Professional Development Strand

Unit 4: Curriculum Studies

Module 4.3 Programming

Lecturer Support Material

Acknowledgements

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PASTEP

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Unit outline

Unit	#	Modules
Unit 4 **Curriculum Studies**	4.1	The National Curriculum
	4.2	Timetabling
	4.3	**Programming**

Icons

📖	Read or	Research
✎	Write or	Summarise
☞	Activity or	Discussion
ⓘ	Suggestion or comment for lecturer	

Table of contents

Module 4.3: Programming

This guide provides additional ideas for teaching and assessing **Module 4.3: Programming.**

Please take note of the following:

- It is important to read the module first, to decide what materials you will use, and what tasks and activities you will set for the students. It is also important to see how this module fits within the complete unit.

- It will be necessary to develop a course overview and determine topics to be presented which will take account of the time allocation given to this module.

- The material is written as a resource for the teaching of this module.

- Do not expect students to work through the total module alone. There is too much material and they will need assistance in determining the tasks required.

- Many of the activities have a number of questions to discuss and tasks to do. They are included to provide some ideas and stimulus, not necessarily to complete every part of each activity.

- The activities provide a focus for learning, and some may be suitable for developing into assessment tasks, but the activities are not written to be used as the assessment program. Ideas for assessment tasks are provided in the Unit Guide.

- Suggested time allocations are provided to give some idea of how this module fits in with the others in this unit. Lecturers have the flexibility to select material and use it in a way that will fit within the lecture program.

- The Lecturer Support Material is the same as the Student Support Material, with additional notes included in the text boxes containing ideas for further exploration of topics.

Rationale

This module is the final of three in a two-credit point unit of study. The modules previously studied in this unit are

- Module 4.1: The National Curriculum
- Module 4.2: Timetabling

The actual break up of topics and time allocation is flexible and is to be decided by the individual lecturer.

Objectives

By the end of this module students will be able to:

- explain the purpose of programs and the processes involved in programming
- demonstrate familiarity with considerations of programming.
- differentiate between types and formats of programs

- use syllabus documents to identify objectives, and incorporate these into programs

- plan a theme web and explain advantages of providing links between subjects

- demonstrate familiarity with outcomes based curriculum planning

- describe and plan for yearly, termly and weekly approaches

- consider the different formats and requirements of programs which may be required by your school.

How to use this material

This module is written as a series of topics, identified in the table of contents, and by their large subheadings. Each topic includes some readings and activities to complete.

It is the lecturer's responsibility to develop a course overview, according to the credit point loading and available time within the semester for each module. As this will vary between colleges, lecturers will need to select topics that are most relevant to the needs of their students.

Major topics include:

- Principles of programming and considerations

- Programming types

- Programming requirements

- Thematic and Integrated approaches to Programming

- Weekly and daily plans

- Outcomes based curriculum programming

- Assessment of programs

Assessment

Assessment tasks should be developed at unit level, recognising the development of knowledge, skills and attitudes across the three modules that make up this unit. The number of assessment tasks will be determined by the credit point loading given to the unit.

References

The student support materials contain all the readings necessary to complete the module. The readings have been adapted from the following texts:

Department of Education, Papua New Guinea (1999). *Programming Guide for Lower Primary Teachers (Grades 3 – 5).*

Department of Education, Papua New Guinea (1998). *Bridging and Bilingual Education.*

Department of Education, Papua New Guinea, (1998). *Bridging to English in Lower Primary.*

Department of Education, Papua New Guinea (1998). *Lower Primary Language Syllabus Grades 3-5.*

Department of Education, Papua New Guinea (1998). *Lower Primary Mathematics Syllabus Grades 3-5.*

Department of Education, Papua New Guinea (1998). *Lower Primary Grades 3-5 Environmental Studies Syllabus.*

Department of Education, Papua New Guinea (1998). *Health Education Syllabus for Lower Primary Grades 3-5.*

Department of Education, Papua New Guinea (1998). *Lower Primary Community Living Syllabus Grade 3 –5.*

Department of Education, Papua New Guinea (1998). *Lower Primary Physical Education Syllabus Grade 3 –5.*

Department of Education, Papua New Guinea (1998). *Lower Primary Syllabus Arts and Crafts Grade 3 –5.*

Madang Teachers College; Professional Development Strand (2000). *Curriculum Studies Booklet.*

Marsh, C. (2000). *Handbook for Beginning Teachers (2nd ed)* Longman

Murdoch, K.and Hornsby, D. (1997). *Planning Curriculum Connections: Whole School Planning for Integrated Curriculum.* Elanor Curtin Publishing: Australia

National Department of Education, Papua New Guinea (2003). *National Curriculum Statement for Papua New Guinea 2003.*

Professional Experience Unit, Faculty of Education (1998). *Planning for Pre-Service Primary Teachers.* Queensland University of Technology.

Planning and Preparing for Teaching

Adapted from Marsh, C (2000.) **Handbook for Beginning Teachers**. *Longman. Chapter 6.*

In Module 4.1, we looked at the role of curriculum in teaching and learning. The curriculum provides an overview, or blueprint for teaching and learning, usually over an extended period. A curriculum can be highly specific and prescriptive for teachers, but typically, it provides only general principles and ideas.

The new curriculum for Papua New Guinea, as we examined in Module 4.1 is a framework or guide. Teachers are required to take that framework and turn it into a teaching program. This can be very challenging, when there is so much to consider and so many choices to be made by the teacher.

What does planning require?

Marsh, (2000) outlines a set of guidelines to consider when preparing for teaching.

- *Planning is largely a mental and verbal activity.* Teachers need to think through their priorities and make links between what they teach, why and how. Through this thinking, imagining and playing with ideas, planning occurs. It's not just the formal document at the end.

- *Planning requires reconciling different priorities and goals.* There is no prescriptive answer to 'what must I teach?' Each teacher has to think about this, and prioritise what will be taught from a very broad curriculum. They need to make decisions based on official documents, school requirements, community needs and most importantly, student needs.

- *Planning requires critical reflection.* Teachers need to think carefully about the planning decisions they make both prior to and after they have given their lessons. It helps teachers to undertake informed action and provides a rationale for practice.

- *Planning requires risk taking.* Teachers must consider flexible approaches to learning. Sometimes they may choose easy planning, other times taking a risk with an innovative idea. Teachers faced with using new technologies can be scared and reluctant to try if they don't feel confident with the subject themselves.

☞ **4.3 Activity 1**

Imagine you are planning a holiday to another country. How would you go about this? What things would you think about? What choices and decisions would you need to make? What risks may you need to take?

ⓘ This activity could be completed in a variety of ways; talking, illustrating, representing ideas with diagrams or flowcharts. Try to encourage a variety of approaches for different learning styles.

What is a Program?

*Adapted from Department of Education, Papua New Guinea (1999) **Programming Guide for Lower Primary Teachers.***

📖

Most education systems throughout the world require teachers to develop programs of teaching (over a year or a term) and daily or weekly lesson plans.

"A program is the teacher's creative representation/interpretation of a curriculum". (Marsh, 2000, p.79)

The program should follow the broad principles of the curriculum. The focus and combination of activities will represent each teacher's judgements about what they consider important for their particular class.

Lesson plans are even more personal, in that the teacher creates learning activities for specific periods, usually half an hour, up to two hours, which enable students to demonstrate particular outcomes.

The main purpose of programming is to help you arrange the presentation of the course in an organised manner. This will help you to know what to teach and when to teach it.

There is no prescriptive national program for teachers to follow in the new reform curriculum. Instead, subject syllabus documents present a framework on which to plan and build teaching programs. Teachers are encouraged to develop their programs using the guidelines provided and according to the needs of their students.

