

Department of Educational Planning and Training



# Teacher's Guide General Studies (Grade 2)





March 2004

International Development Center of Japan (IDCJ)

SCS
JR
04-009





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# How to use this Teacher's Guide

#### **Targets**

This Guide is created mainly for primary school teachers to teach General Studies. To teach the contents in General Studies with joy and let children understand them more deeply, primary teacher can use this Teacher's Guide with many ideas and information necessary to teach General Studies from the Child-Centered Approach (CCA).

Please keep in mind that the target learners of the General Studies are children of KG. They are at the most sensitive and important period in the basic education. Therefore the teachers are expected to formulate class lessons which constantly stimulate the interests and curiosity of children with many attractive methods and motivations.

The studies through "Playing for fun" is very important KG children and creating an arena in the learning process for them to play for fun freely and to enjoy themselves is essential. The children will acquire what is targeted through CCA with all their mind and body in such activities of fun. In order to do so, activities and games for fun of various kinds should be introduced in the General Study. This Guide can provide various ideas and information necessary to teach General Studies from CCA point of view. In this sense, this can be useful for education concerned people such as trainees and trainers in the Education Colleges

#### Contents

This Teacher's Guide includes the following contents:

Ŧ	What in	CCA 2	
1.	What is	UUA ?	

- II. **Designing CCA lessons**
- III. Assessment for CCA
- IV. General Studies - Note for Teachers
- V. **Topics in General Studies**
- VI. Structure of the topic

Each topic of General Studies consists of the following structure:

#### Structure of the Topic

- 1. Key Concept
- General Objectives
  Specific Objectives 2. Learning Objectives

- 3. Activities involved
- Teaching/Learning Materials 4.
- 5. Before Getting Started (Background information for teachers)

- 6. Lesson Planner
- 7. Teaching/Learning Procedure
- 8. Assessment
- 9. Reference

#### For effective use of this Teacher's Guide

This Teacher's Guide adopts an index style. You can search for topics quickly without reading through everything. Basically you can pick up only necessary issues to get information and to prepare the lessons. However, it is highly recommended to take time to read through this Teacher's Guide, as this Teacher's Guide introduces a new concept of the Child-Centered Approach (CCA) for Myanmar's basic education. Fully understanding this concept requires time and serious consideration.

First of all, it is significantly important for teachers who are unfamiliar with the idea of CCA to read carefully the sections of **I. What is CCA**? and **II. Designing CCA lessons**. Even for teachers who are familiar with CCA, it is highly recommended to read these sections, as they provide a concrete description of CCA lessons.

Assessment is one of the most important activities in education. Even now there is no perfect assessment method. There are various assessments used in the current educational institutions considering situations and conditions of learners and teachers The section of **III. Assessment for CCA** introduces the importance of CCA assessment.

The section of **IV. General Studies** – Note for Teachers provides the framework of General Studies at primary education in Myanmar. When teaching a particular topic and item everyday, you tend to forget why and for what purpose you are teaching. Without a solid view of the whole picture, it is impossible to provide a good lesson. If you have questions about "Why should you teach this?", it is suggested that you review this section and get the whole picture of what General Studies is.

In each chapter, there is full of ideas for conducting CCA lessons: Key Concept, Learning Objectives, Teaching/Learning Materials, Before Getting Started (Background information for teachers), Lesson Planner, Teaching/Learning Procedure, Assessment and Reference It is not compulsory to follow the ideas in this Teacher's Guide. They are only examples on how to conduct CCA lessons You can pick up necessary information randomly to use for the creation of your original lessons.

**Before Getting started (Background information for teachers)** can provide useful information and knowledge for the preparation of the each topic deeply and widely.

These background information described important background and brief objectives for the implementation of lessons. Teachers must read it carefully prior to the lesson planner.

Lesson Planner is an entire idea to teach one topic. In one lesson, there are several periods to teach Each period is not separated, but is directly related each other like a story. Teachers must understand the continuation of each period by reading the Lesson Planner.

**Each topic** include Specific Objectives, Teaching / Learning Materials, Teaching /Learning Procedure, and Assessment. Teaching / Learning Procedure is described in detail and teachers can follow this procedure to implement a CCA lesson However, this

is only an example. It is possible for some areas that these examples of lesson plan will not fit. Therefore, it is highly recommended for teachers to create your own lesson plans based on the examples.

**Reference** provides more additional and useful information for teachers. Teachers do not have to teach children this information in the class, but the information can make lesson more interesting if teachers know it. This information, therefore, is prepared to make unique ideas and interesting lessons. The more information, knowledge and skills a teacher has, the more lessons can be interesting.

#### Background information for the successful implementing of the Guidebook

The studies through "Playing for fun and Seeing is believing " is very important for KG children and creating an arena in the learning process for them to play for fun freely and to enjoy themselves is essential. The children will acquire what is targeted through CCA with all their mind and body in such activities of fun. In order to do so, activities and games for fun of various kinds should be introduced in the General Study through this guidebook. This guidebook will serve you for the source of cultivating the creative and thinking power. The essence of CCA lies in the children's understanding through their own senses, exercising their five organs fully, such as watching, listening, speaking and expressing (Writing, Reading, Drawing and etc.) aggressively. So the teachers are constantly expected to provide environment audio-visually interesting for children, creating and utilizing materials which make them feel enjoyable. The traditional plays and games of Myanmar should be included effectively. The cultural diversity of Myanmar provides different kinds of poetry, songs and tales in each area. The most appropriate poems, songs, games and expressions specific to the area should be given importance. At the same time songs and tales which are shared commonly all over Myanmar should also be introduced in good number for the sharing and unity of Myanmar For this purpose, the teachers should be able to understand the lesson plans described in the Guide not just theoretically but practically and concretely in depth. The classroom environment may not be always appropriate for carrying out CCA (Child Centered Approach) For example, some classrooms may not have dividing wall partition facility in the classroom, or necessary teaching and learning materials may not be available. In such situation, what is important are teachers' new ideas and inventions in creating necessary teaching materials based on the local resources and flexible methods depending on the environment, keeping the learning activities described in the Guidebook as the basis. When audio-visual materials and effective teaching materials are not available, it is important that the teachers produce pictures and picture storytelling themselves even with the limited picture quality and show them to children. Such attitude makes a difference.

And it is important to ask children questions constantly such as "What is that?", "Why is that?" at the time of evaluation. Such questions and doubts which suit the interests and curiosity of children from their essential point of views should be given for further enhancing them.

There are experiments and questions raised from children and groups in CCA. At the end of the lesson, therefore, the correct conclusion of such experiments should be told to the children. It is a right method to make children think themselves through experiments and make them to come to an conclusion through numerous trials and errors. However, it is also necessary for teachers to tell children which is the correct conclusion and why it is so clearly. Otherwise there is a danger that children may feel lost, not understanding what is the right conclusion.

When CCA is extensively practiced, children behave freely and aggressively. They may become more active and make a lot of questions. They may take the situation for granted and misunderstand that they could do anything as they wanted to. And teachers may have difficulty in managing the class. In such a case, teachers should observe the whole class situation well and try to control the psychology and desires of children in nurturing creative and thinking powers.

#### <u>Characteristics and New Viewpoints in the Guide Book of the General Studies for</u> <u>lower primary schools</u>

The preparation of the Teachers' Guide based on the Child-Centred Approach (CCA), which was carried out from 2001 to 2004, has been completed along with the training of the counterpart experts The actual lessons of the General Studies for KG, G1 and G2 that were conducted in December 2003 clearly show the significant improvement, achievement and discovery by the teachers themselves. Their teaching styles were already quite different from the conventional teaching methods prevailing in the schools in Myanmar.

This particular Teachers' Guide is different from those usually prepared by the writers who sit in their offices and simply send their manuscripts to the press, or those based merely on the discussions in the rooms. This Guide has been tested and revised based on the students' feedback over the period of 3 years. Because the process of preparing this Guide involved the training of curriculum developers and teachers who acted as counterparts at the same time, the Guide turned out to be a relevant and practical one for the schools in Myanmar. The memorizing and reciting repeatedly is the conventional teaching style in Myanmar widely practiced One of the disadvantages of this teaching/learning style includes that teachers and students simply go on memorizing and reciting even if they do not understand their meanings. Only one-way communication takes place in the classrooms from the teachers to the students, and there is very little or no attention on the part of teachers to be given on how to make the lessons easily or thoroughly understandable by the students. As a consequence, teaching aids were rarely used and the approaches based on children's needs and psychology and the teaching/learning methods allowing the students to experience, think, imagine and create did not exist. In view to improve the teaching/learning situation, the Child-Centred Approach (CCA) was introduced in the lessons in terms of learning objectives, motivations, content, activities, outcome and assessment. The followings are the major improvement for the General Studies lessons.

(1) Large part of the lessons for KG, G1 and G2 was given to make children themselves experience and to make them discover themselves through playing, based on children's essential qualities and psychology. It is reported that the rate of dropout from KG is very high in Myanmar Therefore it is very important to make the schools interesting and enjoyable for young children. For this purpose various methods and devises in teaching were included such as "Story-telling", "Reading Books Aloud to Children" and "Picture storytelling". Various elements from the Myanmar traditional culture such as Myanmar songs, poems and riddles were included, which helped to inspire the teachers and students for enjoyable teaching/learning.

(2) There were cases when the teachers teach lessons without understanding the purposes of certain lessons and their content. In order that they understand the purpose and the content of the lessons well enough and clearly, application in actual daily lives and examples using familiar objects in the respective locality were emphasized in this new Teachers' Guide. In this way, teachers as well as students can find the lessons familiar with themselves and can develop their interests further from their

everyday life experiences. Memorizing names and complex knowledge without understanding what they really are have been quite common in the country, so instead the relationships and meanings were made clearer so that they understand while they teach and learn.

(3) For making the lessons interesting and enjoyable, the effective teaching aids play important roles. However, there are hardly any or very few teaching aids prepared and used in most of the schools at present. Therefore in this Guide, variety of teaching aids and simple-to-make materials were introduced. Once the teachers see themselves that children are given a lot of stimulation and motivation for learning through the interesting teaching aids, the teachers would even try to make new teaching/learning aids of their own. Therefore methods of preparation and usage of low-cost but effective teaching aids are explained.

(4) Numerous illustrations are newly prepared for this Guide for the teachers to understand the content easily. The illustrations themselves have several kinds of styles depending on their purposes and functions, therefore, much attention was given to provide the most suitable illustrations for the specific lessons. The kinds of illustrations used in the Guide include, for example: illustrations of the birds' eye view through which the whole scene of different elements can be observed simultaneously; comical style to enjoy the stories, realistic and precise illustrations which needs accuracy in showing plants, animals, or science experiments The combination of these different kinds of illustrations can enhance the interests of the teachers and students, and they are one of the key elements for a good Teachers' Guide.

(5) In the General Studies, more emphasis was given for the students to develop their abilities through experiencing, becoming aware of, thinking, imagining and creating things in their actual lives, rather than simple transfer of knowledge and techniques alone. Teachers are expected to constantly ask the students question such as "what is it?", "why is it?" and "how is it?" In order to encourage children's curiosity and interests, the active two-way communication between the teachers and the students was given importance This was put into practice emphasizing the usage of five senses of children such as to see, to listen, to touch, to eat and to smell. The lessons are designed to promote actual observation, discovery, imagination, thinking, expressions by the children themselves and to collaborate each other to work in groups, thereby developing the children's thinking and voluntary capacities.

