A SESOURCE MATERIAL ON CISCE CURRECTE

STUDIES (EVS) AT THE PRIMARY LEVEL

(Classes I & II)





Research Development and Consultancy Division

Council for the Indian School Certificate Examinations **New Delhi**

Unfolding the Curriculum: Environmental Studies (EVS) Curriculum in Practice



Expectations of this Module

After reading/using this module the user/teacher will be able to:

- understand the need and significance of this module;
- understand the nature and status of EVS curriculum;
- explain salient features of the EVS curriculum and pedagogical principles in their own words;
- discuss the need for exemplars in the curriculum and use them in practical situations by using hands on activities;
- relate and frame learning based questions for assessment;
- understand some essential tips for using curriculum in the classroom situation.

Structure of this Module

- 1. Overview: Why, What and How of this module
- 2. EVS curriculum in context and practice
- 3. EVS curriculum for classes I and II
 - 3.1 Salient features of the EVS curriculum
 - 3.2 Suggested pedagogical principles for teaching learning of EVS in the classroom
 - 3.3 How should an EVS classroom look like
- 4. Exemplars in EVS
 - 4.1 Need for exemplars
 - 4.2 Planning for the teaching learning process
 - 4.3 Exemplar I
 - 4.4 Exemplar II
 - 4.5 Exemplar III
 - 4.6 Exemplar IV
- 5. Assessment of learning and reflection on action
- 6. Recording and reporting in EVS learning
- 7. Essential tips for practitioners
- 8. Summing up: What have we learnt

1. Overview: Why, what and how of this module



Why this module?

This module aims at providing an understanding on various aspects of the EVS curriculum such as its status in early grades (Class I & II), salient features, pedagogical principles for EVS learning and what makes an EVS classroom a happy classroom. It would also provide a clarity on various components of the EVS curriculum such as learning outcomes, identified concepts in selected themes, transactional processes and learning resources. Apart from this, the module would develop confidence among users to contextualize in their specific situations. In order to understand all the components of the teaching learning process, some exemplars have also been given.



What does this module include?

This module has seven sections. The **first section** provides an overview to explain why, what and how to use the module. **Section II** gives the status and nature of the EVS curriculum in context. **Section III** explains salient features and pedagogical principles. **Section IV** focuses on exemplars which cover planning, implementation and assessment during the teaching learning process. **Section V** deals with reflection and assessment of learning (assessment after completion of theme/unit) and suggestive assessment practices. **Section VI** details out recording and reporting in EVS learning and finally **Section VII** provides some tips to the practitioners/users.



How to use this module?

This module is meant for all stakeholders i.e. practicing teachers, master trainers and school administrators working at the primary level in particular and for primary teachers in general. In each section of this module, some activities have been provided. These activities need to be done after completing each section. Four exemplars have also been given for this subject, which may be used in a classroom situation. After using the exemplars, peer reflection should be taken which would help to further improve the module.



Activity-1 (Pair Work)

Discuss in groups the three benefits of this module for teachers and master trainers. Make a list.

2. EVS curriculum in context and practice

Nature and Status

EVS learning provides an opportunity for children to explore, investigate and develop an understanding of the natural, human, social and cultural dimensions of the local and wider environments. This area enables children to live as informed and caring members of the local, national and global communities at large.

Keeping its significance in view, EVS has been kept as one of the curricular areas in Classes I and II. The major focus area of this subject is - learning *for* the environment, learning *about* the environment and learning *through* the environment. Thus, in this subject, the concepts, issues and concerns related to the social, natural and cultural environment need to be transacted in an integrated manner. Treating natural environment (science) and social-cultural environment in isolation is to be discouraged (disciplinary approach). A thematic approach is necessitated to be followed to provide a holistic perspective of the environment. Due to the thematic nature of the subject, the content/concepts would be derived from the child's family and immediate surrounding. The nature of this subject is process based and therefore emphasis should be placed on development of skills.

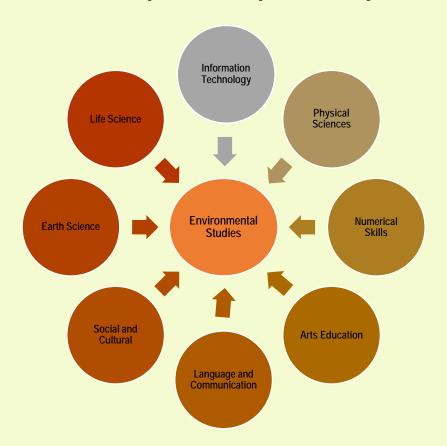


Figure 1: Interdisciplinary and Integrated perspective of EVS

EVS content and skills utilize the teaching-learning process effectively in a way that the social, emotional and attitudinal values of the children are interwoven with the acquisition of knowledge, skills rather than teaching them as an add on activity or in an isolated manner.



Why EVS Learning

The major objectives of EVS teachinglearning is to enable children to:

- learn about the environment- by developing an awareness of the natural, social and cultural environment. It deals with issues/concepts in an integrated manner through various themes and activities related to daily life experiences, e.g. family, friends, plants and animals, etc.
- learn through the environment lays emphasis on using various objects, places, plants and animals in the immediate environment as learning resources:
- learn for the environment emphasizes inculcation of values, attitudes and skills related to protection of the environment;
- enhance/promote curiosity and creativity in relation to the surroundings;
- develop an appreciation for diversity (language, family, habits, variations in plants, animals, culture, etc.) in the surroundings;
- develop sensitivity towards senior citizens, people with disability and disadvantaged groups of society, focusing on their strengths as well as the areas of concern.

Broad Skills/ Processes that EVS Learning Promotes:

- Observation and Reporting Exploring, sharing, narrating and drawing, picturereading, making pictures, collecting and recording information.
- 2. Discussion Listening, talking, expressing opinion, discovering.
- 3. Expression Expressing through gestures/body movements, expressing verbally, expressing through drawing/writing/sculpting, expressing through creative writing.
- Explanation Reasoning, making simple logical connections, describing events/situations, formulating one's own reasoning.
- 5. Classification Identifying objects-based on observable features, identifying similarities and differences in objects, sorting/grouping objects based on observable features. Comparing objects and classifying them based on physical features.
- 6. Questioning Expressing curiosity, asking questions and framing simple questions.
- 7. Analysis Defining situations/ events, identifying/predicting possible causes of any event/situation.
- 8. Experimentation (Hands on activities) Improvising, making simple things and performing simple experiments.
- Concern for Justice and Equality –
 Developing a sensitivity towards the
 disadvantaged or people with special needs/
 disability, showing concern for the
 environment.
- 10. Cooperation Taking initiatives, sharing and working together with empathy.



Activity - 2

- Why does EVS learning need to be integrated in nature rather than a disciplinary one? Give two reasons.
- Write any two features of a theme-based curriculum.

