Unit 1

Philosophy of Curriculum Reform

STUDY GUIDE
Unit 1:
Philosophy of Curriculum Reform

Study Guide
The assessment and certification authority for academic credit is the Papua New Guinea Education Institute
PO BOX 1791, BOROKO, NCD, PNG.

The In-service Units have been developed with the support of AusAID under the Curriculum Reform Implementation Project.

For further information about the units contact the Teacher Education and Staff Development Division.
# Unit 1: Philosophy of Curriculum Reform

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The Papua New Guinea Department of Education *In-service Management Plan 2001-2005* sets out the policies and practices for in-service to support the implementation of curriculum reform in basic education. The development of a culturally relevant curriculum and the provision of quality in-service for all elementary and primary teachers are fundamental components in the reform of basic education.

The provision of accessible, relevant and sustainable in-service training is critical for the effective implementation of the reform curriculum in Papua New Guinea schools. In particular, appropriately trained and skilled teachers, head teachers and support staff are the key.

These self-paced in-service units are being provided to assist teachers implement the primary reform curriculum materials distributed to schools in 2003 - 2005. They are quality materials designed to help each of you continue your professional learning at times to suit you and with the support of colleagues in your school and district. Significantly the units provide a means for all teachers to gain further qualifications through Papua New Guinea Education Institute and primary teachers colleges that may include these units as part of their in-service provision.

The units have been developed with the support of AusAID under the Curriculum Reform Implementation Project (CRIP).

I commend the units to you and invite you to take up the challenges provided by the availability of these units to continue your own learning so that we can be sure that our children receive the best possible education.

DR. JOSEPH PAGELIO
A/Secretary for Education
How to use the study guide

There are a number of ways you can use this study guide:
- As a source of information and activities for school-based, cluster or district learning and development (in-service), or
- As a study guide for self-improvement, or
- As a study guide to improve your qualifications

The decisions and choices you make as you work your way through this section of the study guide will determine the outcomes you achieve and the benefits you gain from your learning journey.

So be very clear about your purpose for studying this in-service unit.

Option 1. School-based, cluster or district learning and development
This unit can be used to establish a learning community of practitioners in schools or across a cluster of schools (that is, to promote the practice of teachers studying together to improve their knowledge and skills and encouraging each other to do so).

To use this unit for school-based, cluster or district learning and development (in-service), first organise a planning group to scan the unit and module content to determine the most suitable approach. The planning group could comprise any of the following - the Head Teacher, the inspector, the in-service coordinator, a trained assessor, classroom teachers.

There are many ways in-service sessions could be organised, for example one to two hours every week, or a half day every month, or during NIST week or any other arrangement that suits the needs of your school, cluster or district.

The planning group may organise for teachers to work through the whole unit over a period of time or may select particular modules, sections or activities that will best help teachers implement the primary curriculum.

Teachers can work through the unit or modules themselves in pairs or in small groups, or they can be guided through the unit or modules by trained assessors or teachers who have already studied the unit at PNGEI.

It is recommended that teachers do a self-assessment of learning before and after each in-service activity. The self-assessment on page 10 of the Accreditation and Certification section can be used for this purpose.

Option 2. Self-improvement
You may study this unit for your own self-improvement to become a more effective and informed teacher, senior teacher, head teacher, inspector or education officer with responsibility for curriculum reform.

If this is your goal, track your pathway through the flow chart on the next page.
Study Pathway Planner for Self-improvement ....

**Step 1**
Read pages 1-12 of *Unit Introduction*

**Step 2**
How do you want to study? Choose your path - is it to be
- at your own pace with or without a learning partner?
- in your group with a facilitator?

- Are you sure you do not wish to be assessed?

  - **Yes**
  - If you change your mind at a later date

  **Step 4**
  Read page 11 of *Unit Introduction* to decide which module to do first

  **Step 5**
  Complete self-assessment, pages 10-11, Accreditation and Certification

  **Step 6**
  Read Final Steps

  **Step 7**
  Do you have access to the resources on pages 4-8 of *Unit Introduction*?

  - **No**
    - Look for the documents, otherwise you cannot proceed with the unit
    - You don’t need to collect them all at once, but only as you need them

  - **Yes**
    - When you have them, go to Step 8

  **Step 8**
  You are ready to start

**How to use the study guide**
Option 3. Improve your qualifications
You may complete this unit to gain potential credit points to upgrade your qualifications through the DEP(I) or other programs offered by PNGEI such as Diploma in Special Education, Certificate of Elementary Teacher Training (CETT) or Diploma in Vocational Education (DOVET) or further education.

If this is your goal, track your pathway through the flow chart on the next page.
Unit 1  Philosophy of Curriculum Reform

Study Pathway Planner for Improving Qualifications...

Step 1
Read pages 1-12 of Unit Introduction

Step 2
How do you want to study? Choose your path - is it to be
- self paced with or without a learning partner?
- in a group with a facilitator?
- off campus face-to-face with an assessor?
- on campus face-to-face with an assessor?

Step 3
Read pages 9 of Accreditation and Certification to see how to apply for external assessment

Step 4
Read detail of the Learning Contract (pages 2-8)

Step 5
Contact your local assessor and negotiate your learning contract

Step 6
Read Final Steps

Step 7
Do you have access to the resources listed on pages 4-7 of Unit Introduction
- Yes
- No

Step 8
You are ready to start

How to use the study guide
Unit Introduction

The Context

This set of nine in-service units has been developed specifically to help primary school teachers, grades 3-8 and the senior teachers, head teachers, education officers and inspectors who support them, to effectively implement primary reform curriculum.

All primary syllabuses contain the Secretary’s Message, Introduction, Rationale, Curriculum principles, Content overview, Course aims, Learning outcomes and Indicators and advice on assessment and reporting.

You are perhaps already familiar with terms such as introduction, rationale, curriculum principles and content overview and have an idea about what to expect. However, there is new information in all of these sections of the document.

The primary teacher guides explain to you, using examples, ways of planning and programming, ways of developing units of work and strategies and tools for assessment and reporting. They also provide information about the knowledge, skills, attitudes and values embedded in each of the outcomes through ‘elaborations’ of the outcomes. ‘Suggested activities’ are also to be found in this section.

The most significant aspect of the new syllabuses is that they describe student learning in terms of learning outcomes and indicators and not in terms of objectives as was the practice previously.

The learning outcomes specify what it is that students know, understand and are able to do as a result of their learning. Indicators list examples of the kinds of things students are able to do, know and understand if they are achieving an outcome. Teachers use indicators when they make judgements about student achievement of outcomes.

This set of in-service units uses an outcomes-based approach to help you become familiar with and to understand and experience learning based on specified outcomes. The in-service units introduce some new concepts and ideas based on effective principles of learning in an outcomes-oriented learning environment.

Learning outcomes are identified at two levels – unit learning outcomes and module learning outcomes. If academic credit is being sought through the study of a unit, the unit learning outcomes form the basis of assessment. If this is not the goal, then the unit learning outcomes may be used for checking own learning.

All units are developed through four modules. The modules are written in a ‘self-learning mode’. You are guided each step of the way. Follow the instructions and you will be able to complete the modules.
In the module summary, at the end of each module, we have repeated the module learning outcomes. Use the list of outcomes as a checklist of your progress/learning through the module.

In the unit summary at the end of the unit, we have repeated the unit learning outcomes. Use this as a checklist for your readiness for assessment.

We have provided space throughout the Study Guide for you to write your responses and reflections. This means that your study guide is also your workbook and your learning journal. Also, at the end of each module, you will find some blank pages. Use them as extra space for your notes if you need it.

We have not given any model answers for the various tasks you will be completing. Instead we have provided ‘hints’ to prompt your thinking. This may also help you check and re-think your responses.

Throughout the Study Guide you are advised to work with a colleague. The term colleague is used to mean a learning partner, a critical friend or a mentor. (Further information in this area may be found on page 7 of Accreditation and Certification section of this Study Guide.)

**Prerequisites**

There are no academic prerequisites for this unit.

**Duration**

It is likely to take you around 48 hours to complete all the Learn, Do, Share and Reflect activities in a unit.

**Learning tips**

Each module includes learning, doing, sharing and reflecting activities. These are all designed to help you achieve the learning outcomes of the unit.

To complete the unit or modules you will need the resources with their pictures next to them listed on pages 4-8. Resource 1 was sent to provinces in 2000 for distribution to schools. All other resources were sent to schools during 2003-2005.

**The learning model**

The activities in this unit, using the learning model of Learn, Do, Share and Reflect, are designed to give you an understanding of the reform and develop your knowledge and skills in implementing it. The four parts of the learning model represent ongoing learning processes that form an integral part of the learning journey.
**Icons**

An icon is a symbol used to show you what action to take in your learning journey. In this unit these icons represent this learning model.

<table>
<thead>
<tr>
<th>Learn (Lainim)</th>
<th>Do (Wokim)</th>
<th>Share (Tok tok wantaim)</th>
<th>Reflect (Tingim bek)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Find out more about</td>
<td>• Do tasks</td>
<td>• Talk to others about what you are learning</td>
<td>• Think critically about what you have learnt, done and shared</td>
</tr>
<tr>
<td>• Use information to create knowledge</td>
<td>• Practise skills</td>
<td>• Discuss findings with a colleague, learning partner or group or an individual acting as a critical friend. Learning in cooperation increases the ability to learn. Discussing and exploring what has been learned with colleagues help in constructing knowledge through seeing, hearing, doing, talking, refining and reflecting.</td>
<td>• Think about changes to your practice</td>
</tr>
<tr>
<td></td>
<td>• Apply new knowledge</td>
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<td>• Think about changes to your beliefs and attitudes</td>
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Reflection helps to make meaning from what is being done, develop shared meaning and challenge ways of thinking and doing things. Some reflective questions might be:
- what does this mean for my practice in my current position?
- what are the implications for the group?
- what are the implications for the school or my classroom?
Resources

Here is a list of resource texts for use with this study guide. If you are currently teaching in the lower primary years, you may think of focusing on the lower primary syllabuses and related documents only. If you are currently teaching in the upper primary years, you may think of focusing on the upper primary syllabuses and related documents only. However, it is important that you become familiar with both sets of documents to become an effective and competent primary school teacher.

You will need access to the relevant documents to successfully complete the unit. These documents were distributed to schools in 2000-2005.

At the beginning of each module, the resource books you will need for that module are identified.

3. National Assessment and Reporting Policy, 2003, Department of Education, Papua New Guinea
5. Arts, Lower Primary Syllabus, 2004, Department of Education, Papua New Guinea


21. Upper Primary Learning Outcomes for Grades 6, 7 and 8,
Department of Education, Papua New Guinea, 2003

22. Lower Primary Learning Outcomes for Grades 3, 4 and 5,
Department of Education, Papua New Guinea, 2004
About this unit

The context

As you know, basic education is currently being reformed throughout the PNG education system. This process began some years ago. You might also be aware that some provinces and schools have already done a great deal of work in implementing the reform, while some others have a long way to go.

This unit is one of a set of nine in-service units developed to help both primary school teachers and those officers who support their work, such as, the senior teachers, head teachers, inspectors and education officers to understand and implement the reform in their work situation.

The in-service units in the set are:
Unit 1: Philosophy of Curriculum Reform
Unit 2: Learning Area: Culture and Community
Unit 3: Learning Areas: Language and Personal Development
Unit 4: Learning Areas: Mathematics and Science
Unit 5: Outcomes-Based Planning and Programming
Unit 6: Learning and Teaching for Outcomes
Unit 7: Assessing and Reporting Achievement of Outcomes
Unit 8: Bridging to English
Unit 9: Vernacular Literacies

You can study one or more units and you can study them in any order.

This unit focuses on the rationale for curriculum reform through three seminal documents – the Primary Education Handbook (2000), the National Curriculum Statement (2002) and the National Assessment and Reporting Policy (2003) – that make explicit the expectations of the reform for all stakeholders. Through these documents and other related documents, DoE makes clear that it is shifting its curriculum focus from objectives to outcomes.

This unit introduces outcomes-based education (OBE) as both an educational philosophy and a system for managing student-centred planning, programming, teaching, learning, assessing and reporting student learning. In OBE the outcomes are the same for all students. However, there is flexibility in the way they learn and demonstrate the achievement of outcomes. This approach caters for differences among students.
Unit learning outcomes

Learning outcomes are statements about the knowledge, understandings, and skills you achieve and are able to demonstrate when you complete the unit. These statements are learner-centred and written in terms that enable them to be demonstrated, assessed or measured.

On successful completion of this unit, you, the learner, can (are able to)

1. describe key aspects of the education reform in Papua New Guinea
2. describe the aims of the primary curriculum for Papua New Guinea
3. explain the links between elementary, lower primary and upper primary sectors of schooling in terms of learning areas, subjects and focuses
4. evaluate outcomes-based education as a system for planning, programming, teaching, learning, assessing and reporting student learning
5. assist a colleague to understand why Papua New Guinea is shifting its focus from objectives to outcomes
6. identify the implications of the advice provided in the *National Curriculum Statement* (2002) and the *National Assessment and Reporting Policy, 2003*, for your role
7. develop and share an action plan to adapt your duties and responsibilities to the reform requirements on your work situation.
The Modules

In order to help you achieve the unit learning outcomes, *Unit 1: Philosophy of Curriculum Reform* is developed through four modules.

The modules are not linked. This means that you can do them in any order you like. It is strongly suggested, however, that you do Module 4 last.

**Module 1: Curriculum Reform – what’s the rationale?**
In this module you are introduced to the background to reform - the rationale, the history of reform, the components of reform, the goals of reform, and the dimensions of change. The contents of the *National Curriculum Statement* (2002) and the *National Assessment and Reporting Policy*, 2003, are the major focuses of this module. You examine relevant sections of the *Primary Education Handbook* (2000) to develop an appreciation of the history of reform.

**Module 2: Outcomes-based Education (OBE) – what is it?**
This module focuses on the concept of OBE and makes clear some of the special features of this approach. You explore these features using the upper and lower primary syllabuses. The module then introduces three approaches to OBE. There is Optional Reading (Section 3) for those who wish to know more about outcomes-based education.

**Module 3: Why an outcomes-based education in Papua New Guinea?**
In this module the focus is the DoE’s approach to implementing outcomes-based education. You begin to explore ways outcomes-based education can and will change teacher practices and practices of others who support teachers.

**Module 4: Dimensions of Change - what are the implications?**
In this module you explore the implications of reform for you in your present capacity. This includes an exploration of implications of OBE and the advice in the *In-service Implementation Plan 2001-2005, National Curriculum Statement* (2002) and the *National Assessment and Reporting Policy*, 2003, regarding your role and responsibilities in the reform context. You apply your learning by designing a plan of action for implementing reform in your work context by choosing one of four scenarios provided.
References

These documents have been used in writing these units. You do not need to have access to these documents.

Department of Education, 2001 In-service Management Plan 2001-2005, Supporting the implementation of curriculum reform from Elementary Prep to Grade 8, Papua New Guinea.

Curriculum Reform Implementation Project, 2002 In-house documents. Professional Reading Series No. 1, 2 and 3.


Curriculum Development Division (undated). The Reform of Basic Education: Elementary and Primary School, Prep to Grade 8.