(6)Group learning activities were adopted frequently in the lesson plans so that the learning opportunities for each student are diversified. Students would be able to make their discoveries through individual approach as well as competing each other. It is often the case in the lessons in the plenary that the responses of the students tend to get monotonous. However, when each group is given the responsibility to carry out certain tasks, they can easily bring out ideas and discoveries of their own through competing each other. This is significant especially for a country like Myanmar with diversity of cultures The local characteristics of various regions in the country and their cultural diversity are taken into consideration in the Guide. The examples of activities or materials appear in the Guide are presented in such a way that the teachers can apply them in their respective natural and local situations and can fully exercise their imaginations.

(7) The lesson plans in the Life Skills and Civics & Morals sections include the lessons on environment and traffic safety, for example, in which useful and practical knowledge in their lives are integrated with science and morals. Issues such as malaria disease and dengue fever which children face in their lives were taken up and their background situation and counter measures were sought out. The lesson plans in the Civics and Morals are based on the traditional wisdom and knowledge of Myanmar and

they were presented in a way communicable and useful for children. These points were acquired through the process of conducting actual lessons with trial and error. The content of this Guide was prepared to make all the lessons to be conducted with ease by the teachers, based on the Myanmar culture and customs. Therefore, it is strongly desired that this Guide will be circulated widely for the use in Myanmar.

# Based on the Teacher's Guidebook, how to activate the reading activities for General Studies ?

In the General Studies the reading movement for children by teachers is of even greater importance in this day and age. The world has become increasingly smaller due to advances in science and technology, while economic, social and cultural structures everywhere are undergoing constant change. The establishment of reading habits for General studies through the teacher-child relationship is thus an urgent and crucial issue in Myanmar and for each individual. A child's first relationship is with its teacher and because of this bond of trust and dependence, the teacher-child relationship is the most effective place to begin establishing reading habits. Through the simple act of reading a book together they can share the world with each other and create a milieu for communication.

Every morning, any story for General Studies could be selected to spend 5 minutes for reading it aloud for children in the class. These stories should be most interesting and stimulating contents for the children in any subjects such as stories,

adventures, history, comics, folktales and etc. These stories should not come from the textbooks at all. These are sub textbooks or reference reading materials chosen by teachers freely. These contents should be so free style for children due to motivating the reading habits for the children. However reading habits should be starting from children's good listening with pleasure and fun.



When the teachers read aloud for about 2 pages every morning, they could stop reading, saying that "That is all for today. The story is to be followed tomorrow!" Then they could start the actual lesson. In the following morning, they could read aloud the next two pages or so. In this way many stories can be told. When some stories are finished with reading, they can be left in the classroom so that the children could touch, see and read them themselves. Children would come to the class expecting to hear the story every morning. The joy of reading and understanding something new is experienced and it gives influence on the reading activities of children.

The books should first reach the ears of children and to be read out loud by adults, before the children read themselves with their eyes. The experience of listening to the stories is important as the very start of good reading habits.

A Picture Story Telling consists of normally around 5 to 10 picture sheets of tales and stories. As each picture is shown one by one to children, the story is told. The Picture Story Telling technique has developed in Japan well and in kindergartens in particular, it is widely used apart from reading books aloud for children.

The Picture Story Telling appeals to both children's visual and auditory capacity as



the story is unfolded. Therefore it gives tremendous impact on pre-school, G1 and G2 children. Since this story-telling method with visuals appeals directly to the sensitivity of children, it is appropriate indeed for CCA and it allows two-way mutual communication for children and teachers and is proved to be one of the most effective learning media. In case teacher couldn't get these picture stories for children, it is advisable to produce these materials by teacher by themselves. Even simple and rough stories, teacher can provide most interesting and stimulating concerns for the children easily in any kind of topics.

#### **Effective Method of Story Telling**

Story Telling by teachers are so exciting time and interesting for the children

Teacher can tell to children any kind of stories such as Folktales, Fairy Tales and etc. based on the teacher's experiences. Therefore teachers are always requested to collect many different kinds of stories from local wisdom and many resourceful peoples in the community. Children will never forget these stories in their life. After reading these books, teachers should keep them in the class room for their reading habits for their daily life with their remind and interests.



# What is CCA?

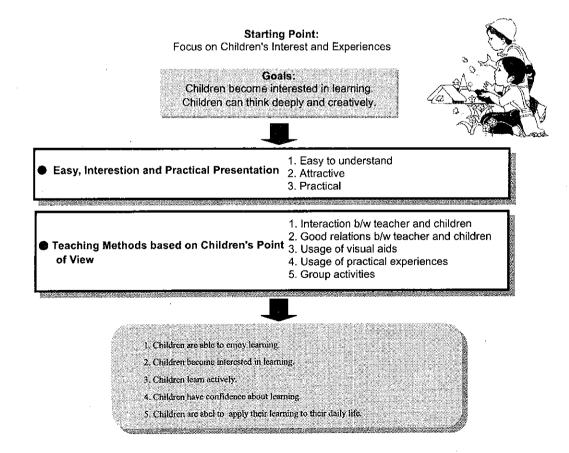
#### **Basic Concept of CCA**

The present rapid social changes have resulted in an increase in the complexity of knowledge, information and technology that teachers and children have to deal with. Therefore, it is now necessary to effectively attract the attention and interest of children in the classroom through transforming the conventional teacher-oriented approach into the child-centered approach (CCA).

Myanmar's conventional teacher-oriented approach whose main activity is memorization by heart, does not provide children with the capacity to understand the complex content of various fields of study or offer techniques necessary for everyday life. It does not improve children's thinking or problem solving skills. It can provide children with only a large amount of facts without offering any chance to think about them.

Rather than attempting to pass knowledge on to children through the teacher-to-children-one-way process, CCA recognizes the rich receptivity in children and seeks to build upon it through concrete experiences while focusing on the joy and excitement of experimental knowledge. CCA is based on the idea that children originally have rich inborn sensitivities and limitless talents and capabilities.

To facilitate the CCA process, the teacher needs to prepare effective, attractive, and simple educational materials and bring enthusiasm and creativity to the classroom. As CCA draws upon children's interests, it naturally stimulates children to learn. Therefore, it is important that teachers clearly understand CCA's concept, utilization and effectiveness. Furthermore, teachers must be knowledgeable in child psychology including a child's desire, willingness, interests, and feelings. Teachers must understand children as broadly and as deeply as possible. Therefore, it is extremely necessary for teachers to build a strong relationship with parents and communities where children live, and to look carefully into various issues faced by children.



#### Q1: What differences are there between conventional teaching and CCA?

Conventional teaching in Myanmar is usually lecture-style focusing mainly on rote learning. A teacher stands in front of the blackboard and explains the contents of textbooks to children. Teachers usually speak constantly to children and children listen carefully to teachers. Children are forced to memorize information in the textbooks as well as what the teacher says. Children never ask teachers any questions because they are scared of teachers and are strictly trained to obey them. At the end of lessons, teachers usually check how much knowledge the children have memorized by using written tests or oral questions.

On the other hand, CCA focuses more on the children's performance. A teacher is not the main person but a mediator or a facilitator. Teachers encourage children to participate in lessons actively and to think deeply about the issues. During lessons, children usually work on activities and discuss their ideas and opinions with their friends. The teacher observes and evaluates their performance through the lessons. The teacher sometimes checks children's levels of knowledge and skills obtained during the lessons by using written tests. Unlike the conventional way, the score of a written test is only a small portion of the evaluation.

While the conventional way of teaching can be conducted even without good preparation, the CCA lessons require a large amount of time for preparation Prior to lessons, teachers must always seriously consider that how to motivate children to study, how to make them understand the lessons, and how to evaluate their performance. The more time you spend for preparation, the better lessons you will have. In addition, CCA classes frequently require improvisations during lessons as teachers usually encourage children to express their ideas and opinions freely and they cannot predict what ideas the children will have. Depending upon children's ideas and opinions, teachers have to make some minor changes in the lesson plan promptly (Refer to the table of "Comparison Between CCA and Conventional Approach").

#### Q2: Is CCA effective for children's education?

Yes, CCA is an effective approach for children's education. First of all, let's think about why we give children education. All parents and teachers expect children to live a happy and rich life in the future. Children are usually protected from any social problems when they stay with their parents However, once becoming independent, they have to deal with issues by themselves. In society, there are various problems and difficulties we have to tackle. Whether or not we live a happy life depends upon our knowledge and skills of how to deal with these problems and difficulties. We believe that children can obtain such knowledge and skills through education.

The conventional teaching method focuses mainly on memorizing facts in textbooks. Teachers force children to memorize and the children blindly obey them. In the short run, children's knowledge increases rapidly through this method. It can be good for preparation of examinations and interview tests. However, in the long run this method is not effective. Children easily forget such knowledge or they cannot apply it to different situations because they have only memorized it without understanding its meaning.

On the other hand, CCA lesson's aim is to develop children's deep understanding of issues. In CCA lessons, the teacher first motivates children to study by starting a lesson with children's experience and prior knowledge. The teacher then encourages the children to participate in the lesson through activities and discussions. During the lessons, children usually work actively. They think about the questions the teacher raises, discuss with friends, share their ideas, and find some answers Children understand the real meaning of issues through these activities. Once they obtain knowledge in this way, they cannot forget it easily. They also can apply this knowledge to different situations Although CCA requires much more time than the conventional way, it is one of the most effective approaches for education.

## Comparison Between CCA and Conventional Approach

		Child-Centered Approach (CCA)	Conventional Approach	
		Headmaster is actively involved in children's education.	Headmaster strictly supervises teachers and	
		Headmaster actively cooperates with teachers to create good teaching environment.	children.	
1	School Administration	Teachers often share their ideas to create good lessons.	Teachers rarely share their opinions.	
		School creates various facilities for children's education, suhc as flower garden, a place for raising small animals, etc.	N/A	
		Classrooms are usually decorated with a variety of children's works.	Classrooms are plain.	
		Classroom arrangement is changed based on the purpose of lessons.	Classroom arrangement is always lecture-style.	
2	Learning Environment	Children are engaged in various activities such as observation, fied-trip, group discussion, etc.	Children listen to teachers.	
		Children are actively engaged in "doing," "imaging," "thinking," and "finding."	Children's learning attitude is always passive.	
		There is frequent interaction b/w children and teacher.	There is only one-way communication from teacher to childre.	
		Teaching materials are based on the teaching contents. Teachers create them by themselves.	There is no teaching materials or they are ready made even if there are.	
3	Teaching Materials	Teaching materials are attractive and interesting for children.	There is no teaching materials or they lack attractiveness even if there are.	
	reacting materials	Teaching materials have reality.	Teaching materials often lack reality.	
		Teaching materials help children understand the contents.	It is not sure that teaching materials help childre undersatnd the contents.	
		Teachers create friendly realtionships with children.	Teachers are always strict and scary.	
		Teachers carefully observe individual child during the class.	Teachers do not pay much attention to individua child during the class.	
4		Teachers always encourage children to participate actively in the class.	Teachers require children only to answer to the questions.	
		Teachers help children realize what they understood and what they did not understand.	Teachers announce children's rank among grou by test score.	
		Teachers create good lessons with children together.	Teachers follow only the instruction of textbooks	
5	Support and Understanding of	Support from parents is highly necessary.	N/A	
2	Outcide School	Support from community is highy necessary.	N/A	

#### Q3: Does CCA require many activities and teaching/learning materials?

Many people tend to think that a teacher must prepare many activities (usually physical activities) in CCA lessons. This is not true. CCA is an approach that brings out the maximum capabilities in a child. If children's interests and expectations are carefully considered and if a lesson plan is well prepared, this lesson plan may be a CCA lesson. It is not necessarily important that lessons include physical activities or various teaching/learning materials. For instance, a teacher tells a story in the class and the children listen to it quietly. In this lesson, the teacher prepares no activities and no teaching/learning materials besides a story. This can also be a CCA lesson if the story is well prepared and considers children's interests and needs. On the other hand, a lesson including many physical activities and using many teaching/learning materials is not necessarily a CCA lesson. If these activities and materials are prepared without considering the children's level of understanding and interests, the lesson may make children confused. This is not a CCA lesson.