3. EVS curriculum for classes I and II



Salient features of EVS curriculum

Salient Features	What does it mean?	Examples
Theme-based and integrated approach to learning	The present curriculum encourages a 'theme-based' rather than a 'topical' approach in this curricular area. Thus, it does not proceed with a list of topics where focus is on coverage of content. Instead of moving from one topic/ subject area to another, in a disconnected, compartmentalised manner, the present curriculum encourages an integrated approach to teaching-learning, so as to enable children to comprehend learning experiences as a unified whole. The curriculum aims to help children make sense of life's experiences by helping them connect and correlate knowledge and experiences across various topics within as well as across subject areas.	The two subjects of Science and Social Studies have been integrated into one core area of EVS. The content has been presented through themes rather than topics. For e.g. In the theme 'Water' the content of the theme is related to the child's life experiences rather than facts connected with it.
Child-centred approach	The curriculum gives primacy to children's experiences and their active participation. The identified concepts, skills, issues/concerns included in the EVS curriculum are developmentally age-appropriate with the understanding of the child progressing gradually from self to the immediate surrounding and further to the wider environment.	In order to follow a child centred approach in EVS, the learning process followed under each theme moves from simple to complex, concrete to abstract, informal to formal in a logical and phased manner. (e.g. food in the family → sources of food → conservation of food)
Range of learning experiences	Recognising different learning styles and individual differences among children, the EVS curriculum suggests a wide range of learning experiences and transactional strategies. Thus, the curriculum aims at ensuring that learning is a joyful experience for all children and that they are able to understand not only what they learn, but also how this learning is relevant in their lives, both for the present and the future.	Using various strategies varying from classroom discussions, case studies, field visits, role play, project work, surveys, hands-on experiences, and experimentation, to model making, poster making, slogan writing, etc. have been suggested in the EVS curriculum.
Spiral approach to learning	As children progress, they will revisit certain concepts/themes which are repeated consciously as an entry level behaviour to build new learning. However, the depth and complexity of the theme/concept will increase with each revisit. The new knowledge would be put in the context of the pre-existing knowledge which would serve as a base or the foundation for the next level of learning.	Planning lessons taking into account prior knowledge and experiences of the children. Thus, the new learning would be built on the previous experiences of the child.

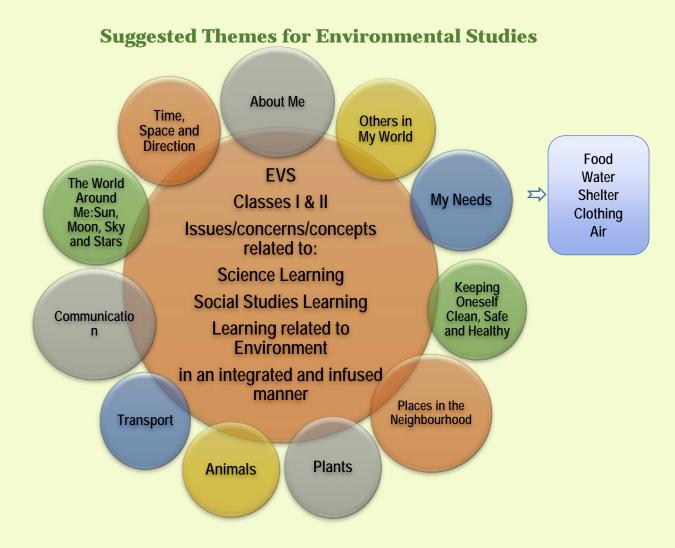
Salient Features	What does it mean?	Examples
Holistic approach to learning	Different domains of learning, i.e., cognitive, affective and psychomotor (head, heart, hand) have been dealt with in an integrated manner rather than addressing them in isolation within/across the themes.	In the Exemplar on the theme 'Water' you will find learning outcomes of all the three domains. i.e. cognitive, affective & psychomotor.
Scope for Contextualization	The curriculum provides flexibility to schools to adapt and contextualize as per their own requirements and the needs of the children. While the key concepts under each theme have been spelt out for this area in the curriculum, it is expected that the teachers would adapt and use appropriate transactional processes, based on the resources available, the interests and aptitude levels of children, as well as their geographical locations and the socio-economic and cultural contexts.	 Designing activities and citing examples that are relevant for children in terms of life experiences and their local contexts. Helping children in connecting and applying their learning to home and community. Using learning resources that are locally available.
Social Constructivist approach	This approach lays emphasis on learning by doing (I do, I understand much better). Also, children learn better while interacting/discussing with elders/peers. Thus, this approach provides opportunities for children to construct their knowledge rather than placing them as recipients of information in the transactional process. The knowledge gained by them is thus an outcome of the children's involvement in the learning process. Engaging/involving children in exploring, observing, discovering the world around them, helps in the process of construction of knowledge.	 Providing opportunities for collaborative and group learning through interaction with peers and elders (group learning). Providing opportunities as well as the necessary resources to enable children to experiment, explore and discover for themselves (learning by doing). Creating an environment in the class where the children feel safe to ask questions (non-threatening environment). Prompting inquiry by asking thought provoking, openended questions (opportunity for development of soft skills).
Values and Life Skills	The values and life skills are not to be developed in isolation and are not 'add on' activities, rather, these are to be developed in an integrated and infused manner from this curricular area. (Age appropriate skills and life skills have been mentioned in the curriculum as a reference point for teachers).	While dealing with all the themes in EVS, one of the considerations is to inculcate values and develop life skills as per the nature of the theme e.g. in the theme 'Water' conservation of water and its judicious use must be emphasised as a value and life skill.



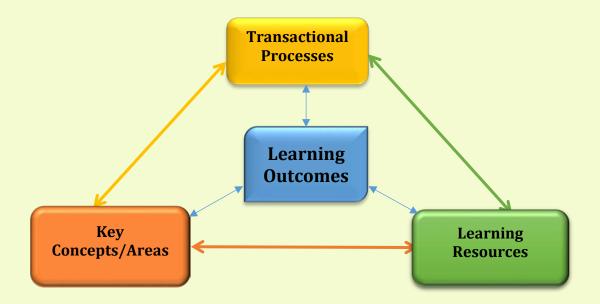
Major Components of EVS curriculum

- EVS learning needs to be theme-based rather than topic based as suggested in the syllabus/ curriculum. Therefore, in each identified theme, the concerns and issues related to physical, social and cultural context of the environment should be discussed holistically and critically so that the child can make informed choices.
- These themes are continued from Class I to Class II. Other themes may be included as per the need and context.

The following themes have been identified for the EVS Curriculum:



- Each theme in the EVS curriculum (refer to Page 120), begins with the need and significance of the theme (why this theme?). You need to not only understand the purpose of giving the theme but also how to deal with it.
- This is followed by the learning outcomes related to the theme. If you study these outcomes, you will find that these learning outcomes cover different aspects of the child's behaviour, i.e. knowledge, comprehension, skills, values/ attitudes. These learning outcomes are developmentally age-appropriate in nature. These are the essential learning outcomes identified for this stage; however, you can add relevant learning outcomes keeping in view the need, context and interest of the children. For better understanding on learning outcomes refer to Module-1, i.e., Understanding the Curriculum.



The curricular components of EVS have been dealt with in three columns.