Department of Education (2002). In-service Units to Support the Implementation of Lower Primary Reform Curriculum, Papua New Guinea.
1. Curriculum Reform and Lower primary Curriculum
2. Bridging to English in Lower primary
3. Planning and Programming
4. Teaching and Learning
5. Assessment and Reporting

In-service Units to Support the Implementation of Upper Primary Reform Curriculum, Department of Education (2003), Papua New Guinea.
1. Philosophy of Curriculum Reform
2. Curriculum Reform and Upper Primary Reform Curriculum
3. Outcomes-based Planning and Programming
4. Learning and Teaching for Outcomes
5. Assessing and Reporting Achievement of Outcomes
Unit 1:
Philosophy of Curriculum Reform

Module 1: Curriculum Reform - what is the rationale?

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Name: ........................................................ File Nº:...........................................................

Date commenced: ...................................... Date completed:.......................................

I have sighted this study guide as evidence of completion of agreed tasks by

..................................................................................................................................(insert name)

Assessor: ..................................................... Date: ......................................................
Module 1: Curriculum reform - what is the rationale?

Module introduction

Welcome to Module 1: Curriculum reform - what is the rationale?

You need to have a sound appreciation of the thinking and philosophy that shaped the way reform curriculum documents are written, the way teachers are now expected to program and teach and the ways students in schools are expected to demonstrate their learning and be assessed.

This module begins with an exploration of the reasons for change as described in Primary Education Handbook (2000). Some of the reasons are to do with the students, as you would expect. There are social, political and economic reasons for the reform. This document provides a historical perspective on reform.

Then the module provides an overview of the National Curriculum Statement (2002). This is a DoE policy document that guides the development of all curriculum documents, elementary prep to grade 12. Its content includes the aims of the national curriculum, in particular, the aims of the primary curriculum, the curriculum principles and curriculum content that support the aims, the learning areas, the subjects and linkages between them, and methods for assessing learning and reporting it.

Finally, this module walks you through another DoE policy document - The National Assessment and Reporting Policy, 2003. This document provides policy advice and directions on assessment, recording, reporting and evaluation for all PNG schools, elementary prep to grade 12.

You become knowledgeable and confident about the rationale and intent of these documents through the tasks and activities in this module.

To undertake this module you will need access to:

- The Primary Education Handbook (2000) (Resource 1)
- The National Assessment and Reporting Policy, 2003 (Resource 3).

These resources are already in your schools, distributed during 2000-2004.

If you are seeking academic credit, make sure you have completed the self-assessment in the Accredidation and Certification section before you start this module. As you work through this module, keep a running record of sections, parts and pages of the module where you can identify evidence for particular unit outcomes. You may wish to record such information in your Learning Contract, found towards the end of the study guide.
Module learning outcomes

When you have worked through this module, you, the learner, can (are able to):

1. state the major reasons for the reform
2. discuss the differences between the old and reform structures of the school system
4. list the aims of the primary curriculum and elaborate on what they mean
5. identify the values underpinning PNG Education Reform
6. prepare a clear presentation to a group about the significant and relevant aspects of the reform
7. discuss principles of assessment and reporting presented in the National Assessment and Reporting Policy, 2003
8. make links between elementary, lower primary and upper primary learning areas, subjects and focuses
9. explain why the curriculum principles presented in the National Curriculum Statement (2002) are important.
Section 1: The *Primary Education Handbook (2000)* - what does it tell us?

The first part of the *Primary Education Handbook (2000)* describes the education reform in general terms and the remainder focuses on parts of the system related to primary education.

There are ten chapters altogether in this document. The first three chapters are relevant to this module from a historical point. Note that new policies are already in place or are currently being developed in relation to the topics discussed in the other seven chapters.

The old school structure had community schools for grades one to six and high schools for grades seven to ten. (see diagram below) This had meant that there was a community school curriculum and a high school curriculum. This was fairly straight forward.

<table>
<thead>
<tr>
<th>The Old Structure</th>
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</thead>
<tbody>
<tr>
<td>Non-formal Tok Ples Pri Skul</td>
</tr>
<tr>
<td>73% continue to Community Schools</td>
</tr>
<tr>
<td>Community Schools</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
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<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>33% continue from community schools to Provincial High Schools</td>
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<tr>
<td>Provincial High Schools</td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>10% continue to National High Schools</td>
</tr>
<tr>
<td>National High Schools</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
In the new system, there are three sectors of schooling – Elementary, Primary and Secondary – with 13 years of schooling altogether. In this unit, we are focusing on grades 3 to 8, the primary years.

In the new system, primary school education is defined in the Education Act of 1983 (amended in 1995) as ‘full time education in accordance with curricula determined under Section 27 for six years from Grade 3 to Grade 8’. (Section 27 refers to the Responsibilities of the Minister, which include determination of the curriculum.)

Only children entering Grade 3 who have completed the new elementary curriculum will follow the new primary curriculum although a decision for all children to switch to the new curriculum may be made in the future. During the period of transition from one system to another, primary schools may contain a mix of younger children following the new curriculum and children at higher grades who are still following the previous curriculum. This happens in a variety of different types of primary schools. (page 1)
Now read on…

**Part 1.1: The reasons for change**

**Make a list of what you think are the reasons for the reform by brainstorming with a colleague.**

In brainstorming you list everything that comes to mind without any discussion about the accuracy or relevance of the ideas generated. That comes later. List the reasons below.

**Hint: List all the possible reasons by brainstorming.**

- Check each of the reasons for accuracy and relevance. Correct those not quite accurate, delete those that are not relevant. Then categorise them into three groups - social reasons, political reasons and those directly relating to the students and list them in the table below.

<table>
<thead>
<tr>
<th>Social</th>
<th>Political</th>
<th>Relating to students</th>
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<tbody>
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</table>
• Now read pages 3-7 of the _Primary Education Handbook_ (2000). While reading, check the reasons you have listed and categorised as relating to the student, against the ones presented on these pages. Place a tick (√) next to your reasons that are consistent with those presented on pages 3-7.

• Now read page 16 where the main reasons for change for the system are discussed. Check your ideas in columns 1 and 2 in the above table against those presented on page 16. Place a tick (√) next to your reasons that are consistent with those presented on page 16.

• Make a comment about the degree of consistency between your reasons and those presented in the document. How would you explain any variance?

Discuss what you have learned about the reasons for reform and share your perceptions of it with another colleague. Write down any significant points raised.

_HINT: Talk about your original list and the reasons provided in the resource document and the differences between them. Find out the colleague’s views on the topic._

Reflect on and record:

• your own schooling and its philosophical basis and the changes since then

• ways recent changes are impacting on you in your work situation.

_HINT: Your response to this will depend on the era in which you went to school and any changes since then. Consider whether recent changes are major or minor changes for you._
Now let us take a look at the events which provided the momentum and drive for change.

Part 1.2: Background to reform

In 1986 a Ministerial Review Committee presented a report to the then Minister for Education, The Hon. Aruru Matiabe.

In formulating the review report, the committee was asked by the minister to do several tasks including the following:

- to critically examine the philosophy implied in existing plans and practices of the National Education System
- to determine if, and to what extent, this philosophy is consistent with the National Goals and Directive Principles as expressed in the National Constitution
- to determine whether this philosophy is carried out in educational activities and expressed in educational materials in the institutions administered by the National Education System
- to analyse the implications of this philosophy for the future development of all sectors of the National Education System.

In calling for submissions from the public, the committee also presented the following questions.

- What kind of future citizens should we now be educating?
- What kind of education is necessary to produce this citizen?
- How can we improve the Education System in order to provide this information?

The ministerial report, often referred to as *the Matane Report*, introduced a new philosophy of education and called for a major change … “the current philosophical basis for educational planning should be changed from one based on manpower needs of the modern economy to one based on the integral human development of all persons.” (Rec. 9, p.48)

Read pages 9-17 of the *Primary Education Handbook (2000)* and prepare a 10 minute presentation about the reform.

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The Reform of Basic Education: Elementary and Primary School, Prep to Grade 8, on page 11, provides a summary of what reform entails. This information is copied below. You may wish to refer to this to help organise your presentation. You may also wish to refer to the table on page 5 of this module.

- If you are a teacher, imagine you have been asked to make a presentation to a group of community members about the reform.
- If you are a head teacher, imagine you have been asked to make a presentation to a group of head teachers about the reform.
• If you are an inspector, imagine you have been asked to make a presentation to a cluster of schools about the reform.

Take notes (about a page long) on the purpose of education, the aims of education, important reform documents, the history of reform, what is being reformed, the reasons for reform and the reform goals.

In preparing for your presentation, record your notes on page 10. Your notes may be recorded as a mind map, if you wish. The template for a mind map is provided on page 11.

**The Reform of Basic Education - what does it mean?** (page 11, *The Reform of Basic Education: Elementary and Primary School, Prep to Grade 8*)

• 9 years of basic education from Prep to Grade 8 for everyone
• 3 years in an elementary school (Prep to Grade 2) and 6 years in a primary school (Grades 3-8)
• a bilingual program commencing in a language the children already speak, with gradual transition (bridging) to English, as shown below.

<table>
<thead>
<tr>
<th>School sector</th>
<th>Elementary</th>
<th>Primary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>El. prep</td>
<td>E 1</td>
</tr>
<tr>
<td>Vernacular</td>
<td>E 2</td>
<td>Gd 3</td>
</tr>
<tr>
<td>English</td>
<td></td>
<td>Gd 4</td>
</tr>
<tr>
<td>Language of Instruction</td>
<td>Vernacular</td>
<td>Vernacular + English</td>
</tr>
<tr>
<td></td>
<td>Bridging to English</td>
<td>+ Vernacular maintenance</td>
</tr>
</tbody>
</table>

Bridging to English commences towards the end of Grade 2 with the introduction of simple oral English. Vernacular means the language most commonly used outside the classroom in everyday life. In some communities this may be a lingua franca, for example, Tok Pisin, Hiri Motu.

• a basic education which bonds children to their culture and community, respects and teaches traditional values, beliefs, knowledge, skills and attitudes
• a basic education which prepares children for a future meaningful life in their communities
• a basic education which provides a firm foundation for further education
• a basic education which is the responsibility of all stakeholders-parents, community leaders, provincial and national education authorities
• a curriculum which is relevant and locally determined following national guidelines which encourages independent, life-long learning, critical thinking, decision-making and problem-solving skills by using child-centred, activity-based, integrated thematic teaching methods in a language the children already know, based on practical, real-life situations and contexts.
Unit 1  Philosophy of Curriculum Reform

• Record your summary notes here (about one page)

Purpose of education:

Aims of education:

Important reform documents:

History of reform:

What is being reformed:

Reasons for reform:

Reform goals:
Alternatively, do a mind map using this template.

Place the topic ‘Education reform’ in the centre, then the main headings around it and the main points around each main heading. Add more circles and lines, if needed.

*Hint: Record your summary notes of significant points under the suggested headings. Your notes should not exceed a page. Alternatively, record the main points around the second set of circles.*
• Make the presentation to a group, as appropriate. Organise a colleague to list any questions or issues raised during the presentation and your responses to them.

<table>
<thead>
<tr>
<th>Questions/Issues</th>
<th>Your responses</th>
</tr>
</thead>
</table>

*Hint: The questions raised and your responses to them are important, as this helps to clarify your understanding of curriculum reform.*

**Reflect on the following and record your thoughts.**

• What have you learned about reform from the module so far? What are the implications of reform for your work?

• Is ‘bridging to English from vernacular’ happening in your school? If not, what are the reasons for this?

• To what extent is your school community involved in making decisions about the activities of the school?

*Hint: Think about some of the ‘big ideas’ driving the reform.*
Your readings so far have been about the background to reform, reform goals, reform documents, history of reform, and so on.

Reflect on the importance of this kind of information for your practice. In responding to the questions below, record your thoughts.

• Do you think your practice will change or be more meaningful to you as a result of having read this information?

• Do you see areas where you personally and/or the school as a whole need to change?

• The reading helps me to understand:

  (i)

  (ii)

  (iii)
Section 2: The National Curriculum Statement (2002) - what does it tell us?

In preparing to engage with The National Curriculum Statement (2002), get hold of a copy of this document and let us take a slow walk through it to see what it is all about.

- First, read page ii.
- Then go to page iii. The contents page is like an overview of the main sections of the document. There are 8 main sections. They are:

  Section 1: Introduction
  Section 2: Rationale
  Section 3: Goals
  Section 4: Aims
  Section 5: Curriculum principles
  Section 6: Curriculum overview
  Section 7: Assessment and Reporting
  Section 8: References

This information gives you an overview of the structure of the document and the focus of each section.

The Secretary’s message comes next.

Read the Secretary’s message on page iv.

The second paragraph is particularly important. Here he makes five important assertions (statements) about the National Curriculum Statement (2002).

- Complete these statements.

It demonstrates that .................................................................
...........................................................................................................

It will also guide .................................................................
...........................................................................................................

It is a stepping-stone .................................................................
...........................................................................................................

This statement promotes .................................................................
...........................................................................................................
It also encourages students to ……………………………………………………………
……………………………………………………………………………………………

The fourth paragraph talks about the consultation process in the development of the
National Curriculum Statement. You may be one of those who were consulted in which
case you can be proud of your contribution to a document of this stature.

Now you are ready to go on.

Introduction (Section 1 of National Curriculum Statement, 2002)

Read pages 1-2 carefully. The third paragraph is of particular interest.

It states:

This curriculum statement will guide and help educators such as senior
officers in the National Department of Education, in the provinces
and in other institutions, to understand and implement the national
curriculum. It will also assist curriculum officers, advisers, principals,
teachers, teacher trainers and others to develop teaching and learning
materials. Subject syllabuses for Elementary Prep to Grade 12 will
provide detailed statements of the educational outcomes that all
students should achieve. Teacher Guides and other support materials
will accompany the syllabuses. (page 1)

• Read the rest of the introduction.

• Answer the following questions:

- What does the introduction say about the following?

  (i) Consistency of approach for all personnel in the PNG education system?

  (ii) Consistency of approach for students?

  (iii) Outcomes-based education?

Hint: The National Curriculum Statement brings together previous statements for elementary, primary
and secondary sectors.
Rationale (Section 2 of National Curriculum Statement, 2002)

The rationale attempts to justify why something is important and relevant. This section gives you information about background to reform, the need for a Papua New Guinea curriculum, outcomes-based curriculum and the reasons for introducing an outcomes-based curriculum.

Read pages 3-6 with a colleague. Together do the following activity.

- Imagine you are asked to justify curriculum reform in Papua New Guinea to those who had set up the previous curriculum practices and policies in this country, or to someone from overseas, say, an Australian. Prepare 10 key points you’d like to use in your presentation.
  1. 
  2. 
  3. 
  4. 
  5. 
  6. 
  7. 
  8. 
  9. 
  10. 

Hint: Read sections 2.1 and 2.2 of the National Curriculum Statement. Identify the reasons for curriculum reform.

Reflect on the implications of the decision to adopt an outcomes-based curriculum for the following groups. Record your thoughts here.

1. Students

2. Syllabus writers
3. Teachers

4. Parents and community

Hint: Consider sections 2.3 and 2.4 of the National Curriculum Statement.