Generally speaking, CCA lessons use some appropriate activities and teaching/learning materials to help children learn. These activities and teaching/learning materials play an important role in the lessons. Therefore, when you make a CCA lesson plan, you have to think about what you will teach in a lesson, whether you need activities and teaching/learning materials, and what activities and teaching/learning materials can bring the highest effect for encouraging children's learning.

#### Q4: Is it possible to implement CCA lessons in poor rural areas?

Yes, it is. The CCA lessons can be conducted in any place and on any occasion if there is a teacher who fully understands the CCA concept. However, many teachers state that they cannot conduct CCA lessons because there are too few teachers and little or no budget to purchase materials for their schools. This belief is wrong. As mentioned in Question 3, CCA is not an approach requiring many materials. Nor is CCA an approach that is applicable only in particular conditions. Even though there is nothing in a school, CCA can still be practiced using a teacher's creative idea. For example, when a teacher teaches children the history of their village, the teacher starts by talking about the largest tree in the village: "You all know the big tree near Ko Mg Mg's house, don't you? That tree is the same age as our village. How many years ago do you think our village was established? Let's ask the tree about the age of our village." Then the teacher takes children to observe the tree and lets them measure its width. This lesson is truly a CCA lesson though it does not use any expensive materials. This lesson depends upon the creative ideas of the teacher.

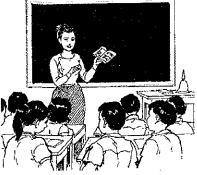
Another problem is that there are too few teachers in a school and there is no partition between classrooms. The teachers must take care of children of different ages at the same time. In this situation, you can practice the multi-grade teaching method. Multi-grade teaching is an effective teaching method when there are children of several different ages in one class. By using the multi-grade teaching method, teachers can deal with children effectively and can implement CCA lessons. However, multi-grade teaching requires special skills. Teachers who must take care of different aged children must gain these skills and techniques through some training courses. In the following, one example of multi-grade teaching practice is introduced:

All children, for example, from KG to G4 are engaged in the same topic together. At the beginning of the lesson, a teacher gives them one presentation by using picture-story telling, book-reading, and musical instruments. After the presentation, the children are given different tasks depending upon their grade. For children at KG, most simple and easy task such as expressing their ideas is prepared. For children at Grade 1, another task such as writing their opinions is prepared. For children at Grades 3 and 4, a task of finding some solutions by group discussion and presenting their ideas are prepared. Getting to know what other graders think and feel helps children understand each other mutually. This is also one of the most effective examples of CCA lesson in the case of the multi-grade teaching.

#### Q5: Is it possible to implement CCA lessons in a class with a large number of children?

Yes, it is. However, it is difficult to implement CCA lessons under this condition. Generally speaking, a class with a small number of children is better because the teacher can easily check each child's performance and level of understanding. On the other hand, a CCA lesson frequently fails in a class with many children because during some activities the teacher can easily check each rge number of children well.

Therefore, teachers have to carefully select teaching methods and learning activities when they conduct CCA lessons in a crowded classroom. For example, group work is one of the effective methods. A teacher gives topics to each group and encourages children's discussion. During the discussion, the teacher observes the groups and gives suggestions and hints if needed. After finishing the discussion, group leaders present their ideas and opinions.



#### Q6: Can we use CCA in every lesson, such as Myanmar language, math and English?

Yes, we can. CCA is not limited by subject or field of study. CCA is more like a rule regarding how a teacher acts and behaves in class and how a teacher deals with children. If you carefully consider what children want to know and what children are interested in, and if you create a lesson plan with your own unique and creative ideas, this lesson plan may be an interesting lesson. This lesson plan may also be a CCA lesson when you implement it effectively in class.

#### Q7: Can we finish teaching all topics in the current textbooks when using CCA?

Most teachers are concerned about this issue. Teachers are usually forced to finish teaching all topics by the end of the academic year. As you know, CCA takes more time than the conventional way of teaching. Therefore, you cannot cover all topics as long as current textbooks that are based on the conventional teaching style are being used. Thus, it is highly necessary to review the current topics, select the most important ones, and reorganize the contents of textbooks.

#### Q8: Is CCA the same as "learning by doing"?

CCA is not the same as "learning by doing." There are a number of teaching methods which can be used when holding a CCA lesson and "learning by doing" is just one of them. However, it is true that "learning by doing" is one of the most basic methods of CCA.

The person who first practiced CCA was John Dewey, an American educator. At the end of the 19th century, he established an experimental school at the University of Chicago. Since he believed that children could learn things better through experience, Dewey made children at his school do various things by themselves. For instance, they wove cloth from cotton and wool and lived in a cave to experience the ancient way of life.

The present-day CCA is rooted in Dewey's experiments, whose essence was "learning by doing." Thus, "learning by doing" remains one basic method of CCA, though it is not equivalent to CCA.

#### Q9: What are the teacher's qualifications necessary for doing CCA?

In Myanmar, rote learning has long been a common practice. Therefore, most Myanmar teachers do not know how to practice CCA. To practice CCA successfully, teachers should fully understand the concept of CCA and know a range of key techniques which can be used. However, this is not easy because CCA is a very broad concept using numerous techniques. As a matter of fact, one hundred teachers would practice CCA in as many different ways. If you can use one CCA method, it does not mean that you can conduct the full range of CCA methods. Thus, it generally takes time for a beginner to fully understand the concept of CCA and become familiar with the methods. The only way to accomplish this is to practice it many times.

Although it takes a long time, to become a CCA practitioner does not require any special qualifications. The first qualification is that you enjoy giving lessons. If you like to give lessons and when you realize a change in children's facial expression during your class, you are standing at the bottom of the CCA ladder.

The second qualification is that you be concerned about children. What do they think about? What are they interested in? What do they want to know? If you try to understand children better, you are standing on the first step of the ladder. The third qualification is for you to be able to analyze how to make children interested in the topics to be taught. If you can do this, you have climbed up to the second step.

The fourth qualification is imagination and creativity. You have to try to create an interesting lesson using your imagination. After completing your lesson plan, review it again and again. Imagination and creativity are the keys to interesting lessons. The fifth qualification is the ability to act like an actor or actress. In the classroom, you should be aware of eye contact, tone of voice and rhythm, and gestures. You should be able to make various expressions like an actor or actress on stage. When you satisfy all the qualifications above, you have reached the fourth step of the ladder. The top is not so far from there.





Kindly taking to children





Humorously explaining to children

Q10: How do we let parents know about CCA?

It is very important to teachers that parents understand what is being taught to children at school. Without parents' understanding and cooperation, education will not be successful. One way of letting parents know what children do at school is to set up an open-school day. On such a day, parents can visit the school and observe school activities. Another way is setting up a meeting with parents in which they discuss any issues concerned with the children. Such a meeting will help parents better understand their children's school performance. Still another way is for teachers to visit children's homes to observe their daily life. This is a very effective way to share information between parents and teachers. The important thing is to contact parents frequently and share as much information as possible with them.

# **Designing CCA Lessons**

Planning is a base for implementation. Good plans make implementation better and easier. How much time did you spend on planning is related to how successful implementation is. CCA implementation is also the same. Applying CCA in your class starts from designing lesson plans. If you make a good lesson plan, your lesson will be more interesting, understandable and attractive to the children. Whether it is a good CCA lesson or not depends on lesson plans. To make a good lesson plan, the teacher has to know several key issues and steps for planning. In this Teacher's Guide, lesson plans are introduced, but the teacher must modify them with considering their own teaching environment to implement effective CCA. The following is the key information necessary for teachers to create a good lesson plan.

#### STEP 1: Let's review the learning objectives of the topic

First of all, look at the objectives of the topic you are going to teach. The objectives are a guideline as to why you teach this particular topic. All contents regarding the topic should be prepared to achieve the objectives. There are two kinds of objectives: general objectives and specific objectives. General objectives indicate the goal to achieve during the lessons on the topic. Specific objectives are the goal for each lesson. You should review these objectives carefully and understand the goal is in a particular topic and what kinds of information needs to be taught. Then, try to imagine the entire lesson in your head.

#### STEP 2: Let's think about related issues of the topic

Based on your image of the lesson, think about what issues will be related to the study of this topic. In this step, you can randomly write down your ideas. Any issues coming to your mind should be written. Think about what information you want to know if you are given a particular topic. For example, if the topic is "Our village," "What do you want to know through the study of this topic?" It may be "How many people are there in our village?" or "When was it established?" or "How many TV sets are in our village?" and so forth.

#### STEP 3: Let's select important issues to teach

The issues picked up at step 2 are carefully reviewed in consideration with the objectives. Then, some important issues are selected as teaching/learning issues. In this selecting step, you should make sure that these issues cover all the objectives. If the selected issues do not cover all the objectives, you should add more issues to supplement it.

#### **STEP 4: Let's consider applicable and effective teaching methods**

In this step, spend time to consider how to teach each issue selected in step 2. In CCA, this part is significantly important and is worth spending more time on "How do we teach so that children can easily understand?", "Do we need some activities to increase children's motivation?", "What activities can work well in teaching this issue?" You can take several methods and activities to teach the issues, such as group discussion, peer work, drawing pictures, presentation and so forth.

#### **STEP 5: Let's create lesson structure**

In this step, think about a particular lesson plan which will be conducted in the classroom. You can choose some issues selected at step 3 and arrange them within the particular timeframe, usually 30 minutes for KG, G1 and G2, and 35 minutes for G3 and G4. In this step, consider how many issues you can teach during one period and in what they should be taught in.

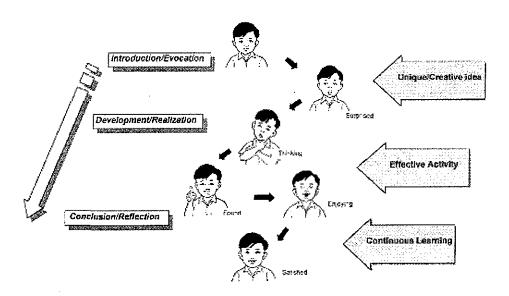
You can usually divide one lesson into three part; *introduction, body (or development),* and *conclusion.* The first part, *introduction*, plays an important role to motivate children to study

a new topic. You should prepare this part well to stimulate children's motivation. For example, if you prepare something surprising, children's interests will peak and the whole lesson can be done smoothly.

The second part of **body** (or development) is the main part of the lesson. In this part, you can teach the important issues you want to give children. To promote children's understanding of the issues, it is better to plan some activities in the lesson. These activities aim to stimulate children's understanding. Therefore, don't do activities randomly. They need to be though out carefully.

The last part, *conclusion*, is a summary. It is also used to link the current lesson with the next lesson. Specifically, you can review the issues with children, ask them their opinions about the issues, and preview the next issues to be taught.