Each teacher must prepare a program, which is prepared in advance and sighted by supervisors and inspectors.

Different provinces have different program formats, so the type of program you must keep will be dependent on where you are teaching.

(i) It is important that students are given every opportunity to become very familiar with the syllabus documents during this module.

Principles of programming and considerations

Before programming, it is important to take into consideration some of the factors or principles.

Consider children's needs

- Be mindful of children's experiences, cultural / religious / family background, interests

- Be aware of work done in previous grades

Examine relevant curriculum documents, materials for the grade assigned

- Have access to syllabuses, teachers guides and other curriculum documents and materials relevant to the grade you are assigned.

- Find out what materials or aids are already available for the subjects you will be teaching.

Consider total teaching time on education calendar

- It's also important to check the education calendar for the current year and note down public holidays, term breaks, school weeks and special events such as Education week, National Book week and so on before programming.

- In Church-run schools, you may need to check the church calendar for agency holidays and note that down.

Refer to timetable

- You will need to refer to your timetable which you will have already prepared when programming lessons.

Allow for revision and tests

- When programming, allow time for revision and tests. Children tend to forget knowledge learnt if they do not revise what they have learnt from time to time. Assessment and testing helps provide feedback on the effectiveness of your teaching.

Programming types

The type of program a teacher develops is closely related to the type of curriculum framework being used.

In the past, **subject** based programs were developed according to the content of the subject syllabus. Each subject was programmed separately, with no integration between subjects.

Subjects were fragmented into short periods of time, for example fifteen minutes for spelling, fifteen minutes for oral expression and fifteen minutes for written sentence. Teachers were required to stick to a very rigid timetable, where every teacher was teaching the same subject at the same time in every primary school. The content was very prescriptive and teachers didn't have too many decisions to make about what to teach and when to teach. These decisions were already made for them by the curriculum developers.

Such a subject-based curriculum was found to be inflexible and unresponsive to the needs of individuals and those living in different contexts within the country.

The reform curriculum has introduced a new approach, which in turn, requires a new way of programming. The reform curriculum gives teachers a curriculum framework from which to develop their programs. Teachers make choices about what and how they will teach. The new curriculum encourages a thematic and integrated approach, where subjects are linked using themes. This type of programming is known as **thematic** or **integrated** programming. Teachers have been using **objective** based programs in the past, but from 2003 an **outcome** based approach will be introduced.

Thematic or integrated planning is the recommended method of programming for the reform curriculum.

Program requirements

Whatever type of programming you are undertaking, there are three stages to developing your class program:

1. Development of an overall yearly plan
2. Development of a more detailed term plan
3. Development of weekly and daily plans.

Two programming methods will be covered in this module;

- programming using a thematic, objectives based program for Lower Primary

- programming using an integrated, outcome-based program for Upper Primary

(i) This module focuses upon current and future requirements in programming and planning, i.e. integrated thematic approaches using objective and outcomes based approaches. Information on subject based programming has been included in the appendix, but not discussed in any detail in the body of the module. Students should be developing skills in the current programming methods.

Thematic and integrated approaches to programming

(i) Wherever possible, lecturers should model the process of planning and develop examples with the students to assist their understanding of the steps.

Adapted from Education Department, Papua New Guinea (1999) ***Programming Guide*** *for Lower Primary.*

The thematic approach is an **integrated way of teaching and learning** which emphasises the common thinking skills, social skills, values and attitudes between subject areas. The process of learning enables the children to see that a body of knowledge is a unified whole that is acquired through elements of all subjects.

Programming using the thematic approach is the **recommended** way of organising learning in the Lower Primary. All subjects in the Lower Primary have a syllabus that outlines the course content. You will need to study the contents of each course and choose themes that you can organise into yearly, term and weekly plans and the daily lessons for each subject area.

Many teachers find it easy and useful to plan as many of their lessons as they can around a central theme. The theme may be used for a few days, a week, two weeks or more. The theme may be used in one or two subjects or in as many subjects as appropriate. It may be difficult to find themes in which you can teach every subject, so you must be careful not to force a subject into a theme. Use your syllabus documents to help you select themes that cover many subjects.

The thematic approach is recommended for the **bridging years** (Grades 3 –5) because themes have been appreciated as being valuable in teaching a new language at primary level. Themes provide a focus for students to participate in **real** and **meaningful experiences**. Themes help to reinforce vocabulary learned in one subject because the same and related vocabulary may be used in other subjects.

Thematic approaches are also recommended for **multigrade classes.** By looking through the syllabus documents, teachers can identify common themes across grade levels, and plan a common theme for the class, but use different objectives and activities for the various groups / grades in the same classroom. Teachers should not program for two or three different classes in the multigrade classroom, but plan one program which caters for the needs of all students in the class.

A thematic approach to programming shares many similarities with the subject based programs we looked at earlier in the module. A yearly, term, and weekly program still need to be developed, but the theme chosen forms the basis of the program and the subject activities are integrated, eg if the theme was my family, activities in all seven subject areas where possible would be based around some aspect of the family.

Identification of themes

The first task in beginning a thematic program is to identify common elements, topics and links between the different subject areas in the syllabus documents for your grade.

1.   *Collect all the Syllabus documents for your area (i.e. Lower Primary or Upper Primary)*

2.   *Identify the main themes or units in the syllabus documents for your grade level (eg, Environmental Studies for Grade 4 has four main themes.*

3.   *Make a list of all the major themes that you can see in the documents (Maths and English focuses are best added later)*

4.   *Think of any other themes that are relevant to your community eg, special events, national days etc*

5.   *Prioritise the themes according to the events of the year.*

6.   *Work out your yearly plan.*

There are a number of ways to go about identifying the themes you will use in your program. Two ways will be outlined here.

1. Start with the syllabus documents

An example of the steps for the development of a yearly plan using the Grade 4 syllabus documents is shown below.

1.   The table below lists the units or topics found in three Grade 4 curriculum documents Can you see the possible links?

Community Living	Different people in the Province
	How People Organise Themselves
	Ways We Do Things
	People and Resources
Environmental Studies	Different Environments
	Plants and Animals of PNG
	The Environment of PNG
	Living Resource of PNG
	Non Living Resources of PNG
Health Education	Healthy Body and Mind
	Healthy Family and Community
	Healthy Food and Hygiene
	Safety and First Aid
	Things that Harm Us
	Lifestyles

English and Maths focuses can be decided once the themes are in place. Arts and Crafts and Physical Education can also be developed around the theme.

2. Community or special event days. For example, World Environment Day, Independence, Easter etc. These could be included as part of another unit if they are relevant, or they could be a unit on their own.

