated Process Skill Instrument (IPSI) is an addition to existing instruments used to evaluate the skills of preprimary school children. The construction of a tool has undergone through three phases. Nine instruments were created and validated. Standardization was ensured through the process of validity and reliability. Validity was ensured through content and face validity and all the developed instrument was shown reliable. So the developed instrument could be readily adapted to local use to monitor the acquisition of integrated process skills by pre-primary school children.

Educational implications of the study

The value of any piece of research in education lies in the implications of the study. The aim of this study was to develop a test instrument that could be directly used by pre-school educators to assess their learner's competence in integrated process skills. Based on the major findings of the present study, some practical

suggestions have been given by the investigator to improve the present educational practices.

- The instrument developed from this study may be used to collect information about how well learners are performing in the acquisition on integrated process skills, and thus contribute to the description of educational phenomenon.
- Teaching should be made interesting; it is useful to enhance teaching learning practices in enjoyable ways.
- Individual test can be used during the teaching and learning process.
- Taking steps to ensure that they will be prepared for success at their next level of education.
- Allowing children plenty of opportunity for guided and independent practice with new concepts and skills.
- Helps to prepare and select interesting, challenging, and developmentally appropriate activities for preparing daily program activities for the children in their classroom setting.
- All aspects of the learning have to be considered for enhancing skills and competency among children.
- To develop new evaluation technique for understanding and following the progress of preschool children.

Suggestions for further study

The results from this study present several further research opportunities, which include the following.

- The instrument may be used to determine competence of students in integrated process skills.
- This instrument may be used to assess learner's competence in integrated process skills nationally, to determine the effectiveness of the new curriculum in imparting process skills to learners
- Development of IPSI on a wide content area related skills expressed among preschool students.
- The study can be extended into other level of education.
- An investigation could be undertaken to know how much or what duration of treatment is needed for the development of integrated process skills in above average, average and below average students.
- Study could be undertaken with large sample for a long period of treatment.
- Study may be undertaken to investigate integrated processing skills based training strategies to train teachers so as to develop competency among the students.

BIBLIOGRAPHY

BIBLIOGRAPHY

Adhiya., Eka., Laksono., & W. ,E. (2018). Development and Validation of an Integrated Assessment Instrument to Assess Students' Analytical Thinking Skills in Chemical Literacy. *International Journal of Instruction*, 11(4), 241-256.

Alkuş, S., & Olgan, R. (2014). Pre-service and in-service preschool teachers' views regarding creativity in early childhood education. *Early Child Development and Care*, 184(12), 1902-1919.

Aktamis, H., & Ergin, O. (2008). The effect of scientific process skills education on students scientific creativity scientific attitude and academic achievements, *Asia Pacific forum science learner*, 9, 1-21.

Andrade, H., & Du Y. (2005). Student perspective on rubric-referenced assessment. *Practical Assessment Research and Evaluation*, 10(3).

Anjali, S. (2013). *Role of play schools with regard to the behavioral profile, creativity, problem solving and social cognition of preschoolers.(*Ph.D. Thesis).M.G.University, Kottayam.

Anvari., Sima, H., Trainor., Laurel, J., Woodside., Jennifer., Levy., & Ann. (2002). Relations among Musical Skills, Phonological Processing, and Early Reading Ability in Preschool Children. *Journal of Experimental Child Psychology*, 83 (2), 111-130.

Armstrong, T. (1994). *Multiple Intelligences in the Classroom*. NewYork: U.S.A

Arthur. J., & Reynoid, S. (2004). Preschool education and school rediness. *encyclopedia on early child hood development, 2.*

Bannink, F., Fontaine., J. R. J., Idro, R., van Hove, G. (2016). Cognitive Abilities of Pre- and Primary School Children with Spina Bifida in Uganda. *International Journal of Educational Psychology,* 5(3), 249-280. doi: 10.17583/ijep.2016.2075

Barton, D. (2007). *Literacy: An introduction to the ecology of written language* (2nd Ed.). Oxford: Wiley-Blackwell.

Best, J. W., & Khan, J. V. (1995). *Research in Education (*9th Ed.). New Delhi: Prentice Hall of India.

Best, J. W., &Khan, J. V. (2012). *Research in Education (*10th Ed.). New Delhi: Prentice Hall of India.

Brewer, J. A. (1998). *Introduction to early childhood education*. Needham Heights: Allyen & Bacon.

Bryant, D. M., & Clifford, R. M. (1992). 150 years of kindergarten: How far have we come?. *Early Childhood Research Quarterly*, 7, 147-154.

Burns, C .J., Okey, R .J., & Wise, C. W. (1985). Development of an integrated process skill test: TIPS II. *jrst,* 22(2), 169-177.

Capie, E. J. (2006). Determining multiple intelligences in the preschool aged child. (PhD. Thesis).Rowan University.

Chaudron, S., Beutel, M. E., Cernikova, M., DonosoNavarette, V., Dreier M., Fletcher-Watson, B., Heikkilä., ….Wölfling, K. (2015). *Young children (0–*

8) and digital technology: A qualitative exploratory study across seven countries. Luxembourg: Publications Office of the European Union, Luxembourg, JRC93239, EUR 27052 EN. Retrieved from http://publications.jrc.ec.europa.eu/repository/handle/ JRC9323

Curtis, V. (2007). All right reserved conservation of number task with small and large quantities on male and female preschool children. *Indiana undergraduate journal of cognitive science,* 2, 28-32.

De Guzman, R. (2007). *Assessment of Learning 2*: Llorimar Publishing, Inc.

Denham, S. A., & Brown, C. (2010).“Plays nice with others”: Social–emotional Learning and Academic Success. *Early Education and Development*, 21(5), 652-680.

Duda, H. J., Susilo, H., & Newcombe, P. (2019). Enhancing Different Ethnicity Science Process Skills: Problem-Based Learning through Practicum and Authentic Assessment. *International Journal of Instruction,* 12(1), 1207-1222.

Edward, Y., & Smith. (1961). *The Educators Encyclopedia*. Prentice-Hall Inc: Englewood Cliffs, pp 78.

Emig, C. (2000). *School Readiness: Helping Communities Get Children Ready for School and Schools Ready for Children: Child Trends Research Brief*. Washington, DC: Child Trends.

Gardner, H. (1999). *Intelligence reframed: Multiple intelligence for 21st century*. New York: Basic Books.

Garret, H. E. (2005). *Statistics in psychology and education.* New Delhi: Paragon.

Garret, H. E. (2012). *Statistics in psychology and education.* New Delhi: surjeet.

Good, C. V., Barr, A. S., & Scates, D. E. (1957). *The methodology of educational research.* New york : Appleton century.

Gordon, A. M., & Browne, K. W. (Eds.). (2014). *Beginnings and Beyond Foundations in Early childhood education* (9thEd.). Wadsworth: Cengage Learning.

Guilford, J. P. (1980). Cognitive styles: What are they?. *Educational and Psychological Measurement*, 40, 715-735.

Hardianti, T., & Kuswanto, H. (2017). Difference among Levels of Inquiry: Process Skills Improvement at Senior High School in Indonesia. *International Journal of Instruction*, 10(2), 1308-1470. www.e-iji.net

Havigerová, M. J., smetanová, V., & Moravcová, K. I. (2016). Talent and creativity in preschool age children: a pilot study. *Studiapaedagogica* , 21(4).

Ip, P., Li, L .S.,Rao, N., Ng, N. S. S., Lau, S. W. W., & Chow, B. C. (2013). Validation study of the Chinese Early Development Instrument (CEDI*). BMC Pediatrics*, 13,146.

Jalil, S., Herman., Ali, S. M., & Haris, A.(2018). Development and validation of science process skills instrument in physics. *Journal of physics,*1028.

JISC (2014). Developing digital literacies. Retrieved from: https://www.jisc.ac.uk/guides/developing-digital-literacies

Kaosa-ard, C., Erawan, W., Damrongpanit, S., & Suksawang, P. (2015). How to classify the diversity of seventh-grade students' mathematical process skills: An application of latent profile analysis. *Educational Research and Reviews*, 10(11), 1560-1568.

Karamustafaoglu, S. (2011). Improving the Science Process Skills Ability of Science Student Teachers Using I Diagrams. *Eurasian Journal of Physics and Chemistry Education*, 3(1), 26-38. Retrieved from: journal homepage: http://www.eurasianjournals.com/index.php/ejpce

Kazakoff, E. (2015). Technology-based literacies for young children: Digital literacy through learning to code.In K.L. Heider & M.R. Jalongo (Eds), *Children and Families in the Information Age: Applications of Technology in Early Childhood* (pp. 43-60). New York: Springer.

Kirton, M. J. (1976). Adaptors and Innovators: A description and Measure. *Journal of Applied Psychology*, 61(5), 622-629.

Kristen, E., Churchill, D., & Lippman, L.(2016). Early childhood social and emotional development: Advancing the field of measurement. *Journal of Applied Developmental Psychology*, 45, 1-7.

Laughin, J. (1999). *Intelligence reframed: multiple intelligence for the 21st century*. New York: Books.

Lonigan, J. C., Burgess, R.S., & Anthony, L. (2000). Development of Emergent Literacy and Early Reading Skills in Preschool Children: Evidence From a

Latent-Variable Longitudinal Study. *Developmental Psychology,* 36(5), 596-613.

Louw, D., & Kail, R. (2007). *BasiesKonsepte van Kindersielkunde', in Louw, D. &Louw, A. Die Ontwikkeling van die Kind en die Adolessent*. Bloemfontein: Psychology Publications.

Lyon, K. J. (2001). *Number sense in urban Aboriginal primary students*. Washington: State University.

Marsh, J. (2013). Media, popular culture and play. In L. Brooker, S. Edwards,& M. Blaise (Eds). Handbook of Play and Learning in Early Childhood (pp.403-414) London, New Dehli, Thousand Oaks, CA: Sage. Digital literacy skills and competences of children of pre-school. *Media education,* 7(2), 178-195.

Marsh, J., Sefton-Green, J., Erstad, O., & Flewitt, R. (2016). Establishing a research agenda for the digital literacy practices of young children: A WhitePaper for COST Action IS1410. Retrieved from http://digi-litey.eu/wp-content/uploads/2015/09/DigiLitEYWP.pdf

Mashburn, A. J., Pianta, R. C., Hamre, B. K., Jason, T., Barbarin, A. D., Bryant, D., Burchinal, M.,...Diane, M.(2008). Early Measures of Classroom Quality in Prekindergarten and Children's Development of Academic, Language, and Social Skills. *Child Development*, 79(3), 732 – 749.

McKenzie, W. (1999). *Standards-based Lessons for Tech-Savvy StudentsA Multiple Intelligences ApproachWorthington*, Ohio: Linworth.

Ministry of Education Malaysia (2010). National Pre-School Curriculum Standard. Kuala Lumpur: DewanBahasa Dan Pustaka.

Ministry of Education Malaysia (2011). BukuPanduanKreativiti: Pembangunan Dan AmalanDalamPengajaran Dan Pembelajaran. Kuala Lumpur: Bahagian Pembangunan Kurikulum.

Miller, L. A., Gouley, K. K., Shield, A., Seifer, R., Dickstein, S., Fox, C., & Radtke, H. (2002). Children's Social and Emotional Competence in Head Start Classrooms: Observational Methods. Head Start National Research Conference : Washington, DC.

Mohanty, J. (1984). Nation's need, importance and objectives of early childhood education of preschool education. *The education quarterly,* 24(4).

Monica, K. M. (2005). *Development and validation of a Test of integrated science process Skills for further education and training learners*. (dissertation published). University of Pretoria.

National Council of Teachers of Mathematics (2000). NCTM standards 2000: Principles and standards for school mathematics. Reston, VA: NCTM.

National Research Council. (1996). National Science Education Standards. Washington, DC: National Academy Press.

Ngaruiya., S. (1991). *Assessing the Influence of Different Early Childhood Development Models on Pre-School Children's School Readiness in Kenya*.(published dissertation).Kenyatta University.

Opper, S. (1996). *Hong Kong's young children. Their early development and learning.* Hong Kong: Hong Kong University Press.

Osman, K. (2012). Primary Science: Knowing about the World through Science Process Skills. *Asian Social Science, 8*(16), 1-7.

Özgelen, S. (2012). Student's Science process skills within a cognitive domain framework. *Eurasia Journal of Mathematics, Science & Technology Education, 8*(4), 283-292.

Panoy, B .R. P. (2013). *Differentiated Strategy in Teaching and Skills Development of Pupils in Elementary Science.* (Master's Thesis). Laguna State Polytechnic University: San Pablo City Laguna.

Piaget, J. (1972). Intellectual evolution from adolescence to adulthood. *Human development,* 15(1), 1-15.

Process skills. (n.d.) *Medical Dictionary for the Health Professions and Nursing*. (2012). Retrieved August 9 2019 from https://medical-dictionary. thefreedictionary.com/process+skills

Raikes, A. H. (2016). Measuring of child development and learning. Global Education Monitoring Report.

Rao, N., Sun, J., Ng., S. S. N., Ma, N…….Ip, P.(2013).The Hong Kong Early Child Development Scale: A Validation Study. *Child educational research*, 6(1), 115–135. Retrieved from: https://doi.org/10.1007/s12187-012-9161-7

Rustaman, N. D. (2003). *Biology learning strategy*. Bandung: FPMIPA-UPI

Senocak, E., Aksoy., Samarapungavan, A., & Tosun, C. (2013). A Study on Development of an Instrument to Determine Turkish Kindergarten Students' Understandings of Scientific Concepts and Scientific Inquiry Processes. *Educational Sciences: Theory &Practice*, 13(4), 2217-2228.

Shahali, M. H., & Halim, L. (2010). Development and validation of a test of integrated science process skill. *Procedia Social and Behavioral Sciences*, 9 , 142–146.

Sood. (1995). Preschool education in ICDS –An appraisal Technical Bulletin, 5.

Spodek, B., Saracho, O. N., & Davis, M. D. (1991). Foundations of Early Childhood Education: Teaching Three-, Four-, and Five-year-old Children: Prentice Hall.

SSCR. (1987). The national curriculum: review newsletter of Secondary Science Curriculum Review, 12, 12-15.

Sternberg, R. J. (2006). The nature of creativity. *Creativity Research Journal*, 18(1), 87-98.

Sukiniarti. (2016). Improving Science Pedagogic Quality in Elementary School Using Process Skill Approach can Motivate Student to be Active in Learning. *Journal of Education and Practice,* 7(5), 2222-1735.

Sun, J., Rao, N., Engle, P. L. (2012) Assessing early child development in the East Asia Pacificregion: Cultural appropriateness and item equivalence in measurement. Unpublished manuscript. Hong Kong: The University of Hong Kong.

UNESCO. (1972). Regional Report on literacy. Tehran: UNECSO Press. LITE.

UNESCO. (1992). Education in Asia, Nos.

Venkataraman, K. S. (1984). Linguistic development of preschool children. *The educational review*, 40(10).

Vygotsky, L. S. (1986). *Thought and language*. Cambrige,MA: MIT Press.

Yilmaz, Y. N. (2019). An examination of the relationship between primary school students environmental awareness and basic process skills. *Educational research and reviews*, 14(4), 140-151.

Wah, L. P. (2012). A Study of Learning Perspectives on Improving the Early Childhood Sector in Sigapore: Lien Foundation.

Walker, S., & Fraser, B. (2005). Development and validation of an instrument assessing distance education learning environments in higher education: The 166 Distance Learning Environment Survey (DELES). *Learning Environments Research: An International Journal*, 8(3), 289-308.

APPENDICES

APPENDIX I
FAROOK TRAINING COLLEGE

Rubrics for Integrated Process Skills Instrument
Age group 3 - 4

Dr. Anees Mohammed. C
Assistant Professor
Farook Training College

Raheesa Farsana. N
MEd Student

Directions

Some of the activities associated with process skills of children are listed below. For each activity, there are three responses 'Exemplary', 'Proficient' and 'Emerging'. Make the selection accordingly after observation. The selection can be done by putting tick mark (✓) in the response sheet.

Sl. No		**EXEMPLARY**	**PROFICIENT**	**EMERGING**
1.	Draw the picture	Able to draw the neat and complete picture	Draw incomplete picture	Just attend
2.	Storytelling	Knows story well and confidently presented	Knows some of the stories and appear uncomfortable	Did not know the story
3.	Find out differences in the picture	Able to find out all differences	Able to find out three or more differences	The observation was done but felt difficulty to find out differences
4.	Sorting games based on colour	Sort all object within the time limit	Sort objects but takes more time	Unable to sort objects
5.	Sequential order	All the items are arranged in correct order	Take extra time to arrange the order	Putting the wrong arrangement in Sequencing
6.	Sudoku level 1	Independently solve the puzzle within the time limit	Solve puzzles but take More time	Not interested to solve the puzzles

7.	Counting 1 to 20	Independently counts the numbers without any error	Count Independently but make some mistakes	Need assistance to count numbers
8.	Match the following	Immediately recognize the pairs and do it quickly	Proper instruction need to make correct matching	Had trouble matching the pairs together
9.	Dictate letters	Independently identify all the letters	Dictate some letters but take more time	Unable to point out the letters
10.	The difference in the picture	Sufficient and proper analysis was done and identify all the difference	Adequate analysis of the pictures and find the sum of the difference	The limited analysis was done
11.	Nursery rhymes	Maximum clarity, follows the flow and rhythm of the original version	Minimum clarity song what follows the flow and rhythm of the original version	No clarity and does not follow the flow and rhythm
12.	Play music by using household gadgets	Make varieties of sound. Able to identify the difference	Make similar songs only	Make only one sound
13.	Poem recitation	Recite full poem with louder and confident	Recite half or few lines of the poem	Reside among the group but does not individually
14.	Participation in rhymes and songs	Consistently participates in rhymes and songs	Usually, participate in rhymes and songs	Rarely or never participate in rhymes and songs
15.	Action songs	Actions are consistently performed skillfully and in time to the music	Actions are usually performed to the song	With support, actions are performed
16.	Sharing of toys	Share the toys without reluctance and will not be having my toy feeling	Have my toy feeling when asked me to share, will share without happiness	Has my toy feeling and not share some toys even asked to do so
17.	Work in a group	Work actively	Likes to participate after assigning a duty	Reluctant to participate
18.	Greeting others	Happy to greet	Give Replay when greeted	Shy to answer
19.	Attitude toward classmate	Enjoy the class with all the students	Having the group in the classroom	Have a best friend to communicate with

20.	Borrowing of property	Always ask permission to use others property	Occasionally ask permission to use others property	Takes objects from mothers without asking permission
21.	Story retelling	Fluently complete the story	Start without any starting trouble but finds difficult to complete the story	Stars after initiating and stops in the middle
22.	Picture description	Identifies and describes the pictures with accuracy	identify and describes some of the pictures	Identification and describes requests some help and finds
23.	Self-introduction	Introduces with correct relationship description	Introduces correctly but finds difficulty in telling the occupation of parents	Needs to give an emotional encouragement for the introduction
24.	Talking to others	Fluently talks without any problem. Show nice vocabulary	Initial difficulty in talking and uses common words	Shows difficulty in talking others
25.	Introducing your best friend	Introduces with the name s of parents and siblings	Introduces with parents name and number of siblings	Introduces without parents name but knows the number of siblings
26.	Dancing	Has a good coordination and movements	Tries to dance but has less flexibility	Find difficulty in dancing
27.	Cycle ridding	Well balanced	Finds difficulty in balancing	Needs support for cycling
28.	Manipulative skills (throw, catch, kick)	Has a good co ordination	Gets good coordination after practice	Finds difficulty in calculation
29.	Games	Enthusiastic in participation	Enthusiastic but Lacks in energy	Needs a good encouragement
30.	Caring for personal belonging	Take care of their own personal belongings and respecting others	Show some effort to care for their own personal belongings	Does not take care of their personal belongings
31.	Cleaning the slate	Cleans with a perfection	Cleans but not perfect	Doesn’t clean properly
32.	Drinking and eating	Likes eat independently	Needs the help to eat neatly	Cannot eat without help
33.	Roleplay	Take initiatives to do the activity and stay focused on his role	No initiation but done the role	Don’t know what to do and how to do

34.	Cleaning the surrounding	Keeps everything in the place and keeps in order	Little bite missy	Not at all organized
35.	gardening	Likes to play with water and mud	Reluctant to play	Super conscious in play
36.	Identification of plants	All items are identified clearly and fully.	Identify only the common ones	Difficulty in identifying/ identifies two or three plants
37.	Identification of animals	All pictures are identified with sound of common animals	Identifies only common animals	Identifies only two or three animals
38.	Nature walk	Runs around with joy with good observation	Enjoys but observes less	Interested in plucking flowers and plants
39.	Reaction to frustration	Attempts to solve the problem first before seeking help	Finds substitute in solving the problem e activity without seeking help	Has a temper tantrum (kick, throwing the object, screams, etc.)
40.	Expressing the feelings	Deals feeling in a very healthy way	Make some effort to handle frustration	Express his feelings in unhealthy unsafe or disrespectful ways
41.	Expressing emotion	Rarely tempered with others and maintain calm in some situation	Often loses temper with others	loses temper with others
42.	Ability to use electronic toys	Able to manipulate toys independently	Need support or instruction to manipulate	Not able to manipulate
43.	Identification of electronic items	identify and label all the items	Identify some of the items	Identifies only two or three items
44.	Ability to do some video games	Manipulate games independently	Need support to manipulate the games	Find difficulty in operation of the device
45.	Receiving calls	Able to receive the call without instruction	Difficulty in identifying the correct button	Call for parents or teachers/

APPENDIX II
FAROOK TRAINING COLLEGE

Rubrics for Integrated Process Skills Instrument
Age group 4 - 5

Dr. Anees Mohammed. C
Assistant Professor
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Raheesa Farsana. N
MEd Student

Directions

Some of the activities associated with process skills of children are listed below. For each activity there are three responses 'Exemplary', 'Proficient' and 'Emerging'. Make selection accordingly after observation. The selection can be done by putting tick mark (✓) in the response sheet.

Sl No		EXEMPLARY	PROFICIENT	EMERGING
1.	Jigsaw puzzle	Showing interest and solve puzzles within the time limit	Occasionally doing but take too much time	Just attend and take one or two movements
2.	Storytelling	Able to retell all events of the story	Able to retell several events of the story and appear uncomfortable to present it	Does not successfully complete the story
3.	Draw the pictures	Shawn their own imaginary world through the pictures	Try to draw the pictures in neatly	Just appear to draw the picture
4.	Identification of basic shapes	Able to identify all the basic shapes more quickly	Identified few shapes	Felt difficult to identify the basic shapes
5.	Sorting games based on size	Able to sort object	Occasionally able to classify the objects	Unable to sort objects
6.	Predict the outcome of a situation	The clear prediction was done	Attempted	Felt difficulty To make the prediction

7.	Word hunting from the grid	Identified all the words	Identified a few words	One time attempt was done
8.	Letter hunt	Able to find out all the letters within the Limited period	Few letters are identified and take more time	Felt difficulty to find out letters
9.	Map Reading	Easily point out all items located on the map	Some items are located	Skip many items
10.	Counting numbers 1 to 40	Independently counts to 40 and beyond with no error	Counting independently but makes the mistake	Need assistant to count the numbers
11.	Sudoku level 2	Able to find out all solution independently	Show some of the puzzles	Just attempted
12.	Filling the blanks	Immediately recognize the responsibility and do it quickly	Try to complete the task with his pace	Fails to complete his task
13.	Identify the colour	All the colours are identified and are able to give one or two examples of objects	Had difficulty in Identify tertiary colours	Difficulty in identifying secondary colours
14.	Dictate body parts	Easily identify the body parts	Had confusion with some body parts	Not able to recognize any of the body parts
15.	Match the following	Were able to match all the things correctly	Had to give some help and instruction to match	Not able to match and even after instruction
16.	Poem recitation	Recite with confident and shows good performance with an appropriate tone	Recite clearly but not rhythmic flow	Does not recite the clearly mispronounces words and is inaudible to the audience
17.	Play music by using household gadgets	Able to create a variety of music using different gadgets	Make the same pattern of sounds throughout the music	Try to do but does not work
18.	Identification of ban instruments from pictures	Identified band instrument among the picture	Identified all the band instrument, required support from others	Only a very few instruments were identified
19.	Participation in rhymes and songs	Consistently participates in rhymes and songs	Usually, participate in rhymes and songs	Rarely or never participate in rhymes and songs
20.	Sharing of toys	Ready to share everything that they have	Share the things with the assistance of the teachers.	Does not like to share their own belongings to others

21.	Participation in group work	Always has a positive attitude about the work and actively participate	Need to call their names and once joined actively participate	Reluctant to participate in the group work
22.	Greeting others	A smart approach to a known person. when strangers become friends, a friendly approach towards them	Reluctant to take initiative to greet others	Takes time to be friendly with people
23.	Roleplay	Positive character	Both positive and negative	Only negative character
24.	Attitude towards classmates	Positive attitude towards classmates (start)	Has a mixed attitude (either mutual or click)	Has a negative attitude towards non-friend in the classroom(isolated)
25.	Work in a group	Likes to be the leader of the group and having good cooperation with others	When initiated, work in a group with a positive attitude	Reluctant to take an active participation
26.	Story retelling	Speak with an appropriate volume and modulation for the audience to hear and clear. Unique or creative use of language and sound.	Voice quality is clear but seems to drag somewhat need to better the modulation technique.	Not audible. Difficulty in facing the audience and there is no flow in the transaction.
27.	Picture reading	Able to convey the exact meaning of the picture and give a detailed and relevant description about it.	Identify the picture but some of the desertions are irrelevant.	Identify the picture, but not able to convey descriptions.
28.	Storytelling by using pictures	Able to create a story by connecting the pictures and there is a sequential order of it.	Try to convey what was in the picture but need assistance to complete it.	The proper analysis was done. But does not able to convey the story
29.	Talking to others	Take the initiative and talk freely to others	Speech is connected but frequently destructed in the transaction	Not interested to talk with others
30.	Story completion	Able to complete the story with a specific team and connect with their life situation	Able to complete the story without a specific theme	Unable to complete the story
31.	Dancing	They can memorize all the steps. Happiness and enjoyment showed throughout their performance.	Most of the steps are memorized and is seldom focused on the performance	Not memorized the movement or. Felt difficult to the steps.
32.	Exercise	Keenly observing the demo and performing in the correct way.	Mechanically doing without any enjoyment in it	Not interested to follow the steps and committed many mistakes

33.	Manipulative skills (throw, catch, kick)	Are able to have an excellent eye-hand coordination	Initial difficulties are overcome by practices	Find difficult even after practice
34.	Games	Actively participate and Showing spirit and interest throughout the game.	Enjoying selected games will be disappointed after losing the game	Less involvement in the participation of the game
35.	Caring for personal belonging	Systematically keeping their own personal belongings	Organized but doesn't search for the lost thing	Disorganized and doesn't have care for their stationeries
36.	Response to unfamiliar adults	Totally avoids or reject any contact with strangers	Avoids contact in the begging, But is Responsive if approached again	Readily move towards unfamiliar adults
37.	Cleaning the slate	Daily	Occasionally	Others are doing
38.	Room cleaning	Systematically keep the things in an orderly way	Arranging the toys and book	Not at all bothered
39.	Asks topic related question	Consistently asks topic related questions	Inconsistently asks topic related questions	Rarely or never asks questions related to the discussion
40.	Planting and gardening	Take initiatives and Likes to spend more time	Maintaining the garden only when it is required and being in the group	Never maintain the garden and did not show interest in the world
41.	Categorizing of plants	able to categorize them in garden plants into their features	Able to categorize some plants based on these basic features	Not able to distinguish
42.	Categorizing animals	Able to categorize the animals according to nature	Able to categorize some of the animals	Felt confusion to categorize
43.	Nature walk	Shows enjoyment while walking through nature and also Keep Touching To It	Like to walk through the plants. And	Not at all bothered about anything, tendency to pluck the flowers and plant
44.	Reaction to frustration	Attempts to solve the problem first before seeking help	Finds substitute in solving the problem e activity without seeking help	Has a temper tantrum (kick, throwing the object, screams, etc.)