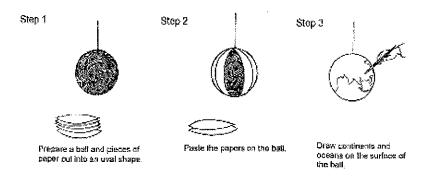
In ideal CCA lesson, children's facial expression will change within one lesson. At the beginning, children are still nervous. However, children's apprehension will be broken by your surprising introduction. Children are then relaxed and can concentrate. Activities can help keep children's motivation high. During the activities, you can observe children's happy expression in your classroom. At the end of the lesson, children will hopefully have a look of satisfaction on their faces.



#### STEP 6: Let's prepare teaching / learning materials

The next step is the preparation of teaching / learning materials. Based on steps 3 and 4, you already know what kinds of teaching / learning materials are needed. Based on this information, you can prepare them. Some of them will be bought and the others can be made by the teacher. Especially in rural areas, teachers should prepare them by themselves instead of purchasing them. You do not necessarily have to create sophisticated materials, but simple ones by using local materials around you.

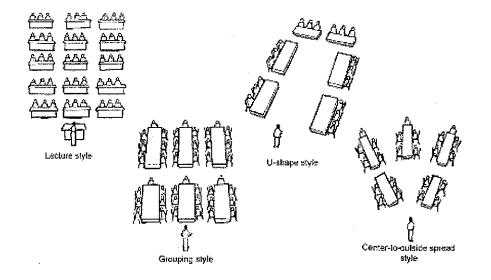
For example, when you need a globe, you do not necessarily have to spend a large amount of money. You can make it cheaply and easily by yourself. Please look at the illustration. Prepare a ball and several pieces of paper cut into an oval shape. Then paste the papers on the surface of the ball. After pasting, wait until it becomes dry. Finally draw some continents and oceans on the surface of the ball. It becomes a good globe.

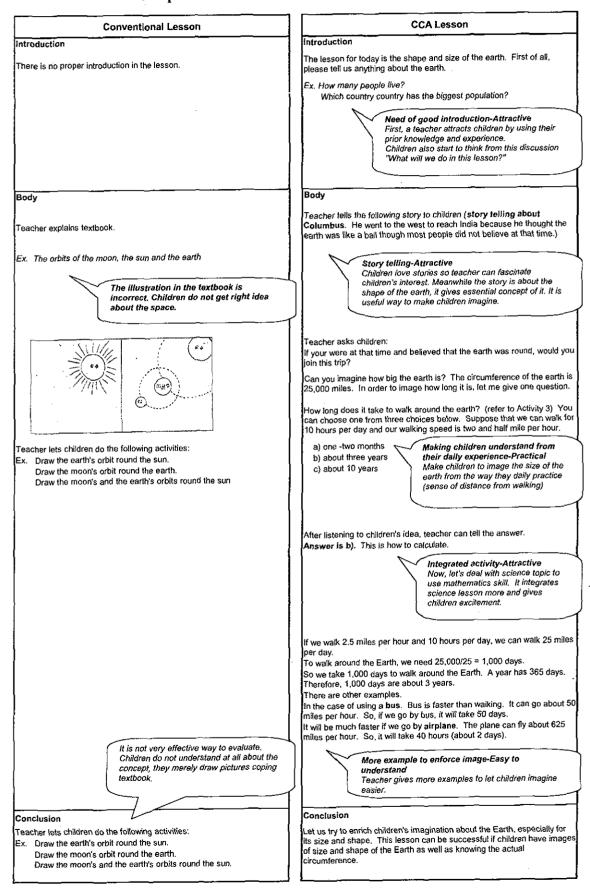


#### STEP 7: Let's think about effective classroom arrangement

The final step is to arrange the most appropriate and effective classroom setting. Each lesson usually prepares different activities. Each activity also requires different classroom arrangement to bring about children's best performance and the most effective lesson. Based on the learning activities you prepared, you can arrange the most effective classroom arrangement.

For example, there are many group activities in your lesson such as group discussion, group observation, group work and group presentation. Therefore, grouping the tables may be the best arrangement. When you show some picture stories or video in your lesson, the U-shape arrangement may be the best. If both activities, group work and showing videos, are used in one lesson, you can use the center-to-outside arrangement.





#### **Comparison between Conventional and CCA lessons**

# **Assessment for CCA**

#### What do we expect children through CCA?

First of all, the following two cases are introduced. One is the case of CCA class and another is the case of the conventional class. Which class is CCA and which class is the conventional class?

#### Case 1:

English, maths and mother-tongue lessons are taught through activity, play, experimentation and discovery. A girl at the kindergarten level takes her pet turtle and toys to school to show and tell her friends about them. Kids were encouraged to interact and ask questions. Worksheets (or assignments) were combined with activities, such as using rice to form letters. Teachers are not big on neatness. Under such a learning environment, she enjoys school very much. "She is a very confident girl and not afraid to speak to adults. She is relaxed about school and uninhibited about asking when she does not understand something," says her mother.

#### Case 2:

English, maths and mother-tongue are taught separately. Teacher stands in front of the class, giving instructions. There are plenty of worksheets, and lots of homework, especially spelling. Children are praised for keeping quiet and turning in neat work. Under this learning environment, a girl is not enthusiastic about school, and fear going if she doesn't finish her homework. "She was very outspoken before pre-school but she gradually toned down and became less curious and talkative," said her mother.

These two cases were conducted in Singapore to improve education for children. Some schools were designated as experimental school under the educational improvement project, and others were designated as control school. *Case 1* is the scenery of one of the experimental schools and *Case 2* is the scenery of the control school. As you know, *Case 1* is CCA class and *Case 2* is the conventional class (*"The Strait Times"*).

The base of CCA is children's interest and experiences. Through the lessons that are based on this CCA base, children become interested in learning and actively participate in classes. Children use their five senses at maximum and tackle with the issues in the classes. In this learning process, children can fully develop their thinking ability and creativity with deeper understanding of the issues. Unlike the conventional approach, CCA focuses on not only children's level of knowledge and understanding, but also their positive attitude and strong interest in learning. Therefore, CCA creates children who are active, curious, and positive towards learning and their life. This is significantly important for human being in the long run. We should think again whether a child who is not interested in learning and is less active in spite of much knowledge can become a good citizen. In this respect, CCA concerns about the foundation and the basis of education.

#### How do we assess children?

Besides level of knowledge, teachers must focus on children's interest and attitude towards classes. To do this, the teachers are required to use various ways of assessment, such as writing tests, questionnaires, essay reports, interviews, observations, etc. These ways of assessment can check different items achieved by children. For example, writing test can check children's level of knowledge, or "how much did children understand?" Questionnaire is good for checking children's interest or "How do children devote themselves to something?" Essay report is very useful for knowing children's attitude or "How do children think about and feel about?" Therefore, the teachers must use these different ways of assessment and assess children's achievement in the comprehensive manner. In addition, another important point is that teachers must think about this question again and must have the common recognition of the assessment. Currently, the result of assessment is used for ranking children and comparing each other by score. As a result, children have become

afraid of and hated assessment tests. This may have discouraged them to learn more and to try new things. Instead of these traditional ideas, the assessment for CCA must encourage children and promote them to learn more. In CCA, the result of assessment must be used for feedback to children. In other words, children know what they accomplished and what they did not through the assessment. By recognizing their accomplishment clearly, children can find the right direction of their studying

Moreover, all teachers must know the following point. The assessment is conducted both by children and teachers. In the traditional thought, the assessment has always been conducted by teachers and given children the result from teachers. This assessment is only one-way assessment: from teachers to children. But the assessment of CCA is conducted by the two parties. Teachers directly assess children's performance by using various different assessment methods *(the assessment from teacher to children)*. At the same time, teachers also realize whether their teaching process was good by the result of assessment. If the children's level of accomplishment had been less than teacher's expectation, the teaching process might not have been effective nor appropriate. The teachers should revise their teaching process *(the assessment from children to teacher)*.

#### What kinds of assessment can teachers use?

There are many different kinds of assessment methods. Teachers can use a variety of assessment methods, depending upon the purpose of assessment. Currently most teachers rely highly on writing test method. However, this method can cover only children's knowledge level, it cannot check children's attitude and interest. In the following, the necessary assessment methods for CCA are introduced, besides writing test

#### • Observation

The observation method is one of the most important assessment methods for CCA. Because CCA pays much attention to improvement of children's attitude towards learning and to reinforcement of their interest in learning, this method is effective and appropriate to check it. However, teachers must establish the criteria prior to observation The major points to check are the following:

- 1. How have children's attitude and behavior changed?
- 2. How have children's interest in learning been strengthened?
- 3. How have children participated in lessons?

In addition, the result of assessment done by the observation method must be given back to children immediately to help children recognize their learning situations.

#### • Self-assessment and Peer-assessment

Although observation is effective assessment method, a teacher has a limitation to observe each child in detail. To supplement teacher's observation, it is significantly useful to let children review their own performance by themselves and to let children evaluate their friend's performance each other. Practically, there are several ways for this assessment, self (or peer)-scoring, self (or peer)-describing, self (or peer)-evaluation sheet, checklist, and questionnaire. Note that it is the requisites for establishing a good relationship among classmates when the peer-assessment is used.

#### • Interview method

This method is also useful to know children's way of thinking and feeling. This is the assessment based on the result that teachers interview with children, sometimes including parents Although it takes a lot of time, teachers can know the details of children's feeling and behavior through direct communication. However, this method highly requires good relationships between teachers and children to collect reliable information. Therefore, teachers make their best efforts to create good environment during interview.

	General Studies – Note for Teachers
Objectives of General Studies	The objectives of General Studies are as follows:
General Studies	Natural Science
	1 To study and explore the nature of things in the environment in the
	natural Science particularly objectives of Natural Science in the
	primary level are;
	(1) To take interest in the natural process and develop the habit of
	studying and observing them,
	(2) To be aware of the advantage of natural resources and be able to
	exploit them for daily living, .
	(3) To learn to appreciate the environment and safe-guard it as well,
	(4) To be able to apply knowledge of personal hygiene and family
	heal procedures to daily activities, and
	(5) To be aware of the importance of science in development of
	production.
	CIVICS
	(1) To have a good character and become polite, dutiful and good
	citizen,
	Life Skills
	(1) To adapt themselves to their surroundings and to equip them
	with the necessary basic skills and good habits,
	a. To provide appropriate knowledge, skills and information for the
	promotion of preventive health,
	b. To live in conformity with the environment and to provide
	appropriate basic skills for life long process, and
	c. To promote the awareness that the preventive health if more
	beneficial than curative health.
Strategies to	
be used	Points to be kept in mind in dealing with children of KC, G1 and G2:
	They include:
	1) to provide them with the plenty of rich experiences and learning in
	everyday life, mainly through various kinds of plays and games as well
	as through nature.
I	2) Io nurture their minds through reading out loud and showing as

many picture books and tales as possible. Through such effort, children could get more interested in and get familiarized with things around them, and also they could enjoy expanding their imagination. 3) to create plenty of different kinds of audio-visual materials for them, so that the designated topic would be introduced in an interesting and in an impressive manner. In other words, during the children's development stages, it is of vital importance for them to be able to absorb things as much as possible in everyday life and through joining group activities. At the same time, it is important for them to be able to express freely what they had thought and imagined, and to feel the joy of expressing themselves, utilizing letters, pictures and body movement. Once something leaves deep impression on the child's mind, she/he will never forget it throughout her/his life. The memory of the deep impressions left on them are necessary at the foundation of any learning process. The children could acquire fine communication capacity and creative power as human beings through numerous trials and errors they themselves go through with their bodies, while engaging themselves in the plays, games and group activities.