3. From these main topics, think about the possible themes that could be developed.
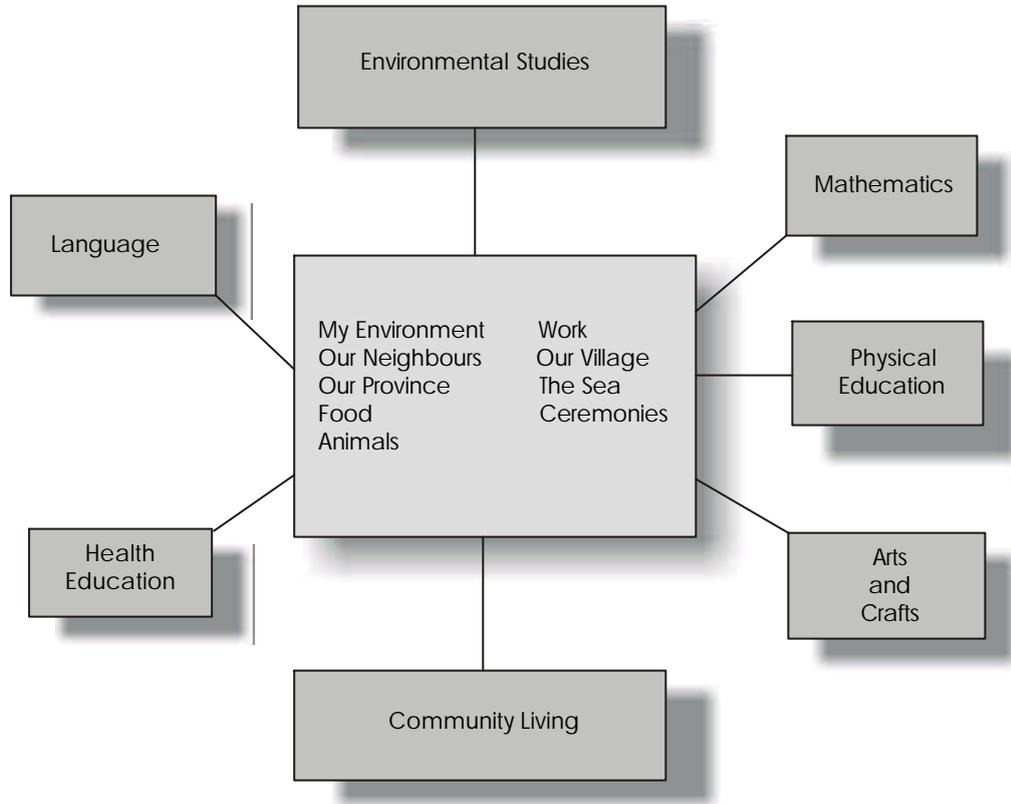
These are not the only possibilities, just some examples. Choose themes that are meaningful and relevant to the community in which you teach.

✍ 4.1 Activity 2

Plan a program for a Grade 4 class using the topics or units identified in the previous table. List the units under the syllabus areas below, then think of a theme(s), which would link the topics together.

Community Living	
Environmental Studies	

Health	
Theme(s)	

ⓘ Encourage students to work in groups. It will support their learning and provide a range of ideas for the task

Next, add any special days or celebrations that may be included in your themes.

Now think of some themes that could include some of the units from your grid. Add them to the chart below.
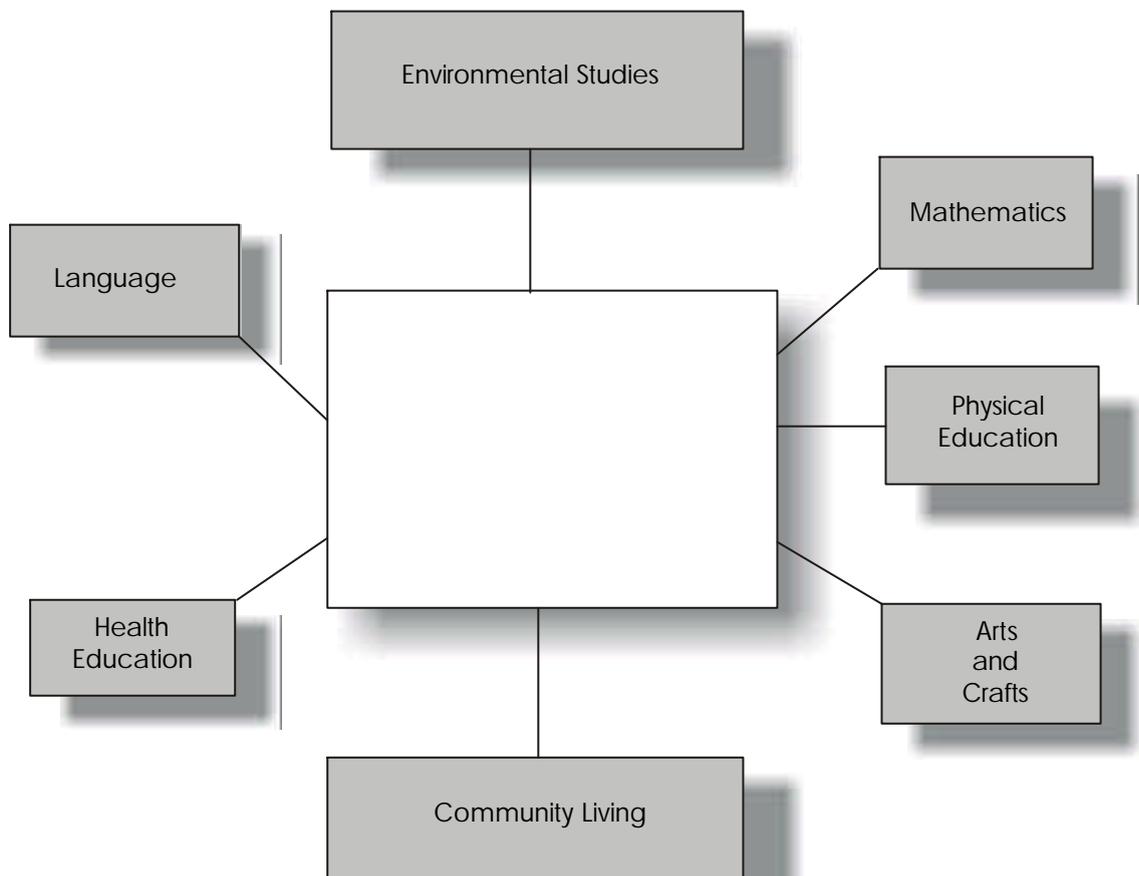
This will be the basis for your yearly plan.

2. Start with brainstorming

Another way you can end up with the same yearly thematic plan, is to brainstorm first, then use the syllabus documents to help identify units and objectives that can be taught under each of the chosen themes.

> 1.   *Brainstorm possible themes. This will require you to think about broader concepts than can be used to cover more than one subject.*
>
> 2.   *Think about community events and ceremonies, eg. Bride price, funerals, gardening etc.*
>
> 3.   *Identify themes that are relevant to your community.*
>
> 4.   *Prioritise the themes according to the events of the year and the needs of your community.*
>
> 5.   *Check the syllabus documents to identify units and objectives that can be taught under each of the chosen themes.*
>
> 6.   *Work out the yearly plan by arranging the themes into a four-term program.*

Some considerations to make when developing themes

- Sometimes teachers choose themes that they like to teach and students 'do the same thing' every year. If you are planning in this way, it is important to plan with other teachers. Some schools design whole school thematic plans to make sure themes are not repeated year after year.

- If you are teaching themes based on interest and community, you still need to ensure that you are covering the topics and units in the syllabus. There is a danger that if you do not look at the syllabus documents, some areas of the curriculum may be missed out completely.

The next step: term and weekly programs

Once you have your yearly overview, you then need to divide it up into terms and weeks. This is the same as the subject based plan, but your themes may go for a number of weeks. You need to decide how much time you wish to spend on the theme, and that will depend on what is included and what your objectives are. One week is too short to develop a theme, and whilst some teachers may have the same theme for the term, others may program two or three themes for a term.

Below is an example of how the yearly plan may be divided up into terms, and the number of weeks spent on each theme is shown.

Week	TERM ONE	Week	TERM TWO	Week	TERM THREE	Week	TERM FOUR
1	Our School	1	My Environment	1	Ceremonies	1	Different Environments
2		2		2		2	
3		3		3		3	
4	Our Neighbours	4		4		4	
5		5		5		5	
6		6		6	Plants and Animals of PNG	6	
7	The Village	7	Our Province	7		7	Healthy Lifestyles
8		8		8		8	
9		9		9			
10		10		10		10	

✍ 4.3 Activity 3

Using your yearly theme developed for Grade 4, try to plan a four-term program which will include the themes you wish to cover.