45.	Identify the emotions of others	Empathetic	Sympathetic	Sensitive
46.	Expressing the feelings	Deals feeling in a very healthy way	Make some effort to handle frustration	Express his feelings in unhealthy unsafe or disrespectful ways
47.	Expressing emotion	Rarely tempered with others and maintain calm in some situation	Often loses temper with others	loses temper with others
48.	Identification of electronic items	Able to identify the most common electronic items. independently	Identified some common electronic items only	Felt confusion to recognize some items
49.	Ability to do some video games	Fully articulated all rules and knows where to verify rules and operate the games	Understood few rules and operate simple tasks	Simply playing something without knowing the rules and correct steps
50.	Ability to use mobile phones \ tab	Independently opens apps and plays games	After some instructions play games	Finds difficult to play games

APPENDIX III
FAROOK TRAINING COLLEGE

Rubrics for Integrated Process Skills Instrument
Age group 4 - 5

Dr. Anees Mohammed. C
Assistant Professor
Farook Training College

Raheesa Farsana. N
MEd Student

Directions
Some of the activities associated with process skills of children are listed below. For each activity, there are three responses 'Exemplary', 'Proficient' and 'Emerging'. Make a selection accordingly after observation. The selection can be done by putting tick mark (✓) in the response sheet.

Sl. no		**EXEMPLARY**	**PROFICIENT**	**EMERGING**
1.	Jigsaw puzzle	Showing very much interest while doing the activity	Occasionally doing	Just attend
2.	Find out missing objects in the picture	Proper analysis and able to find out all the object more quickly	Sufficient analysis of picture but took much time	The analysis was done but able to find out only one or two objects
3.	Draw the picture	Shown interest to transmit imagination through the picture and draw neatly clearly and carefully	Like to try to draw the picture in neatly	Not show any interest while drawing this item to draw without intensively and convey less detail

4.	Identification of shapes from their surroundings	Organized al the shapes that they have learned with the correct specification	Identified few shapes that with correct characteristics	Felt difficult to classify the object based on basic shapes
5.	Sorting games based on shapes	Able to sort the objects	Occasionally able to classify the objects	Unable to sort objects using any attributes
6.	Predict the outcome of a situation given to them	Predicted with the correct explanation of the reasons	Attempted, but the prediction was unclear	Did not make a prediction or made an incomplete prediction
7.	Word hunting from the grid	Identified all the words	Identified some words	Felt difficulty to identify. identified one or nothing
8.	Letter hunt	Shows curiosity to find out letters student's work ethic was exemplary and put an extra effort to do well	Students effort was inconsistent and tried to find the letters as far as possible	Students do not put quality effort and made many excuses
9.	Map Reading	Visualize very clearly all items are located on a map	Some items are located	Incomplete or missing many items
10.	Counting numbers 1 -60	Independently and consistently count the numbers without any error	Counting independently but not complete	Sometimes they need an assistant to complete
11.	Sudoku –level 3	Solve quiet independently, use the logical skills and to find out all solution to the problem	Solve puzzles with the support of others	Not interested to solve the puzzles
12.	Filling the blanks	responds with appropriate answers within the limited time	Able to fill the blanks with the time limit but are not fully right	Student responds incorrectly
13.	Dictate body parts	independently identify common body parts	Could dictate some body parts	Unable to point to any part of the body when asked
14.	Puppetry	An incorrect moment while they act	Sometimes manipulated but couldn't act	Not able to manipulate
15.	Match the following	Able to understand correct pairs of things, can work independently and	Find out a few pairs independently and proper	Did not understand the correct pair and had trouble to match

		quickly	instructions need to make all solutions	the pair together
16.	While doing some important work and their friends asked to accompany them	Shows sensitivity to the feelings of others and try to build a rapport between them. if possible accompanying with him or she otherwise makes a feeling that he is not alone	They try to understand the situation and Express sensitive feelings to them	Needs vocational reminders to be sensitive to the feeling of others
17.	Participation in group work	Always active and contribute to the group work. did a fair share of work and try to help others in the group	Shows interest contributes to the group work or activities in sometimes and walked reasonably well with the group	Rarely contributed to the group work or activities
18.	Sharing of things	Able to understand the needs of they appear and share the things without any direction or advice from the teacher	Share the things by considering the demand for peer or advice from the teachers	Always worried about their own things. does not like to share the things
19.	Greeting others	Great another person appropriately to speak to them and spoke clearly and made himself understood	Made a physical gesture to acknowledge the other person rather than speak	From given situation would not communicate verbally or by the gesture
20.	Attitude towards siblings or classmates	Consistently engaged or Mingled with the classmates more talkative in nature	Often engaged or mingled with their classmates as they need	Does not pay attention at all. They like to be engaged with themselves
21.	Work in a group	Work in a group setting in cooperation with others and share space with others	Likes to participate in group	Shines to take inventiveness in the group
22.	Story completion	The logical sequence with many vocabularies	Attempted to complete it, But is not able to convey what was it	Poor vocabulary. Hesitated to say the story
23.	Listening to others	Able to concentrate and listen attentively throughout the transaction	Found it difficult to Concentrate fully but was able to attend occasionally	Not able to listen to others and was easily distracted and inattentive
24.	Talking to others	Take the initiative and talk freely to	Speech is connected but frequently	Not interested to talk with

		others	destructed in the transaction	others
25.	Reading using pictures	Able to convey correct sequences of the story	Identify some of the events and need assistance to complete the story	The proper analysis was done. But does not able to convey the story
26.	Dancing	They focused on the performance and locomotive are memorized. The enjoyment is observable	Locomotive moments are most of often memorized and is seldom focused on the performance	Not memorized the movement and not focused or concentrated on the performance
27.	Exercise	Kneely observing the demo and performing in the correct way with a satisfaction	Mechanically doing without any enjoyment in it	Not interested to follow the steps and committed many mistakes
28.	Cleaning the slate	Daily	Occasionally	Others are doing
29.	Room cleaning	Systematically keep the things in an orderly way	Arranging the toys and book	Not at all bothered
30.	Games	Showing spirit throughout. Be the part of even after he is out. interested in all games	Enjoying selected games will be disappointed after losing the game	Less involvement in the participation of the game
31.	Riding cycles	Well balance dividing	Difficult to ride in rough path	The attempt was done with the help of peers
32.	Neatness in daily routine	Consistently demonstrate good hygiene and always maintain a tidy	Oftenly demonstrate hygiene and always maintain a tidy	Demonstrates poor hygiene and of them keep an untidy space
33.	Eating and drinking	Always in a balanced manner neatly and independently	Oftenly doing independently	Need supports
34.	Care for belonging	Take care of their own personal belongings and respecting others	Show some effort to care for their own personal belongings	Does not take care of their personal belongings
35.	Develop friendships	Has achieved a strong balance in most of the time among friends and is able to	Sometimes they keep balance with others and try to understand others	Leads an unbalanced friendships

		adjust according to the situation		
36.	Role in a group	Dynamic to lead the group at times in enthusiasm was evident throughout the group work	Group participation was good but taking enthusiasm to contribute	Less role in group activities
37.	Asking questions	Ask specific questions about their own thinking, challenges and the task to specify their enthusiasm	Ask questions about to complete a task	Do not ask questions. passive listener
38.	Planting and gardening	Always maintain the garden and observe the plants carefully and curious to know about it	Maintaining the garden only when it is required and is in the group	Never maintain the garden and did not show interest in the world
39.	Categorizing of plants	Understand common plants and able to differentiate and categorize the plants into	Able to categorize some plants based on these basic features	Not able to distinguish
40.	Categorizing animals	Able to differentiate and categorize the animals according to nature	Able to categorize some of the animals	Felt confusion to categorize
41.	Play music by using household gadgets	Make varieties of sound. Able to identify the difference	Make similar songs only	Make only one sound
42.	Identification of band instruments from a group of pictures	Identified common band instrument	Identified all the band instrument, required support from others	Only a very few instruments were identified
43.	Poem recitation	Recite with good rate and Intonation, and shows confidence and spirit	Recite with good rate and intonation about half of the time	Reciting is choppy and does not flow
44.	Action songs	Actions are consistently performed skillfully and in time to the music	Actions are usually performed to the song	With support, actions are performed
45.	Identification of electronic items	Able to identify the most common electronic items. independently	Identified some common electronic items only	Felt confusion to recognize some items
46.	Ability to do some video	Fully articulated all rules and knows	Understood few rules and operate	Simply playing something

	games	where to verify rules and operate the games	simple tasks	without knowing the rules and correct steps
47.	Ability to use mobile phones \ tab	Independently opens apps and plays games	After some instructions play games	Finds difficult to play games
48.	Ability to use electronic toys	Successfully operate all types of electronic toys with a personal interest	Operate toys with proper instructions and assistance	Need support to do
49.	Identify the emotions of others	Empathetic	Sympathetic	sensitive
50.	Expressing the feelings	Deals feeling in a very healthy way	Make some effort to handle frustration	Express his feelings in unhealthy unsafe or disrespectful ways
51.	Expressing emotion	Rarely tempered with others and maintain calm in some situation	Often loses temper with others	loses temper with others

APPENDIX IV
FAROOK TRAINING COLLEGE

Performance test for Integrated Process Skills Instrument
Age group 3 - 4

Dr. Anees Mohammed. C
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Raheesa Farsana. N
M.Ed. Student

Directions

This performance test has 32 questions. Each question contains three levels represented as a, b and c. choose the correct answer based on the performance of children, and putting tick mark (✓) on the response sheet given along with the questionnaire.

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1. Teacher ask the students to describe the cartoon characters familiar to them
   a) They easily remembers and gives explanation about the peculiarity of the character
   b) The child remembered his favorite character, but he couldn't give explanation about it
   c) He could give only the name
2. Teacher briefly explains the concept of the story
   a) The child beautifully and clearly narrates each incident in the story
   b) Trying to present the story in his own style and completes the story with the help of the teacher
   c) Summarizes the story through one or two instances
3. Teacher asks the students to introduce their family and children introduces their family
   a) They gives the full details about the parents and other family members
   b) Gives details about parents, but couldn't introduce other members
   c) Gives only he names of parents and other family members
4. The teacher asks the children to share the experience about their favorite trip
   a) Presenting the specialties and the reason to like that place
   b) Gives details about the place and the beautiful sights
   c) Says only about the name

5. Reaction on seeing one of the child in your group, falls down during playing
   a) Helping him to dress the wound, immediately
   b) Shows interest in helping and reporting about the incident to the teacher
   c) Continue playing without minding the friend
6. Response of the children while hearing moral stories
   Response of them on hearing the painful stories of the isolated people
   a) The child says, he will help such people
   b) He says he could help, but he won't do it
   c) Simply hearing it like a story, but didn't think over it
7. Teacher gives a situation, while sitting with the family, will you join with them or will you play video games?
   a) Shows interest to play the games with family
   b) Even though he plays with the family, he takes the mobile phone and starts gaming
   c) Playing games without bothering about anything
8. Considering others while sharing things
   How many of them will share their snacks with friends?
   a) Shows interest to share it equally, with everyone
   b) Shares only with the best friend
   c) Shows disinterest to share
9. Response on sharing their favorite things with others
   Response of the child when the teacher asks to share his favorite toy with his friend
   a) Showing excitement in sharing toys with friends
   b) As per the teacher's request, he shares it without any interest
   c) Shows disinterest to share
10. Attitude towards the guests who came unexpectedly
    Attitude towards the dearest guests who comes to the family unexpectedly
    a) Becomes extremely happy

b) Expressing sorrow in the smashing up of all the plans, even though he is happy

c) Engaging in his own business without minding the guest

11. Response on facing the people in an occasion

Response of the children when teacher selects them to participate in a programme

a) Children presents the programme beautifully

b) Presenting the programme with a fear

c) He couldn't present the programme due to the fear in facing the audience

12. Attitude of children towards fellow creatures.

The teacher describes a situation, "what will be your reaction when your dearest pet is in danger"

a) Becomes upset

b) It doesn't affect him, even though his pet is hurt

c) He doesn't have any feelings

13. Children's careful interference during a family trip

Understanding the chance of hitching amidst the crowd

a) Knows how to walk carefully amidst the crowd(walking carefully with the parents)

b) Completely aware of the situation of being stuck amidst the crowd

c) Walking carefully among the crowd

14. Awareness about the dangerous situation

Paying attention while playing in water

a) Playing carefully, even though he knows about the danger

b) Dealing such situation carelessly, even though he knows about the danger

c) Ignoring other instructions

15. Teacher describes a situation about the way you observe the outer sights during travelling

a) Carefully observing the sights from the vehicle

b) Instruction given by parents helps the child to travel carefully

c) Trying to put the hands outside the vehicle

16. Awareness in handling dangerous instruments. The teacher examines the way you handle the dangerous instruments during class activities

a) Using it very carefully by understanding that it is dangerous

b) Using it without bothering about the danger

c) Handling it carelessly

17. Recognizing the fact that the earth and nature are part of our lives

The way how you observe butterflies in the school garden

a) Children loves to play and fly like butterflies

b) The children are running behind the butterflies and trying to catch them

c) Simply looking to the butterflies

18. What will you do when the teacher asks you to make a garden

a) Shows interest to plant the plants

b) Without having any interest, they plant as per the teacher's instructions

c) Engaging in his own business without planting

19. The teacher asks a question, what will be your reaction when you see the heavy rain?

a) Plays happily during raining

b) Playing with water

c) Only interested in watching the rain

20. Teacher asks the children to arrange the pictures of animals and birds

a) They arranges the pictures after keen observation

b) Even though they understood the pictures, they couldn't arrange it in order. The teacher helps him to complete

c) They couldn't arrange according to the idea

21. Teacher gives instructions about the musical chair game and ask them to play accordingly

Presenting one of the exercises through body movements

a) The child shows the exercise as per the instructions

b) He tried to do it properly, but couldn't attain co-ordination

c) Simply doing the exercise

22. Teacher gives a set of building blocks to the students and asks them to build different shapes according to their idea
    a) Building varieties of different shapes
    b) They build different shapes, but they couldn't bring varieties in it
    c) Building simple shapes
23. The teacher gives instruction about the ball passing game and asks the children to play it
    a) The child passes the ball and plays till attaining the goal
    b) He couldn't enter the last level of the game, even though he plays well
    c) He expelled from the game because of carelessness
24. The teacher requests the students to make different objects using clay
    a) Building certain objects according to his imagination
    b) Trying to imitate others objects in order to bring out his talent
    c) Making objects like circles and rollers which is possible for him
25. Teacher gives different types of pictures to children and tell them to select music related pictures
    a) Identifies all music related instruments at a glance
    b) Identifying the familiar one
    c) Identifies with the help of teacher
26. Teacher plays a song and demands the children to dance according to the song
    a) Children beautifully dances along with the song
    b) They dances along with the song
    c) They dances in contrast with the song
27. Teacher demands the children to sing an action song
    a) Children shows the action according to the song
    b) Trying to make actions along with the song
    c) Even though they tried to make actions, they failed
28. Teacher asks to make music by using familiar objects(glass and spoon)
    a) The child makes sound using his talent

b) Making sound with same beat

c) Making chatter

29. Teacher gives electronic toys to the children and asks them to operate it

a) Identifying how to operate it at a glance

b) Operating it with the help of someone else

c) Enjoying while his parents operate it

30. Teacher explains a situation, your response when a call came into your parents or other family members phone

a) Receiving the call when the phone the rings

b) Identifying the mobile phone of each family member

c) Recognizing the mobile phone as a machine used to talk

31. Teacher asks to play video game

a) Child playing the game according to the instructions

b) Needs someone else's help while playing

c) Playing with the help of others

32. A child examines the usage of mobile phone according to the instructions given by the teacher. The teacher asks them to take photos in the mobile phone

a) The child is taking photos

b) He takes photos even though he didn't have an idea about using the phone

c) Taking photos with the help of a person

APPENDIX V
FAROOK TRAINING COLLEGE

Performance test for Integrated Process skills Instrument
Age group 4 - 5

Dr. Anees Mohammed. C
Assistant Prof, Farook Training College

RaheesaFarsana. N
MEd Student

Directions

This performance test has 32 questions. Each question contains three levels represented as a, b and c. choose the correct answer based on the performance of children, and putting tick mark (✓) on the response sheet given along with the questionnaire.

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1. Pictures of animals that are familiar to the children are shown by the teacher. They observe the pictures and gives explanation.

   a) Children could easily identify those animals at a glance and gives the clear features about it.

   b) The child looks the picture carefully. Even though he understood the animal, he could give some of the features. The hints given by the teacher helps the students to a greater extent.

   c) The child could able to identify the animal, but he needs the help of the teacher for the complete explanation.

2. Familiar pictures (story - clever crow) are given to the children, and they tells the story after observing the pictures.

   a) Children tell full story using their imagination.

   b) The child tried to tell the context of the story, but failed to complete it. But the intervention of the teacher helps the child to explain the context.

   c) The child looks at the picture, but is incapable to grasp and share the idea properly and accordingly.

3. The teacher told a story to the children. They have to summarize the idea of the story.

    a) After hearing the story, the child presents it beautifully and excellently by including all the major events that occur in the story.

    b) The child couldn't interpret the concept completely, but he tries to present the story in his own language.

    c) He tells only one or two events in the story.

4. The teacher gives a chance to the students to share an experience of going to school without an umbrella on a rainy day.

    a) Gives narration about the incident or experience beautifully.

    b) He couldn't recollect all the moments he experienced, but gives explanation in one or two sentences.

    c) He couldn't remember and explain the experience through language.

5. Response while seeing your teacher during a family trip.

    a) He goes near the teacher happily and shows interest in introducing to the parents.

    b) Showing disinterest to get into a conversation with the teacher, even though he smiles.

6. The teacher explains a situation in order to understand the helping mentality of the children.

    The friend gives a piece of birthday cake to him. How he consider others while getting a piece of cake.

    a) Divides it equally by considering other family members.

    b) Sharing with the only one whom he liked the most.

    c) He eats the cake without considering others.

7. Honesty in returning the lost things. What would you do if you find your friends lost property?

    a) Shows interest to find out the owner of that property and return it back.

    b) Gives to the teacher immediately.

    c) Putting that thing in the box or bag without thinking that it belongs to someone.

8. Considering towards the closest family member. How would you care your mother, if she suffers from disease?

   a) Being anxious about her disease and engages in her treatment.

   b) Even though he becomes anxious and enquires about the disease, he is not aware about her needs.

   c) Engaging in his own activity.

9. Response of children in an unexpected instant. Teacher describes the situation. If your best friend has a painful experience, what will be your response?

   a) He expresses anxiety and worry about the friend.

   b) He becomes tensed by worrying about his friend.

   c) He shows an attitude like; he doesn't have any relation with the victim.

10. How would you approach your friend, if he didn't get the expected marks in the examination?

    a) Understanding his feeling, which you can't score up to the mark even though you studied hard enough.

    b) Don't be upset, I also have less marks and I didn't have any grievances.

    c) He tells, exam isn't a big deal.

11. Tendency to show compassion on hearing one's problem.

    Teacher says a story of a mother who loves her son. Teacher is checking the attitude of the children while hearing the story.

    a) Expressing deep sorrow by imagining himself as the lost child.

    b) Even though he enquired about the problem, he is not at all aware about the friend's condition.

    c) He is just hearing what the teacher says and is not being ready to enquire.

12. Happiness shown in different life situations. Appreciation given by the teacher to the best performed student.

    a) He expresses extreme happiness and shares it with friends.

    b) Even though he is happy, he believes that he won only because of his talent.

    c) Receiving the prize without even having any change in expression.

13. Awareness about personal hygiene. The teacher examines whether the child wash their hand and mouth after having food at intervals.

    a) Washing hands and mouth neatly after eating snacks.

    b) Just washing hands.

    c) Wiping in the dress without washing the hands.

14. Self-care in different circumstances. How a child gives an attention in overcoming a dangerous situation (water and hanging bridge) during travelling.

    a) Traveling very carefully with the help of the elder.

    b) Even though the child isn't bother about the danger, he walks along with the parents.

    c) Walking carelessly without the help of others.

15. Attention for the self-withdrawal from dangerous situation.

    How the children keep aloof from stranger? How you behave to the Stanger?

    a) Seeking the help of elders without accepting the gifts of strangers and without answering to their questions.

    b) Preparing to speak in discomfort.

    c) Starts to talk by falling in their provocation and accepts the gifts.

16. Awareness in handling dangerous instrument. The teacher examines the way you handle instruments like scissors during classroom activities.

    a) Using it very carefully by understanding that it is dangerous.

    b) Using it without aware about the danger.

    c) Using it carelessly.

17. Pictures related to nature are given to the children. Teacher's shows agriculture related pictures and asks them to arrange it.

    a) They observe the pictures and arrange it correctly.

    b) They couldn't arrange the pictures without the help of teacher, even though they understood it.

    c) Though they observed the pictures, they couldn't understand and arrange the concept.

18. If you get a chance to breed one of your favorite animals, how will you respond in that situation?

a) Spends more time with it and treats well.

b) Looks after it during the playtime or intervals.

c) Playing without minding it.

19. Identify the birds and animals through the sounds.

a) Children easily identify all the birds and animals by hearing the sounds.

b) Identifying the sounds of familiar animals through the hints given by the teacher.

c) He could identify one or two sounds, even though he given the correct explanation.

20. The teacher presents an activity related to the conservation of bird in summer season

a) Collects water in a vessel and exhibits it in a way the bird can see.

b) Engaging in the activities as per the instruction of teacher.

c) Simply looking others activity; without any interest.

21. Giving instructions about physical test (treasure hunt). Teacher examining who complete the task faster.

a) Children identified the object within the given period of time.

b) Asking more instructions to the teacher and talking more time to find the object.

c) Just made a try and shows disinterest to continue the game.

22. The teacher asks the children to measure the table using their hand pan.

a) Children measures accurately and says the measurement to the teacher. Helping the friends after completing own task.

b) He tried to measure the table, but couldn't attain accuracy in measurement. But the teacher's intervention helps him to accomplish it.

c) He failed in the task even after many trails, and he simply looks other children s activities without trying for another chance.

23. The teacher examines the sports skills of children, and requests to run faster according to the instruction of hurdle race and keeps reminding them about the time.

a) He could easily achieve the goal without hitting any hurdle within the given period of time.

b) He skipped the hurdle in the first three levels, but he couldn't perform better in the following levels.

c) He tried to perform well, but couldn't skip any of the hurdles.

24. Teacher explains the instructions to the children about the ring throw game.

a) As per the instruction, the child throws the ring to the target position.

b) Covered only one or two rings were towards the destination.

c) He couldn't throw any of the rings, even after many trails.

25. The teacher sings two line of a familiar song asks the students to complete it.

a) Children began to starts to before the teacher stops and complete the song with correct pronunciation.

b) Complete the song with the help of the teacher.

c) Singing only one or two line.

26. Teacher requested to sing a song related to birds.

a) The child sings the song using his imagination.

b) Remembers the familiar songs immediately and sings it.

c) He tried to remember and sing the song, but he couldn't complete it.

27. Teacher shows pictures of songs familiar to students, and asks them to sing.

a) They remember the song by observing carefully and sing it.

b) They remember the songs, but couldn't complete it.

c) They try to sing the song by observing the pictures.

28. Teacher sings a song and says the children to clap the hands according to the beat of the song.

a) They clap their hands according to the beat.

b) They tried to clap the hands according to the beat, but they couldn't attain thing.

c) They couldn't clap

Digital literacy

29. Teacher gives pictures to the students and ask them to separate the pictures related to computer tools

a) As soon as he saw the pictures he was able to separate the pictures related to computer tools

b) He was only able to identify the pictures which are familiar to him

c) He identified the objects with the hints given by the teacher

30. Teacher instructs the students to play video games

a) He plays the game according to the instructions given

b) Handling the game with the help of others instruction

c) Completely depends on others help

31. Teacher asked students to take photos in the mobile phone

a) Shown mastery to take photos

b) Able to take photos

c) Takes the photos with the help of a person

32. The teacher requests the students to play a video in mobile phone

a) Open the gallery and play the video after that he is choosing another one

b) Depend instructions of another person's

c) He know there are video and photos in mobile phones

APPENDIX VI
FAROOK TRAINING COLLEGE

Performance test for Integrated Process Skills Instrument
Age group 5 - 6

Dr. Anees Mohammed. C
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Raheesa Farsana. N
M.Ed. Student

Directions

This performance test has 32 questions. Each question contains three levels represented as a, b and c. Choose the correct answer based on the performance of children and putting tick mark (✓) in the response sheet given along with the questionnaire

1. Pictures related to the life of children. Checking what all are the feelings that arises in the children. They gives description about the picture
   a) Children could say all the experiences when they see the picture at a glance
   b) Children keenly observe the picture. Even though many thoughts arise in their minds, they cannot express it all. But they share their ideas with help of the teacher
   c) Children couldn't express the idea, even though they keenly observed the picture
2. Story context familiar to the children are given. Children tell the story by observing the picture. Creativity of the children can be examined
   a) A child carefully concentrates in the picture. By relating the pictures they tells the story well
   b) Though they goes through the picture, don't get the clear idea, but they tries to tell the story with the help of teacher
   c) The child couldn't even grab the familiar context and perform according to the idea
3. Telling the beginning of the story familiar to the children. They tries to complete the story in their own imagination using the story context
   a) After hearing the story, children remember the story and tries to complete it
   b) After hearing the story, they tries to complete the story in their own imagination

c) Though they get many ideas while hearing the story, they couldn't express or complete the story

4. Trip with dearest people (beach). The child shares his travel experience with his closest relative

a) He explains his experience clearly in a fine manner

b) He couldn't clarify the sights he have seen, but says it in one or two words

c) Even though he enjoys the trip well, he couldn't describe it in his own language

5. Consideration shown by the child, after returning from a trip with family in his own vehicle

a) Giving lift to his friend and his parents

b) Offering a lift to his friend by worrying about how they will return

c) Going without minding his friend

6. Approach that shown to others while travelling with parents

a) Shows interest in talking, playing and enjoying with family

b) Shows interest in talking and playing with family for sometimes

c) Engaged in mobile gaming and unaware of other things

7. Intervention of children when any of their friend suffers from disease

a) Helping the friend by enquiring about everything

b) Providing necessary help to the friend and reporting the problem to the teacher

c) Showing no interest in understanding the problem of his friend and engaging in his own business

8. Intervention of the children in group activities

Teacher explains a situation, "what will be your response when your friends invite you to play while you play mobile games or computer games"

a) Interested to play with friends. If there is no time to play with friends, then engaged in his own business

b) Sometimes engaging with friends or in gaming

c) Interested in spending time in playing computer or t

9. Response of children in an unexpected situationTeacher describes the situation, "What will you do when your house sink in the heavy rain"

a) As per the instruction of parents, the child helps them by putting off things

b) Though he listened what parents had said, but couldn't concentrate in anything rather than being afraid

c) Crying out loudly without hearing his parents advise

10. Solving the problems between the friends smoothly

Your response when the teacher scolds your friend when they fight

a) Even though he know that he is responsible for the problem, he scolds his friend, later feel guilty and tries to become friendly with him

b) Without falling in the friendly talk, he shows distance with the friends

c) Quarrelling with friends by believing that they are the reason for teacher's scold

11. Intervention to the children in an unfamiliar class

Teacher explains the situation, "How will you receive a student who is a newcomer in the class?"

a) Happily receives him and forcing him to sit near and enquiring whether he is fine

b) Smiling to the newcomer but isn't trying to interact with him

c) Showing disinterest to mingle with the newcomer and keeping distance from him

12. Consideration to the fellow creatures

Teacher shows a short film about the crime against children

a) Being fed up with child seen in the short film, and talkative about the incident to the teacher

b) Watching the film curiously and showing distance to it

c) Just watched the movie and it didn't touched him

13. Attention to the hetero-surroundings while travelling with the family

Teacher explains the situation. "How will you cross the road along with family?"

a) Crossing the road carefully by holding the hands of parents

b) Though he holds the hands of parent, he crosses the road by looking the toys in the nearby shop

c) Crossing the road carelessly without minding the parents

14. Awareness about personal hygiene

Teacher explains the situation. "Your response when seeing your favorite dishes on the dining table after returning from a long journey"

a) Starts to eat food after taking a bath

b) Even though parents were talking, he sits in front of the food by washing only his hands

c) Starts to eat the food without changing the dress and washing

15. Awareness about cleanliness of surroundings

A child is coming to the class to see you. What will you do the chocolate cover after eating it?

a) Dumping the chocolate cover in the waste basket

b) Putting the chocolate cover on the floor carelessly

c) Throwing it outside by rolling up the cover

16. Care in personal matter. Things doing after the classes are over

a) Pack all the books carefully and make sure that everything is packed

b) Keeps the books really fast without caring about it

c) Only thinking about going outside the class and doesn't bother about the books