#### **Effective Method of Picture Story Telling:**

A Picture Story Telling consists of normally around 10 to 15 pictures sheets of tales and stories. As each picture is shown one by one to children, the story is told. The Picture Story Telling technique in Japan has developed well and in Kindergartens in particular, it is widely used apart from reading books aloud for children.

The Picture Story Telling appeals to both children's visual and auditory capacity as the story is unfolded. Therefore it gives tremendous impact on KG, GI and G2 children. Since this story-telling method with visuals appeals directly to the sensitivity of children, it is appropriate indeed for CCA and it allows two-way mutual communication for children and teachers and is proved to be one of the most effective learning media. While the television is an example allowing only one-way communication, such picture story telling based on the oral tradition will make the storyteller and the listener feel close to each other and will give them favorable stimulus.

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There are numerous stories and tales found in Myanmar that are appropriate for making them into picture story telling. Therefore the teachers should include them extensively in the lessons for KG children. For this purpose also, CCA activities should be promoted in close collaboration with the local community concerned. Even though the pictures are simple with limited colours, the teachers' effort to make them with their own hands and ideas itself will lead to making the class lesson effective. It is teachers' attitude that should be emphasized. The attitude is of making an endeavor as to ponder how best to introduce the attractive world of tales to children.

There is a well-known saying the sprit of a 3-year old child remains even to the age of 100 years. The sense of excitement and discovery which registers deep in a child's mind will continue to influence that person throughout his life. It is obvious then, that reading habits, which we are discussing today, should be well established at an early age when the foundation of all aspects of a child's growth are formulated.

## This Teacher's Guide (G 2)

Section 1: Natural Science **Chapter 1: Living Things** Topic 1: Body Parts of Animals Topic 2: Living Things in Our Environment - Parts of Plants Topic 3: The Needs of Living Things Topic 4: Preservation of Environment **Chapter 2 : Matters** Topic 5: Studying Liquid around One's Environment Topic 6: Mobility of Objects in Water Topic 7: Air Present in Our Environment Topic 8: Three States of Matters (Solid, Liquid & Gas) **Chapter 3: Energy** Topic 9: Emergence of Heat from Friction Topic 10: Possible Feeling Caused by Sounds Topic 11: Advantages of Light Topic 12: Use of Magnets and Electricity and Safety Rules for Electricity Topic 13: Different Kinds of Motion **Chapter 4: Earth and Space** Topic 14: Weather Topic 15: Comparison of Different Soils Topic 16: The Sun and the Moon Section 2: Morals and Civics Chapter 5 Topic 17: Graceful to the Eyes Topic 18: Politeness on the Road Topic 19: The One Who Has Sympathy Topic 20: Dutiful Person Topic 21: Mingalar Poem No.6 Topic 22: Let's Assume Responsibility for the Benefit of Others Topic 23: Good Friends Topic 24: Emulate Section 3: Life Skills Chapter 6 Topic 25: Personal Hygiene - (a) Healthy Practice Topic 26: Personal Hygiene - (a) Cleaning Teeth Topic 27: Nutritious Food Topic 28: Diarrhea Topic 29: Wearing Clean Clothes Topic 30: Communicating with Others Topic 31: Spending Beneficially with Your Pocket Money Topic 32: Accidents and Dangers Topic 33: Green and Lush Environment Makes Us Happy Topic 34: Discipline Topic 35: Utilization of Leaves

### Textbook (G 2)

Section 1: Natural Science Part 1: Living Things Chap. 1 Living things around us (a) animals (b) body coverings (c) moving in various ways (d) plants (e) places where plants are found (f) parts of plants (g) remembering animals Chap. 2 Requirements of living things (a) animals (b) plants Chap. 3 Living things and their relationships with environment (a) food (b shelters (c) clothes (d) Man has to depend on animals and plants Chap.4 Preservation of environment Part 2: Matters Chap.5 Studying liquid in surroundings Chap.6 Study of gas Chap.7 Solid, liquid and gas groups Part 3: Energy Chap.8 Heat emerges from rubbing Chap.9 Feeling due to sounds Chap. 10 Advantage of light Chap.11 Magnet and electricity (a) making magnet (b) heat & light Chap.12 Different kinds of motion Part 4: Earth and Space Chap.13 Weather Chap.14 Comparison of soils Chap.15 The sun and the moon Section 2: Morals and Civics Chap.16 Mingalar poems No.5, No.6 Chap.17 National spirit and patriotism (a) be a brave martyr (b) National spirit Chap.18 Morals (a) A Boy and a Pencil (b) Brother & Sister Chap.19 Culture (a) Graceful to the Eyes (b) Emulate Chap.20 Duty (a) School holidays (b) Four Oaths (songs) Chap.21 Good cultural practices - Politeness on the Road Chap.22 Stories (a) An aged mother's loving kindness (b) An idiot (c) Destined to die Section 3: Life Skills Chap.23 Personal Health (a) personal health (b) wearing clean clothes (c) cleanliness of oral cavity and teeth (d) doing cleaning practices Chap.24 Disease free health (a) disease free health (b) diarrhoea Chap.25 Spending beneficially pocket money Chap.26 Oneself and one's friend Chap.27 Discipline makes a peaceful mind Chap.28 Deal politely and cordially Chap.29 Be skillful in handicraft

# SECTION 1 Natural Science



# **Topic 1: Body Parts of Animals**

Key Concept	Animals have different body structures so that their movements and their habitats are different.		
Learning Objectives General Objectives	To be able to tell animals have different body structures so that their movements are different.		
Specific Objectives	<ul> <li>Children are able</li> <li>(1) to differentiate the various structures of animals</li> <li>(2) to differentiate the various movements of animals in accordance with their bodies</li> <li>(3) to identify the differences of footprints and handprints according to the feet and hands of animals</li> </ul>		
Activities Involved	<ul> <li>playing the game of hiding toy</li> <li>differentiating the animals according to their body structures</li> <li>differentiating the animals depending on their movements</li> <li>matching the picture of animal and its footprints</li> <li>making footprints and handprints</li> </ul>		
Teaching/Learning Materials	<ul> <li>small toys and pictures of animals</li> <li>footprints and handprints of various animals</li> <li>drawing the pictures by finger printing</li> <li>glue powder, indigo</li> </ul>		
Teaching Periods	4 period + 1 period for assessment (150 minutes)		
Before Getting Start	ed		

Background Information<br/>for TeachersTeacher has to make children know that animals have different<br/>body structures so that their organs used for movements are also<br/>different. Therefore, their movements are different as well.

# Lesson Planner

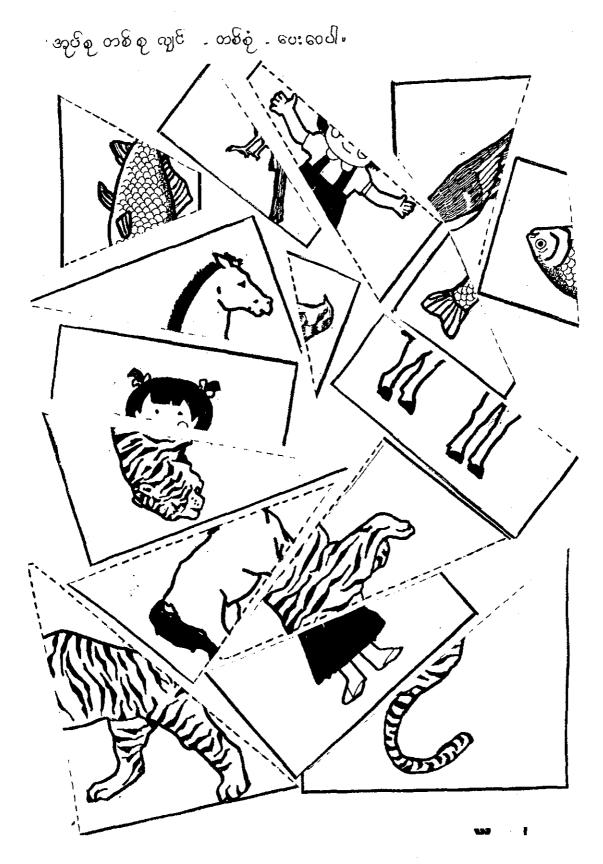
	Period One	Period Two	Period Three	Period Four
Specific	Be able to	Be able to	Be able to	Be able to identify
Objectives	differentiate the various structures of animals	differentiate the various structure of animals' feet	differentiate the various movements of animals in accordance with their bodies	the differences of footprints and handprints according to the feet and hands of animals
Introduction	Jigsaw playing	Differentiating picture cards or	Differentiating picture cards	Matching pictures of animals and
(Evocation)		toys Telling the foot structure	Telling the movements of animals	their footprints Drawing the picture by finger printing
Development	Differentiating	Differentiating	Differentiating	Differentiating the
(Reflection)	animals in accord with the body structures	animals in accord with their feet	animals depending on their movements	footprints of animals
Conclusion	Whole class	Whole class	Whole class	Whole class
(Realization)	discussion	discussion	discussion	discussion

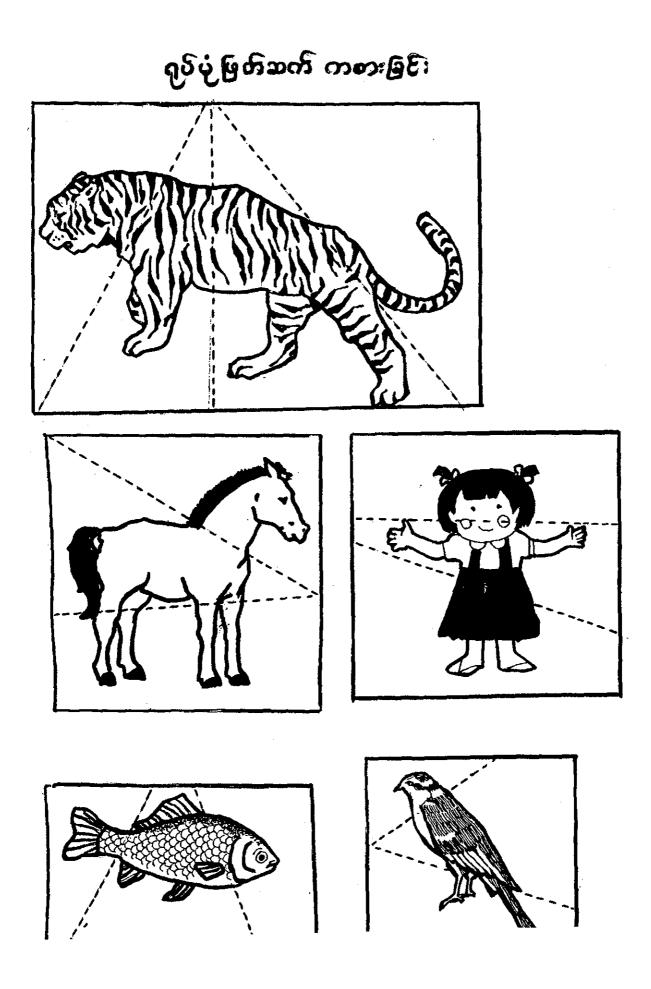
# Teaching/Learning Procedure

## Period One

Learning Activities	Duration (Min.)	Teaching/ Learning Materials	Points to be noticed
By showing the children small toys and pictures of various animals, have them tell the names of animals. And then, ask the children "Which animal do you want to be?" "The first choice?"; the second and the third?" "Why?" "What parts do your animal have?" "How do your animal use them?"	15 min.	small toys and pictures of various animals	Various animals to be introduced to children include varieties of four- footed animals, two- footed animals, animals without legs, animals living on land, aquatic animals, animals flying in air and reptiles, etc. Teacher has to notice to ask almost all the children.
Group the children in accord with the size of class. After mixing the cuttings of various animal pictures and have them play by connecting them correctly.	15 min.	picture cuttings of animals	Cut the pictures of five animals into parts such as head, body, legs, etc. at least three parts per each picture and then mix those cuttings.