**Goals** (Section 3 of *National Curriculum Statement, 2002*)

The next section titled *Goals* identifies the values of Papua New Guinea curriculum, present and future conditions for Papua New Guinea and the National Curriculum Goals for Papua New Guinea. This section is found on pages 7-13.

Skim read pages 7-13. Look especially at Table 3.1 (page 8) and Table 3.2 (page 10). Ensure that you understand the purpose and structure of these two tables. (Skim read means look at any headings and sub-headings, any bullet points and read the first sentence of every paragraph to get a sense of the ideas being presented.)

Now arrange a meeting with two to five colleagues or parents who are unfamiliar with the document. Introduce them to the values that underpin the reform and the future conditions to which the reform is striving. Use the following structure to present the tables to them.

- Table 3.1
  - Row 1 represents …..
  - Row 2 represents …..
  - Row 3 represents …..
  - Each column represents …..

- Table 3.2
  - Row 1 represents …..
  - Row 2 represents …..
  - Row 3 represents …..

• Record up to five significant questions asked during the session.

1. ……………………………………………………………………………………..

2. ……………………………………………………………………………………..

3. ……………………………………………………………………………………..

4. ……………………………………………………………………………………..

5. ……………………………………………………………………………………..
Reflect on the value of this exercise for you. Record your thoughts here.

National Curriculum Goals
The National Curriculum Goals appear on pages 11-12. Goals are usually longer-term expectations of the learning process. There are 19 goals altogether. The stem for these goals claims that the new curriculum will ensure certain things happen for students.

Read pages 11 and 12.
Choose any five goals and explain why you think the former curriculum practices may have been insufficient or inadequate to achieve these goals.

<table>
<thead>
<tr>
<th>Goal No.</th>
<th>Inadequacies of the past</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hint: Think about some of the education and societal issues that are of concern in current days in PNG.

Aims (Section 4 of National Curriculum Statement, 2002)

Section 4, pages 13–15, lists the Aims of the National Curriculum Statement.
Part 4.1 lists the overall aims of the National Curriculum for Papua New Guinea. This is followed by the aims for the three sectors of schooling - Elementary (4.2), Primary (4.3) and Secondary (4.4).

Read Section 4 - you will see how each sector builds upon the previous sector; some of the aims are about shorter-term purposes and others are about longer-term purposes.

Read carefully the Aims of the Primary Curriculum on page 14.
List two aims that are designed to assist students in their immediate school environment, two that will assist them as adults in the future beyond schooling and two designed for teachers.
Unit 1  Philosophy of Curriculum Reform

Whilst at school
1.
2.

As adults
1.
2.

For teachers
1.
2.

- Read the *Aims of the Elementary curriculum* (pages 13-14) and *Aims of the Secondary curriculum* (page 15).

- When you read the aims, do you see any evidence of continuity from elementary through primary to lower secondary? Give two examples.

**Hint:** The curriculum from elementary to secondary is expected to be seamless.

**Curriculum principles** (Section 5 of *National Curriculum Statement*, 2002)

Pages 16-29 give details of the *curriculum principles* that guide all primary syllabuses.

Not all curriculum principles appear in each of the syllabuses. The curriculum writers have identified the curriculum principles that can be effectively addressed in particular subjects. You should remember that there are DoE policies and/or DoE guidelines on some of these principles. Examples are: *Ministerial Policy Statement, No. 3/99, on Language Policy in all schools*, 1999; *Multigrade teaching, Circular No. 1, Department of Education*, 2000; *Gender Equity in Schools Policy*, 2003.

Table 5.1 on page 16 summarises these principles.

**Read pages 16-29 with a colleague. Then discuss the following statements and write a sentence or two about the importance of each.**
• *Our cultures and traditions are unique and should be featured in the National Curriculum.* (page 17)

• *This is a bilingual program.* (page 18)

• *Students will become more aware of the social bonds in the community if they are first taught in the languages of their communities and through activities which socialise people, such as agriculture, fishing and community development.* (page 20)

• *Integral Human Development is the ultimate goal for every person who receives an education.* (page 21)

• *Students need to learn attitudes, skills and knowledge that will help them to become productive, healthy and contented citizens of Papua New Guinea.* (page 22)

• *Our cultural traditions are not being handed down from generation to generation.* (page 23)

• *Addressing gender issues goes well beyond ensuring that females have the same opportunities as males to receive an education .... Gender is also culturally determined. Females are generally a disadvantaged group in Papua New Guinea.* (page 24)
Unit 1  Philosophy of Curriculum Reform

• Students learn in different ways. It is best to use a variety of methods to teach them. No one method is best. (page 25)

• The teacher is a key motivator. Effective participation is prevented when teachers regard their role solely as being dispensers of knowledge and figures of authority. (page 26)

• Most people in Papua New Guinea work in the informal economy. Students who leave at the end of grades 8, 10 and 12 will need to find work in the informal economy. These students however, will not only need to work in the informal economy, but they will also need to be prepared to work in the formal economy and undertake formal education if there are opportunities. (page 27)

• It is essential to teach students how to learn while at the same time teaching students important content. (page 27)

• Language development across the curriculum should be encouraged because all subject areas provide meaningful contexts for real purpose learning. (page 28)

• School is an important part of a student’s education but learning continues throughout life. (page 28)
Unit 1  Philosophy of Curriculum Reform

- Multi-grade teaching is encouraged in elementary and lower primary. Teachers should be aware that in all classes, students are of mixed abilities. Teaching strategies for multi-grade classes are appropriate in these circumstances. (page 29)

- Thematic teaching integrates subjects and reflects more closely the way students think. ..... It is essential that teachers ensure all learning outcomes are covered and the achievement of them is monitored. (page 29)

Hint: Locate the above statements in the document, read around them, discuss each with the colleague and write down ways each statement is important in the context of the curriculum principles.

You may think that the curriculum principles are only for the use of curriculum developers. The syllabuses and teachers guides do reflect the relevant principles. However, it is in the planning, teaching, learning and assessing that they are actually pulled together and applied - this means they are just as relevant to those of you who are teachers and those of you who supervise teachers, as they are to curriculum developers.

Reflect on the implications of the curriculum principles for your practice. Record your thoughts here.

Hint: With how many of these principles are you familiar? How many of these are already part of your practice? How many provide new information that you need to understand and apply or need assistance with? Be open and honest about your response here.

Curriculum Overview (Section 6 of National Curriculum Statement, 2002)

Read pages 30 and 31. Page 30 introduces the concept of a learning area.

There are five learning areas. Table 6.1 identifies the components of each learning area. Read it carefully.
• See how the subjects are grouped within each learning area. Is this what you would have expected? Are there any surprises for you here?

• List the learning areas here.

1.  
2.  
3.  
4.  
5.  

• What is the difference between a learning area and a subject?

In some cases, especially at elementary, lower primary and upper primary levels, a learning area can also be a subject. An example is Mathematics.

Another example is ………………………

Look at the elementary column and the lower secondary column (page 30).

The elementary column helps you to identify the subjects the students did before entering primary and the lower secondary column helps you identify where they may be heading. This is useful information for planning lower and upper primary programs.

Pages 33-41 expand on each learning area and make clear the subjects that make up each learning area. This process enables you to understand the interrelationship between subjects within a learning area and subjects shared between learning areas.

Read pages 33-41 with a colleague and identify the learning areas of the seven subjects you are/will be teaching in the lower and/or upper primary grades, by completing the following table.
### Module 1

**Curriculum reform - what is the rationale?**

<table>
<thead>
<tr>
<th>Primary Subjects</th>
<th>Learning areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
</tr>
<tr>
<td>Making a Living</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>Personal Development</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td></td>
</tr>
<tr>
<td>Community Living</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td>Environmental Studies</td>
<td></td>
</tr>
</tbody>
</table>

- What are the implications of this organisation for
  - time allocation?
  
  - Integration?

- Identify up to three new significant pieces of information about each learning area for your colleague and yourself, in the table below.

As you are reading about each learning area, you may have commented to the other, ‘I didn’t know this!’ Make a list of all the things you did not know previously. This process may help you to do this activity and complete the table below.

<table>
<thead>
<tr>
<th>Learning area</th>
<th>New information for you</th>
<th>New information for your colleague</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Having worked your way through Section 6 of the National Curriculum Statement (2002), prepare a short presentation (about 30 minutes) for your work colleagues about the overview of curriculum for the primary grades.

Use the tables you have completed and the knowledge you have gained for the presentation. In planning for the presentation, do a mind map of the ideas you plan to present in the diagram below. Feel free to add more circles and arrows to represent your plan.
Assessment and Reporting (Section 7 of National Curriculum Statement, 2002)

Pages 42-43 show important aspects of assessment and reporting.

There are nine statements on these pages that are elaborated in the National Assessment and Reporting Policy 2003. This policy is the focus of Section 3 of this module.

Read pages 42-43 and list the main points below. The first and the last points are done for you.

Point 1: Assessment and reporting must be culturally appropriate for Papua New Guinea.

Point 2:

Point 3:

Point 4:

Point 5:

Point 6:

Point 7:

Point 8:

Point 9: The National Assessment and Reporting Policy must be applied at all levels of schooling.
Unit 1  
**Philosophy of Curriculum Reform**

Share this information with a colleague. Discuss the implications of this information for you as well as your school or the schools you manage/supervise.

Record important points made.

*Hint: The National Curriculum Statement is a policy document of DoE. All curriculum materials reflect the directions provided in this document. This in turn affects what you do in your work situation. So think about the implications for your practices in your work situation.*
Section 3: The National Assessment and Reporting Policy, 2003 - what does it tell us?

This policy was developed in 2002 and published and distributed in 2003. It has guided the development of the primary and elementary syllabuses, teachers guides and teacher resources and will guide the development of any future curriculum materials.

This policy applies to all levels of schooling from elementary prep to grade 12. This is a DoE policy required to be used at all levels of schooling and by all persons and authorities within the PNG education system with responsibilities for assessment and reporting student achievement.

Now read on .....
Unit 1  Philosophy of Curriculum Reform

1. This policy identifies …………………………………………………………………………………………………………

2. It also identifies …………………………………………………………………………………………………………………

In the context of your work situation, what do these purposes mean?

Paragraph 2 links this policy with another policy – the National Curriculum Statement (2002). (Section 2 of this module)

• Read this paragraph and comment about the links between these two national policies.

• Read the rest of the message.

It introduces some terms with which you may or may not be familiar. Some of these terms are listed below. Write down what you think they mean. If you are not sure, look up the Glossary on pages 14-15.

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion-referenced assessment</td>
<td></td>
</tr>
<tr>
<td>Norm-referenced assessment</td>
<td></td>
</tr>
<tr>
<td>Outcomes-based education</td>
<td></td>
</tr>
<tr>
<td>Learning outcomes</td>
<td></td>
</tr>
</tbody>
</table>
Why do you think this policy is titled the ‘National’ policy?

- What do the two policies - the *National Curriculum Statement* and the *National Assessment and Reporting Policy*, 2003 - together mean for your practice?

_Hint: You may not be able to fully answer these questions at this point in time. This is only the beginning of your learning journey. Return to these questions when you have completed this section of the module and review your responses._

On pages 1-2, you find the **Introduction** to the policy, the **Rationale** for the policy and its **Purposes**.

In the introduction, two terms commonly used in educational circles - assessment and reporting - are defined. Both of these terms now need to be understood in terms of learning outcomes.

- Read pages 1-2 with a colleague.

Are your colleague’s and your understanding of the terms assessment and reporting consistent with the definitions provided on page 1? Comment.

You may not have started to assess and report achievement of outcomes as yet.

If you were in a school which trialed the primary syllabuses, you may have had some experience in this area. If you weren’t, you need to start thinking about these terms in the new context.

In 2004, you are required to commence implementing the *National Assessment and Reporting Policy*, 2003.

The *rationale* states

‘The reform curriculum sets out the new expectations of learning by all our young people in schools. It values all subjects, is outcomes-based, and requires fair and consistent assessment and reporting.’ (page 2)
Then it goes on to make the links between the National Curriculum Statement and the National Assessment and Reporting Policy, 2003, explicit.

**Read the Rationale and then explain in your own words what the links are.**

Assessment and reporting has five purposes (page 2). Note that all five purposes are to do with the students – their progress and achievement. This section helps highlight students as the key stakeholders of the educational process.

- **Read the purposes. Then respond to the following questions.**
  - Are the purposes consistent with your thinking?
  - Is there anything you would like to add to the set of purposes?
  - Who are the other stakeholders in the educational process?

As you have seen in Section 2 of this module, the National Curriculum Statement (2002) identifies the curriculum principles that helped shape the syllabuses. The National Assessment and Reporting Policy, 2003, identifies the assessment and reporting principles that will direct the process of assessment and reporting in schools. (pages 3-4) Once again these principles are to be understood in the context of learning outcomes.

- Read pages 3-4 with a colleague. Discuss the following terms and draw up an explanation of each:
  - Balanced assessment
  - Valid assessment
  - Reliable assessment
  - Fair and equitable assessment.

*Hint: If you are not sure go to the Glossary on pages 14-15 or seek help from your colleagues.*
Summarise these principles in the table below.

In preparing to do this task, go to pages 7-11 and identify your *Roles and Responsibilities*. For example, if you are a teacher, your responsibilities are on page 8. If you are an inspector, you will find your responsibilities on page 9. It may be that you have multiple roles. For example, you are a head teacher with teaching responsibilities. You may also be a member of a subject advisory committee. In this case you have three roles and the corresponding range of responsibilities in the different contexts.

- Complete the table in accordance with your role or roles.

<table>
<thead>
<tr>
<th>Principles of Assessment and Reporting:</th>
<th>In practice this means</th>
<th>Implications for role/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>are continuous and based on learning outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>are appropriate for Papua New Guinea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Pages 5-6 explain the policy on Assessment, Reporting and Evaluation. Read this section carefully.

This section makes clear the requirement that ‘assessment will be carried out continuously at all levels from Elementary Prep through to Grade 12 and will be used to gather information concerning individual student’s learning and achievement.’ (page 5, paragraph 1)

Is this your current practice?

If yes, you are doing well.

• If not,
  - how often do you assess?
  - how do you assess?
  - how do you plan to commit yourself to this requirement?

Another requirement is ‘Assessment will be criterion-referenced and will provide information on the actual learning that has taken place’. (page 5, paragraph 2)

Is this your current practice?

If yes, you are doing well.

• If not,
  - what is the basis of your current assessment practice?
  - how do you plan to commit yourself to this requirement?

There are two references to external assessment/examination on page 5.

• Read page 5 and answer the following questions.
  - At which grades will external assessment/examination take place?
  - How will such assessment data be used?

• How will this information be reported to students, parents and others?
Read 5.2, on recording (page 5)

The four purposes identified for recording are all to do with the students. Recording is primarily to check student progress, report progress to students themselves and to others and to plan future programs.

Reflect on your practices in recording student achievement information.

- Do the ways you currently record achieve these purposes? If yes, all of them or only some of them?

If not, what is your purpose of recording?

- What is your understanding of the relationship between assessment and recording?

- Have you developed special recording sheets for your students? If you have, why?