17. Teacher gives the pictures of birds, grasses and twigs and ask them to build a habitual diorama

a) Making it very beautiful and attractive, and bring varieties in the objects

b) Even though has an idea about the object in the mind, but couldn't make it correctly

c) According to the teacher's instructions, trying to make it without any interest

18. Identify the birds and animals through the sound

a) Children easily identifies the birds and animals through the sound

b) Identifying the birds and animals that they have seen in their daily life, through the hints given by the teacher

c) Even though teacher gave proper hints, the children identifies only the sounds of one or two birds and animals

19. Relation with the non-living things. Children hears the familiar sound(sea, wind)

a) Easily identifies through the sound

b) Achieving the aim through the teacher's explanation

c) The child couldn't identify it, even though the teacher gave correct definition

20. Teacher explains the situation to the children. Your response on seeing a baby bird fell under a tree in front of your house
    a) Suddenly taking the baby bird and gives the primary treatment and tries to keep it back in its nest
    b) Taking the bird and seeking the help of parents
    c) Engaging in their own games without minding the bird
21. Idea formation

    Teacher asks the students to create objects using clay
    a) Making different objects using his own imagination
    b) Imitating others objects in order to bring out his talent
    c) Trying to make circles or rollers
22. A child represents an idea (elephant) in front of other children through gestures
    a) Presenting the concept in a way other children would understand
    b) Even though he is trying to present the concept, it becomes unproductive
    c) He couldn't present the concept
23. Presenting anyone of the exercise through body movements
    a) The child shows the exercise properly according to the instructions
    b) Trying to do the exercise, but couldn't attain co-ordination
    c) Doing the exercise like playing a game
24. Teacher explains a game (hopscotch) which requires body movements. Teacher requests the students to present it individually
    a) Child reaches the aim fast according to the instructions
    b) Even though he understood the instructions, he couldn't reach the target point
    c) Trying to do it, but his leg hits the floor
25. Examining they could identify the musical instruments

    Teacher plays the sound of the musical instrument and identifying the children's music sense through their response
    a) Understanding from which instrument the sound comes while hearing the sound
    b) Identifying some sounds
    c) He couldn't identify the instrument, even though hears the sound

26. Teacher sings 2 lines of the song which is familiar to the children. And tells them to complete it
    a) Children completes the song with correct pronunciation before the teacher completes
    b) Child tries to sing the song after the teacher completed it
    c) Sings only one or two lines
27. Teacher suggests to sing a song related to rain
    a) Singing in his own style and imagination
    b) Child immediately recalls and sings the song
    c) Even though the child remembered and tried to sing the song, he couldn't complete it
28. Checking the ability to play the musical instruments

    Teacher gives different types of musical instruments in the mobile phone
    a) Brings out the sound according to the beat using his talent
    b) Making sounds of the same beat
    c) Making chatter
29. Teacher gives picture related to computer resources and asks children to arrange properly
    a) Arranging the given pictures properly
    b) Trying to arrange it, but couldn't do it properly and completely
    c) Identifying each one of them, even though he couldn't arrange it
30. When you visit a mall with parents, how do you handle the games?
    a) Handling each of the game according to the instructions
    b) Handling those with the help of others instructions
    c) Waiting for others help
31. Suggesting the children to watch their favorite videos in YouTube
    a) Watching favorite video by selecting YouTube from mobile
    b) Selecting favorite video by opening YouTube with the help of others
    c) Child understands that there is video in it
32. Teacher asks children to play video games
    a) Playing the game according to the instructions
    b) Needs someone's help during playing
    c) Playing according to others instructions

APPENDIX VII
FAROOK TRAINING COLLEGE

Individual test for Integrated Process Skills Instrument
Age group 3 – 4

Dr. Anees Mohammed. C
Assistant Professor
Farook Training College

Raheesa Farsana. N
M.Ed. Student

Directions

- The test contains 14 questions. Try to give answer to all questions
- Please read carefully all the instructions in the questions
- Some questions is provided with choice

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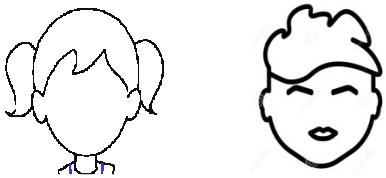
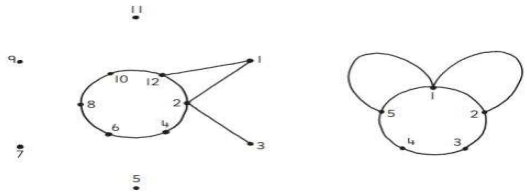
1. Which is best for climbing up high?

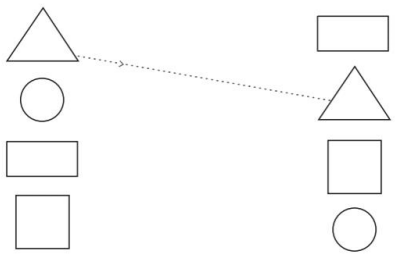
2. Draw eyes to these friends



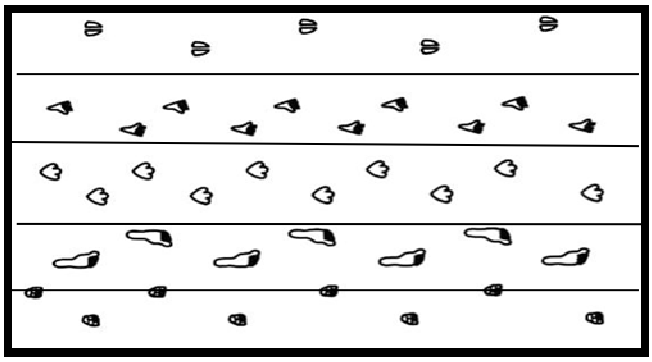
3. Connect the dots and colour it



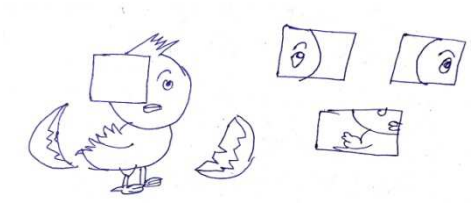
4. Draw a line from each shape on the left to the same shape on the right



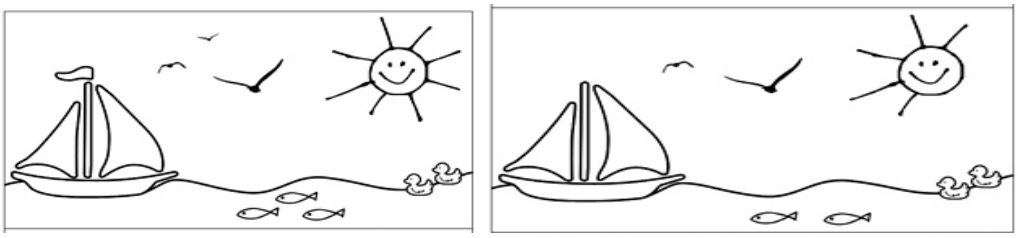
5. Which track is human?



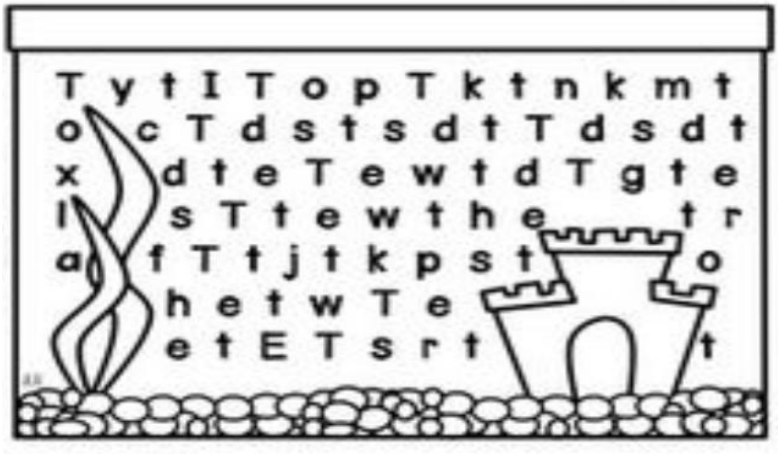
6. Find out what is missing in the picture



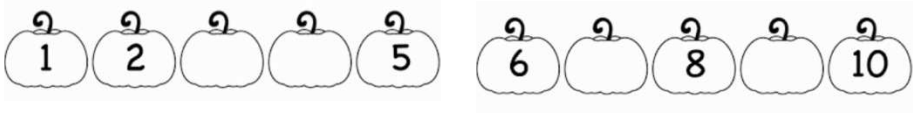
7. Find 4 differences between the pictures on the right and the pictures on the left



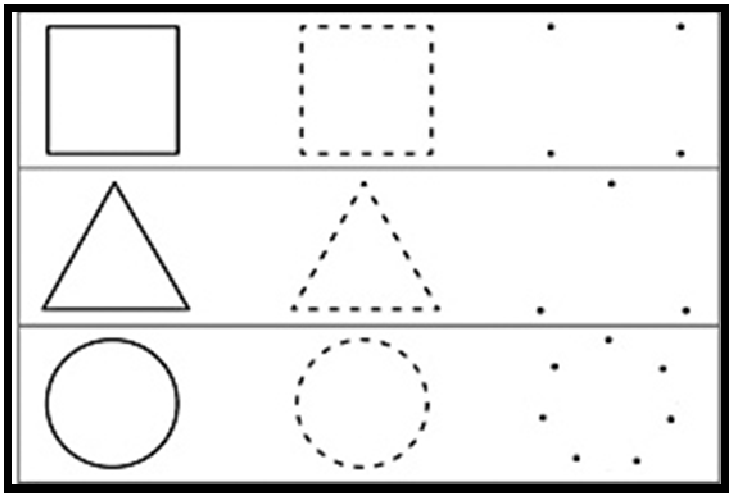
8. Find the letter ‘T , t’ from the box



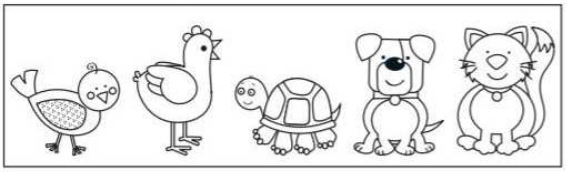
9. Write each missing number



10. Colour each shapes next trace then connect the dots to complete the shapes



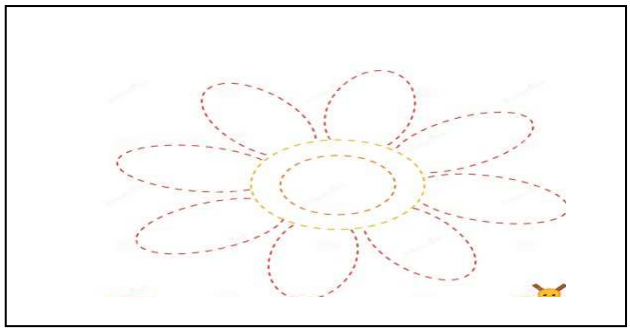
11. Answer the following questions.



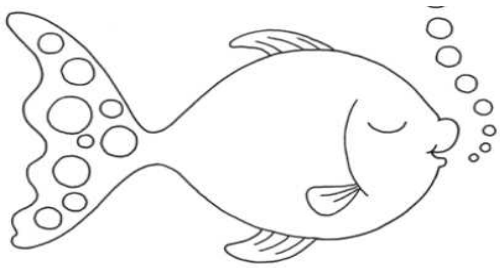
a) How many animals have 2 legs : _____

b) How many animals have 4 legs : _____

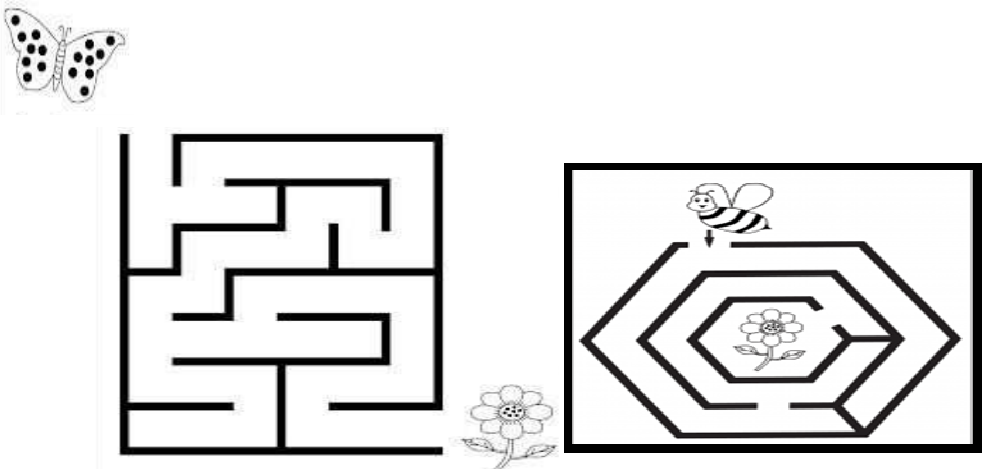
12. Discover the pictures by joining the dots and colour the pictures in your own idea.



13. Colour the circles blue



14. Help bee and butterfly to find the flower



APPENDIX VIII

FAROOK TRAINING COLLEGE

Individual test for Integrated Process Skills Instrument

Age group 4 - 5

Dr. Anees Mohammed. C
Assistant Professor
Farook Training College

Raheesa Farsana. N
M.Ed. Student

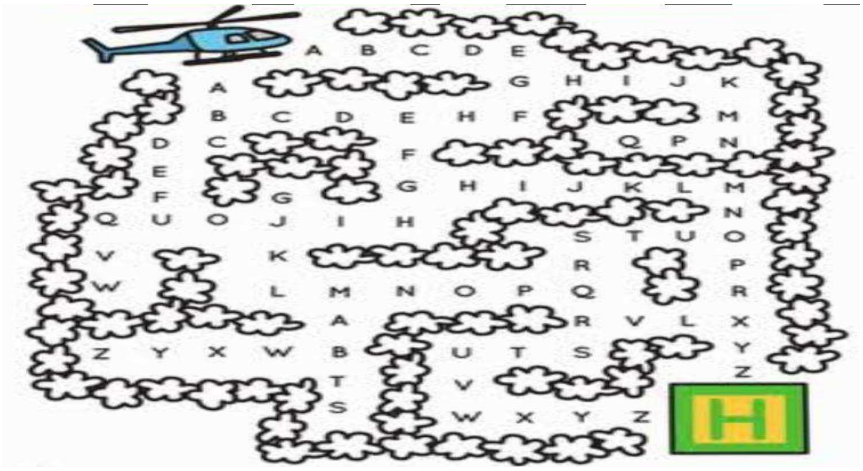
Directions

- The test contains 14 questions. Try to give answer to all questions
- Please read carefully all the instructions in the questions
- Some questions is provided with choice

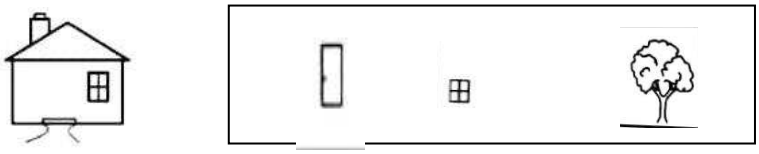
1. Which objects below rolls best?

2. Finish this drawing

3. Draw a line to make a plain to connect A to Z in alphabetical order and go through the maze



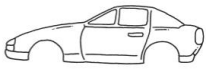
4. What is needed to make the object?



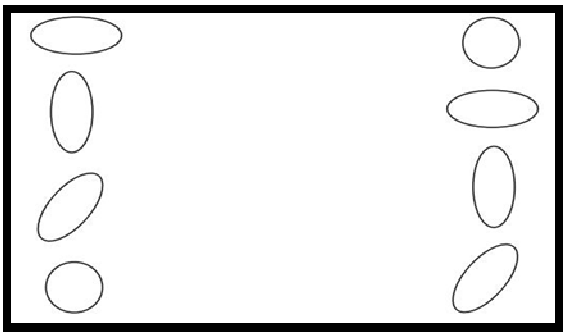
5. Find these words in the puzzle

j	d	o	l	l
b	e	a	r	k
m	n	p	q	s
h	g	i	f	t
b	a	l	l	c

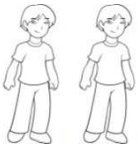
6. Draw the wheel on the cars

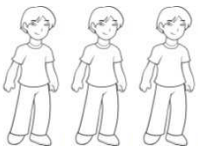


7. Draw a line from each shapes on the left to the same shape on the right

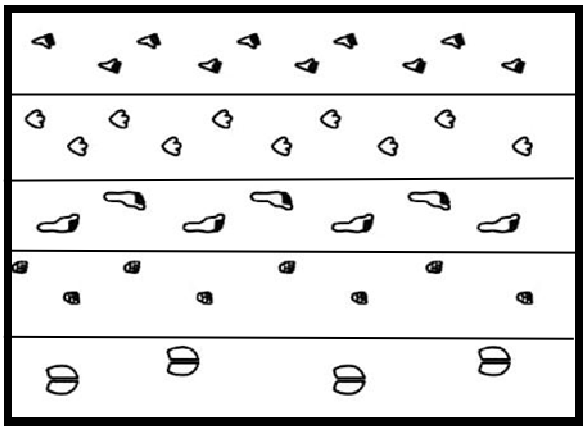


8. A man has 2 legs 

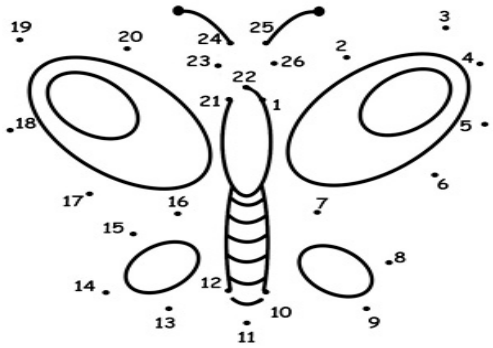
a)  How many legs do 2 man's have : _____

b)  How many legs do 3 man's have : _____

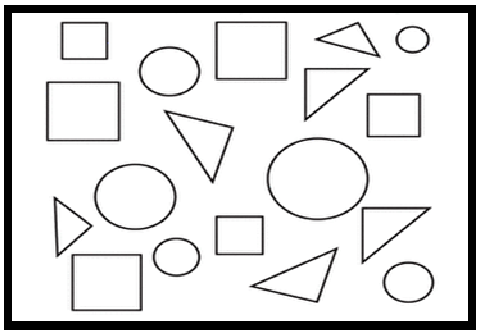
9. Which track is duck



10. Discover the pictures by joining the dots and colour the pictures



11. Colour the all triangles

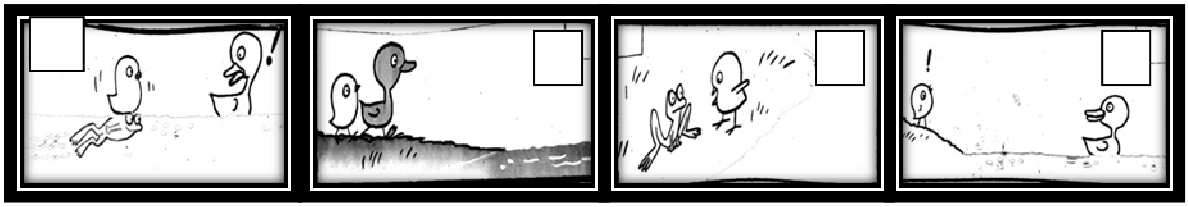


12. Tick the correct animal name

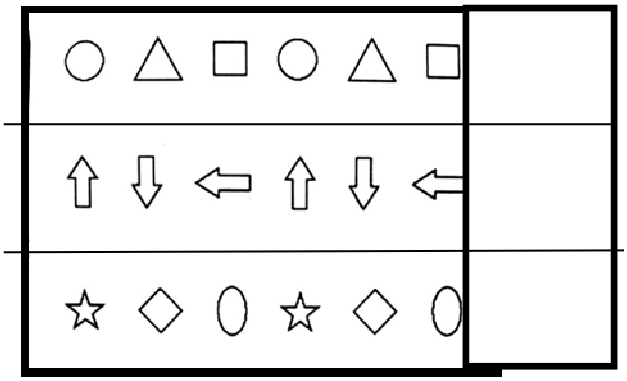
Kangaroo	Crocodile	camel

- It is brown
- It has a long tail
- It is big
- It has a pocket

13. Number these pictures in a sequential order



14. What come next



APPENDIX IX

FAROOK TRAINING COLLEGE

Individual test for Integrated Process Skills Instrument

Age group 5 - 6

Dr. Anees Mohammed. C
Assistant Professor
Farook Training College

Raheesa Farsana. N
M.Ed. Student

Directions

- The test contains 14 questions. Try to give answer to all questions
- Please read carefully all the instructions in the questions
- Some questions is provided with choice

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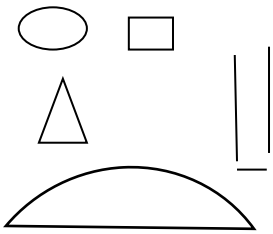
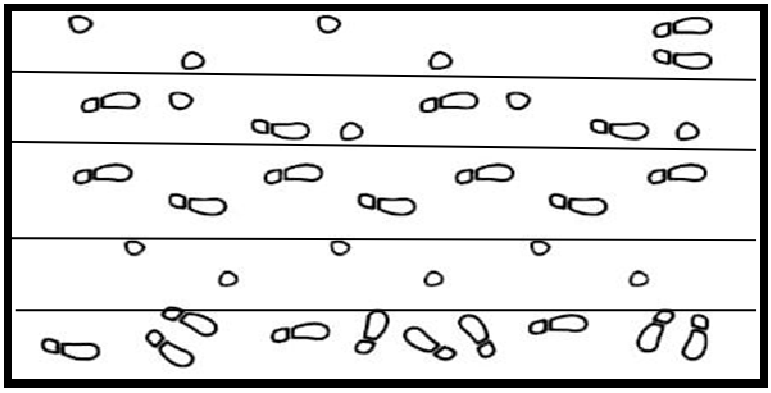
1. Draw the pictures using below figures



2. Which track is of a person walking?

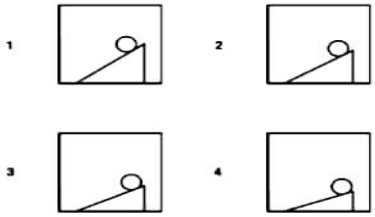


3. Draw a nose on the boy's face

4. Help the grandmother to reach their daughter through week order

SUNDAY	MONDAY	SATURDAY	SATURDAY
FRIDAY	TUESDAY	WEDNESDAY	SATURDAY
SUNDAY	MONDAY	THURSDAY	TUESDAY
FRIDAY	SUNDAY	FRIDAY	SATURDAY

5. Which ball will roll faster



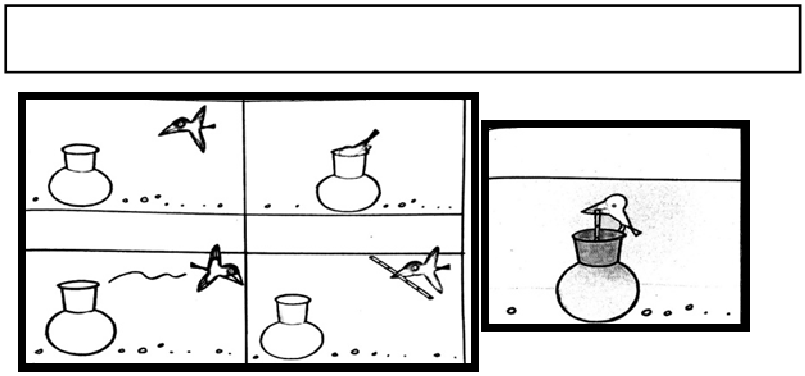
6. Take away the first letter or the last letter and make new words.

W	A	N	T

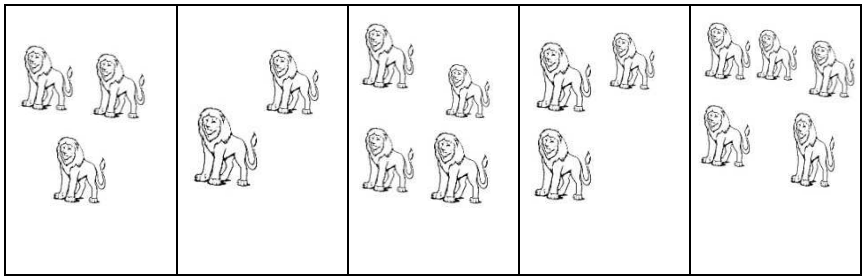
N	E	A	T

P	I	N	K

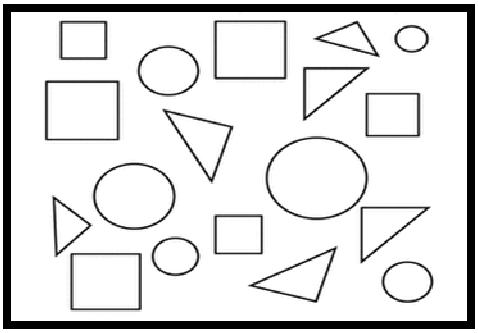
7. Observe pictures carefully and give a title for the story



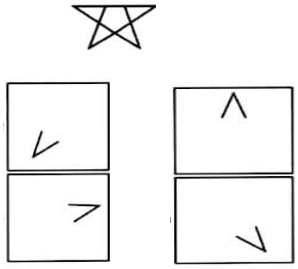
8. There were 3 lions at the zoo. You can see them in the first box. The lions were so popular, that the zoo got 2 more lions. Point to the pictures that shows how many lions are now at the zoo



9. Colour all the circle in red and triangle in yellow

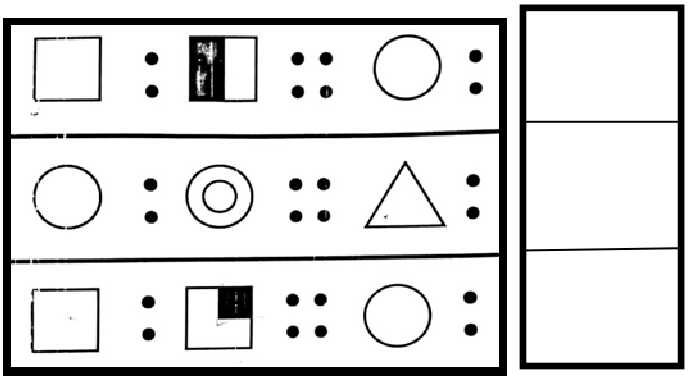


10. What is needed to finish the shapes?



11. Which person is the 5th position from the ice-cream shop?

12. What come next?

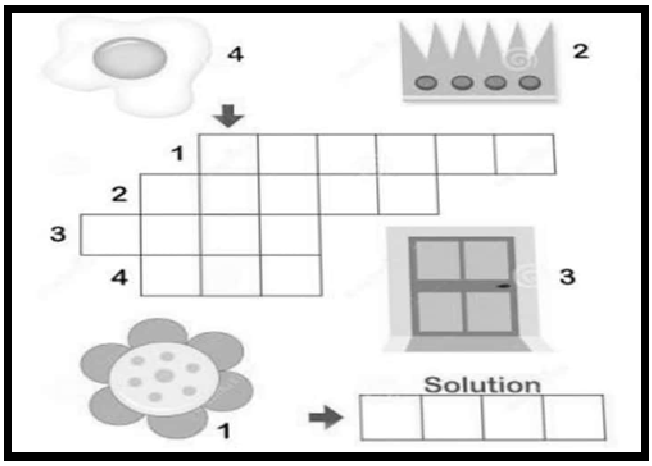


13. A cat has four legs 

a)  How many legs do 2 cats have : _____

b)  How many legs do 3 cats have : _____

14. Find the English words of this picture and fill in the puzzle



APPENDIX - X

FAROOK TRAINING COLLEGE

Performance Test for Integrated Process Skill Instrument

Age Group 3-4

Dr. Anees Mohammed. C
Assistant Professor
Farook Training College

Raheesa Farsana. N
M.Ed. Student

നിർദ്ദേശങ്ങൾ

ഈ പെർഫോമൻസ് ടെസ്റ്റിൽ ആകെ 32 ചോദ്യങ്ങൾ ഉണ്ട്. ഓരോ ചോദ്യത്തിനും a, b, & c എന്നിങ്ങനെ മൂന്ന് ലെവൽ കൊടുത്തിട്ടുണ്ട്. കുട്ടികളുടെ പ്രവർത്തനത്തിനനുസരിച്ച് അവയിൽ ഓരോ ചോദ്യത്തിലും ശരിയായ ഉത്തരം തെരഞ്ഞെടുത്ത് ഈ ചോദ്യാവലിയോടൊപ്പം തന്നിട്ടുള്ള Response Sheet ൽ ✓ ചിഹ്നം കൊണ്ട് രേഖപ്പെടുത്തുക.