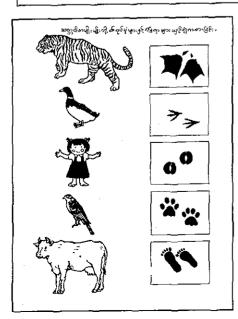
L	 · r	
		It is to give each set of the
		parts of the pictures of
		five animals to each
		group.

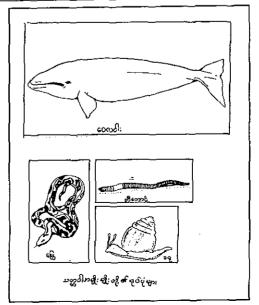




## Period Two

Learning Activities	Duration (Min.)	Teaching/ Learning Materials	Points to be noticed
Collect the pictures of various animals relevant to the numbers of children and distribute each picture to each child. Let them observe the differences of animals' legs in the picture they have got in hands and express the remarkable points.	15min.	picture chart of various animals	Teacher has to collect the small picture charts of various animals by asking the children to stick a picture of animal they like on the covers of used exercise book a week ahead.
Then, draw a table with three cells on the blackboard or draw a table with three cells on a blank card and make small holes on it in order to categorize three groups such as four-footed animals, two-footed animals and limbless animals. Distribute the small pictures to children and ask them to hang the pictures under the respective groups on the big chart hung on the blackboard by inserting the small paper hooks into the holes, or stick on the table drawn on the blackboard.	15 min.		By observing under the topic of Reference, carry out making holes in the table and making small charts to hang. Teacher has not to give decision if the children are correct or not. Ask them to verify each other. All students have to verify every after hanging picture by a child. Teacher has to take out and collect the pictures if the table is full. Then, let the pictures of remaining children stick or insert again.





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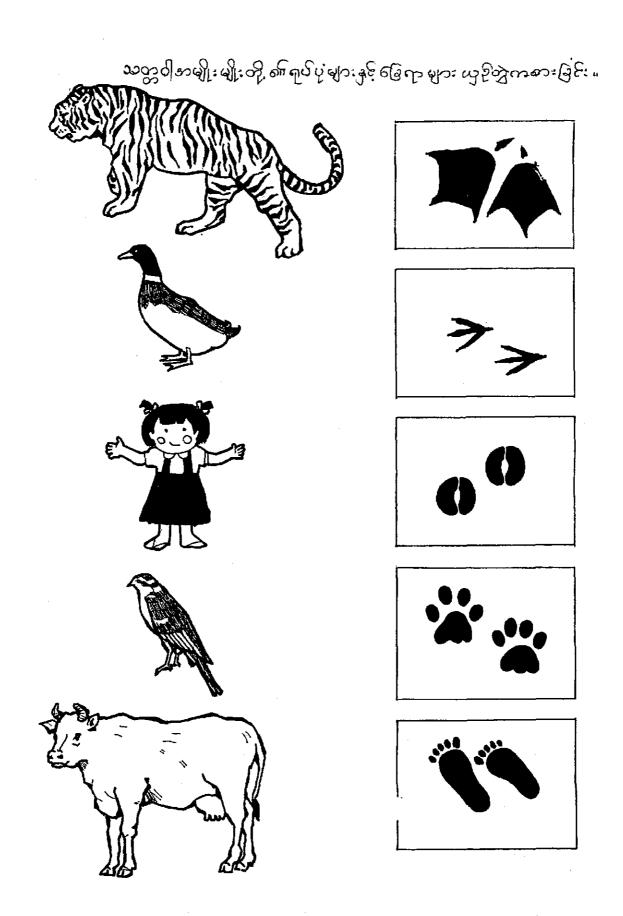
## **Period Three**

Learning Activities	Duration (Min.)	Teaching/ Learning Materials	Points to be noticed
After collecting the pictures again, distribute each picture to each child Ask the children to identify the animal in the picture they got is either four- footed animal two-footed animal or footless or limbless animal. After that, teacher specifies each corner of classroom as the place for quadruped animal (four-footed animal), two-footed animal or animal that has no feet (footless or limbless animal).	15 min.	Picture charts of various animals	Give the children time to think.
Ask the children to gather at the specified place after identifying the picture they got. When all children have got the specified places, have each group raise the picture. Let the other two groups verify if the picture raised by first group is correct or not. Have the three groups discuss each other.			It is possible to specify the places by writing clearly on the floor with chalk or stick or by sticking on the wall after writing on the big paper.

		If incorrect, let them shift to the correct group. Give time to think.
Ask them to role-play the movement of animal in the picture they got after thinking how it moves. E.g. Ask the quadruped group to hop like a frog; two-footed group to walk like a monkey; group that got the picture of limbless animal to demonstrate with hands how a snake moves.	15 min.	Teacher has to give help to the children to think by reading references. Arrange for role- playing by the children to be convenient in accord with the condition of the school.

## **Period Four**

Learning Activities	Duration (Min.)	Teaching/ Learning Materials	Points to be noticed
Ask the children to match the pictures of animals and pictures of different footprints. Divide the children into two groups and give one group the pictures of animals and the other the pictures of footprints. If one group raises and shows a picture of animal and tells the name, the remaining group has to raise and show the picture of footprint. Have the remaining students in class verify if it is correct or not. Have two groups change the activity reciprocally.	15 min.	Pictures of different animals and those of different footprints	
Have them draw the pictures by finger printing with glue powder and indigo.	15 min.	glue powder + indigo	Have the children draw freely as their imagination. Do it by intending to make the children happy.



(1) By showing the pictures of various animals, let the children pick out the picture of one four –footed animal.

Assessment

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(2) Ask the children to pick out the picture of one two-footed animal.

(3) Ask the children to pick out the picture of one footless or limbless animal.

(4) Choose the picture of one quadruped animal that walks on the ground.

(5) Choose the picture of one two-footed animal that walks on the ground.

(6) Choose the picture of one animal that can fly with wings.

(7) Choose the picture of one animal that swims in water.

(8) Choose the picture of one footless or limbless animal that moves on its belly by sliding on the ground.

|--|

Four-footed animals (or) Quadruped animals

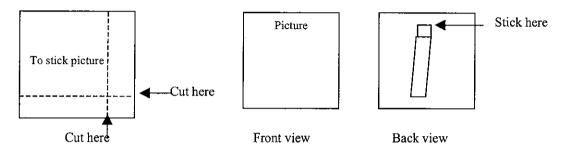
elephant, buffaloes, cov	v – walk on the ground
tiger, leopard, lion	- walk on the ground or move by jumping
frog, rabbit	<ul> <li>hind limbs are longer than fore limbs and it can move by hopping</li> </ul>
Two-footed animals	
man, monkey, gorilla –	Fore two limbs transform into two hands and they can move with two legs on the ground. They can stand relying on the vertebral column.
various kinds of birds –	Fore two limbs transform into a pair of wings and they can fly. They can also move with two legs on the ground.
limbless animals	
various kinds of fishes –	They have fins (pectoral, caudal, anal, dorsal and pelvic fin) and can swim by means of moving those fins.
snake, earthworm, snail,	slug – They move, sliding on the ground by contracting and relaxing muscles in the body.

#### Collecting small picture charts

Collect the used exercise book covers and pictures of various animals by asking the children to bring. Kinds of animals have to be various. (E.g. elephant, horse, tiger, cow,

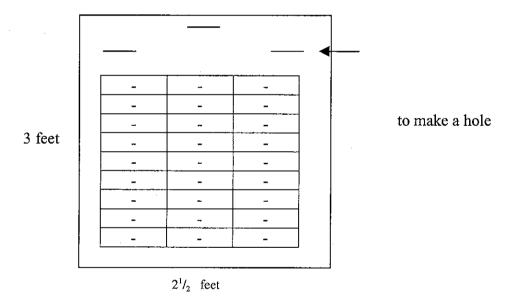
lion, rabbit, frog, rat, cat, dog, man, gorilla, monkey, various kinds of birds, various kinds of fishes, snake, earth worm, snail, chicken, duck)

Cut one inch each out from the lateral side and bottom of the book cover. Then, stick the picture of one animal and write the name on it. Cut a piece of paper that has been cut out previously and stick on the back of the picture.



Making blank chart

Find out a blank chart of card paper with the size of  $2^{1}/_{2}$  feet \_ 3 feet. Draw a table on the chart and make small holes as shown in the figure.



In making holes, leave a small gap by using a knife used in sharpening pencils. Make sure that it is easy for the insertion of small piece of paper stuck on the back of picture chart. The hole made on the top is for the lesson topic and the remaining two holes are for Grade and Subject.

One small hole has to be made top of each cell in the table. Making a blank chart like this is to be able to used in teaching any subject.

It is not necessary to collect small picture charts of animals yearly. It is possible to use in various grade and various lessons by making only once so that it is necessary to do compulsorily.

# Topic 2: Living Things Found in Our Environment

- Parts of Plants

Key Concept	Identification of parts of plants
Learning Objectives General Objectives	Be able to study the parts of plant through identifying them
Specific Objectives Activities Involved	<ul> <li>Children are able</li> <li>(1) to tell the parts of plants</li> <li>(2) to identify the parts of plants practically</li> <li>observing in the school garden</li> <li>playing with parts of plants</li> <li>growing a small plant</li> </ul>
Teaching/Learning Materials	school garden, flower, leaves, fruit, seeds, bud
Teaching Periods	3 periods (90 min.)

# Before Getting Started

Background Information for Teachers	It tends to make student know that a plant is basically divided into parts such as stem, leaf, fruit, flower, root etc. and parts of plants are useful and significant for human existence. It has to give guidance for the children to enable them to identify which part of plant we are using and eating daily. It tends to give basic knowledge on many parts of plants are utilized and consumed in the classroom so that they will be able to apply in daily life and then they will notice that through out the life. It has to make the children know that man and various animal have various organs to eat, to make respiration, to see, to listen, and to move as well as plants have parts such as root, leaf fruit flower and stem. etc. for the functions to survive

# Lesson Planner

	Period One	Period Two	Period Three	
Specific Objectives	Be able to tell the parts of plant	Be able to identify the parts of plant practically	Be able to identify the parts of plant practically	
Introduction (Evocation)	Observation of large trees and small plants in school garden. Plucking leaves	Playing with parts of plant	Observation of plant Cutting a plant and reassembling its parts	
Development (Reflection)	Observation of plants Plucking a leaf and telling about the plant from which the leaf was plucked	Let children collect various parts of a plant (leaf, fruit, flower, stem, root) in advance.	Find out a small plant with full parts and root it out and observe the parts. Cut a small plant and reassemble its parts	
Conclusion (Realization)	Whole class discussion	Whole class discussion	Whole class discussion	
Assessment points	Observe and assess the children if all children take part in whole class discussion, playing, observation or not and if the objectives of the lesson are achieved or not.			