Page 6 elaborates on what is expected in reporting.

- Go back to page 1 of the National Assessment and Reporting Policy, 2003, and re-read the definition of reporting.

This view needs to be understood in the context of outcomes-based education.

Paragraph 1 on page 6 states ‘Schools will present reports in a format that best suits their communities.’

Comment about this statement from your work perspective. Use the following questions to focus your reflections.

- How does your school or the schools you supervise report?

- What are the community’s reactions to the ways schools report?

- How actively do communities work with schools in this regard?
Section 7, *Statements for levels of schooling*, pages 12-13, describes how elementary, primary and secondary schools must assess and report the achievement of learning outcomes described in the syllabus documents.

- Read 7.2: Lower Primary (page 12) and 7.3: Upper Primary (page 12)

For lower primary, four criteria are listed here. All of them refer to internal assessment for diagnostic purposes only. Local cultural approaches and a range of assessment methods integrated with teaching and learning are being recommended.

**Reflect on the consistency of your current practices with the criteria outlined here.**

For upper primary, six criteria are listed here. Three of these refer to internal assessment and the rest refer to external assessment. In all of these a focus on learning outcomes and criterion-referenced assessment are paramount.

**Reflect on the consistency of your current practices with the criteria outlined here.**

**Return to page 29-35 of this module and review the responses you wrote to the reflecting questions.**

- Are you satisfied with your responses? If yes, explain why you are satisfied; if not, improve it.
Module Summary

Congratulations! You have reached the end of this module!

In working through this module, you have examined the structure and contents of three important documents that describe the expectations of curriculum reform in different ways. The National Curriculum Statement and the National Assessment and Reporting Policy, 2003 are DoE policies and their application should affect the way students learn now and prepare themselves for the future.

Some new language and ideas are introduced in this module. They are explained in the documents you have explored as well as in this module. If you are not sure about some of them, re-visit the appropriate sections of the documents and/or the module.

You should by now have developed certain knowledge, understandings, insights and skills as they relate to the reform agenda - the rationale, the goals, the features, and the underpinning philosophy, attitudes and values - in the context of your work. All this should help you to perform better in your work context. You may also wish to discuss them with a colleague.

At this point let us review your progress by assessing the extent to which you can now demonstrate each module outcome.

The outcomes for the module are copied here. For each of the outcomes how do you assess yourself - Yes, No or Not sure?

<table>
<thead>
<tr>
<th>Can you:</th>
<th>Yes/No/ Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. state the major reasons for the reform?</td>
<td></td>
</tr>
<tr>
<td>2. discuss the differences between the old and reformed structures of the school system?</td>
<td></td>
</tr>
<tr>
<td>4. list the aims of the primary curriculum and elaborate on what they mean?</td>
<td></td>
</tr>
<tr>
<td>5. identify the values underpinning the Papua New Guinea Education Reform?</td>
<td></td>
</tr>
<tr>
<td>6. prepare a clear presentation to a group about the significant and relevant aspects of the reform?</td>
<td></td>
</tr>
</tbody>
</table>
7. discuss principles of assessment and reporting presented in the *National Assessment and Reporting Policy, 2003*?

8. make links between elementary, lower primary and upper primary learning areas, subjects and focuses?

9. explain why the curriculum principles presented in the *National Curriculum Statement (2002)* are important?

If you answered ‘yes’ to all of them, you have done very well. Think about the kinds of evidence that will support your answer. If you have said ‘no’ or are unsure of any, then it may be worth your while to go over the appropriate sections of the module again.

Remember these module outcomes help you to achieve the outcomes of the unit. Refer back to the outcomes of the unit in the *Unit Introduction* and reflect on where you are in relation to those outcomes.

If seeking academic credit, you were advised to keep a running record of any evidence you may have for particular unit outcomes. If you have not been doing this, go back over the module and jot down in your *Learning Contract*, what you might consider to be evidence for the *unit learning outcomes* for which you have agreed to provide evidence.

**Additional space for your notes**
Additional space for your notes
# Unit 1:
Philosophy of Curriculum Reform

## Module 2: Outcomes-based education - what is it?

<table>
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<tr>
<th>Contents</th>
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<td>Section 3: Optional reading</td>
<td>47</td>
</tr>
<tr>
<td>Module Summary <em>(and additional space for your notes)</em></td>
<td>51</td>
</tr>
</tbody>
</table>

Name: ........................................................ File Nº:....................................................

Date commenced: ...................................... Date completed:......................................

I have sighted this study guide as evidence of completion of agreed tasks by

.................................................................................................................(insert name)

Assessor: ..................................................... Date: ......................................................
Module 2: Outcomes-based education – what is it?

Module Introduction

Welcome to Module 2: Outcomes-based education – what is it?

Most teachers and other education officers are familiar with the concept of objectives. In the past syllabuses have included rationale, the content (knowledge, skills and attitude) described through aims, goals, general objectives, specific objectives, content overview and suggested activities and have provided advice on teaching and learning strategies and assessment methods. When you read an upper primary or a lower primary syllabus, you will notice that each syllabus identifies the same kind of information but they are presented now in a different way. Student learning outcomes are central to the way the syllabuses and other curriculum materials are structured.

This module focuses on the concept of OBE and makes clear some of the special features of this approach. You explore these features using both the upper primary and the lower primary syllabuses. The module then introduces three approaches to OBE. There is Optional Reading (Section 3) for those who wish to know more about outcomes-based education.

Some new terms and ideas introduced in this module are: strands, sub-strands, indicators, inputs, outputs, outcomes, progress map, ‘on-balance’ decisions, and traditional, transitional and transformational approaches to OBE.

To do this module you will need access to the National Curriculum Statement (2002) (Resource 2), the National Assessment and Reporting Policy, 2003 (Resource 3), the seven upper primary and lower primary syllabuses (Resources 4-18) and the Upper Primary Learning Outcomes for Grades 6, 7 and 8 and the Lower Primary Learning Outcomes for Grades 3, 4 and 5 (Resources 22-23). These are shown on pages 4-8 of the Unit Introduction. All activities in this module are based on these documents.

If you are seeking academic credit, make sure you do the self-assessment in the Accreditation and Certification section before you start this module. As you do this module, keep a running record of sections, parts and pages of the module where you can identify evidence for particular unit outcomes. You may wish to record such information in your Learning Contract, found towards the end of the study guide.
Module learning outcomes

When you have worked through this module, you, the learner, can (are able to):

1. distinguish, using examples, between a learning outcome and a learning objective
2. describe, with examples, the features of outcomes-based education and outcomes statements
3. distinguish between inputs, outputs and outcomes using a teaching and learning example
4. explain why criterion-referenced assessment is more compatible with OBE than norm-referenced assessment
5. describe the differences between the three approaches to OBE
6. (Optional) outline the assumptions (premises), the principles and the practices of OBE.
Section 1 – The concept of outcomes-based education (OBE)

When you set out on a planned journey, you usually know where you want to end up and you usually know how you will get there. Education is a kind of journey that students at school make with the help of teachers. In the past, curriculum developers have described the journey that students should take using learning objectives but it has often been difficult for teachers to know whether a student has arrived at an agreed destination or not.

Teachers need to know the desired learning destinations and how best to help students to reach these destinations. The students also need to know the desired learning destinations so they can help themselves to reach these destinations. The parents also need to know the desired learning destinations so they can help their children to reach these destinations and understand the reports they receive from schools. These destinations are increasingly being described as outcomes or end-points of students’ learning.

When students go to school there is an expectation that they will learn something that is as valuable as and perhaps somewhat different from the things that they learn at home. An outcomes-based education describes what students know, can do and value because of their schooling.

The students reach the destination by means of the inputs teachers plan and provide and the activities (outputs) in which they participate and from which they learn. The starting point for planning is an outcome or a cluster of outcomes. Outputs are sometimes seen as part of the learning inputs. In planning for inputs and outputs teachers consider groups or clusters of outcomes that naturally go together or can be easily linked, from the same subject or from different subjects. Inputs are sometimes written up as short term lesson objectives. In an outcomes-based approach, teachers plan lessons and identify appropriate content and activities that will allow students to reach the defined outcomes.

(You will find further explanation and examples of inputs, outputs and outcomes on page 39, Part 1.4 of this section.)

Part 1.1: Lower and Upper Primary Syllabuses

In preparing to explore the concept of OBE let us take a quick walk through an upper primary syllabus or a lower primary syllabus. All upper and lower primary syllabuses have a common structure. So we need to look through one syllabus only to get a sense of how the syllabuses are structured.

Units 2, 3 and 4 in this set of inservice units focus on the seven upper primary syllabuses and the seven lower primary syllabuses in greater detail.
Get hold of a copy of *Arts, Lower Primary Syllabus 2004.*

*Arts, Lower Primary Syllabus*

Look at page iii at the beginning of the document. It shows that this syllabus has 11 sections, the first of which is *Secretary’s Message*.

Skim read Secretary’s Message (page iv) and the *Introduction* (page 1).

- Is there any new information for you here? If yes, list up to five new ideas here.

- What does the table on page 1 tell you about the links between elementary, lower primary and upper primary in terms of learning area, subject and strands?
  - To which learning area does Arts belong?
  - What are the strands of Arts? List them here.

- What is the required time allocation for Arts in all lower primary classes?

*Rationale comes next (page 2), followed by Curriculum Principles (pages 3-10).*

The *rationale* explains why Arts should be taught in lower primary schools, what it can do for the students and the country now and in the future and its relationship to government policies.

Read the *rationale*

- What does it say about the responsibility of the community in Arts education?
Unit 1  Philosophy of Curriculum Reform

The *curriculum principles* identify, describe and focus on important concerns for the subject of Arts. They should influence what teachers teach, and how students learn and apply their learning throughout their lives.

The curriculum principles are identified and described under three sub-headings – Our Way of Life, Integral Human Development and Teaching and Learning.

Skim read pages 3-10. List the curriculum principles within the three sub-headings in the table below.

<table>
<thead>
<tr>
<th>Our way of life</th>
<th>Integral Human Development</th>
<th>Teaching and Learning</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

- Why are these *curriculum principles* important in the Arts?

Suggested percentage of teaching, learning and assessment in lower primary in vernacular and English on page 4 is of particular significance. This suggests that 60% of teaching/learning/assessment time in grade 3 should be done in the vernacular and 40% in English. This ratio changes from grade 3 to grade 5.

- What are the implications of this for your practice?

Seven *Aims* are listed on page 11 of the syllabus. This is followed by *Content Overview* (pages 12-15). Here the five strands of Arts are identified.

A strand is explained as a particular aspect of a subject or a particular theme such as a set of processes.
The strands are further organised into sub-strands to allow the content to be specified and described as key learning outcomes.

Skim read pages 12-15. Draw a mind map to show the strands and sub-strands of Arts. Some information has already been filled in for you. Add more boxes and links as you need them.

- What conclusion can you make about the sub-strands of each of the strands?

The content of each of the sub-strands is displayed in the table on page 14.
On page 16, you will find an overview of the Learning Outcomes. Looking down the columns for Grade 3, Grade 4 and Grade 5, you notice that there are 15 outcomes for each grade. You also notice that each outcome is numbered by a code with three digits.

The information in small print at the top of page 16 explains the code.

It says that the first digit stands for the grade, the second for the strand and third for the outcome in the strand. For example, 3.1.1 stands for an outcome for Grade 3, Strand 1 (Art), Outcome 1. 3.2.3 stands for an outcome for Grade 3, Strand 2 (Craft), Outcome 3.

Now what do the following codes stand for?

4.2.2: 

5.3.2: 

5.4.1: 

4.4.3: 

4.5.2 

5.1.3: 

Learning outcomes and indicators, pages 17-31, is the major section of this syllabus.

On page 17, you see the term ‘indicators’. You would have come across an explanation of this term on page 15. It states: Indicators are what students do, know and understand if they achieved a learning outcome.

Indicators provide important information about the outcomes. It helps teachers to understand the depth and breadth (that is, the standard) of the outcomes, understand the kinds of evidence they should be looking for in making judgements about student achievement of outcomes, and to a small degree, with planning and programming.

It should also be noted that the achievement of the outcomes may be demonstrated in vernacular and/or English by students. You, the teacher, will make professional judgements about the percentage of time for teaching, learning and assessment guided by the table found on page 4 and the graph found on page 32.

Read the information about indicators on page 15.

Indicators are listed as bullet points after each outcome. They are examples of the kinds of things a student is able to do when he or she has achieved an outcome. This means that there may be other ways a student is able to demonstrate achievement of the same outcome. In time, when you understand the standard of the outcome, you will be able to add to the indicators provided in the syllabuses.
The next section of the syllabus is *Assessment and Reporting*, pages 32-35. This section makes reference to the *National Assessment and Reporting Policy*, a policy document of DoE. It explains terms such as assessment, reporting and evaluation.

**Skim read pages 32-35.**

- List five important points this section makes about assessment in general.

- What is meant by the following statements on page 33?
  - *Assessment in Arts is school-based:*
  
  - *Assessment in Arts is continuous:*
  
  - *Assessment in Arts is criterion referenced:*

- List four assessment methods suggested specifically for Arts assessment.
Now get hold of a copy of *Arts, Upper Primary Syllabus 2003*.

Look at page iii at the beginning of the document. It shows that this syllabus has 11 sections, the first of which is ‘Secretary’s Message’.

Skim read this section and the *Introduction* (page 1).

- Is there any new information for you here? If yes, list up to five new ideas here.

- What is meant by the following statements on page 1?
  - The course is balanced:
  - The course is sequenced:
  - The course is cumulative:
  - The course is written for generalist teachers:

*Rationale comes next (page 2), followed by *Curriculum Principles* (pages 3-7).*

The *rationale* explains why Arts should be taught in upper primary schools, what it can do for the students and the country now and in the future and its relationship to government policies.

The *curriculum principles* identify, describe and focus on important concerns for the subject of Arts. They should influence what teachers teach, and how students learn and apply their learning throughout their lives.

The curriculum principles are identified and described under three sub-headings – Our Way of Life, Integral Human Development and Teaching and Learning.
Skim read pages 2-7. List the curriculum principles within the three sub-headings in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Our way of life</th>
<th>Integral Human Development</th>
<th>Teaching and Learning</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

• What is the importance of the *curriculum principles* for Arts education?

• Are the selected curriculum principles the same as for *Arts, Lower Primary Syllabus*?

Five *Aims* are listed on page 8 of the syllabus. This is followed by *Content Overview* (pages 9-10). Here the four strands of Arts are identified.

A strand is explained as a particular aspect of a subject or a particular theme such as a set of processes.

List the strands of Arts here.
1. .................................................. 3. ..................................................
2. .................................................. 4. ..................................................

The strands are further organised into sub-strands to allow the content to be specified and described as key learning outcomes.
Skim read pages 8-10.

- Draw a mind map to show the strands and sub-strands of Arts. Some information has already been filled in for you. Add more boxes and links as you need them.

- What conclusion can you make about the sub-strands?

- Are the strands and sub-strands the same for upper and lower primary Arts? Explain.

The content of each of the sub-strands is displayed in the table on page 10.

On page 11, you will find an overview of the Learning Outcomes. Looking down the columns for grade 6, grade 7 and grade 8, you notice that there are 12 outcomes for each grade.