- In the first column, key concepts have been mentioned. In column 2, suggested transactional processes have been given. These transactional processes have been identified keeping in view the following:
 - ✓ Class/Grade
 - ✓ Nature of the theme
 - ✓ Key Concepts
 - ✓ Learning Outcomes

For example, the Theme 2, 'Others in my World', covers key concepts related to the child's family, celebrations in the family and neighbourhood, keeping in view the social and cultural aspects. The identified pedagogy would be - sharing personal experiences and discussions, narrating experiences of family festivals, assigning simple projects, drawing pictures of family members/ friends. The learning resources would also be selected to meet out the need of the pedagogical processes. For example, puppet show can be a good learning resource to describe family members' roles, habits as well as relationships between family members. Similarly, flash cards on festivals can help teachers discuss various festivals celebrated in different families (various variations in celebrations could be covered.)

- In column 2, Suggested Transactional Processes have been given. The EVS learning in early classes is process based, therefore the transactional practices need to be guided by skills and processes such as describing, observing, identifying, etc. These processes would make EVS classrooms more child-centred and activity-based.
- In the third column, suggested learning resources have been mentioned. The learning resource(s) mean any action or material which enhances the learning process. For example, while dealing with Theme 2, "Others in My World', children's own experiences (verbal action),

classroom discussions (verbal actions), flash cards (concrete material), children's drawings (nonverbal actions) are some examples of Learning Resources that may be used.

- In each theme, at the end of the Curriculum presentation, integration of EVS with other subjects has also been highlighted. The implication of this reference is that wherever there are linkages, they should be addressed simultaneously, rather than dealing with them in isolation. For example, creative expression through drawing, paper work, origami, clay modelling, etc. relate to the Art Education curricular area as well. While dealing with such skills/ activities, the subject boundaries must be diffused and learning outcomes of both subjects may be addressed.
- Life Skills/ Values, healthy habits have also been addressed in the curriculum of EVS. The infused approach has been followed while dealing with life skills. While transacting the curriculum, life skills should be dealt with in context and in an integrated manner with the EVS concepts by taking suitable examples.



Suggested pedagogical principles in teaching-learning of EVS

- Active participation of children is important in constructing knowledge. Opportunities should be given for observations using a variety of learning resources such as visits to parks, museums, water bodies and various places in the community. If learning occurs beyond the walls of classrooms, the quality of learning is better.
- Efforts should be made by teachers to relate the child's local knowledge to the school knowledge this would discourage rote memorization and encourage developmentally age appropriate learning in EVS.
- Children in early grades learn through a variety of ways, therefore opportunities should be given to explore, observe, draw, categorise, discuss/ speak, ask questions and enlist, etc. to develop various skills /processes.
- Textbook is one of the learning resources both for children and teachers. Other learning resources such as family members and community, newspapers, books and worksheets, etc. should be used for better learning. While interacting with parents/elders, children not only collect past information but also get the opportunity to develop discussion/ questioning skills.
- Pictures /illustrations play a very important role in EVS learning as these support the written material. Picture readings/visual based activities should be encouraged which would not only provide joy but also pose a challenge to children.
- Activities and questions play an important role as these provide opportunities for children to express themselves. Thus, activities/questions should not be used only for assessing children but also to develop skills such as creative expression, observation, classification, explanation, etc. in children.
- Each child learns at his /her own pace. The challenge before the teacher is to handle multilevel groups so as to address the needs of children including the differently challenged group of children. Teachers should design activities for these children in such a manner so that they can be engaged meaningfully while doing activities with their peer group.
- Assessment for learning (formative assessment), should be used as an inbuilt part of the teaching learning process so as to identify and address learning gaps in a timely manner.
 Thus, formative assessment should not be used for reporting progress but for diagnostic purpose to improve children's learning and to develop their potential.
- The real purpose of assessment of learning (summative assessment) is not to compare the
 progress of children but to track the progress of each child regularly. This assessment should
 be done periodically by using a variety of modes (not restricted to the written mode only).
- The teacher should maintain a portfolio of each child and this document should be used as an
 'assessment tool' to know the progress of each child over a period of time. The portfolio should
 include the work done by the child in a variety of situations, covering various aspects of the

child's behaviour. An e-portfolio can be maintained by teachers to reduce the task of recording work

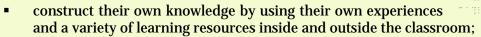
- Teachers must understand that learning is a mutual process. Children learn from each other and a teacher also learns from children, particularly to understand their needs.
- EVS learning is also concerned with the inculcation of important values/ attitudes and appreciation. It fosters an appreciation of the interrelationship between all living organisms and their environments and encourages children to become active agents in the conservation of the environment.
- EVS learning cultivates a respect for cultural diversity and sensitizes children regarding the minorities and people with special needs. Prejudices and discrimination are challenged, while respect and mutual understanding are promoted.

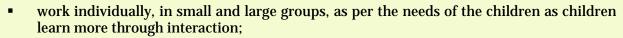


What should an EVS classroom look like?

An EVS classroom should be a child centered and happy classroom where children get opportunities to:

- observe, explore, ask question, do activities, share experiences during the learning process;
- conduct a variety of activities ranging from cognitive (head), affective (heart/emotions) and conative (hands/manipulative);





- reflect on their own work and also on the work of the peer group/ others' work;
- learn to appreciate others' work and learn to respect others' point of view.

Flexible seating, games, puzzles, displays, artefacts, films, posters, charts, costumes, puppets, etc. should form a part of an EVS classroom.





Activity-3

Write any two salient features of EVS learning which are different from language learning.

4. Exemplars in EVS

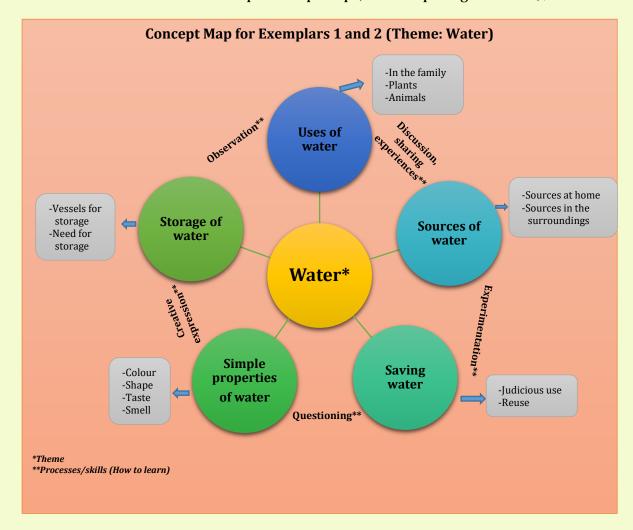
4.1 Why do we need exemplars?

The underlying idea for exemplars is to:

- enable practitioners to translate the curriculum into practice in the classroom;
- help teachers understand the different components of the teaching-learning processes in a sequential manner;
- understand how to translate learning outcomes of the selected concepts in the classroom context.

4.2 How do we plan the Teaching-Learning Process in EVS?

- Select a theme/lesson:
- Brainstorm for ideas to develop a concept map (one example is given below);



- Select learning outcomes from the curriculum and write key learning points of identified concepts;
- Select activities and identify an appropriate pedagogical process to develop concepts/skills;
- Select relevant and appropriate (locally available) learning resource material.