# Teaching/Learning Procedure

#### **Period One**

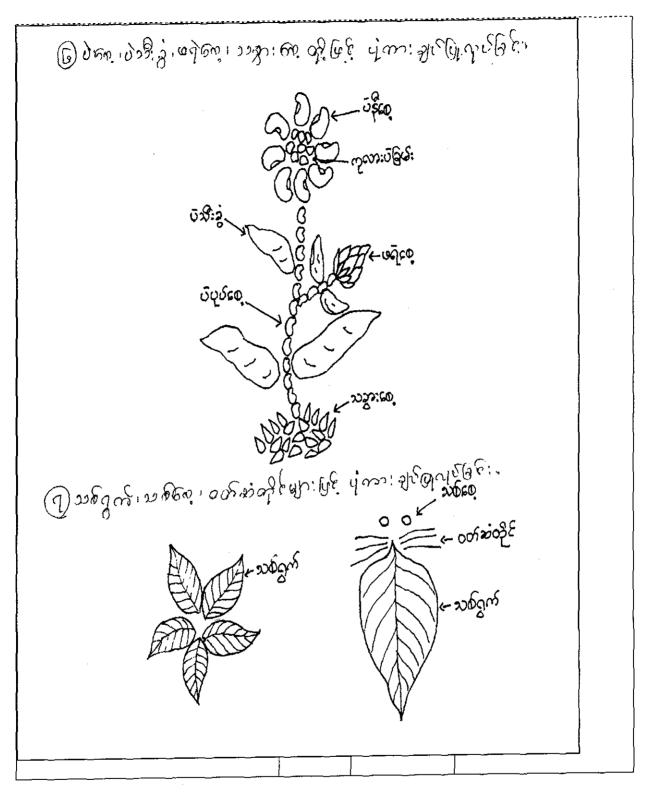
Learning Activities	Duration (Min.)	Teaching/ Learning Materials	Points to be noticed
1. (a) Let children go to school garden and observe plants. Ask children to pick each leaf, which they like. Teacher leads the children in observing plants.	15 min.	School garden	Ask the children one day ahead to bring fruit, flower, and leaves in case of the school, which has no school garden.
<ul><li>(b) Ask the children if they know the leaf that they picked; from what plant they picked that leaf; whether it can be eaten or not etc. and let them come out in front of the class and tell as far as they know.</li><li>Have the children tell as far as they can and teacher has to give them help so as to be able to tell more facts.</li></ul>	15 min.		

#### Period Two

Learning Activities	Duration (Min.)	Teaching/ Learning	Points to be noticed
		Leanna	

	T	Materials	
<ol> <li>Have the children collect various shaped leaves, flowers, fruits and seeds as much as they can and let them play freely.</li> </ol>	20 min.		Take care of seeds not to enter the ears, nose of the children. It is only the description
(a) Making leaf slippers Make slippers with large leaves such Badum leaf (Almond leaf), Teak leaf and In leaf etc.			of sample of games. It is to play with available things. Other game items that children can make such as making necklace
O woogan it as Elin 2 State especial		ng hy <sup>Eul</sup>	with water lily stem, buffalo's head with leaf, making design on the bag and clothes by sticking <i>Araminna fibre</i> .
(b) Making hand bag with leaf It can be made of large leaves.	_		
D 206 g of y moiston Q a v Cat Capiton A capiton A capiton Q a v Cat Capiton A capiton A capit			
(c) Making garland of flower They can be made of flowers with long soft stem.			

Dufini: 29.4 Grave	sc.		Take care of beans not to enter the ears, nose of the children.	
(d) Making sweet potato toys				
Various toys can be made by connecting cut pieces of sweet potato, potato, and taro with toothpicks or small sticks.			202 102 102 102 50 5 102 50 5 102 50 5 102 50 5 102 50 5 102 50 5 102 50 5 102 50 5 102 50 5 102 50 50 50 50 50 50 50 50 50 50 50 50 50	o }
Ask the children what parts of plants the sweet potato, potato and taro are. Where are they located, on the ground or under the ground?	5			
Teacher tells children that they are roots.				
(e) Making designs with various beans	•			
Make design by sticking beans, cucumber seeds, watermelon seeds, sunflower seeds (grain or husk), husks of long bean, and ground nut grains.				
(2) Let the children identify by themselves the leaf, root, flower, fruit and seed with which they are playing. Ask, "Which part of plant is the thing with which you are playing, either one of leaf, fruit, root, seed, and stem?"	10 min.	various parts of plant	Teacher has to give guidance for the children to be able to identify correctly.	



#### Period Two

Learning Activities	Duration (Min.)	Teaching/ Learning Materials	Points to be noticed
Have the children root out the plant of which parts are easy to show like Roselle and chilly.	15 min.		Go and observe in the school garden practically.

	· · · ·		·
Then ask the children to observe by			
group.			
Teacher leads the children to go to			
school garden and to take out each			
small plant by each group and then	,		
they have to observe through			
comparing the small plants with large			
trees.			
Teacher tells the names of five parts of			
plant (stem, leaf, flower, fruit and			
root).			
Depending on the numbers of children,	15 min.	pictures of	
organize about five groups and ask		small plants	
them to cut the small plants that they			
took into parts separately and connect			
again the parts in order to make their			
original forms.			
Teacher cuts off the five parts of plant			
in order to make major parts of tree			TT .1 1911
such as leaf, fruit, flower, root and			Have the children carry
stem distinctive.			out by group.
			Distribute one plant to
After that, have the children stick them			each group.
on the large sheet of paper, and write			Cut the small plants that
labels such as stem, leaf, flower, fruit			Cut the small plants that
and root.			they took out and stick the separate parts on the
လႊဂလာပန			paper by using cello tape
			or glue.
the set			of glue.
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TALIT - MBG.			
<i>X</i> <sup>**</sup> <sup>*</sup>			
By connecting the parts of flower,			
fruit, leaf, stem and root in disorder,			
ask the children, "Why don't you			
connect the parts like that?"			[]

Showing a small plant, teacher lets each child tell at least three parts of plant. Teacher assesses through oral test.

Reference

Assessment

Let the children identify and point out the parts of plant by holding a plant practically by themselves.

#### Parts of a plant

A flowering plant fundamentally consists of an underground root system and an aerial shoot system. The underground root system is made up of main root and lateral roots. The aerial shoot system is composed of stem, branches, leaves, flowers, and fruits. Root, stem, and leaf are vegetative organs and flowers are reproductive organs.

Reference: Standard Nine, Biology Textbook, Basic Education and Textbook Committee.

# Topic 3: The Needs of Living Things

Key Concept	Shelter is also required for growth of living things apart from food, water and air
Learning Objectives General Objectives	To be able to describe the fundamental needs for the growth of living things.
Specific Objectives	<ul> <li>Children are able</li> <li>1) to describe how living things use the basic needs.</li> <li>2) to explain how living animals live and protect themselves</li> <li>3) to classify how living things live in different shelters to get protection and to withstand the weather</li> <li>4) to tell that clothes are worn depending on the weather and location</li> </ul>
Activities Involved	<ul> <li>Observation</li> <li>Whole class discussion</li> <li>Answering questions</li> <li>Group activities</li> <li>Doing practically (drawing)</li> <li>Matching</li> <li>Story telling</li> </ul>
Teaching/Learning Materials	Small picture cards of each type of living things, phrases cards, paper, pencil, living plants and languid plants (if impossible to get real plants, can show picture portraying these two types of plants), picture including living things
Teaching Periods	9 periods (270 minutes)

Before Getting Started	

Background Information for Teachers	<ul> <li>Food, water and air are the basic requirements for the growth of living things. The way of receiving and utilizing these basic requirements differ from one living thing to another.</li> <li>Living things know how to protect themselves for their survival and safety. The way of protecting themselves vary according to the difference in types and body composition.</li> <li>Living things live under various shelters to protect themselves from their enemies and severe weather conditions. As human beings are the most intelligent among the living things, they build houses that include roof and sidewalls to live in and wear various clothes</li> </ul>
	according to the weather and location.

# Lesson Planner

<u> </u>	Period One	Period Two	Period Three
Specific objective	To be able to tell how livir	ng things utilize the basic re	quirements
Introduction (Evocation)	Asking questions; Matching living things with the food they eat	Discussion with whole class; Asking questions by teacher	Practical activity – Doing inhaling exercise
Development (Reflection)	Giving answers after group discussion	Observation by looking at the picture	Group activity; Let them do practical activities
Conclusion (Realization)	Letting the children know how living things make and consume their food	Let the children know that living things are to drink only clean and fresh water	Let the children know which parts of the body can be used for breathing
Assessment points	Collaboration	Collaboration	Let them involve

	Period Four	Period Five	Period Six
Specific objective	To be able to tell how living things utilize the basic requirements	To be able to explain how living things protect themselves and survive.	To be able to describe that living things live under various shelter to be safe and to withstand the weather
Introduction (Evocation)	Group activity	Observation; Asking questions by teacher.	Group activity Drawing
Development (Reflection)	Observation	Group activity; Observing the picture	Practical assignment; Answering questions
Conclusion (Realization)	Let the children know that for the growth of trees, they need nutrition, water and sunlight	Let the children understand that living things can instinctively prevent themselves from danger	To let the children know that human beings live in a complete house with both roof and sidewalls.
Assessment points	Collaboration	Collaboration	Collaboration

	Period Seven	Period Eight	Period Nine
Specific objective	To be able to describe that living things live under various shelter to be safe and to withstand the weather	To be able to explain that living things wear clothes depending on the weather and location	Discussing on the lessons taught to memorize well
Introduction (Evocation)	Group activity; Asking questions by teacher Story telling	Discussing in a whole class; Asking questions by teacher	Group activity
Development (Reflection)	Group activity; Practical assignment Drawing	Group activity Drawing	Give practical assignment; Discussion in group Speak up in turns
Conclusion (Realization)	To let the children know that animals instinctively	To let the children know that men wear clothes	To let the children know that safe protection is

	live in places where they are safe	according to the location and weather	also needed for living things to live apart from food, water and air
Assessment points	Collaboration	Collaboration	Collaboration

# Teaching/Learning Procedure

## Period One

Learning activity	Duration (Min.)	Teaching/ Learning Materials	Points to be noticed
Group discussion Let each group give 2 names of the animals that they know. (Teacher notes down on the blackboard)	5 min.	Small picture cards of animals and their food	Give them time to think before answering.
Let them give answers in groups of the food of the mentioned animals (Teacher matched with the corresponding animals and their food)	5 min.		Teacher should instruct that each group is speaking up in turns.
How do these animals get their food? How about you? What do you eat? How do you make these foods to eat? Then how do animals make their food?	10 min.		To memorize well that animals eat hunted and raw meat. Let them answer freely. Encourage them to get the answer that man cooks food to eat.
Distribute the ready-made pictures of the animals and the cards, on which their food was written, to every group. Have them match the pictures and food correctly. (Make sure to distribute that each group gets at least (3) sets) Let one student from a group to choose carnivorous animal from the pictures and show the class. Let all the groups do the same in turn. Teacher guides to have correct answer.	10 min.		Can take animals in the vicinity as examples depending on the location.
Then in the same procedure as above, let them choose herbivorous and omnivorous animals accordingly.			