By now you should be familiar with the way the outcomes are coded. Try your understanding here.
What do the following codes stand for?

7.2.2:

8.3.2:

6.4.3:

*Learning outcomes and indicators*, pages 12-23, is the major section of this syllabus.

By now you should know what indicators are and why they are provided for each of the outcomes.

Read the information about indicators on page 12.

- Explain why indicators are important in an outcomes-based approach?

The next section of the syllabus is *Assessment and Reporting*, pages 24 and 25. This section makes reference to the *National Assessment and Reporting Policy*, a policy document of DoE. It explains terms such as assessment, reporting and evaluation.

Skim read pages 24 and 25.

- List five important points this section makes about assessment in general.

- List four assessment methods suggested specifically for Arts assessment.
Now let us compare Arts, Lower Primary Syllabus and Arts, Upper Primary Syllabus 2003

- Do a summary of the key information comparing lower and upper primary Arts syllabuses in the table below.

<table>
<thead>
<tr>
<th>Key areas</th>
<th>Lower Primary Arts</th>
<th>Upper Primary Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Curriculum principles</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The same or different?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Aims</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many? The same or different?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Strands</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many? What are they?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Sub-stands</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many? What are they?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Assessment and Reporting</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What assessment methods are being suggested?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any differences?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Recording</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What recording methods are being suggested?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Reporting</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is being suggested here?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Evaluation</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is being suggested here?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Write a summary statement about how the two arts syllabuses compare.

**Hint:** You’ll find that the two syllabuses provide similar kinds of information, however, there are also some differences. The similarities and differences help you to develop an overview of the Arts syllabuses.

### Part 1.2: Comparing Objectives and Outcomes

**An example of an objective** is ‘students will be able to do the four mathematical operations of addition, subtraction, division and multiplication’. This is a statement of intent, and provides the direction in which to proceed, however, it is difficult to see whether a student has actually arrived there. Often objectives are stated as ‘students will be able to ….’, ‘students should be able to ….’, and ‘students will ….’.

An example of an outcome is ‘students do the four mathematical operations of addition, subtraction, division and multiplication’. Here the intent and the end points are the same. The teacher is able to confidently plan learning activities and resources to facilitate the achievement of the outcome.

Outcomes are often stated as, for example, ‘students describe ….’, ‘students are able to describe ….’, or that ‘students can describe ….’. You will notice that they are stated in the present tense and that they are demonstrable, that is, doable. So you will be asking yourself, at particular points throughout a unit of work, based on learning outcomes, questions such as:
- ‘Can my students do this yet?’
- ‘Are they progressing towards doing this?’
- ‘How close are they to doing this?’
- ‘What are ways of finding out whether they can do this?’
- ‘Am I giving ample opportunities for my students to learn and show me whether they can do this?’ etc.

According to Bill Spady, a renowned expert in the field of outcomes-based education:

> Students do something or students demonstrate something. Curriculum content is not the outcome, the demonstration of content is the outcome. Outcome is not the name of a concept, or the name of a competence, or the name of an attribute. Outcomes actually happen, somebody does something. Until they do it, an outcome has not been realised.

> An outcome is an actual demonstration in an appropriate context. It is the result of learning that is visible and observable of three things: knowledge, combined with skills, combined with attitudinal and motivational factors that constitute a demonstration or performance.
The word ‘based’ means to direct, define, derive, determine, focus and organise what we do according to the learning result that we want to have happen at the end. When we put the two words together, the word outcomes-based implies that we will design and organise everything we do directly around the outcomes that have been identified.

Outcomes-based education means to start with a framework and a set of agreed expectations of desired learning results. The curriculum and other requirements that are appropriate for achieving those results can then be built. (As reported in Killen, R, 1999)

A clear statement of outcomes helps and encourages teachers to be student-centred and reflective in their practices.

Here are some examples of objectives and outcomes. Some of the statements show intent (that is, written in the future tense); the others clearly show end-points.

Read each of the statements below carefully.

• Is each one an objective or an outcome?

1. Students should be able to discuss a story and make a summary.
2. Students convert between ratios and fractions.
3. Students design a personal fitness program.
4. Students will be able to read and perform more complex tasks using a set of rules and or instructions.
5. Students evaluate current practices of land and water resource management to design sustainable resource management projects to generate income.
6. Students identify and describe local human-made and natural environments.
7. Students will retell the sequence of events related to own experiences.
8. Students explain the structure and behaviour of matter in terms of the particles from which it is made.

• Which of the statements are objectives and which are outcomes? Which of these are intentions? Which of these are end-points? Record below.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hint: Think whether the statements express intentions or the learning destinations (end-points). There are five outcomes and three objectives in the above list.
Part 1.3: Features of outcomes-based education and outcome statements

Feature 1

Firstly, outcome statements may be simple or complex.
For example, an outcome may be that students ‘write simple sentences or respond to simple instructions’. Another outcome may be that students ‘apply knowledge of sentence structure, grammatical features, punctuation conventions, as well as spelling strategies, to refine own writing’.

Which of the two outcomes is more complex? In terms of time which of the two is likely to take longer for students to learn and demonstrate? These kinds of differences between outcomes are often referred to as the ‘grain size’ of the outcome.

To understand the concept of ‘grain size’, a three step approach is being recommended.

Step 1
Get hold of one of the lower or upper primary syllabuses. Look at the action word (verb) at the beginning and in the other parts of outcome statements. You will see verbs such as list, evaluate, describe, design, etc. Some of these verbs are of a lower order, while others are of a higher order, according to Bloom’s Taxonomy or six thinking levels. (Refer to Primary Inservice Unit 6: Learning and Teaching for Outcomes, if you wish to find out about Bloom’s Taxonomy)

This knowledge by itself is not enough. So we go to Step 2.

Step 2
Look at the concept identified in the outcome.

Let us look at an example.

Outcome 1: Students name the parts a plant found in the local environment.
Outcome 2: Students describe the parts of a plant found in the local environment.

Outcome 1 says ‘Students name’; Outcome 2 says ‘Students describe’. However, the concept is the same - the parts of a plant. Describing the parts is more complex and takes longer to learn and demonstrate than naming the parts. Describing requires knowledge of the names of the parts and a lot more.

Again this knowledge by itself is not enough. So we go to step 3.

Step 3
Look at the context of the outcome. For Outcome 1, the context is ‘the local environment’; Outcome 2 has the same context ‘the local environment’.
We can conclude that outcomes 1 and 2 differ only in one respect – the verbs. So we can agree now that Outcome 2 is of a larger ‘grain size’ than Outcome 1. It is more complex than Outcome 1 and it will take longer for students to learn and demonstrate their learning.

In summary, the three steps are as shown below.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Step 1: Verb?</th>
<th>Step 2: Concept?</th>
<th>Step 3: Context?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>name</td>
<td>parts of a plant</td>
<td>in the local environment</td>
</tr>
<tr>
<td>2</td>
<td>describe</td>
<td>parts of a plant</td>
<td>in the local environment</td>
</tr>
</tbody>
</table>

These ways of looking at and understanding outcomes enables us to effectively plan programs, allow sufficient time for learning to occur, identify assessment methods and tasks, and set criteria for assessment.

Now let us take an example from *Health, Lower Primary Syllabus*.

Outcome 3.1.5: Students demonstrate ways to deal with safe and emergency situations in the home

Outcome 4.1.5: Students demonstrate ways to deal with safe and emergency situations in the school

Outcome 5.1.5: Students demonstrate and evaluate strategies to deal with safe and emergency situations in the community.

**Do an analysis of the above outcomes using the table provided.**

Make a judgement about the degree of complexity of the outcomes and therefore the grain size of the outcomes.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Step 1: Verb?</th>
<th>Step 2: Concept?</th>
<th>Step 3: Context?</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.5</td>
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<tr>
<td>4.1.5</td>
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<tr>
<td>5.1.5</td>
<td></td>
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</tbody>
</table>
Now let us take an example from *Science, Upper Primary Syllabus*.

- Go to page 12 and copy outcomes 6.3.5, 7.3.5 and 8.3.5 in the space provided below.

  6.3.5

  7.3.5

  8.3.5

- Now complete the table.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Step 1: Verb?</th>
<th>Step 2: Concept?</th>
<th>Step 3: Context?</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.3.5</td>
<td></td>
<td></td>
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<tr>
<td>7.3.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.3.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reflect on how an analysis of this nature helps you the teacher. Record your thoughts here.
Now look at the group of outcomes you have identified, in the table, on page 16.

- Place them in order from the simplest outcome (smallest grain size) to the most complex outcome (largest grain size). Record the simplest outcome at one end and the most complex at the other end of the line, then fit the others in between.

<table>
<thead>
<tr>
<th>Simplest (smallest grain size)</th>
<th>Most complex (largest grain size)</th>
</tr>
</thead>
</table>

Hint: Have a go. You may not get it right the first time. This is only the beginning of your engagement with outcomes.

The smaller the grain size, the more specific the outcome is and there will be many of them to describe a concept. Conversely, the larger the grain size, the more general the outcome is and there will be fewer of them to describe the same concept.

As you have already seen, some outcomes are ‘double-headers’, that is, they have two verbs. For example, ‘identify and organise’, ‘identify and describe’, ‘conduct investigations … and use collected data…’, etc. Don’t look at just the first action word. Both verbs are parts of the outcome. Initially you may need to look at each outcome carefully by identifying the action word(s), the concept and the context. With time you will develop an overview of the outcomes and a sense of how they fit together within a subject and how they can be linked across subjects.

How would you plan for students to learn and demonstrate an outcome that states … ‘identify and organise’ or ‘identify and describe’?

Hint: In thinking through the above question, put a context to the verbs. For Example, think ‘identify and organise’ what? or ‘identify and describe’ what?
Some outcomes are ‘multiple-headers’, that is, they have three or more verbs. An example is Outcome 6.1.1 in *Mathematics, Upper Primary Syllabus*, page 12. It states: (Students) add, subtract, multiply and divide fractions. Outcome 6.1.2 on the same page states: (Students) add, subtract, multiply and divide decimals. This means that students must show they can do all four operations before they are deemed to have achieved that outcome.

Another example is Outcome 4.1.1 in *Mathematics, Lower Primary Syllabus*, page 14. It states: (Students) count, order, read and record three and four digit numbers. There are four verbs here that are equally important parts of the outcome. Outcome 4.1.2 on page 15 states: (Students) apply and use the four operations to do calculations with three and four digit numbers. This means that students apply and use addition, subtraction, multiplication and division in doing calculations with three and four digit numbers.

How would you plan for students to learn and demonstrate ‘add, subtract, multiply and divide’ fractions or decimals?

Or

How would you plan for students to learn and demonstrate application and use of ‘addition, subtraction multiplication and division’ with three and four digit numbers?

Record some of your thoughts here.

Do the following activities. You may choose to do the upper primary or lower primary activities or both sets of activities.

Here are some activities based on upper primary syllabuses.

- Look at outcomes 6.3.1, 6.3.2, 6.3.3, 6.3.4 and 6.3.5 on page 12 of the Upper Primary Science Syllabus.
  - Are they of similar ‘grain size’? Explain your answer.

- Now look at outcomes 6.1.1, 6.1.2, 6.1.3, 6.1.4, 6.1.5, 6.1.6, 6.1.7 and 6.1.8 on page 12 of the Upper Primary Mathematics Syllabus.
- Are they of similar ‘grain size’? Explain your answer.

• **Now look at outcomes 6.3.1, 6.3.2, 6.3.3 and 6.3.4 on page 17 of *Language, Upper Primary Syllabus*.**

  - Are they of similar ‘grain size’? Explain your answer.

  - Are the Language outcomes nearly the same ‘grain size’ as the Mathematics outcomes for grade 3? Make a comparative statement here explaining why you think so.

  - What are the implications of the simple (small grain size) and complex (larger grain size) outcomes for you for your practice?

Here are some activities based on lower primary syllabuses:

• **Locate outcomes 3.2.1, 3.2.2, 3.2.3, 3.2.4 and 3.2.5 of *Mathematics, Lower Primary Syllabus*.**

  - Are they of similar ‘grain size’? Explain your answer.

• **Locate outcomes 5.2.1, 5.2.2, 5.2.3, 5.2.4 and 5.2.5 of *Lower Primary Mathematics Syllabus*.**

  - Are they of similar ‘grain size’? Explain your answer.

  - How do 3.2.3 and 5.2.3 compare with each other? Explain your answer.

  - Summarise your learning about the features of outcomes so far using the following mind map or another structure of your choice. Add more circles and links to the map as you proceed with this section. Two circles have been filled for you.
Feature 2

A second feature of outcome statements is that, in the syllabuses, they indicate progress from one grade to the next.

This means that the set of outcomes for each sub-strand for grades 3-5 in any lower primary syllabus or grades 6-8 in any upper primary syllabus may be seen as a ‘progress map’ for grades 3-5 or grades 6-8 respectively. Progress may be indicated through verbs, concepts and/or contexts.

Here is an example from the Language, Lower Primary Syllabus.

Three language outcomes from the sub-strand: production, strand: reading for grades 3 to 5 for English are presented below.

(Note: E or V at the end of the outcome code identifies which language that outcome applies to – English or a vernacular?)

<table>
<thead>
<tr>
<th>Grade 3</th>
<th>Grade 4</th>
<th>Grade 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.1E Read a range of predictable text types</td>
<td>4.2.1 E Read simple text types and interact with the ideas and information from the texts</td>
<td>5.2.1 E Read, reflect on and respond to ideas and information from a wide range of text types in all genre categories</td>
</tr>
</tbody>
</table>
Straight away you will notice that 3.2.1E is a single header (one verb), 4.2.1 E is a double header (two verbs) and 5.2.1 E is a triple-header (three verbs).

Lets us do an analysis of these outcomes.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Verbs</th>
<th>Concept/Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.1E</td>
<td>Read</td>
<td>a range of predictable text types</td>
</tr>
<tr>
<td>4.2.1E</td>
<td>Read … and interact (with) …</td>
<td>simple text types … ……………………………… ideas and information from the texts</td>
</tr>
<tr>
<td>5.2.1E</td>
<td>Read, reflect on and respond (to)</td>
<td>ideas and information from a wide range of text types in all genre categories</td>
</tr>
</tbody>
</table>

All outcomes contain the word ‘read’. What are the students expected to read? In grade 3, a range of predictable text types; in grade 4, simple text types; in grade 5, a wide range of text types in all genre categories.

In grade 4, students are also expected to interact with ideas and information from the texts they read and in grade 5, they are expected to reflect on and respond to ideas and information from text types in all genre categories.

So it is possible to identify the words and phrases that indicate progress from one grade to the next. Initially you’ll have to make the effort to compare and contrast the outcome statements. In time, you’ll internalise the elements of progress and become quite adept at and comfortable with planning for such differences and identifying them in your students’ performances.

The indicators are also important in understanding progression. (see indicators on page 24, Language, Lower Primary Syllabus)

In the Language, Upper Primary Syllabus, for the same strand and sub-strand, the outcomes are 6.2.1, 7.2.1 and 8.2.1. These outcomes are presented below.