Week	TERM ONE	Week	TERM TWO	Week	TERM THREE	Week	TERM FOUR
1		1		1		1	
2		2		2		2	
3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	
9		9		9		9	
10		10		10		10	

Planning a thematic unit outline

*Adapted from QUT Faculty of Education (1998) **Planning for Pre-Service Primary Teachers.** QUT Bookshop Publication*

Once your broad themes are decided, the next step is to develop the theme into a unit of work which will be taught for a number of weeks.

A thematic unit outline is a "brief, concise and relevant outline of the short term program to be undertaken by a particular group of students." (Professional Experience Unit, Queensland University of Technology 1988, p30)

Unit outlines

- assist teachers in the development of well thought out programs of learning for students

- ensure that planned learning programs are sequential

- cater for the changing needs and interests of students as they develop throughout the term, semester and year

- ensure continuity for students, and

- ensure professional accountability.

There are many ways of developing thematic unit outlines. Your lecturer will discuss the format that is required by your college for developing units of work. This module provides examples of ways units could be developed.

Planning the content

Units of work can be planned according to subjects, such as Maths, or English, but more often, content is drawn from across the range of subjects in the curriculum. A unit on Animals in the Sea could use content from Science, Environmental Studies, English, Community Living etc.

Teachers should think about content selection and organisation. The content of the unit should be organised to reflect the key concepts and the major ideas of the material to be learned. This structure can be presented as a unit outline. A unit of work can have a broad objective, outcome or understanding, and more specific objectives or outcomes for particular subjects within the unit. These objectives should be identified in the teacher's planning at a number of levels; in the unit, term, and weekly program documentation.

Planning of learning experiences and teaching strategies

One way of organising the learning experiences and teaching strategies for a unit of work is to consider three general sequential stages of a unit; the **orientation phase**, the **enhancing phase** and the **synthesising phase.**

The orientation phase is setting the scene or mood for the learning experiences to come. The teacher tries to stimulate motivation by introducing pictures, objects, books, telling stories or asking questions to get the students thinking. An excursion is a good method of introducing a unit of work . The main purpose of this phase is to

- identify what they know about the topic

- identify what they want or need to know about the topic.

The enhancing phase assists students to find solutions to problems set up in the orientation phase eg collection of data, organisation of data, drawing conclusions, applying them to other situations, learning the skills to find the solutions.

The synthesising phase is where students demonstrate what they have learned. Students can show their learning through group or individual reports, charts, pictures plays, talks, booklets they have made and demonstrations to name a few. The purpose of this stage is the presentation of findings, organising research and reports and sharing learning with others.

The following table shows the three phases in an English/vernacular unit outline for a study of insects in a Grade 3 class. Maths and other subject areas would also need to be developed around this outline.

Unit Outline: **INSECTS**   Grade 3/4   Duration 4 weeks   Curriculum focus: Language / Environmental Studies

Objectives: develop a greater knowledge of insects / compare the differences and similarities between insects/ plan for and write a description on Insects.

Orienting Activities	*Enhancing Activities*	*Synthesising Activities*

• *K, W, L on Insects*
 • *Books/pictures of insects*
 • *Matching animal names to pictures*
 • *Word bank (in Vernacular / English of insect words*
 • *Stories about insects (traditional and modern)*
 • *Big book about insects (teacher made, with an emphasis on using the genre of description)*
 •
 (Vernacular and English to be developed by the teacher according to the needs of the class)
	• *Modelling the structure of a description – identifying main information, characteristics, food, babies, habitat*
	 • *Modelling the difference between a story (fiction) and a description (non fiction)*
	 • *Jointly construct a description on Insects*
	 • *Deconstruct, (break down) the description into a number of steps*
	 • *Matching a description to an insect*
	 • *Write a description in pairs on an insect (vernacular / English)*
	 • *Read a book on insects (teacher made or from reader)*
	 • *Identify difference between a story and a description*
	 • *Give a verbal description of an insect*
	 • *Draw the life cycle of an insect*
	 • *Write an description of an insect individually*
	 • *Illustrate your description*
	 • *Write an acrostic poem about your insect*
	 • *Draw insects for class display*
	 • *Learn and insect poem*
	 • *Word searches*
	 • *Crosswords*
	 • *Cloze activities*
	 • *Innovations on the text*
		• *Students write 2 – 3 descriptions of insects to make into a small booklet to share with another student*
		    - *Student to choose insect*
		    - *Plan a description of insects*
		    - *Collect information*
		    - *Write information in a few .sentences*
		    - *Write first draft*
		    - *Conference with peers/teachers*
		    - *Edit first draft*
		    - *Publish description*
		    - *Present story in booklet*
		    - *Read/ share book with another student*
		
		 (Students should display confidence in working in the vernacular and English activities developed as decided upon by the teacher

The unit outline can be more detailed, including a weekly breakdown of activities, grouping and listing the strategies and skills. A detailed example is given, adapted from Murdoch, K., Hornsby, D (1997). These are ideas upon which unit planning can be adopted.

Unit Title: Getting Around transport		Host content area: SOSE and Technology		Understandings; There are different forms of (sea, land, air and others)		
Year Level: 3/4				We use transport for many different purposes.		

Stage of Unit	Purpose	Resources, Preparation	Sequence of activities	Grouping	Strategies and skills
Tuning in (Orientation phase) Weeks 1 and 2	To find out children's prior knowledge To establish interest To group and classify known forms of transport To raise questions for further investigation	Magazines Paper Scissors / glue Cardboard for display	Brainstorm How do we move things from one place to the other? How do we travel from one place to another?	Whole class	Brainstorming Listening Recalling Retelling Classifying Grouping Working with a partner Discussing
			Cut out pictures of things to do with transport from magazines, newspapers and group with a partner.	Teacher selected pairs	
		Teacher made big book about transport, story about a canoe trip or a walk to the village. Blackboard, paper to draw different forms of transport. Story from reader selected	In 4's combine pictures and regroup Label groups and display	Pairs join	
			Devise large classification chart for grade	Whole class	
			Children organised into three groups. Read a story with some form of transport as a theme (eg travelling by canoe) Discuss forms of transport children have used. Visually represent one or more forms	Mixed ability groups	Questioning Listening Sharing Interpreting Creating Reflecting Discussing Presenting Questioning Recording
			List questions we have about transport. What do you want to know?	Individuals , then whole class	

Stage of Unit	Purpose	Resources, Preparation	Sequence of activities	Grouping	Strategies and skills
Finding Out (Enhancing Phase) Week 2	To help children gather information about various types of transport and how they are used To broaden children's understandings To provide a link between home and school experience	Plan a walk where some different forms of transport may be seen, (i.e. near the river, near a highway, around the village or town.	Local walk to observe the different forms of transport used in the area. Over a week, children keep a simple log of the various journeys they make, and the type of transport used (i.e. walking, travelling in a PMV or car, canoe transport)	Whole Class Individual	Observing Recording Interpreting Gathering and recording data Carrying out an independent task.
Sorting Out Week 2	To help children work with the data they have gathered in a range of ways	Previous work done on charts etc	Compare transport seen on the local walk with forms listed in the orienting activity. In groups, children choose one form of transport seen to role-play. Others must guess where they are going and how they were getting there.	Whole Class Groups of 4 (2 boys, 2 girls)	Performing
		Materials to make class book. Paper, blackboard	Create a class book about the walk, by completing a joint construction of the story. Teacher can write on the chalkboard or paper. Children can illustrate the book in groups. Vernacular / English text developed	Whole class Group and individual work	Matching visual and written text.
	To process experience through art and technology	Collection of natural materials and scrap materials available.	Design a model to represent the local area around which the children walked. This could be made with materials collected in the playground and arranged on a table, piece of cardboard , outside with a stick in the dirt.	Whole class, then groups of three for construction	Designing, making, evaluating
Week 3	To process experience through mathematics	Information collected on forms of transport. Paper squares for pasting or fastening on to large chart.	Children sort and graph the information they wrote down about transport over the previous week. Combine results on a large class tally. Interpret: What is the most/least common form and use of transport in our area? Why? Write and display conclusions	Individuals Whole class Small groups Individual and whole class	Tallying Counting Graphing Interpreting Sharing