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1. കുട്ടിക്ക് പരിചിതമായ കാർട്ടൂൺ കഥാപാത്രങ്ങളെ കുറിച്ചുള്ള വിവരണം നൽകാൻ അധ്യാപിക ആവശ്യപ്പെടുന്നു.
   a) കഥാപാത്രത്തെ പെട്ടെന്നു തന്നെ ഓർത്തെടുക്കാനും അവയുടെ സവിശേഷതകളെക്കുറിച്ച് വർണ്ണനം നൽകാനും അനുകരണം ചെയ്യാനും സാധിക്കുന്നു.
   b) കുട്ടിക്ക് ഇഷ്ടപ്പെട്ട കഥാപാത്രത്തെ ഓർത്തെടുത്തു എങ്കിലും അവയെ കുറിച്ചുള്ള കൂടുതൽ വിവരണം നൽകാൻ സാധിക്കുന്നില്ല.
   c) കഥാപാത്രത്തിന്റെ പേര് നൽകാൻ മാത്രമേ സാധിച്ചിട്ടുള്ളൂ.
2. അധ്യാപിക കുട്ടികൾക്ക് കഥ പറഞ്ഞു കൊടുത്തു. ആ കഥയുടെ ആശയം ചുരുക്കി പറയുന്നു.
   a) കഥയിലെ ഓരോ സംഭവത്തെയും വളരെ വർണ്ണനയോടും വ്യക്തതയോടും ദൃശ്യ ഭംഗിയോടുകൂടിയും പറയാൻ സാധിക്കുന്നു.
   b) കഥയുടെ ആശയത്തെ തനതായ ശൈലിയിൽ ആവിഷ്കരിക്കാൻ ശ്രമിക്കുന്നു. അധ്യാപികയുടെ ഇടപെടലിലൂടെ കഥ പൂർണ്ണതയിലേക്ക് കൊണ്ടുവരാൻ സാധിക്കുന്നു.
   c) കഥയെ ഒന്നോ രണ്ടോ സംഭവത്തിൽ മാത്രം ഒതുക്കുന്നു.
3. കുട്ടികൾ തന്റെ കുടുംബത്തെ പരിചയപ്പെടുത്തൽ. അധ്യാപിക കുട്ടികളുടെ കുടുംബാംഗങ്ങളെക്കുറിച്ച് അവരോട് പരിചയപ്പെടുത്താൻ പറയുന്നു.
   a) തന്നെക്കുറിച്ചും മാതാപിതാക്കളെയും മറ്റു കുടുംബാംഗങ്ങളെക്കുറിച്ചും വ്യക്തമായ വിവരങ്ങൾ പറഞ്ഞു കൊടുക്കുന്നു.
   b) മാതാപിതാക്കളെ കുറിച്ചുള്ള വിവരണം നൽകിയെങ്കിലും അംഗങ്ങളെ കുറിച്ച് വിശദമായി പരിചയപ്പെടുത്താൻ സാധിക്കുന്നില്ല.
   c) മാതാപിതാക്കളുടെയും വീട്ടിലെ മറ്റ് അംഗങ്ങളുടെയും പേരുകൾ മാത്രം നൽകാൻ സാധിക്കുന്നു.

4. അധ്യാപിക കുട്ടികളോട് ഏറ്റവും ഇഷ്ടപ്പെട്ട ഒരു യാത്രാനുഭവത്തെ കുറിച്ച് ഒരു വിവരണം നൽകാൻ പറയുന്നു.

   a) ഏറ്റവും ഇഷ്ടപ്പെട്ട സ്ഥലത്തെക്കുറിച്ചും ആ സ്ഥലത്തിന്റെ പ്രത്യേകതയെ ക്കുറിച്ചും ഇഷ്ടപ്പെടാനുള്ള കാരണങ്ങളെ കുറിച്ചും വിശദമായി പറയുന്നു.

   b) സ്ഥലത്തെക്കുറിച്ചും ആ സ്ഥലത്ത് ആകർഷണീയമായ കാഴ്ചകളെ കുറിച്ചും പറയുന്നു.

   c) സ്ഥലത്തിന്റെ പേരും സ്ഥലത്തെക്കുറിച്ചും മാത്രം പറയുന്നു.

5. സുഹൃത്തുക്കളുമൊത്ത് കളിച്ചു കൊണ്ടിരിക്കുമ്പോൾ നിങ്ങളുടെ കൂട്ട ത്തിൽനിന്നും ഒരു കുട്ടി വീണ് പോകുന്നത് കാണുമ്പോൾ നിങ്ങൾക്കുണ്ടാ കുന്ന പ്രതികരണം.

   a) പെട്ടെന്നു തന്ന സുഹൃത്തിന്റെ അടുത്ത് പോകുകയും അവനെ കഴുകാൻ സഹായിക്കുകയും ചെയ്യുന്നു.

   b) സംഭവിച്ച കാര്യങ്ങൾ അധ്യാപികയോട് പറയുകയും വേണ്ടത്ര സഹായം കാണിക്കാനുള്ള താല്പര്യം പ്രകടിപ്പിക്കുന്നു.

   c) സുഹൃത്തിനെ ശ്രദ്ധിക്കാതെ തന്റെതായ കളികളിൽ ഏർപ്പെടുന്നു.

6. മൂല്യബോധമുള്ള കഥകൾ കേൾക്കുമ്പോൾ കുട്ടികളുടെ പ്രതികരണം. നമ്മുടെ സമൂഹത്തിൽ ഒറ്റപ്പെട്ടവരുടെ ജീവിതകഥ പറയുമ്പോൾ കുട്ടികളുടെ പ്രതികരണം.

   a) അത്തരത്തിലുള്ളവരെ ഞാൻ തീർച്ചയായും സഹായിക്കും എന്നു കുട്ടി പറ യുന്നു.

   b) സഹായിക്കുമായിരുന്നു. പക്ഷേ എനിക്ക് കഴിയില്ല എന്നു പറയുന്നു.

   c) ഒരു കഥ കേൾക്കുന്ന ലാഘവത്തോടുകൂടി മാത്രം കേൾക്കുന്നു. അതില പ്പുറം ഒന്നിനെക്കുറിച്ചും ചിന്തയില്ല.

7. കുടുംബങ്ങളുമായി ഒത്തുചേരാനുള്ള മനസാമീപ്യം.

   അധ്യാപിക ഒരു ജീവിത പശ്ചാത്തലം വിവരിക്കുന്നു. ''കുടുംബമൊത്ത് ചേർന്ന് കഥകൾ പറയുമ്പോൾ നിങ്ങൾ അതിൽ ചേരുമോ? അല്ലെങ്കിൽ മൊബൈലിൽ ഒറ്റയ്ക്ക് ഗെയിം കളിക്കുമോ?''

   a) കുടുംബവുമൊത്ത് കളികളിൽ ഏർപ്പെടാൻ താത്പര്യം പ്രകടിപ്പിക്കുന്നു.

   b) കുടുംബവുമൊത്ത് കളിക്കുന്നുണ്ടെങ്കിലും മാതാപിതാക്കളോട് അവരുടെ മൊബൈൽ എടുത്തു തരാനും ഗെയിമിൽ ഏർപ്പെടാനും താല്പര്യം കാണിക്കുന്നു.

   c) ഒന്നും കേൾക്കാൻ താല്പര്യം കാണിക്കാതെ മൊബൈൽ ഗെയിം കളിക്കു ന്നു.

8. വസ്തുക്കൾ പങ്കുവെക്കുന്നതിൽ മറ്റൊരാളോട് കാണിക്കുന്ന പരിഗണന.

   ഇടവേളകളിൽ കഴിക്കാൻ കൊണ്ടുവരുന്ന സ്നാക്സ് നിങ്ങളിൽ എത്രപേർ നിങ്ങളുടെ സുഹൃത്തുക്കൾക്ക് നൽകും.

   a) എല്ലാ സുഹൃത്തുക്കളെയും തുല്യരായി കണ്ട് കൊണ്ടുവന്നതിൽ ഒരു പങ്ക് കൊടുക്കുവാൻ ഏറെ താല്പര്യം കാണിക്കുന്നു.

   b) ഏറ്റവുമടുത്ത സുഹൃത്തിനു മാത്രം കൊടുക്കുവാൻ ഇഷ്ടപ്പെടുന്നു.

   c) ആർക്കും കൊടുക്കുവാൻ താല്പര്യപ്പെടുന്നില്ല.

9. ഏറ്റവും പ്രിയപ്പെട്ട വസ്തുക്കൾ പങ്കുവെക്കുന്ന സന്ദർഭങ്ങളിൽ ഉണ്ടാകുന്ന പ്രതികരണം.

   തനിക്ക് ലഭിച്ച ഏറ്റവും പ്രിയപ്പെട്ട വസ്തു (toy) സുഹൃത്തിന് നൽകാനായി അധ്യാപിക പറയുമ്പോൾ ഉള്ള പ്രതികരണം.

   a) മറ്റു സുഹൃത്തുക്കളോടൊപ്പം കളിക്കാനും തന്റെ സാധനങ്ങൾ കൊടുക്കാനും വളരെ ഉത്സാഹം കാണിക്കുന്നു.

   b) വലിയ താൽപര്യമൊന്നും ഇല്ലാതെ അധ്യാപിക പറഞ്ഞതിൽ അടിസ്ഥാനത്തിൽ കൊടുക്കുന്നു.

   c) ഒട്ടും കൊടുക്കാൻ താല്പര്യപ്പെടുന്നില്ല.

10. അപ്രതീക്ഷിതമായി കടന്നുവരുന്ന പ്രിയപ്പെട്ട അതിഥികളോട് ഉള്ള മനോഭാവം.

    നിങ്ങളുടെ കുടുംബത്തിലേക്ക് പെട്ടെന്ന് കയറി വരുന്ന നിങ്ങളുടെ പ്രിയപ്പെട്ട ബന്ധുക്കൾ ആരെങ്കിലും/അവരെ കാണുമ്പോൾ നിങ്ങളുടെ മനോഭാവം.

    a) അമിതമായി സന്തോഷിക്കുന്നു.

    b) സന്തോഷമുണ്ടെങ്കിലും തന്നെ ചില പദ്ധതികൾ നടക്കാതെ പോയതിൽ ഉള്ള വിഷമം ഉണ്ടാകുന്നു.

    c) അവരെ ശ്രദ്ധിക്കാതെ തന്റെതായ കളികളിൽ ഏർപ്പെടുന്നു.

11. ആഘോഷവേളയിൽ ആളുകളെ അഭിമുഖീകരിക്കുമ്പോൾ ഉണ്ടാകുന്ന പ്രതികരണം.

    അധ്യാപിക കുട്ടികളെ തെരഞ്ഞെടുത്ത പരിപാടി അവതരിപ്പിക്കാനായി വിളിക്കുമ്പോൾ ഉണ്ടാകുന്ന കുട്ടികളുടെ പ്രതികരണം.

    a) കുട്ടികൾ തനിക്ക് തന്നിട്ടുള്ള പരിപാടി തന്മയത്വത്തോടു കൂടിയും ആകർഷണീയതയോടെയും അവതരിപ്പിക്കുന്നു.

    b) അല്പം പേടിയോടുകൂടി തനിക്ക് തന്നിട്ടുള്ള പരിപാടി കുട്ടി അവതരിപ്പിക്കുന്നു.

    c) മറ്റുള്ളവരെ അഭിമുഖീകരിക്കാനുള്ള പ്രയാസം കൊണ്ട് കുട്ടിക്ക് ഒന്നും അവതരിപ്പിക്കാൻ സാധിച്ചില്ല.

12. സഹജീവിയോടുള്ള കുട്ടികളുടെ മനോഭാവം.

    കുട്ടികൾക്ക് ഒരു ജീവിത സാഹചര്യം അധ്യാപിക വിവരിച്ചു കൊടുക്കുന്നു. ''നിങ്ങൾ വളരെ അധികം ഓമനിച്ചു വളർത്തുന്ന നിങ്ങളുടെ വളർത്തുമൃഗം എന്തെങ്കിലും ഒരു അപകടം പറ്റുമ്പോൾ എന്തായിരിക്കും നിങ്ങളുടെ അവസ്ഥ?''

    a) അത് ഓർക്കാൻ കൂടി കഴിയാതെ അസ്വസ്ഥരാകുന്നു.

    b) കാണുമ്പോൾ വിഷമം ഉണ്ടെങ്കിലും അതൊരു പ്രശ്നമായി ബാധിക്കുന്നില്ല.

    c) അവന് പ്രകടമായ ദുഃഖം ഒന്നുമില്ല.

13. കുടുംബവുമൊത്തുള്ള യാത്രയിൽ ശ്രദ്ധയോടു കൂടിയുള്ള കുട്ടികളുടെ ഇടപെടലുകൾ. ആൾക്കൂട്ടത്തിനിടയിൽ കൂട്ടം തെറ്റി പോകാതിരിക്കാനുള്ള ശ്രദ്ധ എത്രത്തോളമുണ്ടെന്ന് സന്ദർഭം നൽകി മനസ്സിലാക്കുന്നു.

a) ആൾക്കൂട്ടത്തിനിടയിൽ എങ്ങനെ പെരുമാറണമെന്ന് വ്യക്തമായി അറിയാം (മാതാപിതാക്കളോടൊപ്പം ശ്രദ്ധയോടെ നടക്കുന്നു).

b) ആൾക്കൂട്ടത്തിനിടയിൽ ഒറ്റപ്പെട്ടു പോയാൽ ഉള്ള അവസ്ഥയെ കുറിച്ച് ബോധവാനാണെങ്കിലും നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് മാത്രം നടക്കുന്നു.

c) ആൾക്കൂട്ടത്തിനു ഒപ്പം ചേരുമ്പോൾ ഒട്ടും ശ്രദ്ധയില്ലാതെ തന്നിഷ്ടപ്രകാരം നടക്കാൻ ശ്രമിക്കുന്നു.

14. അപകടം പതിഞ്ഞിരിക്കുന്ന സാഹചര്യത്തെ കുറിച്ചുള്ള അവബോധം. കുടുംബത്തോടെ/കൂട്ടുകാരുമൊത്തുള്ള യാത്രയിൽ വെള്ളത്തിൽ കളിക്കുമ്പോൾ ഉള്ള ശ്രദ്ധ.

a) വെള്ളത്തിലെ അപകട സാധ്യതയെപ്പറ്റി കൃത്യമായ ധാരണയുണ്ട്. അതീവ ശ്രദ്ധയോടെ കളിക്കുന്നു.

b) ധാരണയുണ്ടെങ്കിലും അത്തരം സാഹചര്യത്തിൽ ഒട്ടും ശ്രദ്ധയില്ലാതെ ഇടപെടുന്നു.

c) മറ്റുള്ളവരുടെ നിർദ്ദേശങ്ങൾക്ക് ഒട്ടും പ്രാധാന്യമില്ലാതെ അശ്രദ്ധമായി പെരുമാറുന്നു.

15. അധ്യാപിക സന്ദർഭം വിവരിക്കുന്നു. വീട്ടുകാരുമൊത്തുള്ള യാത്രാവേളയിൽ പുറംകാഴ്ച വീക്ഷിക്കുന്നത് എങ്ങനെയായിരിക്കും.

a) വരാനിരിക്കുന്ന അപകടത്തെ മനസ്സിലാക്കി വളരെ ശ്രദ്ധാപൂർവ്വം വണ്ടിയിലിരുന്ന് പുറംകാഴ്ചകൾ വീക്ഷിക്കുന്നു.

b) ഇടക്കിടെ മാതാപിതാക്കൾ കൊടുക്കുന്ന നിർദ്ദേശങ്ങൾ ശ്രദ്ധാപൂർവ്വം യാത്രചെയ്യാൻ സഹായകമാകുന്നു.

c) യാതൊരു ശ്രദ്ധയുമില്ലാതെ കൈകൾ പുറത്തിടാൻ ശ്രമിക്കുന്നു.

16. അപകടകരമായ ഉപകരണങ്ങൾ കൈകാര്യം ചെയ്യുന്നതിൽ കുട്ടികൾക്കുള്ള ശ്രദ്ധ. ക്ലാസ് റൂം പ്രവർത്തനങ്ങൾക്കിടയിൽ അപകടസാധ്യതയുള്ള ഉപകരണങ്ങൾ നിങ്ങൾ എങ്ങനെയാണ് കൈകാര്യം ചെയ്യുന്നത് എന്ന് അധ്യാപിക പരിശോധിക്കുന്നു.

a) അപകടമാണെന്ന് മനസ്സിലാക്കി വളരെ ശ്രദ്ധയോടുകൂടി ഉപയോഗിക്കുന്നു.

b) അലസതയോടെ അപകടത്തെക്കുറിച്ച് ബോധമില്ലാതെ ഉപയോഗിക്കുന്നു.

c) തീർത്തും അശ്രദ്ധമായി ഉപയോഗിക്കുന്നു.

17. പ്രകൃതിയും പ്രകൃതി ചരാചരങ്ങളും തന്റെ ജീവന്റെ ഭാഗമാണെന്ന തിരിച്ചറിവ്. സ്കൂളിൽ പൂന്തോട്ടത്തിൽ പൂമ്പാറ്റകൾ പറക്കുമ്പോൾ നിങ്ങൾ അവയെ എങ്ങനെ വീക്ഷിക്കുന്നു.

a) പൂവുകളെ നോക്കിയും പൂമ്പാറ്റയെ പോലെ ഓടിച്ചാടി നടക്കാൻ കുട്ടികൾ ഇഷ്ടപ്പെടുന്നു.

b) പൂമ്പാറ്റയുടെ പിറകെ ഓടുകയും അതിനെ പിടിക്കാനും തലോടാനും ശ്രമിക്കുന്നു.

c) പൂമ്പാറ്റയെ കണ്ടു നോക്കി അതിലപ്പുറം ഒന്നും പ്രകൃതമല്ല.

18. അധ്യാപിക കുട്ടികളോട് എല്ലാവർക്കും കൂടി ഒരു പൂന്തോട്ടം നിർമ്മിക്കാം എന്ന് പറയുമ്പോൾ നിങ്ങൾ എന്തൊക്കെയാണ് ചെയ്യുക.

a) വളരെ താൽപര്യത്തോടുകൂടി പൂന്തോട്ടം നിർമ്മിക്കുന്ന പ്രവർത്തനത്തിൽ എർപ്പെടുന്നു.

b) ചെടികൾ നടാൻ താൽപര്യം ഒന്നുമില്ലെങ്കിലും അധ്യാപികയുടെ നിർദ്ദേശമ നുസരിച്ച് നടാൻ ശ്രമിക്കുന്നു.

c) ചെടികൾ നടാൻ താല്പര്യം കാണിക്കാതെ അവനവന്റെ കളിയിൽ മുഴുകു ന്നു.

19. അധ്യാപിക സന്ദർഭം വിവരിക്കുന്നു.

''നല്ല മഴ പെയ്യുന്ന സമയത്ത് നിങ്ങളുടെ പ്രതികരണം എന്തായിരിക്കും?''

a) സന്തോഷത്തോടെ ശബ്ദമുണ്ടാക്കിക്കൊണ്ട് മഴയത്ത് തിമിർത്തു കളിക്കു ന്നു.

b) മഴ പെയ്യുന്ന സമയങ്ങളിൽ കൈകളിൽ വെള്ളമാക്കി കളിക്കുന്നു.

c) മഴ പെയ്യുന്നത് കണ്ട് ആസ്വദിക്കാനാണ് ഏറെക്കുറെ താൽപര്യം പ്രകടിപ്പി ക്കുന്നത്.

20. മൃഗങ്ങളുടെയും പക്ഷികളുടെയും ചിത്രങ്ങൾ നൽകി അവ ക്രമീകരിക്കാൻ പറയുന്നു.

a) ചിത്രങ്ങൾ നന്നായി വീക്ഷിച്ച് പെട്ടെന്ന് തന്നെ കൃത്യമായി ക്രമീകരിക്കാൻ സാധിക്കുന്നു.

b) ചിത്രങ്ങൾ വീക്ഷിച്ച് മനസ്സിലായെങ്കിലും കൃത്യതയോടെ ക്രമീകരിക്കാൻ സാധിക്കുന്നില്ല. അധ്യാപികയുടെ ഇടപെടലുകൾ ഏറെക്കുറെ സഹായക മാകുന്നു.

c) ചിത്രങ്ങൾ വീക്ഷിച്ചെങ്കിലും അതിൽ നിന്നുള്ള ആശയങ്ങൾക്ക് അനുസൃത മായി ക്രമീകരിക്കാൻ സാധിക്കുന്നില്ല.

21. അധ്യാപിക Musical chair കളിയെക്കുറിച്ചുള്ള നിർദ്ദേശങ്ങൾ നൽകുന്നു. അതിനുസരിച്ച് കുട്ടികളോട് കളിക്കാൻ പറയുന്നു. ശരീരചലനങ്ങളിലൂടെ ഏതെങ്കിലും ഒരു വ്യായാമമുറ അവതരിപ്പിക്കുന്നു.

a) നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് കുട്ടി കൃത്യമായി വ്യായാമം ചെയ്തു കാണിക്കു ന്നു.

b) വ്യായാമം ചെയ്യാൻ ശ്രമം നടത്തുന്നുണ്ടെങ്കിലും അതിൽ ഏകോപനം കൈവരിക്കാൻ സാധിക്കുന്നില്ല.

c) കളിക്കുന്ന ലാഘവത്തോടു കൂടി വ്യായാമം ചെയ്യുന്നു.

22. വ്യത്യസ്ത രൂപനിർമിതിക്കാവശ്യമായ ഉത്പന്നങ്ങൾ (Building Blocks) അധ്യാ പിക കുട്ടികൾക്ക് നൽകുന്നു. വളരെ വേഗത്തിൽ മനസ്സിനെ ആശയങ്ങൾക്ക നുസരിച്ച് രൂപങ്ങൾ നിർമ്മിക്കാൻ ആവശ്യപ്പെടുന്നു.

a) തികച്ചും വ്യത്യസ്തമായതും ഉയരം ഏറിയതുമായ രൂപങ്ങൾ നിർമ്മിക്കു ന്നു.

b) വ്യത്യസ്ത രൂപങ്ങൾ നിർമ്മിക്കുന്നുണ്ടെങ്കിലും അതിൽ ഒരു തനിമ കൊണ്ടുവരാൻ സാധിക്കുന്നില്ല.

c) ഒരേ നിരയിൽ ഉള്ള രൂപങ്ങൾ മാത്രം നിർമ്മിക്കുന്നു.

23. അധ്യാപിക Ball Passing കളിയെക്കുറിച്ചുള്ള നിർദ്ദേശങ്ങൾ നൽകുന്നു. അത നുസരിച്ച് കുട്ടികളോട് കളിക്കാൻ പറയുന്നു.

    a) നിർദ്ദേശങ്ങളനുസരിച്ച് ബോൾ കൈമാറുകയും ലക്ഷ്യസ്ഥാനത്ത് എത്തു ന്നതുവരെ നിലനിൽക്കുകയും ചെയ്യുന്നു.

    b) ബോൾ കൈമാറുന്നതിൽ ഏറെക്കുറെ കൃത്യത വരുന്നുണ്ടെങ്കിലും കളി യുടെ അവസാന ഘട്ടത്തിലേക്ക് എത്തിച്ചേരാൻ സാധിച്ചില്ല.

    c) കളിയിലെ കൃത്യതയില്ലായ്മയും അശ്രദ്ധമൂലം ആദ്യഘട്ടത്തിൽ തന്നെ കുട്ടി പുറത്തായി.

24. അധ്യാപിക കുട്ടികളോട് കളിമണ്ണ് കൊണ്ട് വസ്തുക്കൾ ഉണ്ടാക്കാൻ നിർദ്ദേശി ക്കുന്നു.

    a) തന്റെതായ ഭാവനയിൽ നിന്നും തീർത്തും വ്യത്യസ്തമായ വസ്തുക്കൾ നിർമിക്കുന്നു.

    b) തന്റെ കഴിവുകൾ പുറത്തെടുക്കാൻ വേണ്ടി മറ്റു സുഹൃത്തുക്കളുടെ വസ്തുക്കളെ നോക്കി അനുകരിക്കാൻ ശ്രമിക്കുന്നു.

    c) തനിക്ക് കഴിയും വിധത്തിൽ വൃത്തങ്ങളോ റോളർ പോലുള്ള വസ്തുക്കൾ ഉണ്ടാക്കാൻ ശ്രമിക്കുന്നു.

25. വിവിധതരം ചിത്രങ്ങൾ അധ്യാപിക കുട്ടികൾക്ക് നൽകുന്നു അതിൽനിന്നും സംഗീതവുമായി ബന്ധപ്പെട്ട ചിത്രങ്ങൾ തിരഞ്ഞെടുക്കാൻ നിർദ്ദേശിക്കുന്നു.

    a) ചിത്രങ്ങൾ കാണുന്ന മാത്രയിൽ തന്നെ എല്ലാ സംഗീത ഉപകരണങ്ങളും ഉടനടി തിരിച്ചറിയുന്നു.

    b) സർവ്വസാധാരണയായി കാണുന്ന സംഗീത ഉപകരണങ്ങൾ തിരിച്ചറിയുന്നു.

    c) അധ്യാപികയുടെ ഇടപെടൽ മൂലം സംഗീത ഉപകരണത്തെ തിരിച്ചിറിയാൻ സാധിക്കുന്നു.

26. അധ്യാപിക ഒരു പാട്ട് കുട്ടികളെ കേൾപ്പിച്ചു അവരോട് അതിനനുസരിച്ച് നൃത്തം ചെയ്യാൻ പറയുന്നു.

    a) പാട്ടിനനുസരിച്ച് കുട്ടികൾ വളരെ ഭംഗിയോടും താളബോധത്തോടുകൂ ടിയും നൃത്തം ചെയ്യുന്നു.

    b) പാട്ടിനനുസരിച്ച് നൃത്തം ചെയ്യുന്നു.

    c) പാട്ടിനനുസരിച്ചല്ലാതെ കുട്ടി നൃത്തം ചെയ്യുന്നു.

27. കുട്ടികളോട് ആംഗ്യപ്പാട്ട് പാടാൻ അധ്യാപിക നിർദ്ദേശിക്കുന്നു.

    a) വളരെ ഭംഗിയോടു കൂടി പാട്ടിനനുസരിച്ച് ആംഗ്യം കാണിക്കാൻ കുട്ടി കൾക്കു കഴിയുന്നു.

    b) പാട്ടിന്റെ കൂടെ ആംഗ്യം കാണിക്കാനുള്ള ശ്രമം നടത്തുന്നുണ്ട്.

    c) പാട്ടിന്റെ കൂടെ ആംഗ്യം കാണിക്കാനുള്ള ശ്രമം നടത്തിയെങ്കിലും അത് ഫലപ്രദമാകുന്നില്ല.

28. കുട്ടികൾക്ക് പരിചിതമായ വസ്തുക്കൾ (Glass and Spoon) നൽകുന്നു. വസ്തുക്കൾ ഉപയോഗിച്ച് ഏതെങ്കിലും ഒരു ശബ്ദം (സംഗീതവുമായി ബന്ധപ്പെട്ട) ഉണ്ടാക്കാൻ പറയുന്നു.

    a) തന്റെ കഴിവുകൾ ഉപയോഗിച്ച് താളബോധത്തോടു കൂടിയ ശബ്ദം പുറത്തെടുക്കാൻ കഴിയുന്നു.

    b) ഒരേ താളത്തോടുകൂടിയ ശബ്ദം ഉണ്ടാക്കുന്നു.

    c) കലപില ശബ്ദങ്ങൾ ഉണ്ടാക്കുന്നു.