<table>
<thead>
<tr>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2.1 Read and respond to a range of texts about real and imaginary worlds</td>
<td>7.2.1 Read and respond to a wide range of more complex literary and factual texts</td>
<td>8.2.1 Read, reflect and respond critically to a broad range of complex literary and factual texts</td>
</tr>
</tbody>
</table>

Straight away you will notice that 6.2.1 and 7.2.1 are double headers (two verbs each) whereas 8.2.1 is a triple-header (three verbs).
### Module 2  Outcomes-based education - what is it?

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Verbs</th>
<th>Concept/Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2.1</td>
<td>Read and respond (to)</td>
<td>a range of texts about real and imaginary worlds</td>
</tr>
<tr>
<td>7.2.1</td>
<td>Read and respond (to)</td>
<td>a wide range of more complex literary and factual texts</td>
</tr>
<tr>
<td>8.2.1</td>
<td>Read, reflect and respond critically (to)</td>
<td>a broad range of complex literary and factual texts</td>
</tr>
</tbody>
</table>

When you compare the grade 6 and the grade 7 outcomes, you’ll notice that the verbs are the same.

What are the students expected to read and respond to? In grade 6, they are expected to read and respond to ‘a range of texts about real and imaginary worlds’; in grade 7, to ‘a wide range of complex literary and factual texts’.

So we can agree that progress from grade 6 to grade 7 is indicated by the words ‘a wide range of more complex …’.

When you compare the grade 7 and the grade 8 outcomes, you’ll notice that both the verbs and the contexts are different. From ‘Read and respond to a wide range of more complex …’ it progresses to ‘Read, reflect and respond critically to a broad range of complex …’.

So it is possible to identify the words and phrases that indicate progress from one grade to the next. Initially you’ll have to work at understanding the outcome statements. In time, you’ll internalise the elements of progress. This is especially important if you teach or supervise multi-grade classes and schools.

The indicators are also important in understanding progression. ‘Read and Respond’ can mean more complex things in grade 7 than in grade 6. (see indicators on page 22, Language, Upper Primary Syllabus)

Now look at the lower primary and upper primary Language (English) outcomes together.
• Identify some sequences of verbs, concepts and contexts that indicate to you progress expected of students as they move from grade 3 to grade 8.

• Here is a task for you to do.

Three upper primary mathematics outcomes from the strand: space and shape are listed below, however, they are jumbled up. Use your learning so far to examine them closely.

Outcomes A: Investigate volumes of cylinders, cones and prisms and apply some volume rules

Outcomes B: Investigate volumes of simple solids to determine rules

Outcomes C: Investigate volumes of compound prismatic solids and use rules to determine volumes

• Identify the most complex and the least complex outcome statement.

The most complex outcome is Outcome ….

The simplest outcome is Outcome ….
• Explain why you think this.

• Then sequence them from the simplest to the most complex.

<table>
<thead>
<tr>
<th>Simplest (smallest grain size)</th>
<th>Most complex (largest grain size)</th>
</tr>
</thead>
</table>

• Now go to page 13 or page 30 of the *Mathematics, Upper Primary Syllabus* and check your response with that provided in the syllabus.

• How did you go? If your sequence matched the sequence in the syllabus, you have done well.

• If not, have another go with the following outcomes from the *Social Science, Upper Primary Syllabus*.

| Outcomes A: Identify the main physical environment of the province and nation and describe the factors and process that have formed them | Outcomes B: Compare and contrast the main physical environment of the world and describe the factor and process that have formed them | Outcomes C: Identify and describe local human-made and natural environments |

The most complex outcome is ……

The simplest outcome is ……
Then sequence them from the simplest to the most complex.

| Simplest (smallest grain size) | Most complex (largest grain size) |

- Now check your sequence with that on page 9 of the *Social Science, Upper Primary Syllabus*.

Plan an activity with some Personal Development outcomes.

- Photocopy and then cut and paste a sequence of three outcomes on to a piece of cardboard. Then cut the card into three pieces, each with one outcome on it
  or
  on three pieces of cardboard or paper neatly copy the three outcomes from a sequence.
  - Shuffle the cards
  - Then ask a colleague to sequence the outcomes
  - When the task is done, ask the colleague to explain how she or he did it
  - Record any significant points raised during this conversation.

- Then check this sequence with the one in the syllabus.

- Comment about the ease or difficulty of sequencing the outcomes.

- Now go back to page 23 and add your learning to the mind map you are constructing.

Feature 3

A third feature of outcome statements is that we need ‘indicators’ to fully understand the scope, that is, the breadth and depth or the ‘standard’ of an outcome.
Often an outcome is a broad statement of the end-point of learning.

For example, Outcome 6.1.1 sub-strand: fractions of the *Mathematics, Upper Primary Syllabus*, page 17, states: Students add, subtract, multiply and divide fractions.

Six indicators are provided on page 17. Indicators are a list of examples of the sort of things students are able to do, know and understand if they are achieving the outcome.

The indicators for Outcome 6.1.1 suggest that students can demonstrate the achievement of the outcome by doing those kinds of things. Indicators are not necessarily assessment tasks. They are provided to help teachers make judgements about which students actually meet the requirements of the outcome. This information acts as a cue for teachers to understand the ‘standard’ expected at grade 6.

**Read the indicators for Outcome 6.1.1**

- From your teaching experience, write another indicator that will show student achievement of this outcome.

All syllabuses identify indicators for the learning outcomes specific to the syllabuses. Let us take another example.

Outcome 4.1.1 sub-strand: number and place value of the *Mathematics, Lower Primary Syllabus*, page 14, states: Students Count, order, read and record three and four digit numbers.

Seven indicators are provided for this outcome on page 14. The indicators suggest that the students can demonstrate the achievement of this outcome in a variety of ways. Examples are: using an abacus, by bundling concrete things, by using words and numerals, by using comparative terms such as more by … or less by …, by estimating number in group using appropriate strategies. All of these are acceptable provided the students are dealing with three and four digit numbers. You as the teacher will make professional judgements about the range of evidence required of each of your students. Some of your students may be able to demonstrate this outcome already; if this is the case, they should move on to more advanced work.

Let us look at the first indicator for Outcome 4.1.1. It states: students will be achieving this learning outcome in vernacular and/or English, when they, for example:

*show numbers to 1000 by bundling concrete materials such as sticks*

**Reflect on the following and record your thoughts.**

- Aspect(s) of Outcome 4.1.1. this indicator is illustrative of.
• The other aspect(s) of the outcome that you should have evidence of, before you can confidently say that a student has achieved this outcome

• The need to collect evidence over a period of time in a variety of ways before making definitive judgements about achievement of outcomes.

• Can this outcome be achieved in the vernacular?

Consider one outcome from each of the lower or upper primary syllabuses. Construct and add another indicator, keeping in mind the breadth and depth of the outcome as explained by the indicators already provided for the selected outcomes.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Additional indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Now go back to page 23 and add any new learning to the mind map you are constructing.

Feature 4

A fourth feature of outcome statements is that when assessing achievement either formally or informally, criterion-based assessment is best.

The *National Assessment and Reporting Policy, 2003*, explains assessment criteria as statements that are used to judge the quality of student performance. (page 17)
An example is provided here.

Imagine you are teaching a grade 6 class. You plan an integrated unit of work spanning two subjects - Personal Development and Language.

The unit of work is developed around the Personal Development outcomes 6.2.4 and 6.2.6, and the Language outcomes 6.1.2 and 6.3.3.

**Personal development outcomes**
6.2.4: Identify rules and demonstrate safety procedures in play and games
6.2.6: Identify responsibilities attached to different roles in games and sport

**Language outcomes**
6.1.2: Apply a range of speaking and listening skills, on both familiar and introduced topics in spontaneous and structured activities
6.3.3: Identify how texts have been structured to suit the context

You wish to assess the achievement of these outcomes holistically, that is, in an integrated way using a practical, realistic situation.

The task you have selected requires the students to
- design a game with special attention to safety and role and responsibilities of players
- present the game to the rest of the class
- play the game.

You write up the task in three parts in detail, including the assessment criteria. The criteria is discussed and negotiated with the students or at least the students provide some input into the development of the criteria.

Part 1 – a speaking component
Part 2 – a written component
Part 3 – playing the game

**BOX 1**

**TASK DESCRIPTION**

Design own game to be presented to the rest of the class (Grade 6)

**Part 1 – A speaking Component (presentation)**
The presentation should include:
- an explanation of the game
- position of players, roles and responsibilities
- requirements – equipment, number of players, officials
- rules and tactics
- skills expected
- safety aspects
- scoring system
Part 2 – Written component (150 words)
Each student is required to submit the task in a written format. This should include:
- an explanation of the game
- a procedural account of the rules
- team’s involvement (roles and responsibilities, leadership, planning and task break up)
- own and group evaluation of presentation to the class

Part 3 – Play the game
Another group plays the game using the rules and scoring system

Preparation
- Divide the class into small groups
- Outline the task and describe the components of tasks
- Review the assessment criteria with class and outline teacher expectations

Negotiated Assessment Areas
Communication Moving and performing
Interactivity Critical thinking
Planning Team spirit
Enjoyment Considerations of safety

BOX 2
Assessment of Speaking component

Names: ........................................... Date assessed: .....................
...........................................
...........................................
...........................................
...........................................

Key: 1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree

Criteria
- The explanation of the game was clear and concise
- Roles and responsibilities were clearly defined
- Plans for changing roles were identified
- Each group member shared equally in the presentation
- The presentation was well planned
- Group demonstrated the skills of the game competently
- The game was novel and interesting
- The rules were well developed
- The rules had purpose
- Tactics were included in the presentation
- The other students reacted positively to the game

Comments:
**BOX 3**

**Assessment of Written component**

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation text type (genre) was used for game description</td>
</tr>
<tr>
<td>Procedural genre was used for outline of rules</td>
</tr>
<tr>
<td>Communication skills were clearly defined</td>
</tr>
<tr>
<td>Interaction skills were clearly defined</td>
</tr>
<tr>
<td>Group reflection comments were presented</td>
</tr>
<tr>
<td>Own personal reflection comments were presented</td>
</tr>
</tbody>
</table>

**Comments:**

---

**BOX 4**

**Assessment of Playing the game**

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rules, including safety aspects, made sense</td>
</tr>
<tr>
<td>Group tactics worked well</td>
</tr>
<tr>
<td>Change in roles worked well</td>
</tr>
<tr>
<td>Game was very interactive</td>
</tr>
<tr>
<td>Game was very challenging</td>
</tr>
<tr>
<td>Equipment was easily found</td>
</tr>
<tr>
<td>Enjoyed the game</td>
</tr>
<tr>
<td>The game developers are to be commended</td>
</tr>
</tbody>
</table>

**Comments:**
Reflect on the above example. Look at Box 1 – Task Description.

- Is the purpose of the task clear?

- Are the descriptions of the components clear?

- Now look at boxes 2, 3 and 4.

- Do the assessment criteria for each of the components reflect the assessment areas set in the Box 1? Comment.

- Now look at the outcomes on which the unit of work is based (page 31 of this module)

- Is the task appropriate for the outcomes on which the unit of work is based? Comment.

- Are the assessment criteria valid and relevant for the outcomes on which the unit of work is based? Comment.

- If you were the teacher, what changes, if any, would you make to the task and the criteria to match the outcomes?

- Who should assess this task
  - teacher only?
  - teacher and selected students?
  - selected students only?
  - others?
Thus this one assessment task provide you with enough information to make a decision about the students' achievement of the four outcomes? Explain.

The *Personal Development, Upper Primary Syllabus* makes reference to the importance of criteria in assessing outcomes on page 50.

- Read this information.

The *Arts, Upper Primary Syllabus* makes the assertion that ‘Arts assessment is criterion-referenced’. (page 24) Page 33 of *Arts, Lower Primary Syllabus* also asserts that assessment is arts is criterion-referenced. Are both documents giving the same message?

- Read page 24 of upper primary arts syllabus and page 33 of lower primary arts syllabus.

The *Making a Living, Upper Primary Syllabus* explains that students should be aware of what is being assessed, the assessment task being used and the criteria by which their demonstration of outcomes will be judged. (page 24).

- Read pages 24-25.

Page 25 of the *Science, Upper Primary Syllabus* refers to the importance of criteria in assessing and making judgements on student achievement in science.

- Read page 25.

From your reading so far, write a summary of what you understand by criterion-based assessment.

- Now go back to page 23 and add any new learnings to the mind map you are constructing.
Feature 5

The fifth feature of OBE is that it works better when you share the outcomes, ways of assessing achievement and criteria for assessment with students and involve them in assessing their own and their peers’ learning.

We all agree that students should be actively involved in their own learning. This approach helps them to learn how to learn. Student engagement with learning can be encouraged by making clear the purpose of the unit of work, outcomes they are to achieve, methods of assessment and the criteria for assessment and by providing appropriate and timely feedback on the basis of the criteria. Such information should be readily available to the students.

In the curriculum package schools have received in 2003 is a chart titled ‘Upper Primary Learning Outcomes for Grades 6, 7 and 8’. This chart shows you all the upper primary outcomes from the seven syllabuses on one sheet of paper.

A similar chart titled ‘Lower Primary Learning Outcomes for Grades 3, 4 and 5’ was made available in 2005. This chart shows you all the lower primary outcomes from the seven syllabuses on one sheet of paper.

These charts can be used in a number of ways. You might wish to put them up in your classroom and draw the students’ attention to it.

Reflect on your current practice in sharing teaching, learning and assessment information with your students.

• Do they know why they are doing a particular unit of work?

• Do they know what they are expected to learn (that is, the outcomes) from the unit of work?

• Do they know how you plan to assess their learning?

• Do they know what kind of things you will be looking for in an assessment task, such as an investigation?

• What role(s) do they have in planning and carrying out assessment?
In OBE, teachers look for ‘evidence’ of achievement of outcomes. This is done over a period of time using a variety of methods such as observation, written responses, practical demonstration, project work, portfolios and so on. In each of these instances, assessment criteria are developed.

It will be advantageous to develop the criteria jointly with the students. This enables the students to have an appreciation of the tasks and the outcomes you are focusing on.

An enlightened teacher would include the students in the assessment process as well.

On the basis of criterion-based assessment, using all the information available, the teacher makes an ‘on-balance’ decision, using indicators as guides.

You will find more information about criterion-based assessment and self and peer assessment by students in Unit 7: Assessing and Reporting Achievement of Outcomes.

**Feature 6**

**The sixth feature is the need for teachers to make ‘on-balance’ decisions about student achievement of outcomes.** An ‘on-balance’ decision is about inferring whether a student has achieved particular outcomes on the basis of all available evidence at particular points in time. Because students demonstrate knowledge, skills and understandings in a range of ways and at different levels, it is necessary to weigh the available evidence to make the best estimate of the students’ learning especially at reporting time.

- Here is a scenario. Read it with a colleague.

A teacher is trying to help students with the learning of a particular outcome to do with investigating a phenomenon and reporting the findings in a scientific way.

(An example is: Science Outcome 6.3.2: Conduct practical investigations into the nature of mixtures and communicate their findings in a scientific way, using available materials.)