Stage of Unit	Purpose	Resources, Preparation	Sequence of activities	Grouping	Strategies and skills
Finding Out Week 4 Sorting Out	To gather further information about the roles of people in the transport industry.	Arrange a visit to a transport centre, eg an airport, airstrip, wharf.	If possible arrange a trip to the airport or the wharf. Observe what happens at the airport, and other forms of transport (baggage handling, refuelling, etc) Develop a story map for the visit, Develop a vocabulary list of "airport' words in vernacular and English	Whole class	Observing Recording Asking questions Listening
Making conclusions Week 5 (Synthesising phase)	To help revise original generalisations To synthesise activities and complete the unit on transport	Sentence strips Construction materials	In groups, write about what you have learnt about: Types of transport What transport is for People and transport Using available materials, design and make your own vehicle. What is the purpose of your vehicle? How will it work? Where does it travel? Land, sea, air? What people will you need to operate it?	Individually then groups of three Groups then whole class	Writing Generalising Writing full sentences Listing Justifying Designing Creating Cooperating

Moving to the weekly plan

If you are using a unit outline planned in weeks, it will be easy to complete your weekly plans by adding Maths, English and other integrated activities that may cover a number of subject areas.

The weekly program is worked out by using your chosen themes and developing a theme plan. This can be done as a theme web, or on a weekly timetable.

The following is an example from the programming guide showing a weekly program in the form of a theme web.
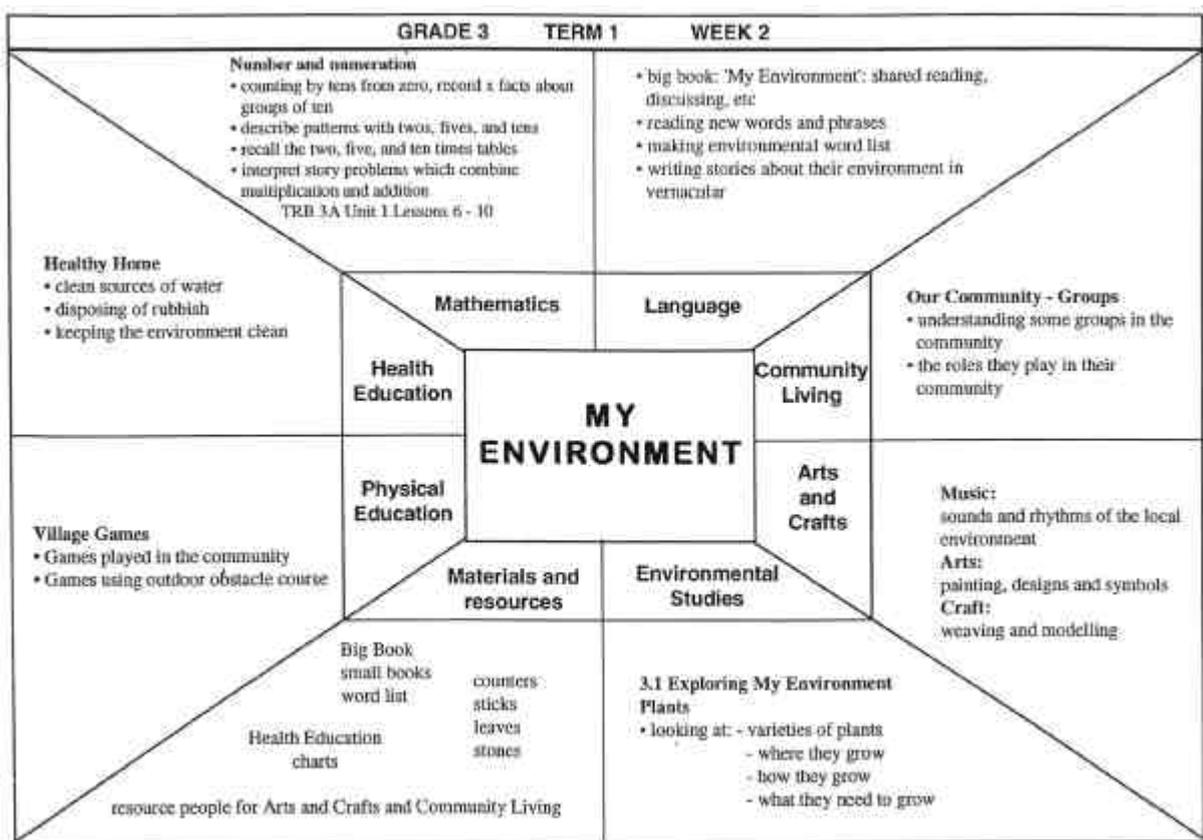
Your college will have particular requirements for weekly planning, and your lecturer will advise you on the required format. When planning during block teaching, you may be required to plan as the classroom teacher does, or you may have the opportunity to develop your own method of weekly and daily planning.

(i) It would be helpful to students if the lecturer can provide a template showing the planning format required.

Daily planning

After you have done your weekly program (web or timetable), you can develop your daily plan using the information from your weekly theme. The daily program should show activities for each subject that will be taught in a day.

1. *Make up teaching objectives with examples of activities for each lesson of each subject, using the weekly topics.*

2. *Identify specific references and resources to enable you to teach the lessons well.*

3. *Write details for each lesson in blocks which match the timetable.*

4. *Include what the teacher and different groups will be doing during each period.*

5. *Write your daily plan in a way that you find most useful.*

There are many different ways that teachers may record their daily plans. Your lecturer will tell you how your college would like to complete these plans.

One way described in the Programming Guide for Lower Primary Teachers is using a web for daily programs, as well as weekly.

One example is given below.

Term 1 Grade 3 Week 2 Day 1

Maths

Multiplication and shapes - Unit 1, 1. 6
• practise counting by tens from zero, and and record
multiplication facts about groups of ten -TRB p 22, Pupils
Book 3 A p 6 - 30 minutes

Arts and Crafts

• investigate and discuss community's arts and
artists and talk about drawings, paintings,
printing, shaping, designs, patterns, materials
etc sample paintings, drawings and crafts from
the local community
• investigate community words, meanings and
feelings relating to colours, lines, shapes and
patterns
(variety of art work, visiting speakers) - 60
minutes

Health Education

Community Living

• list different groups of people living and working in the
community in small groups and write a sentence in
vernacular describing what each group represents on the
charts
(L/P syllabus p 9, pictures of families, and different groups,
in the community, charts) - 30 minutes

My Environment

Physical Education

Environmental Studies

• identify the dangers of water/rivers/sea and
discuss reasons why it is important to learn to
swim/survive in the water
• practise water safety/survival skills with teacher/
or swimming instructor
(L/P Syllabus, Swim & Survive Booklet) -90
minutes

• observe/discuss and list different types of
plants around the school environment and
state where they grow
(L/P Syllabus p 14, cardboards, paper, glue)
- 60 minutes

Language

Theme Activity • Revise greetings/command/do some TPR activities using items in the
room, eg "Put your book on the table." "Give your book to your friend." "Hide your book
under your chair." • Tour the school environment, name things found around the school,
compare old and new school
Literature Activity • Shared Reading - My Environment
Interacting with the text • Answer literal questions (Language Resource Book p 10)
• Create word mobile using words from the shared reading/tour of the school, write the
words in both vernacular and English
Process Writing • Write negotiated text in vernacular about the tour of the school.
Dictation • compare vern. 'a' with Eng. long 'a' • pronounce English words from school tour/
Shared Reading eg. classroom, school, new, big, many, teachers, headmaster, flagpole,
assembly, etc.
Silent Reading (10 minutes) • read books and text of their own choice • tell a friend about
what they have read (L/P Syllabus p 13, LPL p 33, 55, Bridging to Eng. p 10, Phonics Card
Lesson 1) - 105 minutes

✍ 4.3 Activity 4

*Using the format given by your lecturer, write a daily plan for one day
using the information from your weekly plan.*

Outcomes based curriculum programming

Teachers in Papua New Guinea are familiar with using objectives as the basis for programming
and planning. The new reform curriculum is now introducing an outcomes based curriculum,
which will take into account student's individual needs and teachers' decisions about what is
best to teach for the students in their classes.