4.3 Some essentials for EVS classroom transaction:

The EVS curriculum is thematic in nature; therefore, the content of EVS needs to be drawn from the child's life experiences. To make the EVS learning more experiential, the teaching-learning strategies need to:

- be contextual and related to real-life experience.
- be age and developmentally appropriate and diverse.
- be designed so that all the senses (touch, feel, taste, smell, sight, auditory) are involved.
- encourage participation of all children (participatory).
- provide opportunities for hands-on-activities for all children.
- provide opportunities for sharing of experiences/ideas (rather than the correct answer) and reflection.
- use environmental objects and 'environment' as learning resource.
- provide freedom to children to express themselves.
- be designed so that assessment *for* learning and assessment *as* learning are an inbuilt part of the classroom transaction.

In addition, the teacher needs to be a patient listener and giver.





4.3 Exemplar 1

Class I

Theme: Water

Key Concept: Uses of water

Learning Outcomes:

Children will be able to:

- share personal experiences related to use of water;
- identify and give examples of activities done with and without water;
- draw a picture of an activity done with or without water;
- write in a sequence the activities done using water in a day from morning to night;
- classify activities according to less and more use of water;
- group the activities based on the use of water at home and in the surroundings.

Classroom Transaction:

	Pedagogical Processes		
Learning Points:	Strategies	Classroom Interaction	
Activities done with water and without water	Brainstorming and discussion	While taking up any new theme, brainstorming and discussion may be initiated on that theme, to know the initial learning level of children. This process would help the teacher to develop a theme/concept map.	
• Uses of water at home and in the surroundings		Introduce the concept of this theme by having a discussion and asking the children a question like:	
		What did you do yesterday from morning to night e.g. eating breakfast, sleeping,? Note their responses on the blackboard.	
		Now ask children to identify activities that were common to all children out of the above mentioned activities.	
		The children will respond by naming the common activities they did from morning to evening.	
		You may then ask, the difference between sleeping and bathing; playing and brushing activities.	
		 The children's response would be: For sleeping we do not use water whereas for bathing we use water. For brushing we use water but not for playing. You can now display a variety of items such as: a glass of water, a glass of juice, kneaded flour, wet clay, a water painting, a water spray. 	

Learning Points:	Strategies	Pedagogical Processes Classroom Interaction
		You can also display on the display board a variety of pictures depicting activities done with and without water.
	Observe and identify	Give an opportunity to the children to observe and discuss about the displayed items and pictures. Children will identify activities done with the use of water and otherwise.
	Drawing skill	Ask the children to draw a picture of an activity that they did using water and without water. Now ask the children to share their work with their peers.
	Estimation (Cross Curricular linkage)	 Ask the children which activity will require more water? a. Brushing teeth or taking a bath b. Painting a picture or painting a room c. Filling a bucket or filling a tank d. Watering a plant or washing a car Arrange these activities on the basis of consumption of water (high to low).
	As	sessment for Learning
	 This can be done by giving children worksheets, drawing a colouring activities with and without the use of water. Ask children to think of activities they did the day before a list 3 activities that they did with water and three withowater. Ask children to draw a picture of any one activity that they list. 	
	to do, which in	volves use of water and one without water.

Learning Points:

Strategies

Group activity

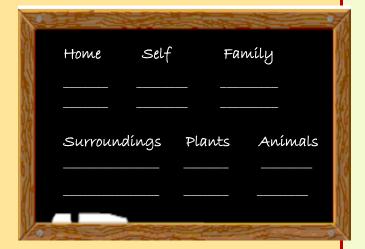
For the Teacher:
You can make your own
worksheet based on the
learning outcomes related
to the concepts.

Pedagogical Processes

Classroom Interaction

Ask children to narrate their personal experiences about how they and their family members use water e.g. for cooking, cleaning, doing laundry, bathing, etc. They can also describe their experiences about the use of water observed by them during their journey from home to school e.g., plants being watered, animals in water, etc.

Now children can be asked to classify the activities of use of water at home and in the surroundings. You can note their observations on the blackboard as mentioned below:



Individual activity (seat work)

After this activity, a discussion can be initiated.

Ask all the children to note down the activities they do using water from morning to night. Let them write these in a sequence.

Let the children share their observations in small groups. Ask them to find out the similarities and differences in the sequence. You can ask the children to depict their findings through illustrations.

Assessment for Learning

Develop worksheets for children with about 8 black and white pictures (outlines only) depicting activities with and without use of water e.g., a person cooking, a person sleeping, a person taking a shower, a person sweeping with a broom or dusting, a person drinking tea, a person kneading flour / cooking or a person washing utensils.

Assessment AS Learning

This can be done by involving children in:

- Reflecting on one's own work/self assessment.
- Assessing peers such as reflection of children on each other's work.

4.4 Exemplar 2

Class I

Theme: Water

Key Concepts: Need for judicious use of water

Reuse of water in the family

Learning Outcomes:

Children will be able to:

develop awareness regarding the need to save water;

identify activities where wastage of water can be reduced, both at home and in school;

suggest and appreciate some ways of reusing water in the family/school;

appreciate the reuse of water at home and at school.

Classroom Transaction:

Learning Points	Strategies	Pedagogical Processes Classroom Interaction
 Awareness to reuse water Need and ways to save water at home and at school 	Observation	While introducing the concept, use children's prior learning (uses of water) and ask them to observe the pictures on the display board related to activities done using water and those done without water, and share with the class. > What is going on in the pictures?
	Group Discussion	 Initiate a discussion in small groups on the pictures where the use of water is more and whether it can be reduced / minimised. The children will respond in varied ways, e.g., We can brush our teeth with half bottle of water rather than full bottle of water. We can save water by taking a bath with a bucket rather than using the shower. Encourage children to reflect and respond freely.
	Narrative	Now encourage children to cite related examples where wastage of water can be reduced in the class. Expected responses may be: We can reduce usage of water when we do our paintings or take only as much water as we need to drink. Tell the children this story on the reuse of water and let them think about it.
		Narrating Story Rupa is little girl like you. She lives in one of the villages in the desert area. They get water supply only two days in a week. Look at ways in which Rupa can reuse the water to overcome its scarcity.

	<u> </u>	n i ·	L D	
Learning Points	G	Pedagogica		
Learning Points	Strategies		Classroom In	iteraction
		D	Pictures	
		Rupa sitting on	Rupa uses	Uses the water
		the charpoy and	the tub of	to mop the
		taking a bath with	water to	floor and wash
		a tub below to	wash	the drain
		hold water	clothes	
		 Children will reflect variety of reflection A child may say in our city so we Another child may say in a desert so we water. A third child may dirty water? Some children mand save water. 	s on the story, that, "We have don't need to hay say that, "E don't need to hay add, "Why say add, "Why say appreciate	e.g. we plenty of water reuse". Since we don't live save or reuse should we use e the need to reuse
	Small Project	songs, related to	saving of wat m bring these to the to enjoy and the their own sto	ories and poems on
Assessment for Learning This can be done through various ways e.g. worksheets, classwork,				

This can be done through various ways e.g. worksheets, classwork, oral discussions.