29. അധ്യാപിക കുട്ടികൾക്ക് ഇലക്ട്രോണിക് ടോയ്സ് കൊടുത്തത് പ്രവർത്തിപ്പിക്കാൻ നിർദ്ദേശിക്കുന്നു.

    a) കാണുന്ന നിമിഷത്തിൽ തന്നെ എങ്ങനെ പ്രവർത്തിക്കണമെന്ന് കുട്ടി അറിയുന്നു.

    b) മറ്റൊരാളുടെ നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് കുട്ടി പ്രവർത്തിപ്പിക്കുന്നു.

    c) രക്ഷിതാക്കൾ പ്രവർത്തിപ്പിച്ച് കൊടുക്കുന്നത് കണ്ട് ആസ്വദിക്കുന്നു.

30. അധ്യാപിക സന്ദർഭം വിവരിക്കുന്നു. നിങ്ങളുടെ മാതാപിതാക്കളുടെയോ മറ്റ് കുടുംബാംഗങ്ങളുടെയോ മൊബൈൽ ഫോണിലേക്ക് കോൾ വരുന്ന സമയത്തുണ്ടാകുന്ന പ്രതികരണം.

    a) മൊബൈൽ ഫോണിൽ കോൾ വരുന്ന സമയത്ത് അത് എടുത്തു സംസാരിക്കുന്നു.

    b) വീട്ടിലെ ഓരോ അംഗങ്ങളുടെയും മൊബൈൽ ഫോൺ തിരിച്ചറിയുന്നു.

    c) മൊബൈൽ ഫോൺ സംസാരിക്കാൻ ഉപയോഗിക്കുന്ന ഉപകരണമാണെന്ന് തിരിച്ചറിയുന്നു.

31. അധ്യാപിക കുട്ടികളോട് വീഡിയോ ഗെയിം കളിക്കാൻ നിർദ്ദേശിക്കുന്നു.

    a) കളിയുടെ നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് കുട്ടി ഗെയിം കളിക്കുന്നു.

    b) കളിയുടെ ഇടയിൽ മറ്റൊരാളുടെ നിർദ്ദേശം ആവശ്യമായി വരുന്നു.

    c) മറ്റൊരാളുടെ നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് കളിക്കുന്നു.

32. അധ്യാപികയുടെ നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് മൊബൈൽ ഫോണിന്റെ ഉപയോഗം എത്രയുണ്ട് എന്ന് പരിശോധിക്കുന്നു. അധ്യാപിക കുട്ടികളോട് ഫോണിൽ ഫോട്ടോ എടുക്കാൻ നിർദ്ദേശിക്കുന്നു.

    a) കൃത്യമായ ധാരണയോടെ കുട്ടി ഫോട്ടോയെടുക്കുന്നു.

    b) ഫോണിൽ ഉപയോഗിക്കാനുള്ള കഴിവ് പ്രകടമല്ലെങ്കിലും കുട്ടി ഫോട്ടോയെടുക്കുന്നു.

    c) മറ്റൊരാളുടെ സഹായത്തോടും കൂടി കുട്ടി ഫോട്ടോയെടുക്കുന്നു.

APPENDIX - XI

FAROOK TRAINING COLLEGE

Performance Test for Integrated Process Skills Instrument

Age Group 4-5

Dr. Anees Mohammed. C
Assistant Professor
Farook Training College

Raheesa Farsana. N
M.Ed. Student

നിർദ്ദേശങ്ങൾ

ഈ പെർഫോമൻസ് ടെസ്റ്റിൽ ആകെ 32 ചോദ്യങ്ങൾ ഉണ്ട്. ഓരോ ചോദ്യത്തിനും a, b, & c എന്നിങ്ങനെ മൂന്ന് ലെവൽ കൊടുത്തിട്ടുണ്ട്. കുട്ടികളുടെ പ്രവർത്തനത്തിനനുസരിച്ച് അവയിൽ ഓരോ ചോദ്യത്തിലും ശരിയായ ഉത്തരം തെരഞ്ഞെടുത്ത് ഈ ചോദ്യാവലിയോടൊപ്പം തന്നിട്ടുള്ള Response Sheet ൽ ✓ ചിഹ്നം കൊണ്ട് രേഖപ്പെടുത്തുക.

1. കുട്ടിക്ക് പരിചിതമായ മൃഗങ്ങളുടെ ചിത്രം കാണിക്കുന്നു. ചിത്രം നിരീക്ഷിച്ച് ചിത്രത്തെക്കുറിച്ചുള്ള വിവരണം നൽകുന്നു.

   a) ഈ ചിത്രം കാണുന്ന മാത്രയിൽ തന്നെ കുട്ടികൾക്ക് മൃഗത്തിന്റെ പേരും അവയുടെ പ്രത്യേകതകളെക്കുറിച്ച് പെട്ടെന്ന് പറയാൻ സാധിക്കുന്നു.

   b) ചിത്രത്തിലേക്ക് കുട്ടി സൂക്ഷിച്ചു നോക്കുന്നു. മൃഗത്തെ മനസ്സിലായെങ്കിലും അവയെക്കുറിച്ച് പ്രാധാന്യമില്ലാത്ത വിവരണം നൽകാൻ സാധിച്ചു. എന്നാൽ അധ്യാപിക നൽകുന്ന സൂചന കുട്ടിക്ക് ഏറെക്കുറെ സഹായകമാവുന്നു.

   c) കുട്ടിക്ക് മൃഗത്തെ മനസ്സിലായി എന്നാൽ പൂർണ്ണ അർത്ഥത്തിൽ വിശദീകരണം കൊടുക്കാൻ അധ്യാപികയുടെ സഹായം തേടേണ്ടിവന്നു.

2. കുട്ടിക്ക് പരിചിതമായ ചിത്രങ്ങൾ നൽകുന്നു. ചിത്രങ്ങൾ നിരീക്ഷിച്ച് കുട്ടികൾ കഥ പറയുന്നു.

   a) കുട്ടികൾ ചിത്രം നന്നായി നിരീക്ഷിച്ചതിൽ നിന്നും തന്റെതായ ഭാവനയിൽ കഥപറയുന്നു.

   b) കഥാസന്ദർഭങ്ങൾ കുട്ടി പറയാൻ ശ്രമിക്കുന്നുണ്ടെങ്കിലും കഥയ്ക്ക് പൂർണത നൽകാൻ സാധിക്കുന്നില്ല. എന്നാൽ അധ്യാപികയുടെ ഇടപെടലുകൾ കുട്ടിക്ക് ഏറെക്കുറെ ആശയം പറയാൻ സഹായകമാകുന്നു.

   c) ചിത്രം നോക്കുന്നുണ്ടെങ്കിലും അതിന്റെ ആശയം ശരിയായ രീതിയിൽ ഉൾക്കൊള്ളാനും അതനുസരിച്ച് ആശയം പങ്കുവെക്കാനോ സാധിക്കുന്നില്ല.

3. അധ്യാപിക കുട്ടികൾക്ക് ഒരു കഥ പറഞ്ഞുകൊടുത്തു കുട്ടികൾ ആ കഥയുടെ ആശയം ചുരുക്കി പറയുന്നു.

   a) കഥ വളരെ ആവേശത്തോടെ കേട്ടശേഷം കഥയിലെ എല്ലാ സംഭവവികാസങ്ങളും ഉൾക്കൊള്ളിച്ച് ഭംഗിയോടു കൂടിയും ശ്രേഷ്ഠതകളോടു കൂടിയും കഥ പറയുന്നു.

b) കഥയിലെ ആശയം പൂർണ്ണമായും കുട്ടിക്ക് ആവിഷ്കരിക്കാൻ സാധിക്കുന്നില്ല. എന്നാൽ തന്റെതായ് ഭാഷയിൽ കഥ പറയാൻ ശ്രമിക്കുന്നു.

c) കഥയിലെ ഒന്നോ രണ്ടോ സംഭവങ്ങൾ മാത്രം പറയുന്നു.

4. മഴയുള്ള ഒരു ദിവസം കുടയെടുക്കാതെ സ്കൂളിലേക്ക് വരുമ്പോൾ നിങ്ങൾക്കുണ്ടായ ഒരു അനുഭവം പറയുക.

a) തനിക്ക് ഉണ്ടായ അനുഭവത്തെ വളരെ ഭംഗിയോടെയും അനുഭവിച്ചത് അതുപോലെ വിവരിച്ചു കൊടുക്കുന്നു.

b) മഴയിൽ താനനുഭവിച്ച എല്ലാ കാര്യങ്ങളും ഓർത്തെടുത്തു പറയാൻ സാധിക്കുന്നില്ല. എന്നാൽ ഒന്നോ രണ്ടോ വാക്യങ്ങളിലൂടെ വിവരണം നൽകുന്നു.

c) തനിക്കുണ്ടായ അനുഭവത്തെ ഭാഷയിൽ ആവിഷ്കരിക്കാൻ ഓർത്തെടുക്കാൻ സാധിക്കുന്നില്ല.

5. കുടുംബാംഗവുമൊത്തുള്ള യാത്രാവേളയിൽ വെച്ച് തന്നെ പഠിപ്പിക്കുന്ന അധ്യാപകനെ കാണാൻ ഇടയാകുന്ന സാഹചര്യത്തിൽ നിങ്ങളുടെ പ്രതികരണം.

a) വളരെ സന്തോഷത്തോടെ തന്റെ അധ്യാപികയുടെ അടുത്തേക്ക് പോകുകയും മാതാപിതാക്കൾക്ക് പരിചയപ്പെടുത്തിക്കൊടുക്കാൻ അതിയായ താല്പര്യം കാണിക്കുന്നു.

b) അധ്യാപികയെ കണ്ട് ചിരിക്കുന്നുണ്ടെങ്കിലും അവരുമൊത്ത് സംഭാഷണത്തിൽ ഏർപ്പെടാൻ മടികാണിക്കുന്നു.

c) അധ്യാപികയെ കണ്ടിട്ടും കാണാത്ത രീതിയിൽ ഇടപെടുന്നു.

6. കുട്ടികളുടെ സഹകരണമനോഭാവം മനസ്സിലാക്കാൻ അധ്യാപിക ജീവിതപശ്ചാത്തലം വിവരിക്കുന്നു.

സുഹൃത്തിനെ ജന്മദിനത്തിന് ഒരു കഷണം കേക്ക് സുഹൃത്ത് അവന് കൊടുക്കുന്നു. ആ കേക്ക് കയ്യിൽ കിട്ടുമ്പോൾ മറ്റുള്ളവരെ പരിഗണിക്കുന്നത് എങ്ങനെ?

a) വീട്ടിലുള്ള മറ്റ് അംഗങ്ങളെയും പരിഗണിച്ച് തുല്യമായ രീതിയിൽ തനിക്ക് കിട്ടിയ കേക്ക് കഷണം വീതിക്കുന്നു.

b) തനിക്ക് ഏറ്റവും ഇഷ്ടമുള്ള വ്യക്തിക്ക് മാത്രം പങ്കുവെച്ചു കഴിക്കുന്നു.

c) മറ്റുള്ളവർക്കും ഇതിൽനിന്ന് ഒരു പങ്ക് കൊടുക്കണം എന്ന ചിന്തപോലും ഇല്ലാതെ സ്വയം കഴിക്കുന്നു.

7. നഷ്ടപ്പെടുന്ന സാധനങ്ങൾ തിരിച്ചേൽപ്പിക്കാൻ കാണിക്കുന്ന സത്യസന്ധത.

സുഹൃത്തുക്കളുടെ ഏതെങ്കിലും ഒരു വസ്തു വീണുകിട്ടിയാൽ എന്തുചെയ്യും?

a) ആരുടേതാണെന്ന് കണ്ടെത്തി അത് അവർക്ക് തന്നെ കൊടുക്കാനുള്ള മനഃസ്ഥിതി കാണിക്കുന്നു.

b) കിട്ടിയ ഉടനെ അത് ടീച്ചറുടെ കൈയിൽ ഏൽപ്പിക്കുന്നു.

c) മറ്റൊരാളുടെ വസ്തുവാണ് എന്ന ചിന്ത പോലുമില്ലാതെ അടുത്തുതന്നെ ബാഗിലോ ബോക്സിലോ ഇടുന്നു.

8. കുടുംബത്തിലെ ഏറ്റവും അടുത്ത അംഗങ്ങളോടുള്ള പരിഗണന.

   നിങ്ങളുടെ അമ്മയ്ക്ക് അസുഖം വല്ലതും ഉണ്ടായാൽ നിങ്ങളെങ്ങനെ അവരെ സഹായിക്കും.

   a) അവരുടെ അസുഖത്തെക്കുറിച്ച് വ്യാകുലത ആകുകയും, അന്വേഷിച്ച് അവർക്കുള്ള പ്രഥമ ശുശ്രൂഷയിൽ ഏർപ്പെടുകയും സഹായിക്കുകയും ചെയ്യുന്നു.

   b) അസുഖത്തെ കുറിച്ച് അന്വേഷിച്ച് അതിൽ സങ്കടപ്പെടുന്നുണ്ടെങ്കിലും അവ രുടെ ആവശ്യങ്ങളെ കുറിച്ചൊന്നും ബോധവാൻ ആകുന്നില്ല.

   c) ഒന്നും ശ്രദ്ധിക്കാതെ അവരുടേതായ കളികളിൽ ഏർപ്പെടുന്നു.

9. അപ്രതീക്ഷിതമായ സംഭവങ്ങളിൽ കുട്ടികളുടെ പ്രതികരണം. അധ്യാപിക സാഹചര്യം വിവരിക്കുന്നു. നിങ്ങളുടെ ഏറ്റവും പ്രിയപ്പെട്ട സുഹൃത്തിന് ഒരു സങ്കടകരമായ ഒരു അനുഭവം ഉണ്ടായിട്ടുണ്ട്. ഈ ഒരു വാർത്ത കേട്ടാൽ നിങ്ങ ളുടെ പ്രതികരണം.

   a) ആ സുഹൃത്തിന്റെ വിവരങ്ങൾ അറിയാനുള്ള ആശയും, അവരെക്കുറിച്ച് വേവലാതിയും അവരുടെ മുഖത്ത് വ്യക്തമായി പ്രകടമായിരുന്നു.

   b) സുഹൃത്തിനെ കുറിച്ച് ഓർത്ത് അവന്റെ മുഖം വാടിയിരുന്നു.

   c) അപകടം പറ്റിയ സുഹൃത്തുമായി അടുത്ത ബന്ധമില്ല എന്ന ഭാവം.

10. പരീക്ഷയിൽ തന്റെ സുഹൃത്തിന് പ്രതീക്ഷിച്ചത്ര മാർക്ക് ലഭിക്കാതെ വന്നാൽ എങ്ങനെയാണ് നിങ്ങൾ അവരെ സമീപിക്കുക.

    a) പഠിച്ചിട്ടും നിനക്കു മാർക്ക് വാങ്ങാൻ സാധിക്കാതെ വിഷമം എനിക്ക് മനസ്സിലാകുന്നു.

    b) സങ്കടപ്പെടേണ്ട കാര്യമൊന്നുമില്ല. എനിക്കും മാർക്ക് കുറവാണ്. അതിൽ എനിക്കും സങ്കടമില്ല.

    c) പരീക്ഷ എന്നത് ഒരു വലിയ കാര്യമൊന്നുമല്ല എന്നുപറയുന്നു.

11. മറ്റുള്ളവരുടെ പ്രശ്നങ്ങൾ കേൾക്കുമ്പോൾ അതിൽ സതാദാത്മ്യം കാണിക്കാ നുള്ള പ്രവണത. അധ്യാപിക മകൻ നഷ്ടപ്പെട്ട അമ്മയുടെ കഥ പറഞ്ഞു കൊടുക്കുന്നു. ഈ കഥ കേൾക്കുമ്പോൾ ഉണ്ടാകുന്ന കുട്ടികളുടെ മനോഭാവം.

    a) താൻ ആ കുട്ടിയാണ് എന്ന് കരുതി തീവ്രമായ സങ്കടം പങ്കുവെക്കുകയും ചെയ്യുന്നു.

    b) തന്റെ സുഹൃത്തിനു പറ്റിയ സംഭവത്തെ കുറിച്ച് അന്വേഷിക്കുന്നുണ്ട്. എങ്കിലും അവനെ അവസ്ഥയോ പ്രയാസങ്ങളോ കുറിച്ച് ബോധവാനല്ല.

    c) അധ്യാപിക പറയുന്നതെല്ലാം കേൾക്കുക മാത്രം ചെയ്യുന്നു. അതിനപ്പുറം ഒരു അന്വേഷണത്തിനും മുതിരുന്നില്ല.

12. വ്യത്യസ്ത ജീവിത സാഹചര്യങ്ങളിൽ ആഹ്ലാദപ്രകടനം. അധ്യാപിക മികച്ച പ്രകടനം കാഴ്ചവെക്കുന്ന കൂട്ടിക്ക് നൽകുന്ന പ്രോത്സാഹനം.

    a) അവന് കിട്ടിയ അംഗീകാരത്തിൽ അവന് മതിയായ ആഹ്ലാദം പ്രകടിപ്പിക്കു കയും കൂട്ടുകാരുമൊത്ത് പങ്കിടുകയും ചെയ്യുന്നു.

b) സന്തോഷമുണ്ടെങ്കിലും അത് തന്റെ മിടുക്കായി മാത്രം കാണുന്നു.

c) പ്രത്യേകിച്ച് ഭാവഭേദങ്ങൾ ഒന്നുമില്ലാതെ അംഗീകാരം സ്വീകരിക്കുന്നു.

13. വ്യക്തി ശുചിത്വത്തെ കുറിച്ചുള്ള അവബോധം ഇടവേളകളിൽ സ്നാക്സ് കഴിച്ചതിന് ശേഷം എത്ര കുട്ടികൾ വായും കൈയും വൃത്തിയാക്കുന്നു എന്ന് ടീച്ചർ പരിശോധിക്കുന്നു.

a) സ്നാക്സ് കഴിച്ചതിനുശേഷം വൃത്തിയായി കൈയും മുഖവും കഴുകുന്നു.

b) കൈകൾ മാത്രം കഴുകുന്നു.

c) സ്നാക്സ് കഴിച്ചതിനു ശേഷം വൃത്തിയാക്കാതെ സ്വന്തം വസ്ത്രത്തിൽ തുടയ്ക്കുന്നു.

14. വ്യത്യസ്ത സാഹചര്യങ്ങളിൽ തന്നെക്കുറിച്ചുള്ള അമിതശ്രദ്ധ. കുട്ടികൾ യാത്ര പോകുന്ന സമയത്ത് അപകടകരമായ ഏതെങ്കിലും ഒരു അവസ്ഥ (തൂക്കുപാലം, വെള്ളം) തരണം ചെയ്യുമ്പോൾ ഉണ്ടാകുന്ന കുട്ടിയുടെ ശ്രദ്ധ.

a) വളരെ ശ്രദ്ധയോടെ മുതിർന്നവരുടെ സഹായത്തോടുകൂടി മാത്രം യാത്ര ചെയ്യുന്നു.

b) അപകടത്തെ കുറിച്ച് വലിയ ബോധം ഒന്നുമില്ലെങ്കിലും മാതാപിതാക്കളുടെ സഹായത്തോടെ നടക്കുന്നു.

c) ആരുടേയും സഹായമില്ലാതെ തീർത്തും അശ്രദ്ധമായ നടത്തം.

15. അപകടകരമായ സാഹചര്യങ്ങളിൽ നിങ്ങൾ സ്വയം പിന്മാറാനുള്ള ശ്രദ്ധ.

അപരിചിതരുടെ ഇടപെടലിൽ നിന്നും കുട്ടികൾ എത്രത്തോളം വിട്ടുനിൽക്കുന്നു. സൗഹൃദം സ്ഥാപിക്കാൻ എത്തുന്ന തീർത്തും അപരിചിതനായ ഒരു വ്യക്തിയുടെ നിങ്ങൾ എങ്ങനെ പെരുമാറുന്നു.

a) അപരിചിതന്റെ ചോദ്യത്തിന് വ്യക്തമായ മറുപടി പറയാതെ അവർ തരുന്ന സാധനങ്ങൾ വാങ്ങാതെ മുതിർന്നവരുടെ സഹായം തേടുന്നു.

b) അസ്വസ്ഥതയോടെ സംസാരിക്കാൻ തയ്യാറാകുന്നു.

c) താൽപര്യത്തോടെ അപരിചിതന്റെ പ്രലോഭനങ്ങളിൽ വീണു സംസാരിക്കാൻ തുടങ്ങുകയും അവരുടെ കയ്യിൽ നിന്ന് സാധനം വാങ്ങുകയും ചെയ്യുന്നു.

16. അപകടകരമായ ഉപകരണങ്ങൾ കൈകാര്യം ചെയ്യുന്നതിൽ കുട്ടികൾക്കുള്ള ശ്രദ്ധ. ക്ലാസ് റൂം പ്രവർത്തനങ്ങൾക്കിടയിൽ കത്രികപോലുള്ള ഉപകരണങ്ങൾ നിങ്ങൾ എങ്ങനെയാണ് കൈകാര്യം ചെയ്യുന്നത് എന്ന അധ്യാപിക പരിശോധിക്കുന്നു.

a) അപകടമാണെന്ന് മനസ്സിലാക്കി വളരെ ശ്രദ്ധയോടു കൂടി ഉപയോഗിക്കുന്നു.

b) അലസതയോടെ അപകടത്തെക്കുറിച്ച് ബോധമില്ലാതെ ഉപയോഗിക്കുന്നു.

c) തീർത്തും അശ്രദ്ധമായി ഉപയോഗിക്കുന്നു.

17. പ്രകൃതിയുമായി (ചെടികളുടെ വളർച്ചയുടെ വിവിധ ഘട്ടങ്ങൾ) ബന്ധപ്പെട്ട ചിത്രങ്ങൾ നൽകി അവ ക്രമീകരിക്കാൻ പറയുന്നു.

    a) ചിത്രങ്ങൾ നന്നായി വീക്ഷിച്ച് പെട്ടെന്ന് തന്നെ കൃത്യമായി ക്രമീകരിക്കാൻ സാധിക്കുന്നു.

    b) ചിത്രങ്ങൾ വീക്ഷിച്ച് മനസ്സിലായെങ്കിലും കൃത്യതയോടെ ക്രമീകരിക്കാൻ സാധി ക്കുന്നില്ല. അധ്യാപികയുടെ ഇടപെടലുകൾ ഏറെക്കുറെ സഹായ കമാകുന്നു.

    c) ചിത്രങ്ങൾ വീക്ഷിച്ചെങ്കിലും അതിൽനിന്നുള്ള ആശയം മനസ്സിലാക്കാനും ക്രമീകരിക്കാനും സാധിക്കുന്നില്ല.

18. നിങ്ങൾക്ക് ഇഷ്ടപ്പെട്ട ഏതെങ്കിലും ഒരു മൃഗത്തെ വളർത്താനായി നിങ്ങൾക്ക് ഒരു അവസരം കിട്ടിയാൽ നിങ്ങൾ എങ്ങനെ അതിനോട് പെരുമാറും.

    a) കൂടുതൽ സമയം അതിനോടൊപ്പം ചിലവഴിക്കുകയും പരിചരിക്കുകയും ചെയ്യുന്നു.

    b) തന്റെ കളികൾക്കിടയിൽ കിട്ടുന്ന സമയം അതിനെ പരിഗണിക്കുന്നു.

    c) അതിനെ ഒട്ടും ശ്രദ്ധിക്കാതെ സ്വന്തം കളികളിലും ഏർപ്പെടുന്നു.

19. ചില പക്ഷിമൃഗാദികളുടെ ശബ്ദം കേൾപ്പിച്ച് അവ ഏതെന്ന് തിരിച്ചറിയുക.

    a) ശബ്ദത്തിലൂടെ കുട്ടികൾക്ക് പെട്ടെന്ന് തന്നെ പക്ഷിമൃഗാദികളെ തിരിച്ചറി യുന്നു.

    b) അധ്യാപിക നൽകുന്ന സൂചനകളിലൂടെ ദൈനംദിന ജീവിത്തിൽ കാണുന്ന പക്ഷി മൃഗത്തിന്റെ ശബ്ദം തിരിച്ചറിയുന്നു.

    c) കൃത്യമായ സൂചനകളും വിവരണവും നൽകിയെങ്കിലും കുട്ടിക്ക് ഒന്നോ രണ്ടോ ശബ്ദം മാത്രം തിരിച്ചറിയുന്നു.

20. പക്ഷികളുടെ സംരക്ഷണവുമായി ബന്ധപ്പെട്ട പ്രവർത്തനം (വെള്ളം ശേഖരി ക്കൽ) ക്ലാസ്സിൽ അധ്യാപിക അവതരിപ്പിക്കുന്നു.

    a) വളരെ ആവേശത്തോടുകൂടി പാത്രത്തിൽ അതിൽ വെള്ളം ശേഖരിക്കു കയും പക്ഷികൾ കാണുംവിധം പ്രദർശിപ്പിക്കുകയും ചെയ്യുന്നു.

    b) അധ്യാപികയുടെ നിർദ്ദേശപ്രകാരം പ്രവർത്തനങ്ങളിൽ ഏർപ്പെടുന്നു.

    c) ഒട്ടും താൽപര്യമില്ലാതെ മറ്റുള്ളവരുടെ പ്രവർത്തനങ്ങൾ നോക്കിനിൽക്കു ന്നു.

21. കാലിയക ശേഷി പരിശോധന അധ്യാപിക ട്രഷർ ഹണ്ട് – നെക്കുറിച്ചുള്ള നിർദ്ദേശങ്ങൾ നൽകുന്നു. ഏറ്റവും വേഗത്തിൽ ആരാണ് പ്രവർത്തി മുഴുവൻ ആക്കുന്നത് എന്ന് പരിശോധിക്കുന്നു.

    a) പരിമിതമായ സമയത്തിനുള്ളിൽ തന്നെ വസ്തു കണ്ടെത്താൻ കഴിയുന്നു.

    b) വസ്തു കണ്ടെത്തുന്നതിന് അധ്യാപികയോട് കൂടുതൽ നിർദ്ദേശങ്ങൾ ചോദിക്കുകയും കൂടുതൽ സമയം എടുക്കുകയും ചെയ്യുന്നു.

    c) ഒരു ശ്രമം മാത്രം നടത്തുകയും പിന്നെ അത് പിന്തുടർന്ന് പോകാൻ താല്പര്യം പ്രകടിപ്പിക്കുന്നുമില്ല.

22. കുട്ടുകളുടെ ഹാൻസ് പാൻ ഉപയോഗിച്ച് അവർ ഉപയോഗിക്കുന്ന മേശയുടെ അളവ് നിരീക്ഷിക്കാൻ പറയുന്നു.

    a) അതിവേഗത്തിൽ തന്നെ മേശ കൃത്യമായി അളക്കുകയും അതിന്റെ യഥാർത്ഥ അളവ് അധ്യാപികക്ക് പറഞ്ഞുകൊടുക്കുന്നു. തന്റെ പ്രവർത്തനം പൂർത്തിയാക്കാൻ സഹായകരമാകുന്നു.

    b) മേശ അളക്കാൻ ശ്രമം നടത്തുന്നുണ്ടെങ്കിലും അതിൽ കൃത്യത കൈവരിക്കാൻ സാധിക്കുന്നില്ല. അധ്യാപികയുടെ ഇടപെടൽ ഏറെക്കുറെ പ്രവർത്തനം പൂർത്തി യാക്കാൻ സഹായകരമാകുന്നു.

    c) ഒന്നോ രണ്ടോ തവണ ശ്രമിച്ചെങ്കിലും പരാജയമായതിനാൽ വീണ്ടും ഒരു ശ്രമത്തിനു മുതിരാതെ മറ്റുള്ള കുട്ടികളുടെ പ്രവർത്തനം നോക്കിനിൽക്കുന്നു.

23. കായികശേഷിയും ചലനവും എത്രത്തോളം ഉണ്ടെന്ന് അധ്യാപിക പരിശോധിക്കുന്നു. കുട്ടികളോട് Hurdle Race കളിയുടെ നിർദ്ദേശങ്ങൾ അനുസരിച്ച് വളരെ വേഗത്തിൽ ഓടാൻ പറയുന്നു. അവർ ഓടാൻ എടുക്കുന്ന സമയത്തിന് പ്രാധാന്യമുണ്ടെന്ന് ഓർമിപ്പിക്കുന്നു.

    a) ഒരു Hurdle പോലും തട്ടാതെ പരിമിത സമയത്തിനുള്ളിൽ തന്നെ ലക്ഷ്യ സ്ഥാനത്തേക്ക് എത്തിച്ചേരാൻ സാധിച്ചു.

    b) രണ്ടോ മൂന്നോ ഘട്ടങ്ങളിൽ നല്ലരീതിയിൽ ഹർഡിൽ മറികടന്നെങ്കിലും പിന്നീടുള്ള ഘട്ടങ്ങളിൽ മികച്ച പ്രകടനം കാഴ്ചവയ്ക്കാൻ സാധിക്കുന്നില്ല.

    c) തുടക്കത്തിൽ ആവേശത്തോടെ ചെയ്യാൻ ശ്രമിച്ചെങ്കിലും ഒരു Hurdle പോലും നല്ലരീതിയിൽ മറികടക്കാൻ സാധിച്ചില്ല.