*What is an outcomes based curriculum and how is it different to an objectives
based curriculum?*

- An outcomes based curriculum has a focus on **outputs.** The focus is on what students
  have **learnt** rather than what systems and schools have provided, and what teachers
  have taught.

- Accountability is in terms of **student outcomes** rather than in terms of what is
  provided by way of curriculum, hours of instruction, buildings and equipment.

- Curriculum is designed to enable students to achieve outcomes which are explicitly and publicly described (in the syllabus documents)

- The outcomes are **common** across the country, but the **learning experience** and **curriculum** are not fixed. Outcomes are identified and the process (the way we deliver the curriculum) is differentiated according to the learner.

- Curriculum is designed down from where you want your students to end up. That is, **start with outcomes** (the destination) and then **determine the curriculum** (the routes to get there)

The following statement is taken from the National Curriculum Statement for Papua New Guinea, 2003.

> The Papua New Guinea outcomes based curriculum identifies what students will demonstrate as a consequence of following the national syllabuses developed for Elementary to Grade 12. Each subject syllabus identifies a set of outcomes that students are expected to achieve at each grade. Each outcome is accompanied by a list of indicators that identify examples of the knowledge, skills, attitudes and values that students will need to demonstrate in order to achieve the learning outcome. Teachers will use the outcomes and indicators to write learning objectives when planning a program and lessons. These objectives will identify the learning steps to be completed in order to achieve the learning outcomes.

Grades and stages in outcomes based curriculum

Some outcomes based curriculum approaches are organised in grades. The new Papua New Guinea curriculum is an example of a grade based curriculum. Each subject syllabus identifies a set of outcomes that students are expected to achieve at each grade. An example of the key outcomes for the Reading strand in the Upper Primary Language syllabus document is reproduced below. Note the differences in the key outcomes across the grade levels.

Strand: Reading

Production	Grade 6	Grade 7	Grade 8
	6.2.1 Read and respond to a range of texts about real and imaginary worlds	7.2.1 Read and respond to a wide range of more complex literary and factual texts	8.2.1 Read, reflect and respond critically to broad range of complex literary and factual texts.

You will see that each outcome builds upon the one before. Remember that the outcome is what a student can do and demonstrate. If you are teaching in a multigrade class, or are programming for individual needs, you will need to look across the grades to identify an outcome which can be work towards and achieved. In reality, you may have Grade 7 students working towards Grade 6 outcomes.

Staged based outcomes curriculum is organised around **achievement** levels, which can be called levels or stages. The levels are not tied to particular grade levels, recognising that different students progress through different levels at different rates. One level may correlate

with a three or four year age span. Teachers make informed decisions about placing students on a level appropriate to their development. When outcomes are achieved at that level, students work towards attaining outcomes in the next level.

How do I plan using outcomes based curriculum?

The methods of thematic and integrated planning are still applicable to use for this type of curriculum planning. Thematic and integrated approaches across the curriculum are still relevant, and development of yearly, term and weekly plans still necessary. The main difference is identifying the specific outcomes to be achieved, or worked towards by the students. These will come from the subject syllabus documents. Teachers then use these outcomes to work from to design learning objectives.

For example; Making a Living: Managing Resources strand

Grade 6: Output 6.1.1 **Investigate the importance of land and water resources and apply appropriate ways of managing these to meet basic human needs.**

This is the destination; what we want students to know and demonstrate. Teachers will plan objectives to assist the students on the path to reaching the outcome. Some objectives for this outcome may include identifying land and water resources in the area, investigating how people in the area use farming, fishing, hunting and/or gardening. The kinds of things that students should be able to do, know and understand if they are achieving an outcome are called **indicators.** Achievement of indicators, through planned programs by teachers enables the teacher to determine if the student has achieved the key outcome/s. There may be many outcomes identified from across the curriculum when planning an integrated unit of work. Teachers will select the ones they feel to be the most important, and the ones which meet the learning needs of their particular students.

Support materials for outcomes based education will be developed and distributed during 2003 and 2004.

Assessment

(i) This is not a module focusing on assessment, but students should know the place of assessment in programming and planning. How the teacher plans to assess the outcomes should be considered when developing the plan

Whether you are programming in a subject based format or a thematic based format, you will need to consider how you plan to assess the students' learning.

Your assessment tasks should be included in your planning.

Consider how you will assess the students' understanding of the objectives /learning outcomes. You can keep a record of what students know by using

- Checklists

- Work samples with dates and comments

- Teacher's notes

- Photos and comments

Assessment is continuous and we need to remember that

- Some objectives can be assessed during the topic or at the end of the topic

- You should try to plan assessment tasks which students can demonstrate if they have achieved the objective

- You may need to do other activities to reinforce the same objective before assessing it.

Evaluating what has been taught

These questions may help you to evaluate a unit of work and to identify what needs to happen in future units.

- Were all the objectives covered that you planned to teach? If not, which ones need to be planned for again in future units or themes?

- Did all the students achieve the objectives? If not, which ones need to be planned again in future units or themes?

- Did all students understand and cope with the learning activities? If not, which learning activities would be good to repeat, modify, eliminate?

- Was the unit /theme enjoyable?

Summary

Teachers are now curriculum decision makers. You make the decisions about your students' learning needs and use the frameworks provided by the syllabus documents to develop your programs.

Make your teaching program relevant to the students you are teaching and the community to which they belong.

Glossary and Key Terms

Program

A teacher's creative representation/interpretation of the curriculum.

Lesson Plans

Plans for learning activities which cover specific periods of time and enable students to demonstrate particular outcomes.

Subject based approaches

Planning is organised around subject areas and given periods of time as required by the Education Department guidelines.

Thematic based approaches

An integrated way of teaching and learning which emphasises the common thinking skills, social skills, values and attitudes between subject areas. The thematic approach deals with learning as a whole and in context.

Outcomes based curriculum

Identifies the knowledge, skills, attitudes and values that all students should achieve or demonstrate in a particular subject at a particular grade.

Syllabus documents

Guides or frameworks provided by the Education Department for each subject in the Lower and Upper Primary curriculum.

Bridging classes

Grade Three classes who are making the transition from Elementary, where vernacular is the language of instruction, to Primary school where English is introduced.

Theme web

A way of representing a theme/ unit of work based around a common context.

Concept map

General topics which will provide the context for the development of learning activities across the curriculum. Topics are developed from syllabus guidelines

Appendix 1: Examples of Programming and Planning

You will see there are a number of ways to approach the task, and as a teacher, you will develop your own methods of managing and recording your planning.