- Ask the children to identify an activity where water can be reused at home and depict it through pictures.
- Ask the children to suggest any two ways where water can be reused in school.
- Children can talk to their grandparents/elders to find out if there was a need to reuse water when they were small and why the need to do so now. They can share their findings in class.

Assessment AS Learning

This can be done by involving children in:

- Reflecting on one's own work/self assessment done on the activities related to water such as identifying ways to save water, reuse of water.
- Assessing peers on the activities done on worksheets, colouring, drawing activities and give feedback to peer in the presence of teacher.

Activity Bag



Materials needed: a small cardboard piece, a flexible drinking straw, a drinking glass, a glass bowl, water in a jug.

(a) Put some water in the glass and place the Put some water in the glass and place the cardboard on top. Hold the glass to press down on the cardboard. Hold the cardboard firmly in place and quickly turn the glass upside down. Now take your hand away. For a little while, the water will not spill but don't wait too (b) Fill a bowl with water till it is half full and place the glass upside down into the bowl. The water level will be same inside and outside the glass.

Ask children to enact in small groups, a day when there was no water supply in the house

Write down any 2 activities in which water is being used. Which activity requires more than a bucket and which will require less than a bucket?

Ask the children to take a dropper, a spoon, a cup, a bowl, a mug and a small bucket. Ask them to estimate how many of each will fill the other. Let them first guess and then actually measure to see how or where they went wrong. This will help them to see how each drop of water matters.

Ask the children to make their own word grid using water words such as, save, conserve, tap, lake, rain, river, pond, bathe, etc. They can ask their friends to find these words in the word grid and circle them. They can also frame fill in (a) We use water for..... the blanks like:-

from.....

(b) We get water for drinking

With the help of an adult identify any 5 dishes made using water and 5 without the use of water.

Circle only those dishes which are cooked using Ask an adult and write a recipe.

Let's make a rain gauge to measure rainfall

You will need: Straight sided glass jar, a funnel, a large tin can, a small spade, tape and waterproof pen. Make a scale on the side of the jar and tape

them together. The tip of the funnel should not be much bigger than the bottom of the jar. Set the jar in the can. Bury the can nearly up to its rim to keep the gauge from overturning in stormy weather. Make sure the rain can reach the gauge from all sides. When it rains, collect water in the jar. Decide how long you will wait before checking your rain gauge. When the time is up look at the level of the water in the jar to see how much rain fell in that period.

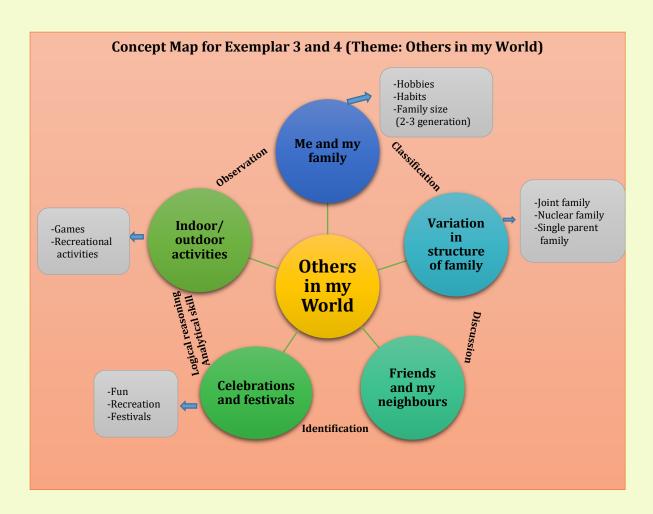
Ask the children to make paper boats and float them in water

Ask the children to set up a bird bath for birds to come and bathe and drink water too!

4.5 Exemplar 3

Class II

Theme: Others in my World



Key Concepts:

- Togetherness through sharing, having fun, recreational events, festivals with family and relatives
- Celebration of important events /days/festivals

Learning Outcomes:

Children will be able to:

- observe and share personal experiences related to fun and celebrations;
- distinguish between events/ days /festivals celebrated at home, at school and in the neighbourhood;
- draw a picture of any important day/festival/celebration/fun activity;
- describe verbally and in writing how festivals are celebrated at home and in school;
- discuss ways to avoid crackers, loud music and chemical colours during festivals.

Classroom Transaction:

		Padagagias Processes
Learning Points	Strategies	Pedagogical Processes Classroom Interaction
 Recreational events, festivals in the family Importance of festivals and their celebrations 	Brainstorming Observation	Prior to the concepts being introduced, ask the children to bring to class, photographs of them having fun e.g. going to a picnic, fair or zoo with friends and family or celebrating any day/event at home or in school, be it a naming ceremony, birthday, wedding, religious/ national festival. On the day you introduce this theme with its related concepts, ask the children to share their
	Class discussion	photographs with each other. After they have had a look at each other's photographs, initiate a discussion on what the photographs are about.
		Discussion points could be:
		 What are the kinds of activities shown in the pictures? Which activities do you enjoy the most? Why do you enjoy most of the activities? Which are the events being celebrated in the picture?
		Write the responses of the children on the blackboard. These would be mostly related to celebrations of important days, festivals and fun filled events.
		 Thereafter, ask the children: Which of these events do you celebrate with: (i) your family (ii) to your friends (iii) your relatives or (iv) everyone? Which of these events do you celebrate at (i) home and (ii) school? Which of these events do you celebrate in your neighbourhood?
		Note down their responses on the blackboard/smartboard. Then ask children to identify which of these are (i) important days and (ii) festivals.
		 Let them name and talk about some of them. Show them films, pictures, drawings and charts of different festivals- local, regional

Leguring Deints		Pedagogical Processes
Learning Points	Strategies	Classroom Interaction
		(harvest), national like Republic and Independence Day and talk about them.
	Ask children to colle and paste these in th	essment for Learning (Activity) ct pictures of local, regional and national festivals heir notebook. If they can't find pictures, they can he draw pictures of their own. he on children's work, feedback may be given.
	Drawing Colouring Creative Writing	 Ask them to draw similarities and differences between important days and festivals e.g. between Diwali and their Birthday or between Republic Day and Christmas. Show them our national flag. Give them a black and white outline of the national flag and ask them to colour it. They can also draw a picture of their favourite festival and write a few lines on it.
	Quiz	Assessment for Learning (Activity) Hold a class quiz on festivals. You can ask simple questions like: 1. Which festival is celebrated in August? 2. Which festival is celebrated with lots of lights? 3. On which festival do we decorate a tree? 4. On which festival do we eat sewain? 5. On which festival do we eat plum cakes? 6. Which festival is played with colours? 7. On which festivals do we sing the national anthem?
		 8. Which festival comes in the month of January? 9. Which festival is a spring festival? 10. Which festival is celebrated on 2nd October?
	on festivals and	Assessment AS Learning In some opportunities to share their work done also ask them to reflect on each other's work. In to frame questions/puzzles and conduct a quiz rup activity).