The teacher finds out by talking to her students that they do not know how to do a scientific report. As part of the teaching/learning activities the teacher wishes her students to learn how to do a scientific report. She starts by sharing with the students a sample report explaining the background to it. Together with the teacher the students explore the features of the report. The teacher then presents one or two more reports. Through this process students begin to see the pattern of scientific reports.

Over a period of time, the students and the teacher conduct one or more investigations and jointly construct reports of their investigation(s). This is done on the blackboard or a large sheet of paper. The teacher is now fairly satisfied that the students have formatively learned scientific report writing. So she decides to ask them to write a report of an investigation independently which she plans to assess.

The teacher then negotiates the criteria for assessment with the students.
There are two aspects to assessment that are clear in this teacher’s approach.

Firstly, she makes explicit that she will be looking for such things as: the purpose of the investigation, materials used, the procedure and the findings in relation to the purpose of the investigation, sources of error, etc. In other words, she sets the criteria for assessment. She does this with assistance from the students. This way both the teacher and the students are clear about the expectations and the way the task will be assessed.

The second aspect of assessment is that the teacher needs to make judgements about which students in her class do meet the criteria.

One student is able to meet all the set criteria for the task. However, she has some difficulty with English expression and spelling. So in making an on-balance decision the teacher provides feedback to the effect that the student is able to write a scientific report, however, she needs to pay attention to spelling and English expression. English expression and spelling were not specifically part of the assessment criteria. So they cannot be used in making judgements about the achievement of the outcome unless poor English expression makes the student’s work difficult to understand. Again one piece of evidence is not sufficient to establish achievement of an outcome. On other occasions this student meets most criteria. The teacher over a period of time becomes more and more sure about the achievement of this student and on-balance decides that the student can write a scientific report.

Another student is not able to make any connection between the findings and the purpose of the investigation. In this case, the teacher explains this to him and then goes on to explore why the student is not able to do this. The teacher then helps the student to overcome this problem. Further opportunities are then provided for formative learning. So the story continues…..

Some important aspects of an outcomes-based approach are illustrated in the above scenario.

Reflect on the points this scenario is making in relation to an outcomes-based approach.

- Think about the differences, if any, between your approach to teaching and assessing and the approach described in the scenario. The following questions may assist with your thinking:
  - the role of students in developing assessment criteria
  - the role of students in assessment
  - consistency of assessment with criteria set
- follow up activities for students not able to do a task or understand a concept

- opportunities for students to learn and practise their learning before being assessed.

Part 1.4: Inputs, Outputs and Outcomes

One way of understanding OBE is by considering the inputs and the outputs required in relation to the outcomes.

Imagine you wish to make a bilum and sell it at the market.

The outcome you are seeking is the sale of the completed bilum. The output in this case is the actual weaving of the bilum. The inputs are many – the materials or funds to buy the materials, your skills in designing and weaving, your time, a place to work, help from others and the transportation of the bilum to the market.

Here is another example to illustrate outcomes, outputs and inputs.

Think of a series of meetings you are planning to assist teachers in implementing an outcomes-based approach in your school. The longer-term outcome (that is, a complex outcome) is ‘teachers can implement an outcomes-based approach’. One of the shorter-term outcomes (that is, a simpler outcome) may be that ‘teachers can discuss the structure and contents of the upper primary syllabuses’. You may wish to set some session objectives as part of the inputs. Objectives are about ‘inputs’.

Towards achieving the longer-term outcome, you are organising the first of a series of meetings. Having identified both the longer-term and the shorter-term outcomes, you can now plan the activities that will take place and the inputs to them. Your ideas are then recorded as follows. You will need to align the second and third columns so that the outcome can be achieved.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Outputs</th>
<th>Inputs</th>
</tr>
</thead>
</table>
| Teachers can discuss their structure and the contents of the upper primary syllabuses | Various interactive activities to (list them here)  
- help unpack the syllabuses  
- help see structure of and patterns across syllabuses  
- explore the rationale for OBE and how OBE is reflected in the syllabuses etc. | Teachers’ attendance and time, knowledge and skills, copies of primary syllabuses, facilitators’ time, knowledge and skills, resource materials, funding, meeting rooms, etc. |
The above table uses an example from your work context to illustrate inputs, outputs and outcomes.

**Now have a go at doing one by yourself.**

- Consider this scenario.

A group of visitors are coming to your school or office and you have been asked to receive them, show them around and brief them about your school or your work. State the outcome you are seeking; list the sort of activities (outputs) that are likely to take place (for example, meeting particular people, organising morning tea, etc.); list the kind of support, materials, information, etc. (inputs) required from yourself and others. Use the table below to write these down.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Outputs</th>
<th>Inputs</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

In the classroom context inputs are like ‘objectives’ that you have been using in the past, but can include resources; outputs relate to teaching, learning and assessment activities, processes and products; and, the outcomes are what is stated in the syllabuses (the knowledge, skills, attitudes and values that the students gain and are able to demonstrate as a result of the inputs and outputs).

**Take Outcome 6.2.1 from the ‘Reading’ strand on page 22 of the Language, Upper Primary Syllabus.**

Quickly jot down some ideas for ‘inputs’ and ‘outputs’.

Remember inputs help provide direction for classroom activities and help achieve the outcomes. Inputs can be the resources including skilled people and other kinds of community support you can use.
### Unit 1: Philosophy of Curriculum Reform

#### Module 2: Outcomes-based Education - What is it?

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Outputs</th>
<th>Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2.1 Read and respond to a range of texts about real and imaginary worlds</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Take outcome 3.2.1V and 3.2.1E from the strand: reading, sub-strand: production on pages 23-24 of the lower primary Language syllabus.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Outputs</th>
<th>Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.1V: Read and respond to a range of text types on familiar and unfamiliar ideas and information</td>
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<td></td>
</tr>
<tr>
<td>3.2.1E: Read a range of predictable text types</td>
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<td></td>
</tr>
</tbody>
</table>
Share your ideas with the colleague.
In doing this you will need to give your colleague some background information about inputs, outputs and outcomes and how they relate to each other. Prepare some notes for this here. Your notes may be done in the form of a mind map or another organiser.

Reflect on your understanding of OBE now.
- Is it:
  - Beginning □
  - Developing □
  - Consolidating □
  - Achieved □?
- What can you do to improve your understanding of OBE, if needed?
- What can you do to inform your colleagues about OBE?
There are many forms of outcomes-based education and there are many ways of developing an outcomes-based curriculum. Bill Spady, an American educationist has described three broad approaches to outcomes-based education - traditional, transitional and transformational.

The *traditional approach* to OBE is based primarily in subject matter content. This means that the outcomes are closely tied to particular subjects and therefore cannot be applied to other subjects in the curriculum. This means that the outcomes are subject-specific. School is the only place where they are usually demonstrated. The *traditional approach* is rarely driven by a clear concept of the school graduate as a total person or an integrated human being.

The *traditional OBE* conforms to the conventional nature of the school day, for example, and the fixed-time approach to unit and course outcomes. By focussing primarily on unit and course outcomes, it seeks and generates greater success on conventional measures of achievement such as examinations.

The *transitional approach* to OBE takes a more complex view of learning. It assumes that learning cannot be divided into subjects. It also takes the view that some of the skills and knowledge acquired in one subject can be applied in other subjects – that is, they can be generalised across content areas. A simple example is the skill of understanding and interpreting tables and graphs. This skill can be applied in a number of subject areas. Once such a skill is demonstrated in one content area, we can assume it can be applied in similar contexts in other content areas. It suggests that similar concepts found in outcomes dealing with the environment in Science, Social Science and Making a Living can be integrated. Outcomes can also be developed through cross curriculum approaches.

Another option this approach offers is that outcomes need not be subject-based; they can be cross-curriculum. An example would be an outcome based on environmental issues.

The *transitional OBE* is an approach for education systems to go beyond existing subject barriers. One of the questions considered in this approach, albeit in an informal way, is: what is most essential for our students to know, be able to do and be like in order to be successful when they leave school?

The *transformational approach* to OBE requires learners to own, integrate and use prior learning so that they can apply them to real-life situations that are by nature complex. It expects education systems to throw out traditional curricula, courses and programs and to start from the exit outcomes (end of schooling outcomes) to define what schools will teach and how they will teach it. The transformational approach orients education to future needs of society and individuals. Subjects and approaches are seen only as means of achieving the exit outcomes.
In traditional OBE, the fundamental organisation of the system is tied firmly to the calendar. From the time students enter the system to the stage when they complete their studies, everything is ruled by time. Transformational OBE aims to change this time-based system of education.

So outcomes-based education is a way of planning, delivering and evaluating teaching and learning that requires teachers and students to focus their attention and efforts on desired end results of education, particularly when those end results are expressed in terms of student learning. However, the desired end results will depend on the approach taken by the system – traditional OBE, transitional OBE or transformational OBE.

No matter which approach or mixture of approaches is adopted all OBE approaches have certain common features.

Outcomes-based education is often said to have two purposes, three premises or assumptions, four principles and five practices.

Outcomes-based education has two purposes. They are:
• to equip all students with knowledge, understandings, skills, attitudes and values needed for future success
• to implement programs and opportunities that maximise learning.

The three premises (assumptions) of OBE are:
• all students can learn and succeed (but not on the same day or in the same way)
• success breeds further success
• schools can make a difference.

The four principles of OBE are:
i Clarity of focus through learning outcomes
ii High expectations of all students
iii Expended opportunities to learn
iv Planning and programming by designing down.

Each of these is explained below.
i Clarity of focus through learning outcomes
This means that everything teachers do must be clearly focussed on what they want students to ultimately be able to do successfully. For this to happen, the outcomes should be clearly expressed. If students are expected to learn something teachers must tell them what it is and create appropriate opportunities for them to learn it and demonstrate their learning.

ii High expectations of all students
A fundamental aim of OBE is for all students to succeed. This can be a problem for those who think that some people are born ‘smart’ and therefore should learn a lot; that some people are born ‘average’ and therefore should learn a modest amount; and that some people are born ‘dumb’ and therefore should not bother to learn very much at all. Some people make similar assumptions based on the gender of a person or socio-economic status or ethnicity or a combination of these and other factors.
The structure of traditional education, the way it is structured and defined, creates failure. Success is defined in a particular way and creates, simultaneously, the conditions that produce failure.

The high expectation principle means that as teachers we reject comparative forms of assessment and embrace criterion-referenced approached. It also means abandoning streaming, curriculum tracking and specific ability groups.

The principle of high expectations is about insisting that work be at a very high standard before it is accepted as completed, while giving students the time and support they need to reach this standard. At the same time students begin to realise that they are capable of far more than before and this challenges them to aim even higher.

iii Expanded opportunities to learn
Intellectual quality is not something reserved for a few students; it is something that should be expected of all students. This principle is based on the idea that not all students can learn the same thing in the same way in the same time. Some achieve the outcomes sooner and others later. However, most students can achieve high standards if they are given appropriate opportunities. Traditional ways of organising schools do not make it easy for teachers to provide expanded opportunities for all students.

For some children, school is a self-defeating experience for every day that they attend. Traditionally, school systems have been used for selecting and sorting students into university. OBE presents changed expectations by advocating that if every student is given enough time and support, achievement of outcomes occurs for everyone.

Currently there is a great deal of information about learning styles and teaching styles. This is creating greater diversity with regard to possible methods and opportunities for students to learn. The view that there is one single, best way of doing things is disappearing.

iv Planning and programming by designing down
Designing down means that the starting point for planning, programming and assessing must be the outcomes – the desired end results. All decisions on outputs and inputs are then traced back from the outcomes. It means creating the fundamental building blocks that have to be in place for students to complete expected work and then progress to more advanced work.

The five practices of OBE are:
- Design outcomes (ie. write or develop outcomes)
- Design programs (ie. plan units of work including assessment, reporting and evaluation strategies, with outcomes in focus)
- Deliver instruction (ie. teach/learn with outcomes in focus)
- Document results (ie. assess in an on-going way, interpret and record achievement of outcomes)
- Determine advancement (ie. identify progress in relation to grade outcomes for grades 3, 4, 5, 6, 7 and 8).
Reflect on the following and record your thoughts

• Do the purposes, premises and principles make sense to you?

• Do you think you can develop a commitment to the principles of OBE?

• Do you see OBE as a system (model) for programming, teaching, learning, assessing and reporting? Explain your answer.

• Having looked through some of the syllabuses, reflect on the links you see between the learning outcomes, the National Curriculum Principles (Section 5, National Curriculum Statement, 2002) and the National Curriculum Goals for Papua New Guinea (Section 3.3, National Curriculum Statement, 2002).

• Which approach is being adopted in Papua New Guinea – Traditional, Transitional or Transformational?

Hints: Have a go at thinking the above through. It is important for you to understand the big picture when implementing curriculum change.

If you wish to know more about OBE, go to Section 3. This section is optional.
Bill Spady summarises the concept of OBE in the following way.

The OBE Pyramid

One paradigm
Outcomes-based education is an approach to planning, delivering and evaluating teaching and learning that requires teachers and students to focus their attention and efforts on desired end results of education, particularly when those end results are expressed in terms of student learning. It is about student-centred learning. It is about teachers focussing on learning processes and progress being made, knowledge of students and their lives, methods of teaching and classroom management, and the design of materials, plans and programs all for the purpose of facilitating learning.

Two purposes
The two purposes are:
- to equip all students for future success
- to implement programs that maximise learning

Three premises
The three premises are:
- all students can learn and succeed (but not on the same day or in the same way)
- success breeds success
- schools can make a difference.

Four principles (see below for explanation)
The four principles are:
- Clarity of focus through learning outcomes
- High expectations of all students
- Expanded opportunities to learn
- Planning and programming by designing down.
• Clarity of focus through learning outcomes
This means that everything teachers do must be clearly focussed on what they want
students to ultimately be able to do successfully.
This involves:
  - focusing on demonstrations of learning outcomes, rather than on the
    content being used in the activity
  - students, teachers, parents, and members of the community knowing the
    outcomes that students are working towards
  - clearly informing students the short term and long term intentions at
    every stage of the teaching/learning process
  - clearly identifying and informing students about what is to be assessed
    and how it will be done
  - students understanding the reasons for learning what they are learning
    always keeping the ‘longer term’ outcomes in mind.

• High expectations of all students
There is ample evidence to suggest that if teachers establish high challenging standards
students usually rise to the challenge. Successful learning promotes more successful
learning.
This involves:
  - recognising that all students can succeed
  - challenging students to achieve high standards by providing experiences
    that promote learning
  - giving students time to produce work of a high standard
  - establishing clear expectations of student performance, including criteria,
    and referring to these when monitoring the progress of student learning.

• Expanded opportunities to learn
Intellectual quality is not something reserved for a few students; it is something
that should be expected of all students. This principle is based on the idea that not
all students can learn the same thing in the same way in the same time. However,
most students can achieve high standards if they are given appropriate opportunities.
Traditional ways of organising schools do not make it easy for teachers to provide
expanded opportunities for all students.
This involves:
  - giving students opportunities to progress and to demonstrate learning
    outcomes in more than one context
  - developing activities, units and programs that are sufficiently flexible to
    cater for the different characteristics and learning needs of students
  - involving students in planning, assessment and evaluation processes.