The following pages include a number of examples developed by bridging teachers during a workshop in 1999. They are presented as submitted, and provide examples of the different ways teachers approach the planning process.
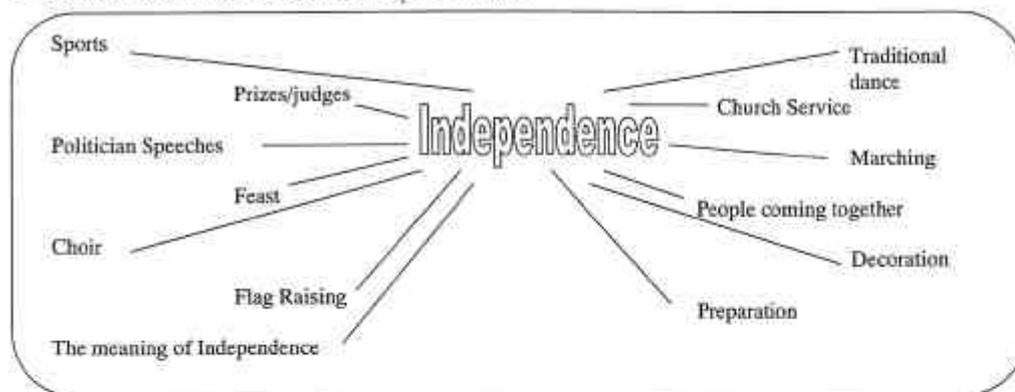
The first example shows a concept map for the theme of Independence, to be completed by a Grade 5 class.

The first part of the diagram shows the sub topics, which have come from brainstorming, the syllabus documents, or a combination of both.

Underneath are more specific focuses listed under six of the curriculum areas. There are no Health education activities shown. Perhaps the teacher is planning a separate unit for Health, or this topic doesn't lend itself well to health activities.

Grade 5 Theme: Independence
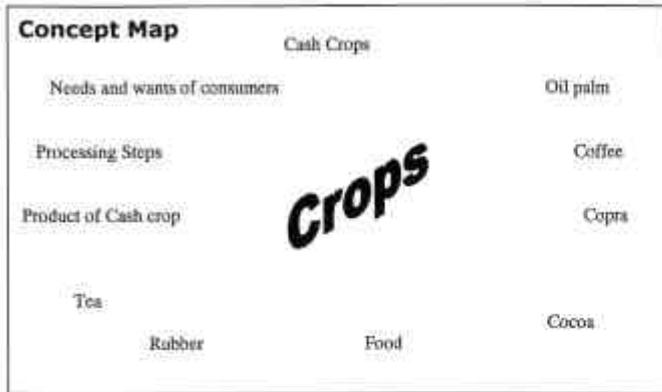developed by the New Ireland Bridging teachers

Environmental St	Comty Living	Phys Ed	Arts & Crafts	Maths	Language
Plants and Animals of PNG	My Nation:	Game skills for Independence celebration games	Making traditional costumes & musical instruments	History and time line	Written simple expository text about what happened to bring about independence
Plants and animals used in feast for independence	-our government history		-their uses -modelling, drawing, dramatising, miming and puppet show	Words and numbes up to 10,000	
	-parliamentarian responsibility			Graph population	Make a big book from the best text
				Fraction and pecentage	Phonic and spelling activities
			Visual: watching traditional dances/ video tapes	Distance	Writing and reading
			Writing descriptive texts about visual activities	Reading scales Direction Mapping	Speaking and listening

Another example using a similar type of planning is based around the theme Crops, a unit for Grade 4 developed by the New Ireland Bridging teachers during their workshop.

Grade 4 Theme: Crops
developed by the New Ireland Bridging teachers

Concept Map

Cash Crops

Needs and wants of consumers

Oil palm

Processing Steps

Coffee

Product of Cash crop

Crops

Copra

Tea

Rubber   Food

Cocoa

Sample Theme Lesson

Environmental Studies:
Exploring Crop Sites-Food Crops

Objective: explore a crop site, discuss and draw a food garden, and write captions.

Talk: Discuss what students will do while on excursion, discuss new word 'crop'.

Do: Go to the crop site. Give students questions to answer during the excursions – where the plants grow? What it needs in order to grow?, How it grows?

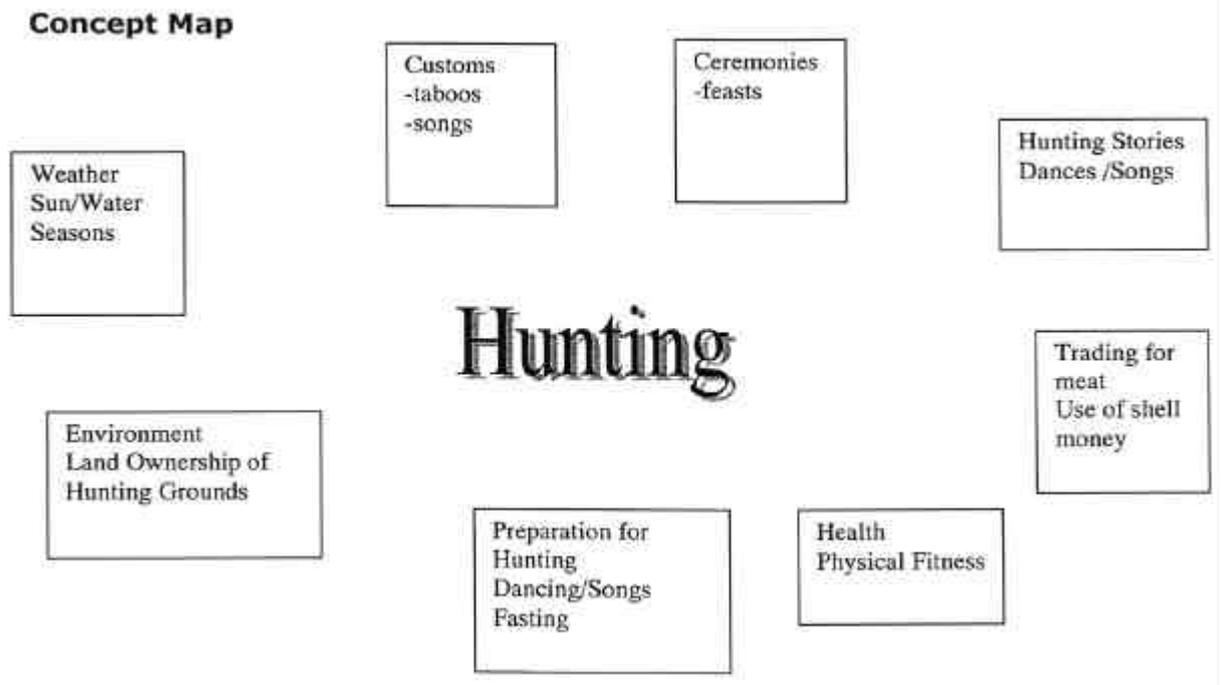Talk: Discuss their findings, teacher asks open ended questions.

Record: Draw a food garden (explored site) and write captions.

Theme Plan:

Envt Studs	Arts & Crafts	Maths	Health	Comty Living	Language
Exploring crop site: -looking at food crops: where they grow, how they grow, what they need to grow -looking at cash crops: where they grow, how they grow, what they need to grow	Modelling: a food crop area, cash crop plantation Arts: painting a food crop area, cash crop area Poem writing	Measurement : area, distances, money -reading scales -graphs: interpreting graphs, making own graphs -weights: grams, kilogram, tonne -problem solving on above areas	Effects of processed foods (cash crop products) –good and bad Contributing factors of Factories (pollution, land disputes, etc)	What are cash & food crops What are crops Products of cash crops Food factories set up in PNG	Bigbooks: My Garden & My Cocoa Plantation -shared reading, discussion, etc -making crop word list -writing captions -letter formations (cursive c) -writing stories about their own cash crop plantation, food crop garden or based on excursion

The following theme based on Hunting was developed by Paul Samson of Boreboa PS, NCD.