I samina Dainta	Pedagogical Processes	
Learning Points	Strategies	Classroom Interaction
	Small Group Project	Divide the class into small groups and let each group work on a local/regional/national festival. They can make a presentation or a poster or a play on the festival. Information related to clothes worn, food eaten, customs followed, decorations done can be included. Display their work on the board for one week in the class.
	Interpretation and analysis of data (whole class activity) (Cross – Curricular)	Write all the names of the months on a drawing sheet. Get the children to tick the month in which they were born. From the numbers obtained get the children to pose questions to each other.
		January February March April May June July August
		 How many birthdays in summer? How many birthdays in winter? Children can be asked to represent the information in a simple bar chart.
		January February March April May June July

Learning Points	Strategies	Pedagogical Processes Classroom Interaction
	Whole Class Discussion	 Make children sit in a circle and initiate discussion on the need to ban crackers, low music and chemical colours during festivals. Talk about the health hazards that they carcause. Thereafter pose questions like: What can we use in place of chemical water colours to play Holi? Why should crackers be banned? How can we celebrate Diwali without the us of crackers? Why should we not use loud speakers during festivals? Tell the children about children working it factories producing fireworks. Ask the children to collect and bring to class newspaper clippings/pictures related to pollution caused by crackers and colours. They must tak the help of an adult to get these items. Read thes out to them and then put them up on the display board.
	like sew kite list. abo • Ask fest thes • Let lege fest (wi	Assessment for Learning e the children a list of festival /celebration words decorations, flowers, lights, diyas, gifts, cakes, vain, langar, sweets, candles, clothes, bands, flags, es etc. Ask the children to add more words to the Thereafter, ask them to write a small description ut the festival they like best using these words. The children to draw pictures of their favourite ival or draw designs for rangolis and colour see. Display these on the class display board. The children collect with the help of an adult ends, stories, poems and songs related to the ivals talked about. They can search the Internet the the support of elders) for this purpose. Let

bursting crackers and burning fireworks (a) without

(c) with dogs around, etc. Initiate a discussion and let

situations where fireworks can cause health hazards.

the supervision of an adult (b) in a closed area

Let the children role play/illustrate to show

children reflect on the issues.

4.6 Exemplar 4

Class II

Theme: Others in my World

Key Concepts:

- Family structure-Immediate and extended family
- Family tree showing distant relations- upto 3 generations

Learning Outcomes:

Children will be able to:

- identify different family structures;
- differentiate different family structures;
- compare and contrast between close and distant relations;
- cite examples of both kinds of relatives;
- draw a family tree of one's own family / extended family;
- interpret a given family tree;
- respect and appreciate family diversity in the society.

Classroom Transaction:

I coming points		Pedagogical Processes
Learning points	Strategies	Classroom Interaction
 Family structure Family tree showing relations upto two/three generations 	Discussion	Ask the children to bring to class photographs of their families. You can also ask the children to draw a picture of their family. Discussion may be initiated on the family picture.
	Small group activity	 The children can form small groups and do the following work: observe the pictures/photographs of their own and their peers' families share information about each other's family e.g. name, age, description of person, etc. discuss how they call different family members in their own mother tongue (e.g. baba, bapu, papa)
	Observation	Ask the children to compare their families to see the similarities and differences in their family structure. After completing their exercise, you will write on the blackboard findings of the groups.

Learning poin	ts	Strategies	Pedagogical Processes Classroom Interaction
	structure fact that children	For the Teacher: liberating on family s be sensitive to the the sentiments of from single parent ive families are not hurt.	Initiate a discussion on different family structures: Nuclear family Single parent family Joint family Extended family Adoptive family Initiate a discussion on the similarities and differences of different kinds of families. While discussing the diversity in family structure children will develop respect and appreciation for each other's family.
		Field Visit	 Activity: Ask the children to visit any three families in their neighbourhood with an adult and find out: What kind of family structure it is? How the children in the family address their elders for example in a Bengali family the child will call her/his elder brother "Dada" and grandfather "Dadu" Thereafter children share their findings/experiences with their classmates.
		Role Play	Ask the children to role play the following: mother, father, brother, sister, grandparents, aunts, uncles through mime and verbally in two groups. One group will mime while the other group will guess and when the other group performs they will appreciate their expressions and gestures.
		Picture reading	After the role play you can display pictures of different kinds of families. Ask the children to observe these pictures carefully and find out the similarities and differences and share these with their classmates.

Learning points	Strategies	Pedagogical Processes Classroom Interaction
	Drawing relationships	 Ask the children to draw a family tree showing their family members. Let the children use their imagination and draw whatever they visualise. Let the children share their work in pairs. They can reflect on their own work and that of their peer. Thereafter, draw two family trees on the blackboard. One depicting a nuclear family and the other a joint family. Let the children replicate and draw their own.
		Assessment for Learning
	Study the family with imagination	tree carefully and create your own family tree n showing:
	Family	tree up to 2 generations / 3 generations
	Provide names t	o the family members.

Assessment AS Learning

Ask the children to draw a picture of their immediate family and one of their extended family and label these.

Activity Bag



Ask the children to design greetings cards for their family and friends for Mother's Day, Festivals, Birthdays and Wedding Anniversaries.

Tell the children, "It is your Mother's birthday. You are expecting some friends and relations. How will you organize it? Write down every detail starting from the guest list to the menu, games and beyond.'

Ask the children to make their own word grid using family words such as mother, father, aunt, uncle, sister, brother, granny, grandpa etc. They can ask their friends to find these words in the word grid and circle them.

Read to the children the following family stories: (a) Red Riding Hood

- (b) Goldilocks and the three
- (c) Families are different by Nina Pellegrini (d) A chair for my mother

(e) Mama do you love me?

Make the children play the game, "I sent a letter to my mother".

Ask the children to make a family circle:

Ask the children to make a face in the centre of a sheet. This face represents the child. Around it let the child make a circle with as many in number of faces showing the brothers, sisters and cousins. After that comes another circle showing parents, uncles and aunts. Then they draw a last circle showing grandparents, granduncles and grandaunts and so on. It will be like the solar system with the child as the sun.

Let the children sing the song, "My grandfather's clock" with actions.

5 Assessment of Learning and Reflection

Assessment of learning needs to be done keeping in view the criteria of assessment such as learning outcomes, related key concepts of a theme. This should be done after completion of a theme. This can be undertaken in multiple ways and should include oral, written, group work, individual work, picture reading, project work, model making, games, puzzle etc. These ways could be:

- 1. Picture Reading
- 2. Making a list
- 3. Fill in the blanks
- 4. Data analysis/Reasoning
- 5. Picture puzzle
- 6. Circle the odd one out
- 7. True and false
- 8. Choose the correct option
- 9. Sequencing
- 10. Word Grid
- 11. Creative description
- 12. Match the Columns
- 13. Art work/Creative expression
- 14. Analogy
- 15. Inference making questions
- 16. Short answer questions

Such assessment must be kept in the portfolio as this will be a criteria of quarterly/periodic assessment of a child's progress and help in reporting.