24. Ring Throw കളിയുടെ നിർദ്ദേശങ്ങൾ അധ്യാപിക കുട്ടികൾക്ക് വിവരിക്കുന്നു. അതനുസരിച്ച് പ്രവർത്തിക്കാൻ പറയുന്നു.

    a) നിർദ്ദേശങ്ങളനുസരിച്ച് തനിക്ക ലഭിച്ച എല്ലാ വളയങ്ങലും ലക്ഷ്യസ്ഥാനത്ത് ഇടാൻ സാധിക്കുന്നു.

    b) ഒന്നോ രണ്ടോ വളയങ്ങൾ മാത്രം ലക്ഷ്യസ്ഥാനത്തേക്ക് ഇടാൻ സാധിച്ചിട്ടുള്ളൂ.

    c) ശ്രമം നടത്തിയെങ്കിലും ഒന്നുപോലും ലക്ഷ്യസ്ഥാനത്ത് ഇടാൻ സാധിച്ചിട്ടില്ല.

25. അധ്യാപിക പരിചിതമായ പാട്ടിന്റെ 2 നിര പാടി കേൾപ്പിക്കുന്നു കുട്ടികളുടെ പാട്ട് പൂർത്തിയാക്കാൻ പറയുന്നു.

    a) പാട്ട് അധ്യാപിക നിർത്തുന്നതിനു മുൻപ് അത് ആലപിക്കുകയും അക്ഷര സ്പുടതയോടുകൂടി പൂർത്തിയാകുന്നു.

    b) അധ്യാപിക പൂർത്തിയാക്കിയശേഷം കുട്ടി പാടാൻ ശ്രമം നടത്തിയെങ്കിലും അധ്യാപികയുടെ സഹായത്തോടെ കുട്ടിക്ക് പൂർത്തിയാക്കാൻ സാധിച്ചു.

    c) ഒന്നോ രണ്ടോ വരികളിൽ മാത്രം ഒതുക്കുന്നു.

26. പക്ഷികളുമായി ബന്ധപ്പെട്ട ഒരു പാട്ടുപാടാൻ അധ്യാപകി നിർദ്ദേശിക്കുന്നു.

    a) തന്റെതായ ഭാവനയിൽനിന്നും കുട്ടി പാട്ട് പാടുന്നു.

b) പെട്ടെന്ന് തന്നെ കുട്ടി കേട്ട് പരിചിതമായ പാട്ട് ഓർത്തെടുക്കുകയും കുട്ടി പാടുകയും ചെയ്യുന്നു.

c) പാട്ട് ഓർത്തെടുക്കുകയും പാടാനുള്ള ശ്രമം നടത്തിയെങ്കിലും അത് പൂർത്തീകരിക്കാൻ കുട്ടിക്ക് സാധിച്ചില്ല.

27. കുട്ടികൾക്ക് പരിചിതമായ പാട്ടിന്റെ ചിത്രങ്ങൾ നൽകുന്നു. ചിത്രം നോക്കി കുട്ടികളോട് പാട്ട് പാടാൻ നിർദ്ദേശിക്കുന്നു.

a) കുട്ടികൾ ചിത്രം നന്നായി ശ്രദ്ധിക്കുന്നു. പാട്ട് പെട്ടെന്ന് തന്നെ ഓർത്തെടുക്കുകയും തനിമയോട് കൂടി പൂർത്തായാക്കുകയും ചെയ്യുന്നു.

b) പാട്ട് ഓർത്തെടുക്കാൻ കഴിഞ്ഞിട്ടുണ്ടെങ്കിലും അക്ഷര ഭംഗിയോടും കൂടി പൂർത്തീകരിക്കാൻ സാധിക്കുന്നില്ല.

c) കുട്ടികൾ ചിത്രം വീക്ഷിച്ച് പാട്ട് പാടാൻ ശ്രമം നടത്തുന്നു.

28. അധ്യാപിക പാട്ടുപാടുകയും അതോടൊപ്പം പാട്ടിന്റെ താളത്തിനനുസരിച്ച് കുട്ടികളോട് കൈകൾ കൊട്ടാൻ നിർദ്ദേശിക്കുന്നു.

a) പാട്ടിന്റെ താളത്തിനനുസരിച്ച് വളരെ കൃത്യതയോടെ കൈകൾ കെട്ടാൻ സാധിക്കുന്നു.

b) പാട്ടുപാടുന്ന സമയങ്ങളിൽ തന്നെ ചെയ്യാൻ ശ്രമിക്കുന്നുണ്ടെങ്കിലും അതിൽ ഒരു കൃത്യത കൈവരിക്കാൻ സാധിക്കുന്നില്ല.

c) പാട്ടിനനുസരിച്ച് കൈകൾ കെട്ടാൻ സാധിക്കുന്നില്ല.

29. അധ്യാപിക കുട്ടികൾക്ക് ചിത്രങ്ങൾ കൊടുക്കുന്നു. അതിൽനിന്ന് കമ്പ്യൂട്ടർ ഉപകരണവുമായി ബന്ധപ്പെട്ട ചിത്രങ്ങൾ വേർതിരിക്കാൻ നിർദ്ദേശിക്കുന്നു.

a) ചിത്രങ്ങൾ കാണുന്ന മാത്രയിൽ തന്നെ കമ്പ്യൂട്ടറുമായി ബന്ധപ്പെട്ട ചിത്രങ്ങളെ കുട്ടി തിരിച്ചറിയുന്നു.

b) കൂടുതൽ കണ്ടു പരിചിതമായ ഭാഗങ്ങൾ മാത്രം തിരിച്ചറിയുന്നു.

c) അധ്യാപിക നൽകുന്ന വിശദമായ സൂചനയിൽ കുട്ടി തിരിച്ചറിയുന്നു.

30. അധ്യാപിക കുട്ടികളോട് വീഡിയോ ഗെയിം കളിക്കാൻ നിർദ്ദേശിക്കുന്നു.

a) കളിയുടെ നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് കുട്ടി ഗെയിം കളിക്കുന്നു.

b) കളിയുടെ ഇടയിൽ മറ്റൊരാളുടെ നിർദ്ദേശം ആവശ്യമായി വരുന്നു.

c) മറ്റൊരാളുടെ നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് കളിക്കുന്നു.

31. അധ്യാപികയുടെ നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് മൊബൈൽ ഫോണിന്റെ ഉപയോഗം എത്രയുണ്ട് എന്ന് പരിശോധിക്കുന്നു. അധ്യാപിക കുട്ടികളോട് ഫോണിൽ ഫോട്ടോ എടുക്കാൻ നിർദ്ദേശിക്കുന്നു.

a) കൃത്യമായ ധാരണയോടെ കുട്ടി ഫോട്ടോയെടുക്കുന്നു.

b) ഫോൺ ഉപയോഗിക്കാനുള്ള കഴിവ് പ്രകടമല്ലെങ്കിലും കുട്ടി ഫോട്ടോയെടുക്കുന്നു.

c) മറ്റൊരാളുടെ സഹായത്തോടുകൂടി കുട്ടി ഫോട്ടോയെടുക്കുന്നു.

32. അധ്യാപിക കുട്ടികളോട് വീഡിയോ പ്ലേ ചെയ്യാൻ നിർദ്ദേശിക്കുന്നു.

a) ടാബിലെ ഗ്യാലറി ഓപ്പൺ ചെയ്യുകയും അതിൽനിന്നും വീഡിയോ കാണുകയും ചെയ്യുന്നു. ഒരു വീഡിയോ കണ്ടതിനുശേഷം മറ്റൊന്ന് തിര ഞ്ഞെടുക്കാനും സാധിക്കുന്നു.

b) മറ്റൊരാളുടെ സഹായത്തോടുകൂടി ചെയ്യാൻ സാധിക്കുന്നു.

c) വീഡിയോസ് ഫോട്ടോസും ഉണ്ടെന്ന് കുട്ടി അറിയുന്നു.

APPENDIX XII
FAROOK TRAINING COLLEGE
Performance Test for Integrated process Skill Instrument
Age Group 5-6

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നിർദ്ദേശങ്ങൾ

ഈ പെർഫോമൻസ് ടെസ്റ്റിൽ ആകെ 32 ചോദ്യങ്ങൾ ഉണ്ട്. ഓരോ ചോദ്യത്തിനും a, b, & c എന്നിങ്ങനെ മൂന്ന് ലെവൽ കൊടുത്തിട്ടുണ്ട്. കുട്ടികളുടെ പ്രവർത്തനത്തിനനുസരിച്ച് അവയിൽ ഓരോ ചോദ്യത്തിലും ശരിയായ ഉത്തരം തെരഞ്ഞെടുത്ത് ഈ ചോദ്യാവലിയോടൊപ്പം തന്നിട്ടുള്ള Response Sheet -ൽ ✓ ചിഹ്നം കൊണ്ട് രേഖപ്പെടുത്തുക.

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1. കുട്ടികളുടെ ജീവിതവുമായി ബന്ധപ്പെട്ട ചിത്രം. കുട്ടികളുടെ മനസ്സിലേക്ക് ആ ചിത്രം കാണുമ്പോൾ എന്തെല്ലാം ചിന്തകൾ ഉണ്ടാകുന്നു എന്ന് പരിശോധിക്കുന്നു. ചിത്രത്തെക്കുറിച്ചുള്ള വിവരണം കുട്ടികൾ നൽകുന്നു.

   a) ഈ ചിത്രം കാണുന്ന മാത്രയിൽ തന്നെ കുട്ടികൾക്ക് ഉണ്ടായ അനുഭവങ്ങൾ പെട്ടെന്ന് പറയാൻ സാധിക്കുന്നു.

   b) ചിത്രത്തിലേക്ക് കുട്ടികൾ സൂക്ഷിച്ചുനോക്കുന്നു. അവരുടെ മനസ്സിലേക്ക് പല ചിന്തകളും വരുന്നുണ്ടെങ്കിലും അവർക്ക് അത് പറയാൻ കഴിയുന്നില്ല. എന്നാൽ അധ്യാപിക നൽകുന്ന സൂചനകളിലൂടെ കുട്ടികൾ അവരുടെ മനസ്സിലെ ആശയം പങ്കുവെക്കുന്നു.

   c) കുട്ടികൾ ചിത്രം നന്നായി വീക്ഷിച്ചെങ്കിലും കുട്ടികൾക്ക് ആശയം പറയാൻ സാധിക്കുന്നില്ല.

2. കുട്ടികൾക്ക് പരിചിതമായ കഥാസന്ദർഭങ്ങൾ ചിത്രത്തിലൂടെ നൽകുന്നു. ആ ചിത്രങ്ങൾ നോക്കി കുട്ടികൾ കഥ പറയുന്നു. കുട്ടികളുടെ സർഗ്ഗശേഷി പരിശോധിക്കാൻ സാധിക്കും.

   a) കുട്ടികൾ ചിത്രം നന്നായി ശ്രദ്ധിക്കുന്നു. കഥാസന്ദർഭങ്ങൾ ഓർത്തെടുക്കുന്നു. അവ പരസ്പരം ബന്ധിപ്പിച്ച് നന്നായി കഥ പറയുന്നു.

   b) കഥാസന്ദർഭങ്ങളിലൂടെ കുട്ടികൾ കടന്നുപോകുന്നുണ്ടെങ്കിലും കുട്ടികൾക്ക് ശരിയായ ധാരണ കിട്ടുന്നില്ല. എന്നാൽ അധ്യാപികയുടെ ഇടപെടലുകളിലൂടെ കുട്ടികൾ കഥ പറയാൻ ശ്രമിക്കുന്നു.

   c) പരിചിതമായ കഥാസന്ദർഭങ്ങൾപോലും കുട്ടിക്ക് ശരിയായ രീതിയിൽ ഉൾക്കൊള്ളാനോ അതനുസരിച്ച് പ്രവർത്തിക്കാനോ സാധിക്കുന്നില്ല.

3. കുട്ടികൾക്ക് പരിചിതമായ കഥയുടെ തുടക്കം പറഞ്ഞു കൊടുക്കുന്നു. കുട്ടികൾ പരിചയപ്പെട്ട കഥാസന്ദർഭങ്ങൾ ഉപയോഗിച്ചു തന്റേതായ ഭാവനയിലൂടെ കഥ പൂർത്തിയാക്കാൻ ശ്രമിക്കുന്നു.

   a) കഥ കേട്ടതിനുശേഷം കുട്ടികൾ പരിചയപ്പെട്ട കഥാസന്ദർഭങ്ങൾ ഓർമ്മിക്കുകയും കഥ പൂർത്തിയാക്കുകയും ചെയ്യുന്നു.

   b) കഥ കേട്ടതിനു ശേഷം കുട്ടികൾ തന്നെ ഭാവനയിലൂടെ കഥ പൂർത്തിയാക്കാൻ ശ്രമിക്കുന്നു.

c) കഥ കേൾക്കുമ്പോൾ കുട്ടികൾക്ക് പല ആശയങ്ങളും വരുന്നുണ്ടെങ്കിലും അത് പ്രകടിപ്പിക്കാനോ കഥ പൂർത്തിയാക്കാനോ സാധിക്കുന്നില്ല.

4. പ്രിയപ്പെട്ടവരോട് ഒപ്പമുള്ള ഒരു യാത്ര (Beach).

ഈ യാത്രാനുഭവത്തെക്കുറിച്ച് കുട്ടി തന്റെ ഏറ്റവും അടുത്ത ബന്ധുവിനോട് പങ്കുവയ്ക്കുന്നു.

a) യാത്രയിൽ താനനുഭവിച്ച എല്ലാ കാര്യങ്ങളും കുട്ടി ആശയഭംഗിയോടു കൂടിയും ശ്രേഷ്ഠതകളോടുകൂടിയും അനുഭവിച്ചതുപോലെ വിവരിച്ചുകൊടുക്കുന്നു.

b) കണ്ട കാഴ്ചകൾ പൂർണ്ണമായും കുട്ടിക്ക് വ്യക്തമാക്കാൻ സാധിക്കുന്നില്ല. എങ്കിലും ഒന്നോ രണ്ടോ വാക്യങ്ങളിലൂടെ അവന്റെ അനുഭവം പറയുന്നു.

c) യാത്രയുടെ സന്തോഷം നന്നായി അനുഭവിച്ചിട്ടുണ്ടെങ്കിലും ആ അനുഭവത്തെ തന്റേതായ ഭാഷയിൽ ആവിഷ്കരിക്കുവാൻ സാധിക്കുന്നില്ല.

5. മാതാപിതാക്കളോടൊപ്പം ഒരു യാത്ര കഴിഞ്ഞ് സ്വന്തം വണ്ടിയിൽ തിരിച്ചുവരുന്ന കുട്ടി കാണിക്കുന്ന പരിഗണന.

a) തന്റെ സുഹൃത്തിനെയും അവന്റെ മാതാപിതാക്കളെയും തങ്ങളോടൊപ്പം വണ്ടിയിൽ കയറ്റുന്നു.

b) എങ്ങനെയാണ് തന്റെ സുഹൃത്ത് വന്നത്. എങ്ങിനെ അവൻ തിരിച്ചുപോകുന്നു എന്നോർത്ത് വ്യാകുലനായി തന്റെ കൂടെ പോരുന്നോ എന്ന് ചോദിക്കുന്നു.

c) സുഹൃത്തിന്റെ യാത്രയെക്കുറിച്ചും പ്രയാസത്തെക്കുറിച്ചും ശ്രദ്ധിക്കാതെ പോകുന്നു.

6. തന്റെ കുടുംബവുമൊത്തുള്ള യാത്രയിൽ മറ്റുള്ളവരോട് കാണിക്കുന്ന സമീപനം.

a) കുടുംബമൊത്ത് ഉല്ലസിച്ച് രസിക്കാനും കളിക്കാനും സംസാരിക്കാനും മാർഗ്ഗനിർദ്ദേശങ്ങൾ കൊടുക്കുന്നതിലും താൽപര്യം പ്രകടിപ്പിക്കുന്നു.

b) കുറച്ചുസമയം കുടുംബവുമായി സംസാരിക്കാനും പിന്നെ തനതായ കളിയിൽ ഏർപ്പെടാനും താൽപര്യം പ്രകടിപ്പിക്കുന്നു.

c) കൂടുതൽ സമയവും മൊബൈൽ ഗെയിമിൽ ഏർപ്പെടുന്നു. മറ്റൊന്നിനെക്കുറിച്ചും യാതൊരുവിധ ചിന്തകളും കാണിക്കുന്നില്ല.

7. ക്ലാസ്സിലെ ഒരു സുഹൃത്ത് എന്തെങ്കിലും തരത്തിലുള്ള അസുഖംകൊണ്ട് ബുദ്ധിമുട്ട് നേരിടുമ്പോൾ കുട്ടികളുടെ ഇടപെടലുകൾ.

a) സുഹൃത്തിനോട് വിവരങ്ങൾ ചോദിച്ച് തനിക്കാവുന്ന വിധത്തിൽ സഹായിക്കുന്നു.

b) സുഹൃത്തിനുവേണ്ട സഹായം നൽകുകയും പെട്ടെന്ന് തന്നെ അധ്യാപികയോട് പ്രശ്നം പറയുകയും ചെയ്യുന്നു.

c) സുഹൃത്തിന്റെ പ്രയാസങ്ങൾ മനസ്സിലാക്കാൻ താൽപര്യം കാണിക്കാറില്ല. എന്തിന് ഇടപെടണം എന്ന ഭാവത്തിൽ തനതായ കളികളിൽ മുഴുകുന്നു.

8. ഗ്രൂപ്പ് പ്രവർത്തനങ്ങളിൽ കുട്ടികളുടെ ഇടപെടലുകൾ.

   അധ്യാപിക ഒരു സന്ദർഭം വിവരിക്കുന്നു. നിങ്ങൾ നിങ്ങൾക്ക് ഇഷ്ടപ്പെട്ട മൊബൈൽ ഫോൺ/കമ്പ്യൂട്ടർ ഗെയിം കളിച്ചുകൊണ്ടിരിക്കുമ്പോൾ നിങ്ങളുടെ സുഹൃത്തുക്കൾ പുറത്തുപോയി കളിക്കാൻ നിങ്ങളെ വിളിക്കുമ്പോൾ നിങ്ങളുടെ പ്രതികരണം എന്തായിരിക്കും?

   a) കൂട്ടുകാരോടൊപ്പം കളിക്കാനാണ് താൽപര്യം. അവരുമൊത്ത് കളിക്കാൻ സാഹചര്യമില്ലാത്ത സമയം സ്വന്തമായുള്ള കളികളിൽ ഏർപ്പെടുന്നു.

   b) ചില സമയങ്ങളിൽ കൂട്ടുകാർക്കൊപ്പം അല്ലെങ്കിൽ ഗെയിമിൽ ഏർപ്പെടുന്നു.

   c) കൂടുതൽ സമയവും കമ്പ്യൂട്ടറിലോ ടാബിലോ ഉള്ള ഗെയിമുകളിൽ ഏർപ്പെടാനാണ് താൽപര്യം.

9. അപ്രതീക്ഷിതമായ സാഹചര്യങ്ങളിലെ കുട്ടികളുടെ പ്രതികരണം. അധ്യാപിക ഒരു സാഹചര്യം വിവരിക്കുന്നു.

   ''ശക്തമായ മഴയിൽ നിങ്ങളുടെ വീട് മുങ്ങിക്കൊണ്ടിരിക്കുമ്പോൾ നിങ്ങൾ എന്തുചെയ്യും?''

   a) മാതാപിതാക്കളുടെ നിർദ്ദേശങ്ങളനുസരിച്ച് ഓരോ സാധനങ്ങളും മാറ്റിവെക്കുകയും അവരെ സഹായിക്കുകയും ചെയ്യുന്നു.

   b) മാതാപിതാക്കൾ പറയുന്നത് ശ്രദ്ധിക്കുന്നുണ്ടെങ്കിലും മനസ്സ് അസ്വസ്ഥമായി ഒന്നിലും പൂർണ്ണ ശ്രദ്ധ കൊടുക്കാൻ കഴിയാതെ വല്ലാതെ പേടിക്കുന്നു.

   c) മുതിർന്നവരുടെ ഉപദേശങ്ങൾ ഒന്നും ശ്രദ്ധിക്കാതെ ഭയത്തോടുകൂടി ഉറക്കെ കരയുന്നു.

10. കൂട്ടുകാർ തമ്മിലുള്ള പ്രശ്നങ്ങൾ രമ്യമായി പരിഹരിക്കാൻ.

    ക്ലാസ്സിൽ കൂട്ടുകാർ തമ്മിൽ വഴക്ക് കൂടുമ്പോൾ അധ്യാപിക ശാസിക്കുന്ന സന്ദർഭത്തിൽ നിങ്ങളുടെ പ്രതികരണം.

    a) പ്രശ്നക്കാരൻ താനാണെന്ന് അറിഞ്ഞിട്ടും സുഹൃത്തിനെ ശാസിക്കുന്നതിൽ വിഷമംതോന്നുകയും അവനോട് അടുപ്പം കാണിക്കാൻ ശ്രമിക്കുകയും ചെയ്യുന്നു.

    b) സുഹൃത്തിന്റെ സൗഹൃദവാക്കുകളിൽ ഒന്നും വീഴാതെ തനിക്ക് കേട്ട ശാസനയെ കുറിച്ചോർത്തു സങ്കടം കാണിച്ച കൂട്ടുകാരോട് അടുത്തിരിക്കുന്നു.

    c) അധ്യാപിക ശാസിക്കാൻ കാരണം സുഹൃത്തുക്കളാണെന്ന് ഓർത്ത് അവരോട്പിണങ്ങുന്നു.

11. മുൻപരിചയമില്ലാത്ത ക്ലാസ്സിലെ കുട്ടികളോട് ഉള്ള ഇടപെടൽ.

    അധ്യാപിക ഒരു സന്ദർഭം വിവരിക്കുന്നു. ''നിങ്ങളുടെ ക്ലാസിലേക്ക് ഒരു പുതിയ കുട്ടി കടന്നുവരുന്നു. നിങ്ങൾ എങ്ങനെയാണ് സ്വീകരിക്കുക.''

    a) അവനെ സ്നേഹത്തോടെ അരികിലുള്ള സീറ്റിൽ തന്നെ ഇരിക്കാനായി നിർബന്ധിക്കുകയും അവരോട് വിശേഷങ്ങൾ ചോദിക്കുകയും ചെയ്യുന്നു.

    b) പുതിയ കൂട്ടുകാരനെ നോക്കി ചിരിക്കുന്നുണ്ടെങ്കിലും അവനോട് അടുത്ത് ഇടപഴകാൻ ശ്രമിക്കുന്നില്ല.

    c) ക്ലാസ്സിലേക്ക് വന്ന അതിഥിയുമായി ഒട്ടും പൊരുത്തപ്പെടാൻ താൽപര്യം കാണിക്കുന്നില്ല. അവരോട് അകൽച്ച പാലിക്കുന്നു.

12. സഹജീവികളോടുള്ള പരിഗണന.

    കുട്ടികൾക്ക് നേരെയുള്ള അതിക്രമങ്ങളെക്കുറിച്ചുള്ള ഒരു ഷോർട്ട് ഫിലീം അധ്യാപിക ക്ലാസ്സിൽ കാണിക്കുന്നു.

    a) ഫിലിമിൽ കണ്ട കുട്ടിയെക്കുറിച്ച് ഓർത്ത് അസ്വസ്ഥനാവുകയും അധ്യാപികയോട് അതിനെക്കുറിച്ച് വാചാലനാവുകയും ചെയ്യുന്നു.

    b) കൗതുകത്തോടെ ഫിലീം കാണുകയും അതിലെ സംഭവങ്ങളോട് അടുപ്പം കാണിക്കാതിരിക്കുകയും ചെയ്യുന്നു.

    c) ഒരു സിനിമ കണ്ടു എന്നതിനപ്പുറത്തേക്ക് കഥയിലെ കഥാപാത്രങ്ങളും സാഹചര്യങ്ങളും സ്പർശിക്കുന്നില്ല.

13. ബന്ധുക്കളോടൊപ്പം യാത്രപോകുന്ന സമയത്ത് ഇതര ചുറ്റുപാടുകളുടെ ശ്രദ്ധ.

    അധ്യാപിക സന്ദർഭം വിവരിക്കുന്നു. നിങ്ങൾ ബന്ധുക്കളോടൊപ്പം നഗരമധ്യത്തിലെ റോഡ് മുറിച്ചുകടക്കുന്നത് എങ്ങനെയായിരിക്കും.

    a) മാതാപിതാക്കളുടെ കൈകൾ പിടിച്ച് റോഡിന് ഇരുവശത്തേക്കും നോക്കി ശ്രദ്ധയോടെ റോഡ് മുറിച്ചുകടക്കുന്നു.

    b) മാതാപിതാക്കളുടെ കൈ പിടിക്കുന്നുണ്ടെങ്കിലും കടകളിലും മറ്റും കാണുന്ന കളിപ്പാട്ടങ്ങളിൽ ഒക്കെ നോക്കി റോഡ് മുറിച്ചുകടക്കുന്നു.

    c) മാതാപിതാക്കളെ ശ്രദ്ധിക്കാതെ അശ്രദ്ധയോടെ റോഡ് മുറിച്ചുകടക്കുന്നു.

14. വ്യക്തിശുചിത്വത്തെക്കുറിച്ചുള്ള അവബോധം.

    അധ്യാപിക ഒരു സന്ദർഭം വിവരിക്കുന്നു. ഒരു ദീർഘയാത്ര കഴിഞ്ഞ് വീട്ടിൽ തിരിച്ചെത്തിയ നിങ്ങൾ ഇഷ്ടപ്പെട്ട ഭക്ഷണപദാർത്ഥങ്ങൾ വിളമ്പിവെച്ചിരിക്കുന്ന തീൻമേശ കാണുമ്പോൾ നിങ്ങളുടെ പ്രതികരണം.

    a) വൃത്തിയോടുകൂടി കുളിച്ചുവന്ന് ഭക്ഷണം കഴിക്കാൻ തുടങ്ങുന്നു.

    b) മാതാപിതാക്കൾ പറയുന്നുണ്ടെങ്കിലും അത് ശ്രദ്ധിക്കാതെ കൈകൾ മാത്രം കഴുകി ഭക്ഷണത്തിന് മുന്നിലിരിക്കുന്നു.

    c) വസ്ത്രം പോലും മാറാതെ കൈകൾപോലും കഴുകാതെ ഇഷ്ടപ്പെട്ട ഭക്ഷണം കഴിക്കാൻ ആരംഭിക്കുന്നു.

15. പരിസരശുചിത്വത്തെ കുറിച്ചുള്ള അവബോധം.

    നിങ്ങളെ കാണാൻ ക്ലാസ്സിലേക്ക് ഒരു കുട്ടി ചോക്ലേറ്റുമായി കടന്നുവരുന്നു. ചോക്ലേറ്റ് കഴിച്ചശേഷം അതിന്റെ കടലാസ് നിങ്ങൾ എന്തുചെയ്യും?

    a) ചോക്ലേറ്റ് കടലാസ് വേസ്റ്റ് ബാസ്കറ്റിൽ നിക്ഷേപിക്കുന്നു.

    b) അശ്രദ്ധയോടെ കടലാസ് നിലത്തിടുന്നു.

    c) ചുരുട്ടിക്കൂട്ടി ക്ലാസ്സിൽനിന്ന് പുറത്തേക്ക് എറിയുന്നു.