1. A concept map was completed first.

Concept Map

Customs
-taboos
-songs

Ceremonies
-feasts

Hunting Stories
Dances /Songs

Weather
Sun/Water
Seasons

Hunting

Trading for meat
Use of shell money

Environment
Land Ownership of
Hunting Grounds

Preparation for
Hunting
Dancing/Songs
Fasting

Health
Physical Fitness

2. A theme plan or web showing the subject areas, objectives and suggested assessment tasks was developed.

Theme Plan (Web)   **Hunting**

Community Living	Environmental Studies	Arts and Crafts	English Language	Vernacular Language
Topic: Customs, Special Events **Sub Topic:** Ceremonies, Festivals	**Topic:** Use of things in my environment **Sub Topic:** How I use animals, How I use plants for hunting (magical charms), Ways of preparing food	**Topic:** Music & Drama **Sub Topic:** How to mime a hunting skill-spear throwing Exploring sound and singsing special songs	**Topic:** Speaking and Listening Reading, Writing **Sub Topic:** Attentive listening, Learning to Write	**Topic:** Speaking and Listening Reading, Writing **Sub Topic:** Attentive listening, Learning to Write
Objective: The students will -appreciate and respect tasks (hunting) different people do for/at special occasions, such as singsing, feasts, and other ceremonies -have knowledge about types and ways of preparing food for special occasions	**Objective:** The students will -compare and classify the different areas and different animals found in the local environment, (according to what they eat and their physical features).	**Objective:** The students will -dramatise hunting movements and skills -beat the rhythm and sing a hunting song	**Objective:** Listen to teacher to understand the tasks and talents of a hunter students ask questions about hunting -read class composed big book " I went hunting" -write an English recount sentence to include in the big book -draw picture of hunting trip and write short story about the picture (hunting trip)	**Objective:** Listen to teacher to understand the tasks and talents of a hunter students ask questions about hunting -read class composed big book " I went hunting" -write an vernacular recount sentence to include in the big book -draw picture of hunting trip and write short story about the picture (hunting trip)
Assessment Task: to explain and describe how meat is processed or prepared for a ceremony. (This can be done after they record the things they do)	**Assessment Task:** Students to walk around school ground with pencil and paper, and record local land forms and special areas. Then in class classify different animals and where they live according to land forms and special places – and where to hunt each animal -demonstrate different ways of hunting each animal	**Assessment Task:** to explain the skills of how to throw a spear, and reason why special hunting songs are sung (good luck)	**Assessment Task:** Do –create simple hunting dialogues and use role play Talk –about usages, pronunciation, grammar, spelling Record – write dialogue on a chart to aid memory during role play	**Assessment Task:** Do-make role plays of hunting (Language) -act out the play including use of vernacular terms to describe animals, spears,... Talk – Compare differences in ways of catching different animals, and different areas where each animal lives in the local environment Record – group text from role play, write steps in preparation for hunting trip.

3. The activities to be completed for the week were put on a weekly timetable.

Timetable: Hunting

	Monday	Tuesday	Wednesday	Thursday	Friday
8-8:15	Assembly	Assembly	Assembly	Assembly	Assembly
8:15-10	Religious Education (60 mins) ----------- Theme: Envt Sts excursion: exploring envt. Introduce habitat, stud,s should be able to identify varieties of animals, plants and types of land formations in local envt. Record on flashcards (45 mins)	Theme: Language (E) Listening with understanding to spoken English -Simple stories on hunting -speaking in Eng retelling simple stories about hunting -asking and answering questions related to hunting -role play/drama- hunting with use of Eng words -animals names and types of land formations/ envt (105 mins)	Maths (105 mins)	Theme: Language (E) Genres: story "Pig Hunting Trip"-whole class -effective communication in Eng making up simple sentences -organise and build up the sentences to form big book story/ read story ----------- Group activity -participate in effective communication and create in English/ produce stories of hunting different animals -report on groups activity and students answer and ask questions based on their group work	Theme: Language Writing -write independently simple stories using internal sequencing, cohesion, and clarity of thought at an acceptable level of correctness -display work after checking and marking (60 mins) ----------- Assessment-whole group -students translate in English selected stories written in vernacular- emphasis on level of correctness (45 mins)
10:30-12	Theme: Envt Sts How things relate to each other Studs explain and give examples of how animals depend on each other ; living and non living things. Explain how people depend on animals and plants. Give examples of food chains. Explain the importance of animals found in certain areas of envt. (45 mins) ----------- Phys Ed (45 mins)	Theme: Envt Sts Use of things in my envt Studs classify plants and animals in the local envt according to way people use them Compare the different ways Demonstrate different ways of preparing food in the area (45 mins) ----------- Language (E) – Radio b/cast (15 mins) ----------- Health (30 mins)	Theme: Envt Sts Small changes to my envt -observe and record changes caused by nature (weather) so to choose the best time for hunting -describe changes in envt caused by humans/ making it difficult to hunt certain animals -identify examples of man made changes in envt (45 mins) ----------- Language (E) – Radio b/cast (15 mins) ----------- Block time (30 mins) -used for assessment of envt sts	Maths (45 mins) ----------- Language (E) – Radio b/cast (15 mins) ----------- Theme Language Reading -class reading of selected group story -describe characters in story -teacher reads to students the class big book (genre focus)(30 mins)	Health (60 mins) ----------- Block time (30 mins)

After lunch

	Monday	Tuesday	Wednesday	Thursday	Friday
1-3	Maths (60 mins) ----------- Theme: Language (V) studs listen with critical understanding to oral form of a story (30 mins) Drama and Lang (V) Songs and conversations based on hunting Communicate effectively in spoken venacular explaining and narrating hunting stories (30 mins)	Theme: Arts and Crafts Knowledge-'community story teller to tell legend about hunting, with emphasis on customs -teach culture song with actions based on legend -dramatise action while singing culture song (60 mins) ----------- Craft -construct simple hunting spears/bows and arrows etc and craft work -use tools safely -follow steps of making simple hunting tools/ weapons (60 mins)	Theme: Language (V) Genres- story 'Pig Hunting' – whole class -communicate effectively and creatively in spoken vernacular making up simple sentences -build up the sentences to form (big book) story (60 mins) ----------- Small group activity communicate and createw in spoken vernacular & produce stories of hunting different animals -report on group activity and students ask and answer questions based on their work (60 mins)	Theme: Arts & Crafts drama- whole class Acting the legend/ role play associated with singsing the culture song and using their hunting tools in the drama (30 mins) ----------- Theme: Comty Living Introduce Customs- to be familiar with traditional food, beliefs, arts, and customary lands Tasks taken by and played by certain people in the community, especially for ceremonies eg. huntes (meat) (30 mins) ----------- Sport (60 mins)	Theme: Comty Living Needs and wants -understanding some needs and wants of the local community -for ceremonies/festivals the comty would need a lot of meat so hunters are tasked to hunt for meat -appreciate the effort of their parents and others in meeting this need -students distribute food and instruction given (60 mins) ----------- Preparation of food in groups -students prepare food in local way of processing -record the steps in preparing -describe the steps of processing local food -eat the food (60 mins)

From the weekly timetable, daily lesson plans would be developed. You can see the times are indicated on this Timetable, so it would not take much work to develop the daily program. This timetable is incomplete because the focus of the example was on the theme. Maths activities would need to be included.