Some of the examples related to the above assessment are given below:

1. Picture Reading



Ask the children to look at the picture and an	nswer tl	he following questions:
(1) What do you see in the picture?		
(2) Why does the house have a sloping root	f?	
(3) Where is the rain water going from the	roof?_	
(4) Why is the rain water being collected?		
This assessment can be o	done .	individually or in group
2. Making a list		
Your birthday is next week. Make a list of all with (a) guest list (b) sending out invitations		ings you need to do for the event starting
(a)		(b)
(c)		(d)
(e)	-	(f)
(g)		(h)
(i)		(j)
3. Fill in the blanks Pick out the words from the pot that re	elate t	o 'use of water' and fill in the blanks
Tick out the words from the pot that is	ciate t	o use of water and in in the blanks.
	I.	
Drinking	II.	
Cleaning Sleeping Washing Dancing	III.	
	IV.	
Cooking Playing	V.	
Polishing Brushing		
Drushing	VI.	

4. Reasoning

(A)	Name	the ty	pe of :	family 1	they be	elong to:

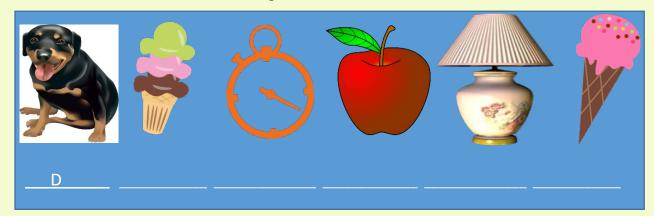
- (a) Amyra lives with her mother and brother _____
- (b) Sam lives with his father, mother and sister _____
- (c) Ali lives with his parents, grandparents, aunt and uncle_____
- (d) Simi lives with her adoptive parents _____

(B)	Write the names of	vour famil	v members and	your relationship	with them
١	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	WILL THE HUILES OF	your rainin	y michibers and	your relationship	

Names	Relationship

5. Picture Puzzle

(A) Take the first letter from each picture name to find the name of a festival.



Create your own picture puzzle.

(B) Crossword puzzle

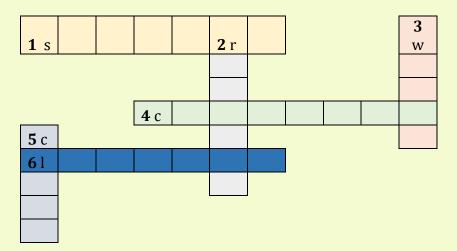
Help save water

ACROSS

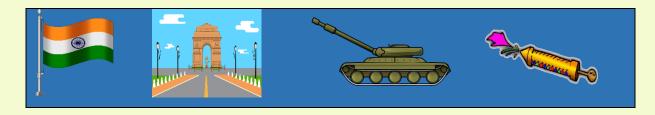
- 1. Don't take long ______.
- 4. Remember to _____ water.
- 6. Ask someone to fix _____ taps.

DOWN

- 2.Don't keep water _____ when not using it.
- 3. Plants and animals need ______ to swim.
- 5._____ taps tightly to prevent water waste.



6. Circle the odd one out







7. True and False

Write T for True or F for False in the box against the statements given below:

- a) My Mother's brother is my uncle.
- b) My father's mother is my aunt.
- c) My mother's mother is my grandmother.
- d) My brother's aunt is my aunt.
- e) My aunt's son is my cousin



8. Choose the correct option

Choose the correct word given in brackets and tick it:

- a) Diwali is the festival of (colours / lights).
- b) We can save water by (throwing / reusing) it.
- c) We use (more/less) water to brush our teeth than to take a bath.
- d) A nuclear family is (smaller/bigger) than a joint family.
- e) (Crackers / Diyas) can cause health related problems.

9. Sequencing

Look at a calendar. List the sequence in which these festivals appear from January to December.

Christmas, Republic Day, Dussera, Eid, Easter, Gandhi Jayanti, Diwali, Holi, Guru Nanak Jayanti, Buddha Jayanti

10. Word Grid

In the word grid find 5 water related words and circle them. One has been done for you.

b	W	a	S	h	i	n	g	S	m
r	X	l	m	0	q	b	p	n	0
u	q	r	d	g	n	v	S	a	p
s	С	0	0	k	i	n	g	v	p
h	a	m	С	e	f	t	u	i	i
i	b	a	t	h	i	n	g	n	n
n	t	i	n	h	r	S	p	g	g
g	s	w	i	m	m	i	n	g	d
u	v	w	Z	w	X	y	m	l	Z

11. Creative description

- (A) Create / Write a short poem or story on the topic 'My Family' and share the same in class.
- (B) Write your own poem about water and read it to your class.

Example:

Drip, Drip, Drip Is not a good sound, If you let it go on, Soon no water will be found.

Don't take long showers, Don't wash your car, The water we have, Won't go very far.

12. Match the Columns

	EID
	HOLI
The state of the s	CHRISTMAS
	DIWALI

13

. Art Work/Creative expression	
Draw pictures of any two activities whi	ch you would like to do with water.
Activity 1	Activity 2
Draw a picture showing any festival pattern.	celebrated at home or draw a rangoli

14. Analogy

(i) Grandfather: Father:: Grandmother: _____

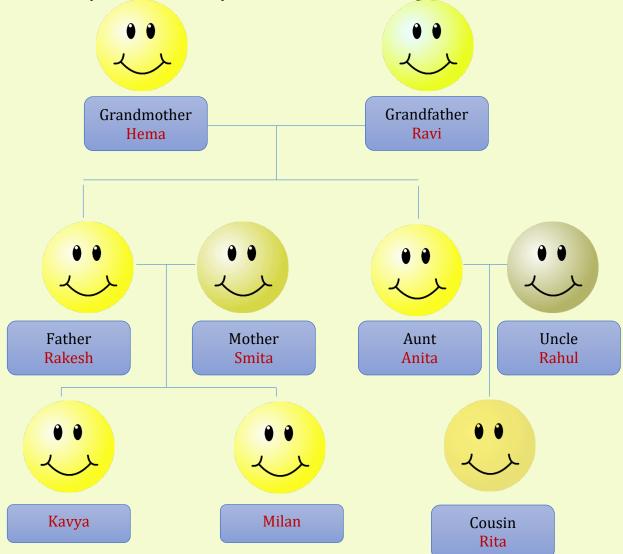
(ii) Holi: Colour: : Diwali: _____

(iii) Independence Day: Red Fort: : Republic Day:

(iv) Combing: Comb: : Swimming:

15. Inference making questions

(a) Look at Kavya and Milan's family tree and answer the following questions.



- 1. Who are Rita's parents?
- 2. Who is Kavya's cousin?
- 3. Do Rita and Milan have the same grandparents?
- 4. Who is Rakesh's sister?
- 5. How many grandchildren do Hema and Ravi have?
- 6. Who is Milan's aunt?
- 7. How many people are there in Kavya's family?
- 8. What is Kavya's mother's name?
- (b) Study the family tree and create your own going back at least three generations.