16. വ്യക്തിപരമായ കാര്യങ്ങളിൽ ശ്രദ്ധ. സ്കൂൾ വിടുന്നതിന് തൊട്ടുമുമ്പ് ബെൽ അടിച്ചുകഴിഞ്ഞാൽ എന്തൊക്കെയാണ് ചെയ്യുക?

    a) ശ്രദ്ധയോടുകൂടി പുസ്തകങ്ങൾ എല്ലാം ഒതുക്കിവെക്കുകയും തനതായ സാധനങ്ങൾ ഒക്കെ ഉണ്ടോയെന്ന് ഉറപ്പുവരുത്തുകയും ചെയ്യുന്നു.

    b) പുസ്തകങ്ങളൊക്കെ ധൃതിയിൽ അടുക്കിവെക്കുന്നു. കൂടുതൽ ശ്രദ്ധ ഒന്നിലും കാണിക്കുന്നില്ല.

c) സ്കൂൾ വിട്ടു പുറത്ത് എത്തുക എന്നതുമാത്രമാണ് ചിന്ത. ബാഗിനെക്കുറിച്ചും പുസ്തകങ്ങളെക്കുറിച്ചും ശ്രദ്ധിക്കുന്നില്ല.

17. അധ്യാപിക കുട്ടികൾക്ക് പക്ഷികളുടെ ചിത്രങ്ങളും, പുല്ല്, ചുള്ളിക്കമ്പുകൾ എന്നിവ നൽകി അതുപയോഗിച്ച് ഒരു പക്ഷിക്കൂട്) (habital diorama തയ്യാറാക്കാൻ നിർദ്ദേശിക്കുന്നു.

a) വളരെ ഭംഗിയോടുകൂടിയും ആകർഷണീയമായും തയ്യാറാക്കുകയും നിർമ്മിക്കുന്ന വസ്തുവിൽ ഏറെക്കുറെ തനിമ കൈവരിക്കാൻ സാധിക്കുന്നു.

b) മനസ്സിൽ ഉണ്ടാക്കേണ്ട വസ്തുവിന്റെ ആശയം ഉണ്ടെങ്കിലും കൃത്യമായി നിർമ്മിക്കാനോ അടക്കിവെക്കാനോ സാധിക്കുന്നില്ല.

c) താൽപര്യം ഒന്നുമില്ലാതെ അധ്യാപികയുടെ നിർദ്ദേശപ്രകാരം നിർമ്മിക്കാൻ ഒരു ശ്രമം നടത്തുന്നു.

18. ചില പക്ഷി മൃഗാദികളുടെ ശബ്ദം കേൾപ്പിച്ച് അവ ഏതെന്ന് തിരിച്ചറിയുക.

a) ശബ്ദത്തിലൂടെ കുട്ടികൾക്ക് പെട്ടെന്നുതന്നെ പക്ഷിമൃഗാദികളെ തിരിച്ചറിയുന്നു.

b) അധ്യാപിക നൽകുന്ന സൂചനകളിലൂടെ ദൈനംദിന ജീവിതത്തിൽ കാണുന്ന പക്ഷി മൃഗത്തിന്റെ ശബ്ദം തിരിച്ചറിയുന്നു.

c) കൃത്യമായ സൂചനകളും വിവരണങ്ങളും നൽകിയെങ്കിലും കുട്ടികൾക്ക് ഒന്നോ രണ്ടോ പക്ഷി മൃഗത്തിന്റെ ശബ്ദം മാത്രം തിരിച്ചറിയുന്നു.

19. പ്രകൃതിയുടെ ചരാചരങ്ങളുമായുള്ള ബന്ധം കുട്ടികൾക്ക് പരിചിതമായ ശബ്ദം കേൾപ്പിക്കുന്നു (കടൽ, കാറ്റ്).

a) ശബ്ദത്തിലൂടെ കുട്ടികൾ പെട്ടെന്നുതന്നെ അമൂർത്തമായി തിരിച്ചറിയാൻ സാധിക്കുന്നു.

b) അധ്യാപികയുടെ വിശദീകരണത്തിലൂടെ ലക്ഷ്യത്തിൽ എത്തുന്നു.

c) കൃത്യമായ വിവരണം നൽകിയെങ്കിലും കുട്ടിക്ക് പറയാൻ സാധിക്കുന്നില്ല.

20. അധ്യാപിക കുട്ടികൾക്ക് സന്ദർഭം വിവരിക്കുന്നു. നിങ്ങളുടെ വീടിന്റെ മുൻവശത്ത് ഒരു മരത്തിന് ചുവട്ടിൽ ഒരു പക്ഷിക്കുഞ്ഞു വീണുകിടക്കുന്നത് കാണുമ്പോൾ നിങ്ങൾക്കുണ്ടാകുന്ന പ്രതികരണം.

a) പെട്ടെന്നുതന്നെ പക്ഷിയെ എടുത്തു അതിനുവേണ്ടിയുള്ള പ്രഥമശുശ്രൂഷ നൽകുകയും അതിനെ തിരിച്ചു കൂട്ടിൽ വെക്കാൻ ശ്രമം നടത്തുകയും ചെയ്യുന്നു.

b) പക്ഷിയെ എടുക്കുകയും ആ വിവരം മാതാപിതാക്കളോട് പറഞ്ഞ് അവരുടെ സഹായം തേടുകയും ചെയ്യുന്നു.

c) പക്ഷിയെ കണ്ടിട്ടും കാണാത്ത മട്ടിൽ അവരവരുടെ കളികളിൽ ഏർപ്പെടുന്നു.

21. ആശയ രൂപീകരണം

അധ്യാപിക കുട്ടികളോട് കളിമണ്ണ് കൊണ്ട് വസ്തുക്കൾ ഉണ്ടാക്കാൻ നിർദ്ദേശിക്കുന്നു.

a) തന്റേതായ ഭാവനയിൽനിന്നും തീർത്തും വ്യത്യസ്തമായ വസ്തുക്കൾ നിർമ്മിക്കുന്നു.

b) തന്റെ കഴിവുകൾ പുറത്തെടുക്കാൻ വേണ്ടി മറ്റു സുഹൃത്തുക്കളുടെ വസ്തുക്കളെ നോക്കി അനുകരിക്കാൻ ശ്രമിക്കുന്നു.

c) തനിക്ക് കഴിയുംവിധത്തിൽ വൃത്തങ്ങളോ റോളർപോലുള്ള വസ്തുക്കളോ ഉണ്ടാക്കാൻ ശ്രമിക്കുന്നു.

22. അംഗവിക്ഷേപങ്ങളിലൂടെ കുട്ടി ഒരു ആശയത്തെ (ആന) കുട്ടികളുടെ മുന്നിൽ അവതരിപ്പിക്കുന്നു.

a) നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് കുട്ടി കൃത്യമായി വ്യായാമം ചെയ്തുകാണിക്കുന്നു.

b) വ്യായാമം ചെയ്യാൻ ശ്രമം നടത്തുന്നുണ്ടെങ്കിലും അതിൽ ഏകോപനം കൈവരിക്കാൻ സാധിക്കുന്നില്ല.

c) കളിക്കുന്ന ലാഘവത്തോടുകൂടി വ്യായാമം ചെയ്യുന്നു.

24. ശരീരചലനം ആവശ്യമായ ഒരു കളി (Hopscotch) അധ്യാപിക വിശദീകരിച്ചു കൊടുക്കുന്നു. വ്യക്തിഗതമായി അത് അവതരിപ്പിക്കാൻ ടീച്ചർ ആവശ്യപ്പെടുന്നു.

a) നിർദ്ദേശങ്ങളനുസരിച്ച് അതിവേഗത്തിൽ തന്നെ കുട്ടിക്ക് ലക്ഷ്യസ്ഥാനത്ത് എത്തിച്ചേരാൻ കഴിയുന്നു.

b) നിർദ്ദേശങ്ങൾ മനസ്സിലായിട്ടുണ്ടെങ്കിലും കുട്ടിക്ക് ലക്ഷ്യസ്ഥാനത്ത് എത്താൻ കഴിയുന്നില്ല.

c) ശ്രമങ്ങൾ നടന്നിട്ടുണ്ടെങ്കിലും മുന്നോട്ടുപോകാൻ കഴിയാതെ കാൽ കളത്തിലേക്ക് കുത്തിപ്പോകുന്നു.

25. സംഗീതവുമായി ബന്ധപ്പെട്ട ഉപകരണങ്ങൾ തിരിച്ചറിയാൻ കഴിയുന്നുണ്ടോ എന്ന് പരിശോധിക്കുന്നു.

അധ്യാപിക സംഗീതവുമായി ബന്ധപ്പെട്ട ഉപകരണങ്ങളുടെ ശബ്ദം കുട്ടികളെ കേൾപ്പിക്കുന്നു. കുട്ടികളുടെ പ്രതികരണത്തിലൂടെ അവരുടെ സംഗീതാവബോധം കണ്ടെത്തുന്നു.

a) ശബ്ദം കേൾക്കുമ്പോൾ അത് ഏത് ഉപകരണത്തിൽനിന്നുള്ള സ്വരമാണ് എന്ന് മനസ്സിലാക്കുന്നു.

b) ചില സ്വരങ്ങൾ (drum) മാത്രം മനസ്സിലാക്കാൻ കഴിയുന്നു.

c) ശബ്ദം കേൾക്കുന്നുണ്ടെങ്കിലും അത് ഏത് ഉപകരണത്തിൽനിന്നുള്ള സ്വരമാണെന്ന് മനസ്സിലാക്കാൻ കഴിയുന്നില്ല.

26. അധ്യാപിക പരിചിതമായ പാട്ടിന്റെ 2 നിര പാടി കേൾപ്പിക്കുന്നു. കുട്ടികളോട് പാട്ട് പൂർത്തിയാക്കാൻ പറയുന്നു.

a) പാട്ട് അധ്യാപിക നിർത്തുന്നതിനു മുൻപ് അത് ആലപിക്കുകയും അക്ഷരസ്പുടതയോടുകൂടി പൂർത്തിയാക്കുന്നു.

b) അധ്യാപിക പൂർത്തിയാക്കിയ ശേഷം കുട്ടി പാടാൻ ശ്രമം നടത്തിയെങ്കിലും അധ്യാപികയുടെ സഹായത്തോടെ കുട്ടിക്ക് പൂർത്തിയാക്കാൻ സാധിച്ചു.

c) ഒന്നോ രണ്ടോ വരികളിൽ മാത്രം ഒതുക്കുന്നു.

27. മഴയുമായി ബന്ധപ്പെട്ട ഒരു പാട്ടുപാടാൻ അധ്യാപിക നിർദ്ദേശിക്കുന്നു.

a) തനതായ ശൈലിയിലും ഭാവനയോട് കൂടിയും പാട്ടുപാടുന്നു.

b) പെട്ടെന്നുതന്നെ കുട്ടി കേട്ട് പരിചിതമായ പാട്ട് ഓർത്തെടുക്കുകയും കൂട്ടി പാടുകയും ചെയ്യുന്നു.

c) പാട്ട് ഓർത്തെടുക്കുകയും പാടാനുള്ള ശ്രമം നടത്തിയെങ്കിലും അത് പൂർത്തീകരിക്കാൻ കുട്ടിക്ക് സാധിച്ചില്ല.

28. സംഗീത ഉപകരണങ്ങൾ വായിക്കുന്നതിനുള്ള കഴിവ് പരിശോധിക്കുന്നു.

അധ്യാപിക മൊബൈൽഫോണിൽ പല തരത്തിലുള്ള സംഗീത ഉപകരണങ്ങൾ കുട്ടികൾക്ക് കൊടുക്കുന്നു.

a) തന്റെ കഴിവുകൾ ഉപയോഗിച്ച് താളബോധത്തോടുകൂടിയ ശബ്ദം പുറത്തെടുക്കാൻ കഴിയുന്നു.

b) ഒരേ താളത്തോടുകൂടിയ ശബ്ദം ഉണ്ടാക്കുന്നു.

c) കലപില ശബ്ദങ്ങൾ ഉണ്ടാക്കുന്നു.

29. കമ്പ്യൂട്ടർ ഉറവിടവുമായി ബന്ധപ്പെട്ട ചിത്രങ്ങൾ അധ്യാപിക നൽകി അവയെ കൃത്യമായി ക്രമീകരിക്കാൻ നിർദ്ദേശിക്കുന്നു.

a) തന്നിരിക്കുന്ന ചിത്രങ്ങളെല്ലാം കൃത്യമായി ക്രമീകരിക്കുന്നു.

b) ശ്രമം നടത്തുന്നുണ്ടെങ്കിലും അവയെ പൂർണ്ണമായും കൃത്യതയോടുകൂടിയും ക്രമീകരിക്കാൻ സാധിക്കുന്നില്ല.

c) ക്രമീകരണം നടത്താൻ കഴിയുന്നില്ലെങ്കിലും അവ ഓരോന്നും തിരിച്ചറിയുന്നു.

30. മാതാപിതാക്കളുമൊത്ത് മാളുകളിൽ സന്ദർശിക്കുമ്പോൾ അവിടെയുള്ള ഗെയിംസ് എങ്ങനെയാണ് നിങ്ങൾ കൈകാര്യം ചെയ്യുന്നത്.

a) ഓരോ ഗെയിമിന്റെയും നിർദ്ദേശങ്ങളനുസരിച്ച് ഒറ്റയ്ക്കുതന്നെ കൈകാര്യം ചെയ്യുന്നു.

b) മറ്റുള്ളവരുടെ നിർദ്ദേശപ്രകാരം അവയെല്ലാം കൈകാര്യം ചെയ്യുന്നു.

c) മറ്റുള്ളവരുടെ സഹായത്തിനായി കാത്തുനിൽക്കാറാണ് പതിവ്.

31. കുട്ടികളോട് അവർക്ക് ഏറ്റവും ഇഷ്ടപ്പെട്ട വീഡിയോ യൂ ട്യൂബിൽ നിന്ന് കാണാൻ നിർദ്ദേശിക്കുന്നു.

a) നല്ല മുൻപരിചയം പോലെ മൊബൈലിൽ നിന്ന് യൂട്യൂബ് ഓപ്ഷൻ എടുത്ത് ഇഷ്ടപ്പെട്ട വീഡിയോ യൂട്യൂബിൽനിന്ന് തിരഞ്ഞെടുത്ത് കാണുന്നു.

b) മറ്റുള്ളവരുടെ നിർദ്ദേശപ്രകാരം മൊബൈലിൽനിന്ന് യൂട്യൂബ് ഓപ്ഷൻ എടുത്ത് ഇഷ്ടപ്പെട്ട വീഡിയോ തിരഞ്ഞെടുത്ത് കാണുന്നു.

c) വീഡിയോ ഉണ്ടെന്ന് കുട്ടി മനസ്സിലാക്കുന്നു.

32. അധ്യാപിക കുട്ടികളോട് വീഡിയോ ഗെയിം കളിക്കാൻ നിർദ്ദേശിക്കുന്നു.

a) കളിയുടെ നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് കുട്ടി ഗെയിം കളിക്കുന്നു.

b) കളിയുടെ ഇടയിൽ മറ്റൊരാളുടെ നിർദ്ദേശം ആവശ്യമായി വരുന്നു.

c) മറ്റൊരാളുടെ നിർദ്ദേശങ്ങൾക്കനുസരിച്ച് കളിക്കുന്നു.

APPENDIX XIII
FAROOK TRAINING COLLEGE
Individual Test for Integrated process Skill Instrument
Age Group 3-4

Dr. Anees Mohammed. C
Assistant Professor
Farook Training College

Raheesa Farsana. N
M.Ed. Student

നിർദ്ദേശങ്ങൾ

- 14 ചോദ്യങ്ങൾ ഉൾപ്പെടെ ഒരു ചോദ്യപേപ്പർ ആണ് നൽകിയിരിക്കുന്നത്.
- ചോദ്യങ്ങൾ നല്ലതുപോലെ വായിച്ചതിനുശേഷം മാത്രം ഉത്തരം നൽകുക.
- എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരം കണ്ടെത്തുവാൻ ശ്രമിക്കുക.
- ഓപ്ഷനുകൾ ഉള്ള ചോദ്യങ്ങൾക്ക് ശരിയായ ഉത്തരം രേഖപ്പെടുത്തിയ ഓപ്ഷൻ മാത്രം തിരഞ്ഞെടുക്കുക.

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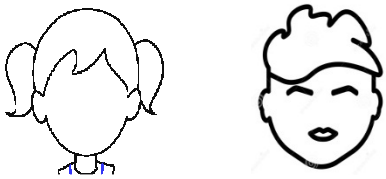
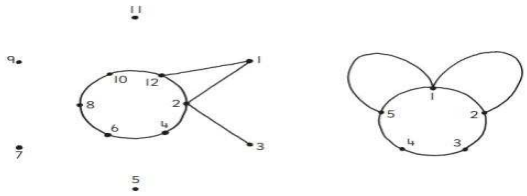
1. കൂടുതൽ ഉയരത്തിൽ എത്താൻ സഹായിക്കുന്ന ഉപകരണം കണ്ടെത്തുക.

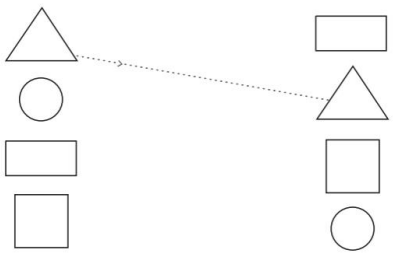
2. താഴെയുള്ള കൂട്ടുകാർക്ക് കണ്ണുകൾ വരയ്ക്കുക.



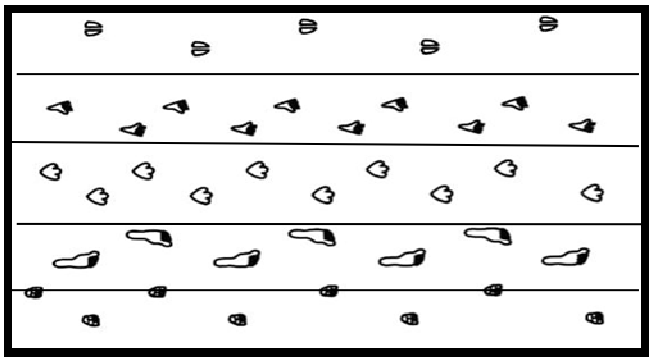
3. ഒന്നുമുതൽ അഞ്ച്വരെയും ഒന്നുമുതൽ പന്ത്രണ്ടുവരെയുമുള്ള കുത്തുകൾ യോജിപ്പിച്ച് നിറം നൽകുക.



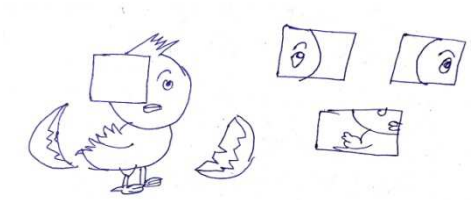
4. ഒരേ ആകൃതിയിലുള്ള ചിത്രത്തെ പരസ്പരം യോജിപ്പിക്കുക.



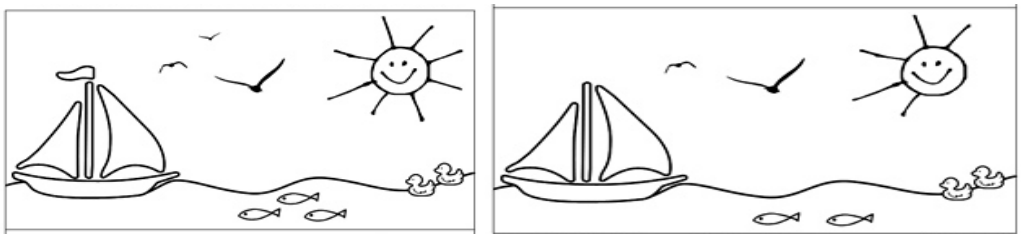
5. മനുഷ്യപാദത്തെ കണ്ടെത്തി അടയാളമിടുക.



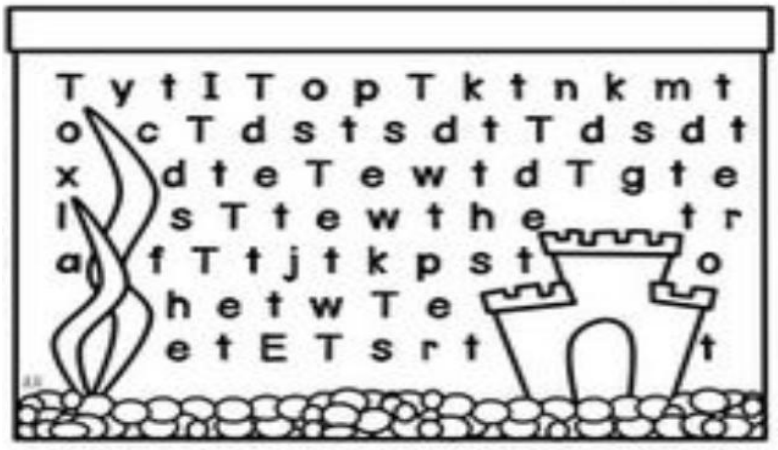
6. ചിത്രത്തിൽ കാണാതായ ഭാഗം കണ്ടെത്തി അടയാളപ്പെടുത്തുക.



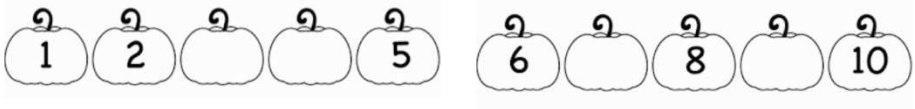
7. ഈ രണ്ടു ചിത്രങ്ങളും തമ്മിലുള്ള വ്യത്യാസം കണ്ടെത്തി വട്ടമിടുക.



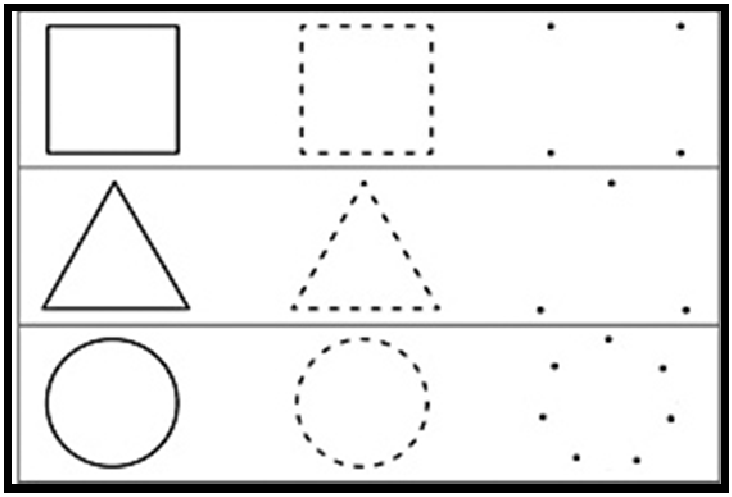
8. താഴെ കൊടുത്തിരിക്കുന്ന ബോക്സിൽനിന്നും 'T t' കണ്ടെത്തുക.



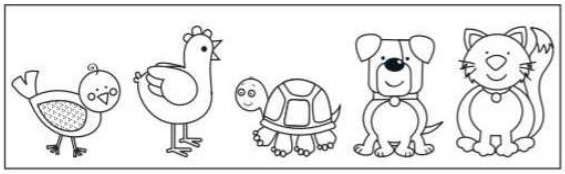
9. വിട്ടുപോയ നമ്പറുകൾ എഴുതുക.



10. ഓരോ രൂപങ്ങളും കുത്തുകളിലൂടെ വരച്ച് അതിനിടയിൽ എഴുതിയിരിക്കുന്ന നിറങ്ങൾ കൊടുക്കാം



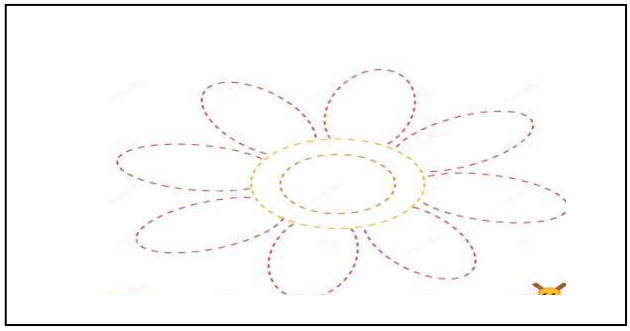
11. താഴെ കൊടുത്തിരിക്കുന്ന ചോദ്യങ്ങൾക്ക് ചിത്രം നിരീക്ഷിച്ച് ഉത്തരമെഴുതുക.



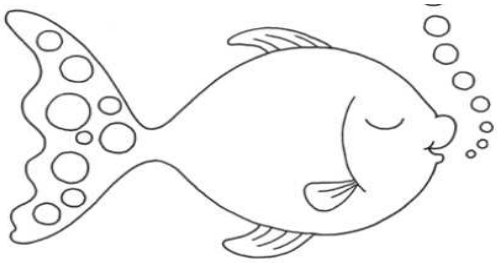
c) രണ്ട് കാലുകൾ ഉള്ള എത്ര മൃഗങ്ങളുണ്ട് ? : _____

d) നാലു കാലുകൾ ഉള്ള എത്ര മൃഗങ്ങളുണ്ട്? : _____

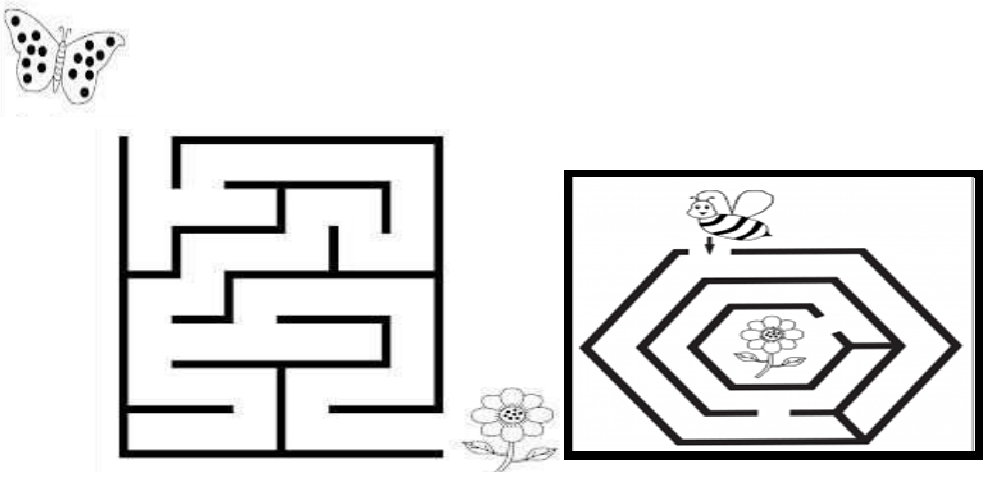
12. കുത്തുകൾ പൂർത്തിയാക്കി നിറം കൊടുക്കുക.



13. വൃത്തത്തിന് നീലനിറം കൊടുക്കുക.



14. തേനീച്ചയെ പൂവിന്റെ അടുത്തേക്ക് എത്താൻ സഹായിക്കുക.



APPENDIX XIV
FAROOK TRAINING COLLEGE
Individual Test for Integrated process Skill Instrument
Age Group 4-5

Dr. Anees Mohammed. C
Assistant Professor
Farook Training College

Raheesa Farsana. N
M.Ed. Student

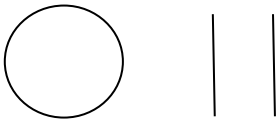
നിർദ്ദേശങ്ങൾ

- 14 ചോദ്യങ്ങൾ ഉൾപ്പെടെ ഒരു ചോദ്യപേപ്പർ ആണ് നൽകിയിരിക്കുന്നത്.
- ചോദ്യങ്ങൾ നല്ലതുപോലെ വായിച്ചതിനുശേഷം മാത്രം ഉത്തരം നൽകുക.
- എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരം കണ്ടെത്തുവാൻ ശ്രമിക്കുക.
- ഓപ്ഷനുകൾ ഉള്ള ചോദ്യങ്ങൾക്ക് ശരിയായ ഉത്തരം രേഖപ്പെടുത്തിയ ഓപ്ഷൻ മാത്രം തിരഞ്ഞെടുക്കുക.