### Period Two

Learning activity	Duration (Min.)	Teaching/Learning Materials	Points to be noticed
<b>Discussion in a whole class</b> Begin the lesson by asking questions of the previous lesson. How do men make and eat rice, curry and food? How about animals?	5 min.	Pictures of (3) glasses of different types of water (if realia is not available, draw on the whiteboard)	Raw and cooked
Group Activity Children, what do you normally drink after eating? What do you do when you get tired after playing? What have you seen animals do apart from eating? What kind of water do you drink? What do we do with the water before drinking? Have you seen filling up the drinking water pot at home? How do you fill up? (Let the groups answer in turn)	15 min.		Give them some time to think and give answer. Teachers should ask and help to get the answer, 'drink water'.
Distribute the pictures including the (3) cups of water that show i) water that includes some residues (unfiltered water) ii) clear water (filtered water) and iii) boiled water. (Only if realia are not available) Let them think and give answer, which water would they drink from this picture? How would you do to purify the water and make if free from bacteria? Conclude the lesson by saying that living things need water apart from	10 min.		Teacher should prepare that each group has one picture. NOTE: Everybody cannot boil water to drink but we should let the children have the idea that water should at least be filtered before drinking
food.	T St	Bessee	

#### **Period Three**

Learning activity	Duration (Min.)	Teaching/Learning Materials	Points to be noticed
<b>Discussion in a whole class</b> ( <b>Practical Activity</b> ) Begin the lesson with breathing exercise.	5 min.		Teacher should guide that all students are involved in the practical activity.
Group Activity During breathing exercise, which part of your body inhale the air? Let the children breath by holding their stomach. Ask what happen to the stomach? Let them exhale and ask what happen then. Which animals live in the water? Let the children breathe by closing their nose. Which part of the body does the inhale and exhale?	10 mir	t.	Let them answer only after taking some time to think. Teacher should guide to answer in turns. Teacher asks to get to the answer, 'Fish'. Let them know that 'mouth' does the inhale and exhale.
Distribute the picture of the respiratory system of fish to all groups and let them discuss. How do fish breathe in?	15 mir	respiratory system of fish.	Let them realize that f a fish breathe with gills.
Where do earthworms live? Which part of their body, do you think, would do the inspiration? What's happening with the skin of earthworms? Teacher will explain that earthworms inhale through their outermost wet skin.			

## **Period Four**

Learning activity	Duration (Min.)	Teaching/Learning Materials	Points to be noticed
Group Activity (Memorizing the previous lessons) Let them match the pictures of various animals and their corresponding nose correctly.	10 min.	picture of various animals and their nose	Teacher should organize to discuss among one another.

	Image: Second	Toocher notes down
Distribute 2 pairs of plants, one fresh and one withered, to each group. Let them compare the two plants and ask them the differences. Give them some time to think and ask, 'Why is this one fresh?' Why is this one withered? What would you do to refresh it? What will happen if we leave it without watering for a long time?	Pictures of the two plants (If real plants are not available)	Teacher notes down all the answers on the whiteboard.
Distribute pictures of 2 trees that are grown on separate places to each group. Let them discuss and answer the peculiarity in this picture. Which tree from this two, is growing and why?	Pictures of the two trees	Teacher notes down all the answers on the whiteboard. Let the children understand that food, water, air and sunlight are necessary for the growth of a tree.

### **Period** Five

Learning activity	Duration (Min.)	Teaching/Learning Materials	Points to be noticed
Hang the picture of various living things in front of the whole class.	10 min.	Picture that includes various kinds of living things	Let them answer freely and note down all their answers on
<b>Discussion with the whole class</b> Let them give the names of the			the whiteboard.
animals by pointing out in the picture. Ask what these animals would do if they are to face the enemies and difficulties or when they are frightened. Let them answer after discussing. Eg: What does a cat do when it faces an enemy? What does a bird do when it faces an enemy? (Children, what would you do if you see something scary or horrible?)			
<b>Group activity</b> Let them give answer by observing peculiarity of the picture of butterfly, moth and grasshopper. Let them think and answer why they have this peculiarity. What could have happened if they do not have this for protection?		Andrew An	Teacher should help and ask to get the answer, 'taking precaution'.
Distribute small pictures of animals and word cards. Let them discuss in groups and match correctly.	10 min.	Pictures of living things and cards on which their precautionary measures are written	Show the whole class after matching correctly. Any animal in the vicinity can be taken as example depending on the region.

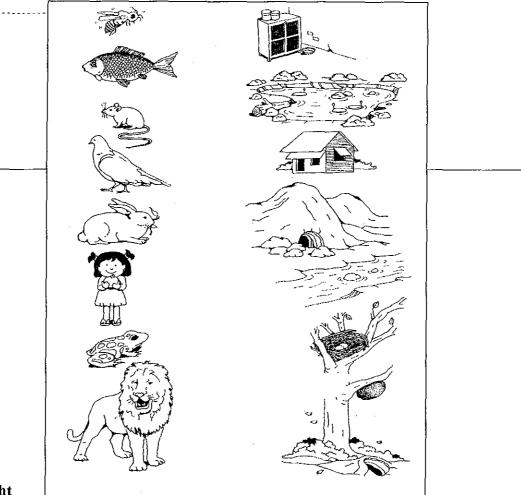
## **Period Six**

Learning activity	Duration (Min.)	Teaching/Learning Materials	Points to be noticed
<b>Group activity</b> Let the children draw a picture of their house or a house they want to live in.	10 min.	Cards of parts of a house and pictures of a complete house	Let them draw on an appropriate papers or on note books
By looking at the house that they have drawn, ask: How did you build your house? What should be included to be a house? What will happen if a house doesn't have a roof? What will happen if a house doesn't have walls? Can you always live outside without staying in a house? What will happen if you live like that?	10 min.		Teacher should let them think first and help them to get some answers such as roof, sidewalls, floor, door, stairs, etc. Organize that all groups are to answer in turns
Teacher prepares the parts of a house such as roof, sidewalls, windows, doors, ladders, etc. with paper or cards. Distribute them incompletely to all the groups, i.e.: by omitting one part. Let them connect the parts and ask: What is missing in group (1)'s house, group (2)'s, group (3)'s, etc.? Teacher will ask in turns if they can live in a house like those. Then distribute a picture of a complete house to each group.	10 min.		
Do you want to live in a house like this? Why?			Let the children answer freely.

#### **Period Seven**

Learning activity	Duration (Min.)	Teaching/Learning Materials	Points to be noticed
Story Telling	15 min.	Small pictures of animals and places they live	Let them answer freely.
"Home Sweet Home" Once upon a time, there was a little ra together with his mother. One day, his because he did not want to do his hom from his house and sat by the stream a the stream heard his sound, he was ve. little rabbit and started to speak; "O p crying?". The little rabbit replied, "M don't want to go back home". So, the fish invited him to live together	mother scolded him ework. So, he went or ind cried. When a fish ry sympathetic upon i oor rabbit, why are y y mother scold me an	ut in he ou	

Do you think the little rabbit can live together with the fish?			
Then, the little rabbit tried to go down the stund not dive into the water. He, thus, said, "It's in you. I think I'll die in the water and I'm afrai get me something to eat?". So the fish broug for the rabbit. They were worms. moss. funci	npossible to i d of it. Will y tht some of hi	live with ou just	
Do you think the rabbit will like the food of the fish?			
The little rabbit did not want to eat such kind cried loudly again. A little bird in the tree he sympathized the rabbit and invited him to live	ard his cry. S		
Do you think the little rabbit can live in the nest of the bird and eat the food offered?			
She collected a lot of insects to offer him. Bu climb up the tree and dared not eat the bird's became more and more hungry but his friend The sun gradually set down so the evening bu darker. The rabbit thought of looking for foo could not even see his way home. He missed and his food so he decided to go home by gu At that time, his mother was preparing species collected carrot, water cress and some fruits	food as well ls could not h ecame darker d by himself i his mother, h essing the wa al dinner for h	. He help him. and but he is home y.	
She waited for his return. Later she became we look for him along the road. Somewhere on the rabbit and his mother accidentally knocked end wery very happy. The little rabbit promised the homework regularly and they happily went be home. One the way back, the little rabbit said invite my new friends, the fish and the bird we they really want to help me while I am in troo them nicely with our delicious food".	he road, the l each other. Th eat he will do ack to their w l, "Mother, I ho are my be	little hey were his varm want to nefactors.	
Can you imagine what will happen to them?			
<b>Group activity</b> Distribute one picture each, could either be of an animal or their dwellings, to every group. Then ask them to match	15 min.		Teacher should make sure that all groups get one each.
correspondingly. Let them draw a picture of an animal they like and where it lives.			Let them draw as they wish (this is just to make them happy)



# Period Eight

Learning activity	Duration (Min.)	Teaching/Learning Materials	Points to be noticed
<b>Discussion with the whole class</b> Children, why do you wear clothes? Is it possible that we don't wear anything? What will happen then? What kind of clothes should we wear when it's hot? What kind of clothes do we wear on a rainy day? How about in winter, when it is cold?	10 min.	Pictures showing the weather conditions	Let the children answer freely and happily. Record all the answers.
		->	

<b>Group activity</b> When traveling depending on the weather and location, what kind of clothes would you bring? Let them answer in group after thinking. After consideration, the leader from each group will give answer in turn.	15 min.	e.g.: Group 1) summer Group 2) rainy season Group 3) winter Group 4) trip to a beach
Tell me your favorite clothes or the one you wish to wear most.	5 min.	

#### Period Nine

Learning activity	Duration (Min.)	Teaching/Learning Materials	Points to be noticed
Recalling the previous lessons Distribute cards of animals, their food, protection, dwelling, etc to every group. Teacher should make sure that each group gets one kind of animal. Let them discuss in groups and write about the animal that they receive. e.g.: Rabbit Herbivorous animal, fast runner, lives in burrow, four-footed animal, etc (Let them tell every facts that they know) Then, ask them to write about their favourite animal Name of the animal: Its food: How it protects from enemy: Where it lives, etc:	30 min.	Cards of animals, their food, protection, dwellings	It is much better to hang the pictures that children have drawn on the places where children can see easily. The animal that they receive and the facts they have written should be matched. By giving time to think, children will promote their thinking ability and be able to speak out everything they know. Let children answer freely and happily. Teacher should supplement the necessities by asking questions.

#### 1. Describe (2) kinds of animal found in your environment and their ways of eating.

- 2. What do living things need apart from food?
- 3. Describe (2) animals that breathe with skin.
- 4. Describe the name of animal that breathes with gills.
- 5. Describe (3) types of animal in your surrounding and explain how they protect themselves.
- 6. How would you protect yourself?
- 7. What are necessary for the growth of trees?
- 8. How was your house built? Please explain.
- 9. What kind of clothes would you wear according to the season?
- 10. Describe the clothes that you wear.

## Reference

#### 1. The respiratory system of fish

Fish breathes through the blood capillaries that are included in the gills by means of exchanging gas. **Inhalation** 

When breathing the air in:1) the mouth is opened 2) the pharynx is lowered and 3) the opercula are closed. Then the mouth cavity spreads out and sucks water into the mouth. This water gets into the gill chambers. The oxygen saturated water passes over the gill fibers and exchange gas. The blood capillaries on these gill filaments absorb oxygen and release carbon dioxide.

#### Exhalation

In breathing out: 1) the mouth is closed 2) the pharynx is lifted up. When the oral cavity becomes narrower, the operculum is opened. Then the water that is saturated with carbon dioxide is released from the gill chambers.

2. Earthworms absorb oxygen and release carbon dioxide through their outermost layer (epidermis) of their wet skin by means of exchanging gas.

3. For children:

Pages 24, 25, 44, 76 from the book Thutayadanar Thaik (Encyclopedia on knowledge) under 'Insect' volume.