16. Short answer questions

- (a) There are just two buckets of water in your house. How will you use this water for different activities in a full day.
- (b) There is a scarcity of water. Which dishes can you cook with minimum use of water?

6 Recording and reporting in EVS learning

i) Anecdotal Records

Anecdotal Records refers to written descriptions of a child's progress that a teacher keeps on a day-to-day basis. It provides observational narrative records of significant incidents in a child's life. Anecdotes are used to record specific observations of student's behaviour, skills, attitudes as they are related to the outcomes in the studies. Such records provide cumulative information on children's learning and direction for further instruction for improvement. These should be brief, focussed and objectively written.

ii) Why Anecdotes

- Provide information on children's development over a period of time
- Capture observations that might be over sighted
- Provide ongoing documentation of learning, which may be shared with the children, teachers and parents

iii) Exemplar of Anecdotes Records Assessment Form

Child	's Name E	Evalı	ıator's Name
1.	Dates	2.	Dates
3.	Dates	4.	Dates
5.	Dates	6.	Dates
Assessn	Assessment Statement (Coding)		

·	
Recommendation of next step:	

Portfolio

A Portfolio is a collection of a child's work over a period of time. It could be kept on a regular basis and maintained separately for each child. For easy maintenance, you can develop an e-portfolio of each child so that the parents/ elders/ others can also see them regularly to know the progress of their child.



Pocket	

Concrete Portfolio

This is one of the most important tools of assessment of the child's progress. The Portfolio should not contain only the best work but all kinds of work done by the child over a period of time to show the growth and progress over the entire school year. This portfolio should be referred to while reporting the child's progress on a quarterly/ half yearly basis. This portfolio also helps parents/ elders/ other teachers to know more about the child which could not be explored/ identified by them.

In the Portfolio, the following material may be kept:

Written work – worksheets, creative writing, test papers, reports made by children, diary, paragraphs written by children

Art/ Craft Work: paper folding, cutting, origami, children's drawings

Collection Work: leaves/ flowers on paper sheets

Poem/Song: Poems written/ collection

Songs written/collection



Activity- 4

- How do you record children's progress in EVS?
- What makes EVS recording useful for children? Write five suggestions.

7 Essential tips for practitioners

Some essentials for curriculum implementation in classrooms and beyond

- For EVS transactions the teacher must be equipped with an understanding of the principles of pedagogical processes such as:
 - Easy to difficult
 - Simple to complex
 - Known to unknown
 - Whole to part
 - Child constructs her/his own knowledge
 - Play /activities as the basis/strategy for learning
 - Children's discussion/sharing experiences are also learning resource other than concrete material
 - Approach of EVS must be immediate to distant in selection of context/skills
- The themes which have been given in the curriculum are not exhaustive. You can add/select other themes as per the need and context of the children. The point here is to understand that the curriculum should not create any kind of burden on children. 'Age appropriateness' is the key to this process.
- Theme based approach has been suggested in the EVS learning. It means these must be dealt in totality rather than in a piece meal manner. For example, if the theme 'Water' is initiated in the month of July, the other chapters related to the theme 'Water' in other subjects need to be done parallelly When a theme is started in the class, the classroom must be equipped keeping in view the theme. For example, all the relevant material (concrete or visual) should be displayed.
- Before starting the theme, a broad 'planning' for transaction is necessary. For example, you must plan keeping in view the following parameters:
 - ✓ What are the key concepts?
 - ✓ What strategies need to be used?
 - ✓ What kind of the theme map should be developed to put concepts in integration?
 - ✓ What would be the learning outcomes related to the concepts?
 - ✓ What kind of learning resources would be required?
 - ✓ What kind of time frame is needed to achieve the learning outcomes?

While transacting the theme, the selection of pedagogy is crucial. Always follow age appropriate strategies so that all children can be involved.

Points to remember:

- ✓ Children's learning experience should be used to create environment for brainstorming / discussion.
- ✓ Allow children to talk/discuss while doing activities.
- ✓ Be flexible in your approach. If any strategy does not work, switch to the next one.
- ✓ Be practical in your planning.
- ✓ Ask questions from children during interaction and provide opportunities for children to raise questions. Try to encourage them to ask, explore, discuss in the class.
- ✓ Questioning not only develops confidence in children but also develops analytical and critical thinking.

Always Remember

All children are not in the habit of asking questions. Some children might not be good in framing questions or their questions might be irrelevant.

Don't let other children laugh or comment on such situations as this would discourage them from asking questions and damage their confidence level.

The successful implementation of classroom transaction is that

which involves all children in the classroom activities. However, it does not mean that all children should be kept engaged in similar work. 'Heterogeneity' is inevitable (you cannot have homogeneous level of learning), and in order to give attention to all children, multilevel grouping is required. Multilevel grouping is that setting which engages children of different learning levels. This grouping may include 5-6 children in small group settings.

This would help you in many ways:

- Provide space for children to learn at their own pace.
- Pair learning and group learning would be encouraged.
- You (teacher) would get time to monitor groups rather than pay attention to every child. This would facilitate self-learning and self-assessment.
- Would also help in scaffolding/feedback from elders.
- Always remember that in early grades (up to class II/III) emphasis should be laid on the processes of learning i.e. development. These contents/concepts are the means not the end and these may be as an exemplar and context specific.
- Transactional process in early grades is based on children's learning experiences therefore the transactional process in these grades is not structured and mainly follows group activities and manipulative hands on exercises. The pedagogy in these grades must involve more than two senses (eyes, ear, and stimuli through hands).
- Assessment during a teaching learning process (assessment for learning) is an essential and inbuilt component of the transactional process. This means that this assessment needs to be used both as a developmental and diagnostic strategy for learning. While developing any concept, you need to follow some strategies such as organizing discussions, role play, experimentation, picture reading, etc. After employing these strategies, you would like to know whether they have understood or not, so during this process you may ask questions, give worksheets or give some assignments. All these would be check points to know the level of learning. Such assessment helps you in many ways:

 - To identify gaps in learning
 To provide inputs/intervention timely
 - To modify your teaching learning plan/strategies
 To identify strength areas of children

 - To help in the assessment of learning
 - To record procedures in EVS
 - To make checklist
 - To use anecdotal records
 - To know how to maintain a portfolio
 - To know what should be reported in a report card
 - To reflect on your teaching.



Activity- 5

- What are the essentials of teaching learning EVS given in this module applicable to your school context?
- Which of these are not implementable and why?

Summing Up

- The EVS curriculum follows a thematic approach rather than a disciplinary approach. It focuses on the natural, social and cultural environment in an integrated manner. It is a context based, age appropriate and child friendly curriculum.
- The main objectives of EVS teaching learning are to enable children to learn about the environment, through the environment and for the environment.
- Children learn in a variety of ways and at their own pace. They learn best when learning is hands on and linked to real life situations.
- An EVS classroom should reflect the EVS teaching learning pedagogy.
- In order to understand curriculum transaction in EVS, exemplars are given which show the linkage between key concepts, learning outcomes, learning resources and classroom interactions.
- Recording and reporting of progress in EVS can be done through anecdotal records, portfolios and teacher's diaries.