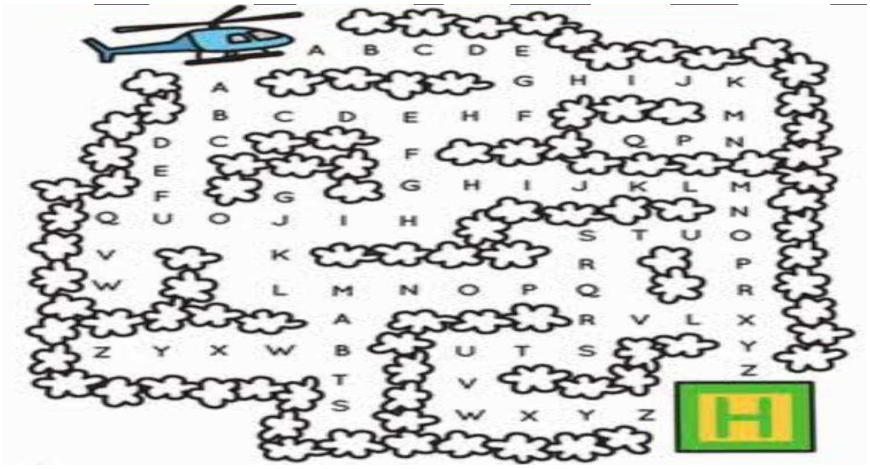
---

1. ഉരുളുന്ന ചിത്രം കണ്ടെത്തി വട്ടമിടുക.

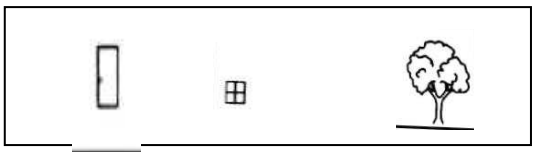
2. താഴെ കൊടുത്തിരിക്കുന്ന ചിഹ്നങ്ങളുപയോഗിച്ച് ചിത്രം വരയ്ക്കുക.



3. ഹെലികോപ്റ്ററിന് H അടുത്തേക്ക് വഴി കാണിക്കുക.



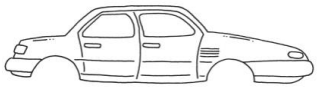
4. ചിത്രം പൂർത്തിയാക്കാൻ സഹായിക്കുക.

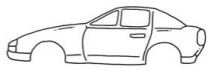


5. ഈ ചിത്രങ്ങളുടെ ഇംഗ്ലീഷ് പേരുകൾ താഴെയുള്ള കളത്തിൽനിന്നും കണ്ടുപിടിക്കുക.

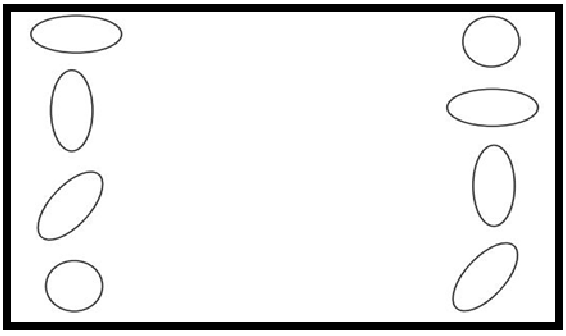
j	d	o	l	l
b	e	a	r	k
m	n	p	q	s
h	g	i	f	t
b	a	l	l	c

6. കാറിന് ചക്രം വരച്ച് സഹായിക്കുക.

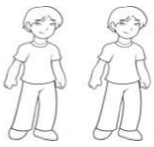


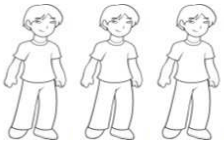


7. ഒരേ ആകൃതിയിലുള്ള ചിത്രത്തെ പരസ്പരം യോജിപ്പിക്കുക.

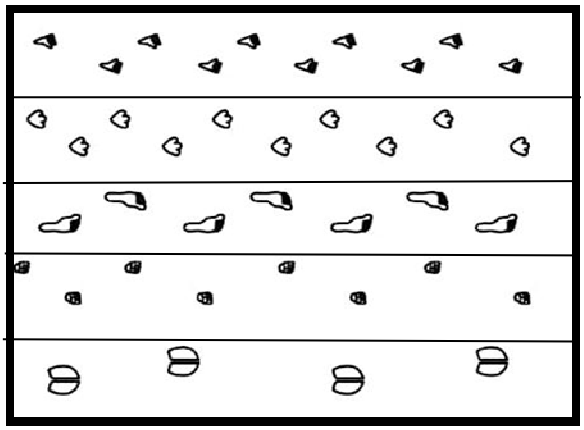


8. ഒരു മനുഷ്യന് രണ്ട് കാലുകൾ ഉണ്ട്. 

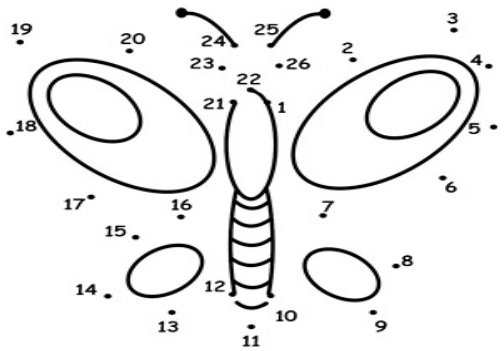
c)  രണ്ടു മനുഷ്യന് എത്ര കാലുകൾ ഉണ്ടാകും?: _____

d)  മൂന്ന് മനുഷ്യർക്ക് എത്ര കാലുകൾ ഉണ്ടാകും ?: _____

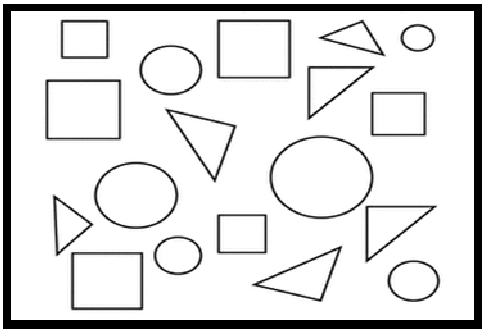
9. താറാവിന്റെ പാദത്തെ കണ്ടെത്തി അടയാളമിടുക.



10. 1 മുതൽ 20 വരെയുള്ള കുത്തുകൾ യോജിപ്പിച്ച കൂട്ടുകാരനെ കണ്ടെത്തി നിറം നൽകുക.



11. ത്രികോണാകൃതിയിലുള്ള ചിത്രങ്ങൾക്ക് നിറം നൽകുക.

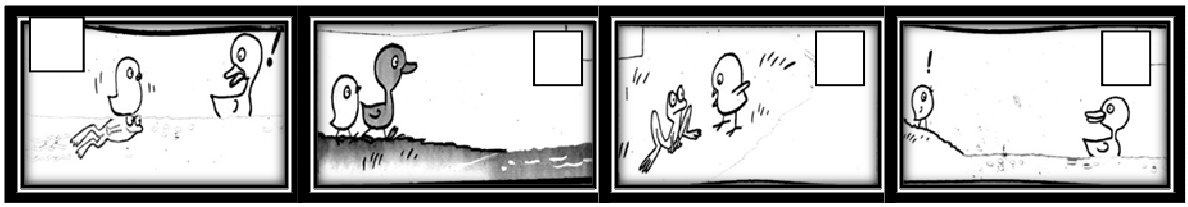


12. താഴെ കൊടുത്തിരിക്കുന്ന സൂചനയിൽനിന്ന് ശരിയായ മൃഗത്തിന്റെ പേര് തിരഞ്ഞെടുക്കുക.

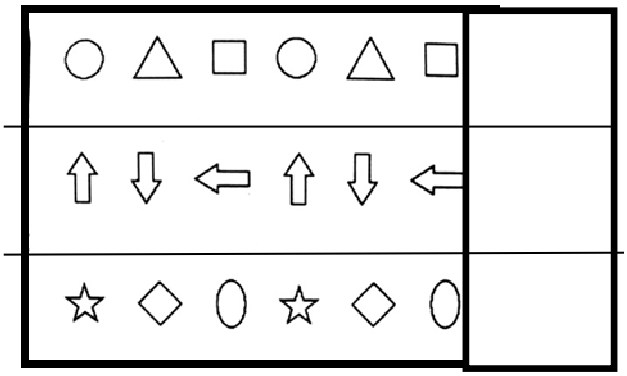
കംഗാരു	മുതല	ഒട്ടകം

- ഇത് തവിട്ടുനിറമാണ്
- ഇതിന് നീളമുള്ള വാൽ ഉണ്ട്
- അത് വലുതാണ്
- ഇതിന് പോക്കറ്റുണ്ട്

13. ഈ ചിത്രത്തിൽ അവ നടന്ന ക്രമത്തിൽ നമ്പറിടുക.



14. ചിത്രം നിരീക്ഷിച്ച് അടുത്തതായി എന്താണ് വരുന്നതെന്ന് വരയ്ക്കുക.



APPENDIX XV
FAROOK TRAINING COLLEGE
Individual Test for Integrated process Skill Instrument
Age Group 5-6

Dr. Anees Mohammed. C
Assistant Professor
Farook Training College

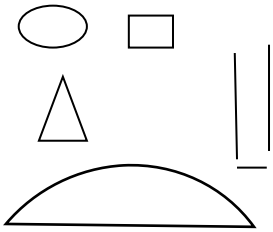
Raheesa Farsana. N
M.Ed. Student

നിർദ്ദേശങ്ങൾ

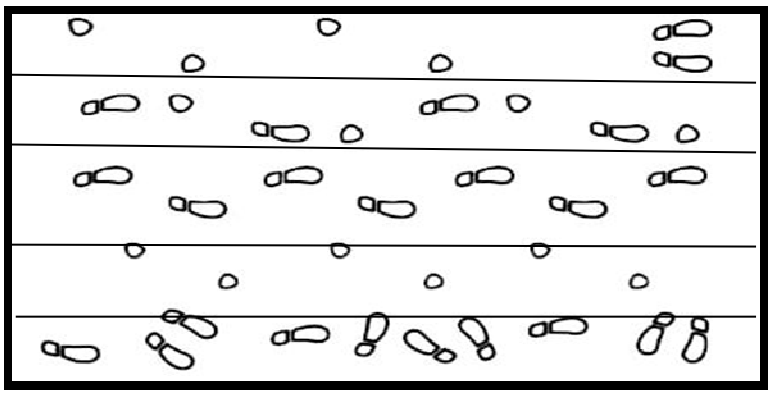
- 14 ചോദ്യങ്ങൾ ഉൾപ്പെടെ ഒരു ചോദ്യപേപ്പർ ആണ് നൽകിയിരിക്കുന്നത്.
- ചോദ്യങ്ങൾ നല്ലതുപോലെ വായിച്ചതിനുശേഷം മാത്രം ഉത്തരം നൽകുക.
- എല്ലാ ചോദ്യങ്ങൾക്കും ഉത്തരം കണ്ടെത്തുവാൻ ശ്രമിക്കുക.
- ഓപ്ഷനുകൾ ഉള്ള ചോദ്യങ്ങൾക്ക് ശരിയായ ഉത്തരം രേഖപ്പെടുത്തിയ ഓപ്ഷൻ മാത്രം തിരഞ്ഞെടുക്കുക.

---

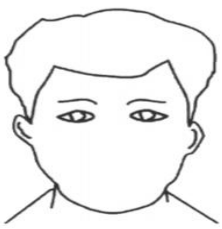
1. താഴെ കൊടുത്തിരിക്കുന്ന ചിഹ്നങ്ങൾ ഉപയോഗിച്ച് ചിത്രം വരയ്ക്കുക.



2. ഒരു വ്യക്തി നടന്നുപോകുന്ന ട്രാക്ക് അടയാളപ്പെടുത്തുക.



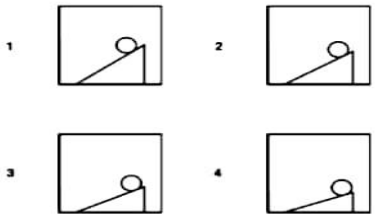
3. താഴെ കൊടുത്തിരിക്കുന്ന കൂട്ടുകാരന്റെ മൂക്ക് വരയ്ക്കുക.



4. അമ്മൂമ്മയ്ക്ക് അമ്മയുടെ അടുത്തേക്ക് ആഴ്ചകളുടെ ഇംഗ്ലീഷ് പേരിന്റെ ക്രമത്തിൽ വഴി കാണിക്കുക.

SUNDAY	MONDAY	SATURDAY	SATURDAY
FRIDAY	TUESDAY	WEDNESDAY	SATURDAY
SUNDAY	MONDAY	THURSDAY	TUESDAY
FRIDAY	SUNDAY	FRIDAY	SATURDAY

5. ഏറ്റവും വേഗതയിൽ ഉരുളുന്ന പന്ത് നേരെ വട്ടമിടുക.



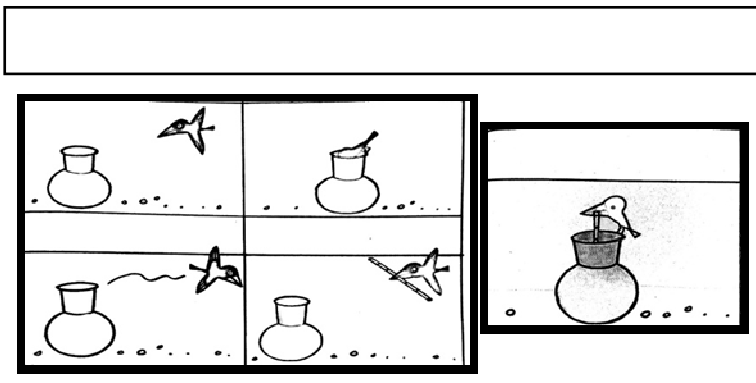
6. ആദ്യാക്ഷരമോ അവസാനക്ഷരമോ ഒഴിവാക്കി പുതിയ പദങ്ങൾ കണ്ടെത്തുക.

W	A	N	T

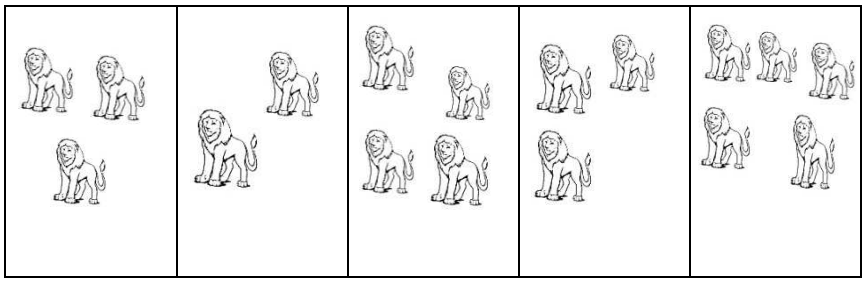
N	E	A	T

P	I	N	K

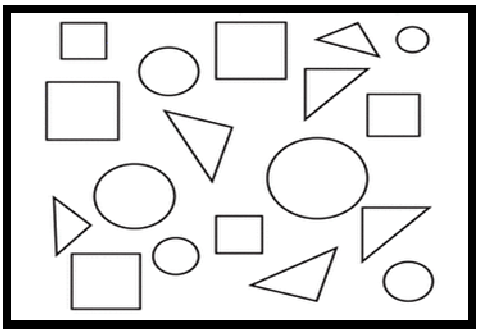
7. ചിത്രം നന്നായി നിരീക്ഷിച്ച് കഥയ്ക്കൊരു തലക്കെട്ട് നൽകുക.



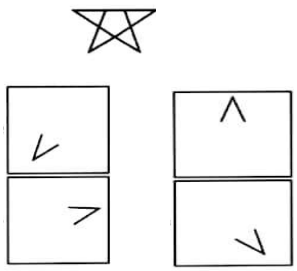
8. മൃഗശാലയിൽ മൂന്ന് സിംഹങ്ങളുണ്ടായിരുന്നു. ആദ്യത്തെ ബോക്സിൽ നിങ്ങൾക്ക് കാണാൻ കഴിയും. സിംഹങ്ങൾ വളരെ ജനപ്രിയമായിരുന്നു. ആ മൃഗശാലയിൽ രണ്ട് സിംഹങ്ങളെ കൂടി ലഭിച്ചു. എന്നാൽ മൃഗശാലയിൽ ഇപ്പോൾ എത്ര സിംഹങ്ങൾ ഉണ്ടെന്ന് കണ്ടെത്തി അടയാളപ്പെടുത്തുക.



9. എല്ലാ വൃത്തങ്ങളും ചുവപ്പുനിറത്തിലും ത്രികോണം മഞ്ഞയിലും നിറം നൽകുക.

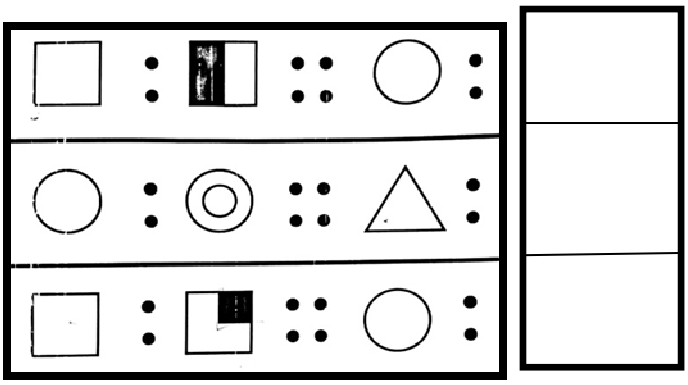


10. ചിത്രം പൂർത്തീകരിക്കാൻ സഹായിക്കുന്ന ചിഹ്നം അടയാളപ്പെടുത്തുക.



11. ഐസ്ക്രീം ഷോപ്പിൽനിന്ന് തുടങ്ങുന്ന വരിയുടെ ആറാം സ്ഥാനത്ത് നിൽക്കുന്ന വ്യക്തിയെ കണ്ടെത്തുക.

12. ചിത്രം നിരീക്ഷിച്ച് അടുത്തതായി എന്താണ് വരുന്നതെന്ന് വരയ്ക്കുക.



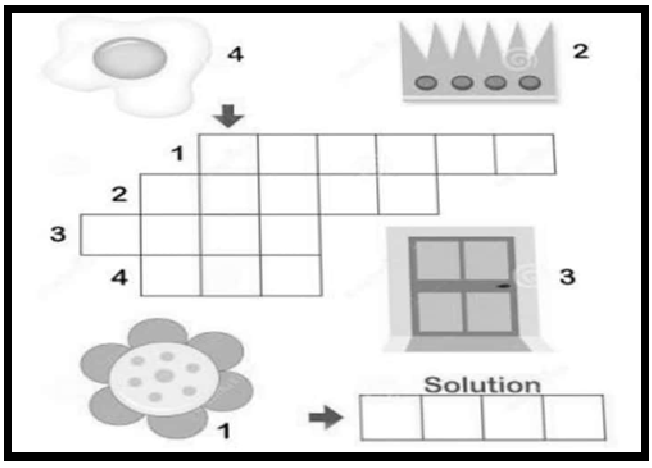
13. ഒരു പൂച്ചയ്ക്ക് നാലു കാലുകൾ ഉണ്ട്. 

b)  രണ്ട് പൂച്ചയ്ക്ക് എത്ര കാലുകൾ ഉണ്ടാകും?: _____

b)  മൂന്ന് പൂച്ചയ്ക്ക് എത്ര കാലുകൾ ഉണ്ടാകും?: _____

14. ചിത്രപ്രശ്നം

ഈ പ്രശ്നം ചിത്രം നോക്കി ഇംഗ്ലീഷിൽ പൂരിപ്പിക്കുക.



APPENDIX XVI
SCORING KEY ON INDIVIDUAL TEST FOR PROCESS SKILL ASSESSMENT
Age group 3 – 4

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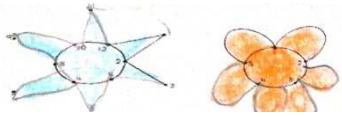
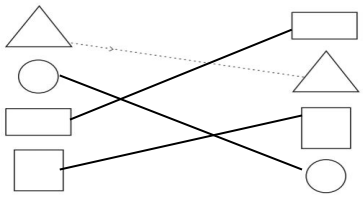
1. (1)

2. (1)

3. (3)

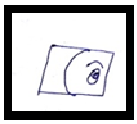


4. (1)

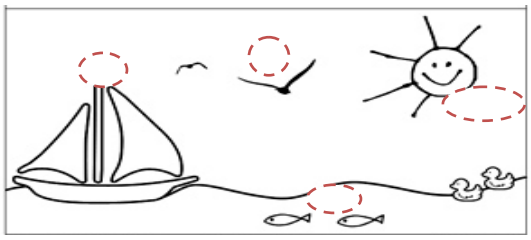


5. (1)

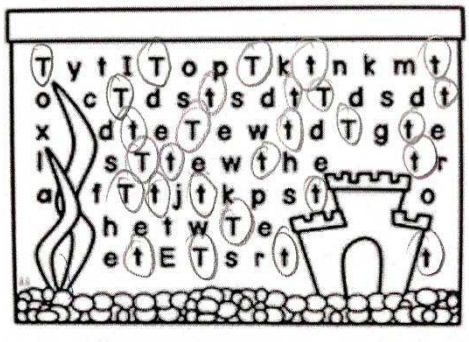
6. (1)



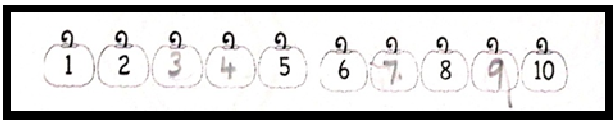
7. (2)



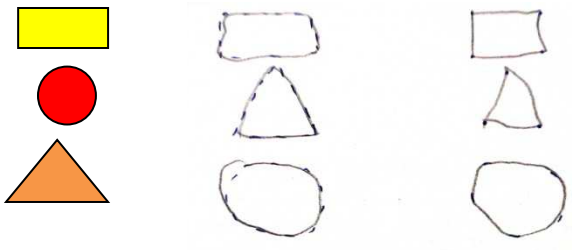
8. (2)



9. (2)



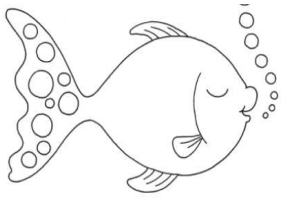
10. (3)



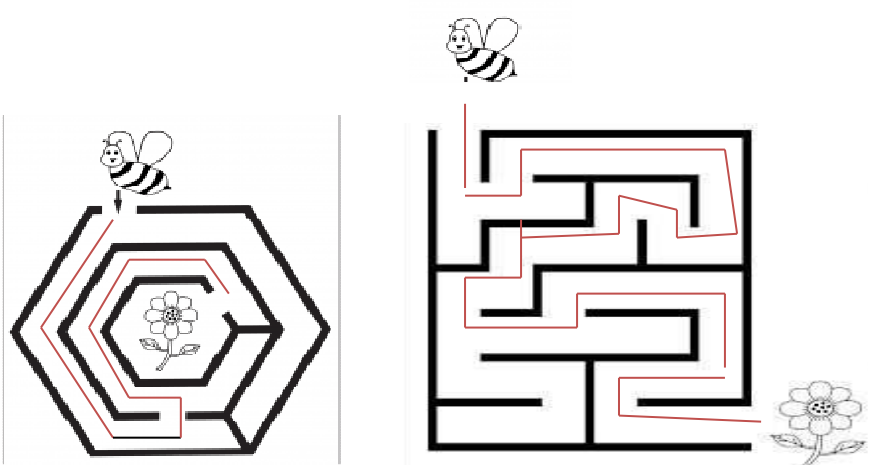
11. a) 2
    b) 3

12. (2)

13. (1)



14. (3)



APPENDIX XVII
SCORING KEY ON INDIVIDUAL TEST FOR PROCESS SKILL ASSESSMENT
Age group 4 - 5

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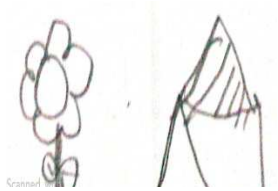
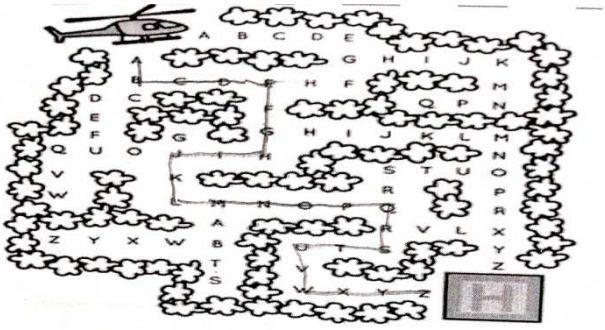
1. (1)

2. (3)



3. ` (3)

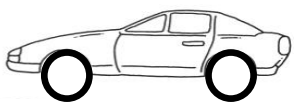


4. (1)

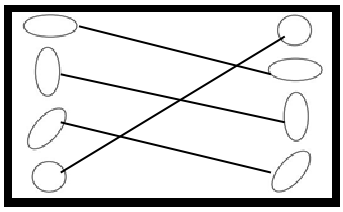
5. (5)

j	~~d~~	~~o~~	~~l~~	~~l~~
~~b~~	~~e~~	~~a~~	~~r~~	k
m	n	p	q	s
h	~~g~~	~~i~~	~~f~~	~~t~~
~~b~~	~~a~~	~~l~~	~~l~~	c

6. (1)

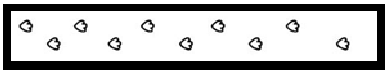


7. (2)

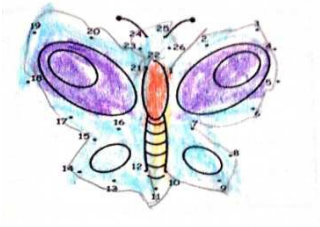


8. a) 4 (2)
   b) 6

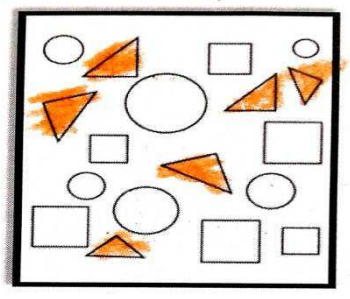
9. (1)



10. (3)



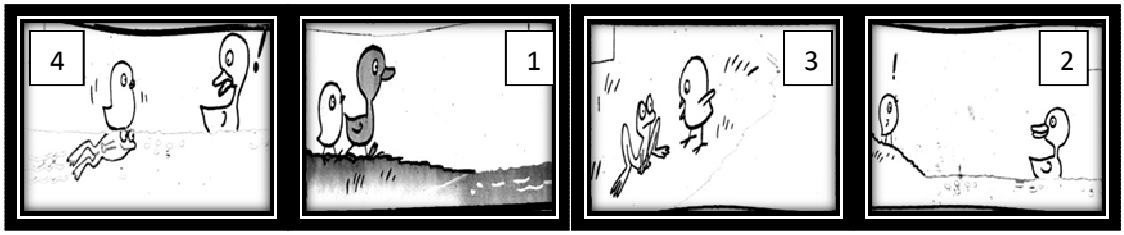
11. (2)



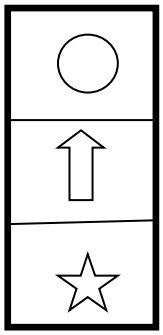
12. (1)

Kangaroo

13. (2)



14. (3)



APPENDIX XVIII
SCORING KEY ON INDIVIDUAL TEST FOR PROCESS SKILL ASSESSMENT
Age group 5 - 6

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1. (1)

2. (3)

3. (3)

4. (1)

SUNDAY	MONDAY	SATURDAY	SATURDAY
FRIDAY	TUESDAY	WEDNESDAY	SATURDAY
SUNDAY	MONDAY	THURSDAY	TUESDAY
FRIDAY	SUNDAY	FRIDAY	SATURDAY

5. (1)

6. (3)

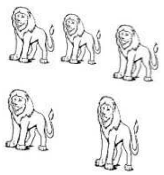
W	A	N	T
	A	N	T
	A	N	
	A		

N	E	A	T
	E	A	T
		A	T
		A	

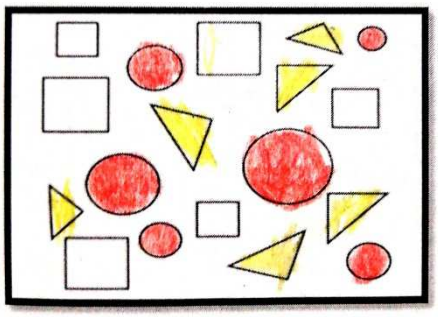
P	I	N	K
	I	N	K
	I	N	
	I		

7. (2)

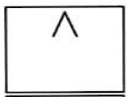
8. (2)



9. (2)

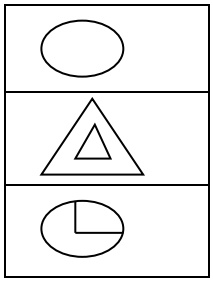


10. (1)



11. (1)

12. (3)



13. (2)

a) 8

b) 12

14. (2)