• Planning and programming by designing down
Designing down means that the starting point for planning, programming and assessing
must be the outcomes – the desired end results. All decisions are then traced back from
the outcomes.
This involves:
  - teachers and students being mindful of the longer term outcomes such as
    end of year grade outcomes or end of schooling exit outcomes
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**Philosophy of Curriculum Reform**

- all learning activities contributing to the achievement of the longer term outcomes
- outcomes for shorter term programs being derived from the longer term outcomes.

**Five practices (see below for explanation)**

The five practices are:

i. Design outcomes (ie, write or develop outcomes)
   This involves:
   - systems setting up processes for identifying relevant and visionary exit outcomes of significance for schooling in consultation with the stakeholders
   - systems deciding on and developing relevant, visionary and significant exit outcomes for end of Grade 12 for their future citizens
   - curriculum authorities developing grade by grade outcomes or progress maps or developmental continua for the years of schooling.

ii. Design programs (ie, plan units of work including assessment, reporting and evaluation strategies, with outcomes in focus)
   This involves:
   - deciding on which syllabus outcomes the students are to achieve
   - deciding how to assist students to achieve the outcomes
   - planning becoming a process of anticipating possible activities rather than predetermining specific activities
   - valuing students’ backgrounds, interests, prior understandings, experiences and learning styles, and considering these when planning activities
   - recognising the different ways and settings in which learning and assessment take place
   - identifying and overcoming barriers that might limit students or groups of students from demonstrating achievement and progressing
   - maintaining a learner-centred approach to learning and teaching
   - planning assessment at the same time as planning experiences that promote learning
   - collecting evidence of achieving outcomes formally and informally
   - using assessment information to inform future planning and to provide opportunities to learn.
iii Deliver instruction (ie, teach/learn with outcomes in focus)
This involves:
- making sure students have the necessary prerequisite knowledge and skills at the start of instruction
- creating a positive learning environment in which students know they will be helped
- helping students to understand what they have to learn, why they should learn it and how they will know they have learned it
- using a variety of methods to help each student to learn
- providing students with sufficient opportunities to practise using the newly gained knowledge and skills
- helping students to bring each unit of work to a personal closure so that they are aware of what they have learned and where it is leading them
- looking at learning from the students’ perspective.

iv Document results (ie, assess in an on-going way, interpret and record achievement of outcomes)
This involves:
- assessing what is intended to be assessed (ie. valid assessment)
- stretching students to the limits of their understanding and ability to apply their knowledge (ie. challenging assessment)
- providing genuine opportunities and alternative ways for students to show what they know, understand and can do (ie. authentic assessment)
- conveying to students the results of assessment clearly and as soon after the assessment as possible, showing them what they have learned and what they are yet to learn (ie. useful and timely feedback)
- acknowledging the different preferred learning styles of students
- providing students multiple entry and exit points in assessment tasks so that they can respond in ways that reflect their knowledge and understanding (ie. being fair and equitable).

v Determine advancement (ie, identify progress in relation to grade outcomes) Here the focus is on development, growth and progress.
This involves:
- a knowledge of students’ progression along the outcomes continua or progress map (ie, from one grade to the next, in the PNG context)
- providing opportunities for self-assessment so that students can monitor their own progress
- the use of a wide range of strategies to cater for the developmental differences and prior knowledge and skills of students
- building comprehensive and cumulative developmental assessment using the techniques of observation, consultation, formal assessment and peer- or self-assessment to facilitate further learning.
Module Summary

Congratulations! You have reached the end of this module.

Outcomes-based education may be a new concept for you. This module has dealt with outcomes-based education as a philosophy and a system for planning, programming, teaching, learning, assessing and reporting. You know the differences between an outcome and an objective and how to analyse an outcome to understand what students are expected to achieve. Analysis also assists you in estimating the length of units based on a group of outcomes, when planning and programming.

You should by now have developed certain knowledge, understandings, insights and skills as they relate to the reform agenda and how to apply them in the context of your work. All the work you have done and your reflections should help you to perform better in your work context.

At this point let us review your progress by assessing the extent to which you can now demonstrate each outcome.

The outcomes for the module are copied here. For each of the outcomes how do you assess yourself - Yes, No or Not sure?

<table>
<thead>
<tr>
<th>Can you:</th>
<th>Yes/No/ Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. distinguish, with examples, between a learning outcome and a learning objective?</td>
<td></td>
</tr>
<tr>
<td>2. describe, with examples, the features of OBE and outcomes statements?</td>
<td></td>
</tr>
<tr>
<td>3. distinguish between inputs, outputs and outcomes in the context of a lesson?</td>
<td></td>
</tr>
<tr>
<td>4. explain, with examples, why criterion-referenced assessment is more compatible with OBE than norm-referenced assessment?</td>
<td></td>
</tr>
<tr>
<td>5. describe the differences between the three approaches to OBE?</td>
<td></td>
</tr>
<tr>
<td>6. outline the (assumptions), premises the principles and the practices of OBE? (Optional)</td>
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</tbody>
</table>

If you answered ‘yes’ to all of them, then you have done very well. Think about the kinds of evidence that will support your answer. If you have said ‘no’ or are ‘not sure’ of any, then it may be worth your while to go over the appropriate sections of the module again and have another go at repeating the tasks.
Remember these module outcomes help you to achieve the outcomes of the unit. Refer back to the outcomes of the unit in the *Unit Introduction* and reflect on where you are in relation to those outcomes.

If seeking academic credit, you were advised to keep a running record of any evidence you may have for particular unit outcomes. If you have not been doing this, go back over the module and jot down in your *Learning Contract*, what you might consider to be evidence for the *unit learning outcomes* for which you have agreed to provide evidence.
Unit 1  Philosophy of Curriculum Reform

Module 2  Outcomes-based education - what is it?

Additional space for your notes
Unit 1: Philosophy of Curriculum Reform

Module 3: Why an outcomes-based education in Papua New Guinea?

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<tr>
<td>Module Summary (and additional space for your notes)</td>
<td>20</td>
</tr>
</tbody>
</table>

Name: ........................................................ File Nº:....................................................

Date commenced: ...................................... Date completed:.......................................

I have sighted this study guide as evidence of completion of agreed tasks by

..............................................................................................................................................(insert name)

Assessor: ..................................................... Date: .......................................................
Module 3: Why an outcomes-based education in Papua New Guinea?

Module Introduction

Welcome to Module 3: Why an outcomes-based education in Papua New Guinea?

Papua New Guinea is in the process of implementing curriculum reform. The *Primary Education Handbook* (2000), the *National Curriculum Statement* (2002) and the *National Assessment and Reporting Policy, 2003*, make clear the fundamentals of curriculum reform. This is the focus of Module 1.

Module 2 focuses on the concept of outcomes-based education.

This module focuses on how Papua New Guinea is implementing outcomes-based education (OBE). It also challenges you to think how the introduction of OBE is likely to change some of your practices in your work situation whether you are school-based or office-based.

To do this module you will need access to the *National Curriculum Statement* (Resource 2) and the *National Assessment and Reporting Policy, 2003* (Resource 3). These are shown on pages 4-8 of the *Unit Introduction*. All activities in this module are based on these documents.

If you are seeking academic credit, make sure you have completed the *self-assessment* in the *Accredidation and Certification* section before you start this module. As you work through this module, keep a running record of sections, parts and pages of the module where you can identify evidence for particular unit outcomes. You may wish to record such information in your *Learning Contract*, found towards the end of the study guide.
Module learning outcomes

When you have worked through this module, you, the learner, can (are able to):

1. explain the reasons for Papua New Guinea adopting an outcomes-based education
2. identify the intended benefits of outcomes-based education
3. identify and explain Papua New Guinea’s approach to implementing outcomes-based education
4. discuss the similarities and differences between outcomes-based programming and other programming approaches.
Section 1: The rationale

Many countries have introduced outcomes-based education. This is done usually to meet emerging educational needs. Research has identified a mismatch between the curriculum intentions of the government of the time and what teachers teach and assess and what students know and can do. In other words, the intended curriculum, the taught curriculum and the achieved curriculum all seem quite different.

Some educators believe that an outcomes-based education can help reduce the gaps that exist between the intended curriculum, the taught curriculum and the achieved curriculum. Outcomes can provide the means of linking the intended curriculum outlined in the syllabuses with what is actually assessed, learned and taught.

To see why Papua New Guinea has adopted an outcomes-based approach, we need to take another look at the National Curriculum Statement (2002).

Go to page 3. Page 3 is where the rationale begins. Read pages 3-5.

Page 4, Section 2.2, explains the reasons for developing a Papua New Guinea Curriculum.

On page 5, Section 2.3 explains outcomes-based curriculum. Section 2.4 explains why Papua New Guinea is adopting an outcomes-based curriculum.

- Read pages 5-6.

Pay special attention to what an outcomes-based curriculum is expected to achieve, listed on page 6.

This list is reproduced here.

An outcomes-based curriculum will

- give teachers, individually or collaboratively, the flexibility to devise programs and units of work that meet the differing needs of students at levels of schooling in a broad range of settings in Papua New Guinea
- include all aspects of Integral Human Development
- help teachers assess and report students’ achievements in relation to the learning outcome statements
- allow students’ achievements of the outcomes to be described in consistent ways
- help teachers to monitor student learning, and
- help teachers plan their future teaching programs.
Reflect on the following:

• How does the objectives-based curriculum you are using now or have used in the past compare in terms of the benefits listed above?

• Reflect on the statement ‘An outcomes-based curriculum will allow students’ achievement of the outcomes to be described in consistent ways.’ (4th point)

  - What does this statement mean to you?

  - How do you currently assess and make judgements about student achievement?

  - How do you currently report?

  - Are ways of reporting in your school consistent across teachers?

  - When you score two students at 70/100 or award them both a ‘B’ grade, it looks as if they are equally good. However, can we assume that their strengths and weaknesses are the same? Explain.

*Hint: It is important to reflect on your current practices and make comparisons in order to effect changes.*

**Most education systems that have adopted OBE have opted for a traditional approach or a mixture of traditional and transitional approaches.** Countries that have tried to implement the transformational approach have found it to be very difficult.

The traditional, transitional and transformational approaches are described in Module 2, pages 43-44.

The Papua New Guinean approach focuses on outcomes ‘based primarily in subject matter content’.

However, Papua New Guinea is adopting a Melanesian approach. It has blended a traditional approach to OBE with some elements of a transitional approach.
encouraging integration and cross-curriculum approaches to developing and implementing outcomes at elementary and primary levels of schooling.

The National curriculum goals for Papua New Guinea (exit outcomes of schooling in PNG) are found in the National Curriculum Statement. (see 3.3, pages 11-12).

*They are derived from Papua New Guinean values and beliefs, which are found in the Constitution, Government policies, reports and circulars. They state in broad terms what the curriculum is designed to achieve for all students at all levels of schooling and the country.* (page 7)

Thus the Papua New Guinea curriculum has elements of the transformational approach as well. Exit outcomes clearly identified in the National Curriculum Statement directly influence the development of grade outcomes.

The National Curriculum Statement (2002) provides a curriculum framework for the development of curriculum materials. It has been written by bringing together numerous reports, policies and frameworks. The old frameworks were not thrown out as is advocated by the transformational approach. Instead, they are incorporated into a new more coherent framework that combines some elements of the traditional and transitional approaches. Similarly, the new syllabuses for elementary, lower primary and upper primary build upon existing syllabuses and include the curriculum principles of the National Curriculum Statement (2002). The new syllabuses identify learning outcomes for each grade for each subject in the curriculum. The outcomes become progressively broader and more complex indicating development and growth. This is the concept of a progress map. Teachers should be in no doubt what students achieve by the end of each grade and from grade to grade.

Imagine you are invited to make a 10-minute presentation to a group of your colleagues to explain the reasons for Papua New Guinea adopting an outcomes-based education as a major thrust of curriculum reform.

- Record the significant points you plan to make and the resources you plan to use here. You may present this plan using a diagram or a table or any other structure you wish.
Share your plan with a colleague.

- Record any significant questions raised by your colleague and your responses to them.

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<tr>
<th>Questions</th>
<th>Responses</th>
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Section 2: How is Papua New Guinea implementing OBE?

Having looked at OBE in a general sense and the policy documents that support OBE in detail, it is important for you to understand Papua New Guinea’s approach to implementing it.

The following principles are important in Papua New Guinea’s approach to OBE. (Adapted from Professional Reading Series 1-3)

Learning outcomes are derived from higher order goals or exit outcomes, which describe what the government, parents and the community want students to know, do and understand.

As you are already aware, the National Curriculum Statement (2002) includes the higher order goals and values, and the aims for each level of schooling. The goals, values and aims describe what government reports and national plans say. They are the exit outcomes of learning in schools. The achievement of the learning outcomes in the syllabuses contributes to the achievement of these higher order outcomes. Learning outcomes provide an explicit focus for student-centred planning for assessing, learning and teaching that promote the achievement of longer term exit outcomes.

Learning outcomes challenge and extend students’ learning. Outcomes are not about trivial things. Each learning outcome in the syllabuses contains a number of important concepts and processes that will challenge and extend all students. Given the right opportunity, time and flexible teaching programs the majority of students should be able to achieve these outcomes. This is a challenge for teachers as well. Teachers will need to be creative and flexible, making good use of the resources available to them.

Planning and teaching need to be flexible so teachers are able to meet the needs of their students. Students should have the opportunity to achieve the learning outcomes by using different content and different teaching and learning approaches. This means that teaching programs need to be flexible in order to deal with students’ actual needs and the differences there are in available resources. For instance, not all schools will have full sets of textbooks but this does not mean that particular subjects cannot be taught. By being resourceful, a teacher can teach successfully using the resources within the community and local environment.

Students need more than one chance to succeed. An important aspect of OBE is the belief that by being flexible with time and being resourceful teachers can help most students to succeed. Students may need many opportunities to succeed. Learning outcomes usually deal with a range of content. Teachers should select the content and teaching approaches that will best suit the needs of their students. The teacher guides and other support material will help teachers to do this.
Learning outcomes show the typical progress of learning for all students and are written sequentially within each subject syllabus.
Learning outcomes have been written for each grade in each sub-strand of each strand of each subject syllabus. The outcomes are written to show a typical learning sequence or a progress map for all students. The learning sequence continues from grade to grade. This enables schools to track students’ progress in a subject from one grade to the next.

All students demonstrate what they know and can do regarding each learning outcome.
Outcomes are the products of learning. Outcomes-based education emphasises what students can do and know as a result of learning. Students must demonstrate what they know and can do regarding each learning outcome. Teachers assess students in an on-going fashion using a range of assessment methods in order to monitor their progress towards achieving the outcomes. Assessment in this context is formative and is very much a continuous way of supporting and improving students’ learning by providing relevant and timely feedback. This way of assessment is not usually used to rank and grade students. Ranking and grading is more often associated with normative assessment practices such as end of term tests or end-of-year examinations. In order to support and improve students’ learning, the criteria used to judge students’ achievements are made very clear so that students know exactly what is expected of them. This form of assessment is known as criterion-referenced assessment.

Reflect on each of the six principles.

• Do you see any link between the six principles and the information provided on pages 43-45 of Module 2?

Think of the kinds of changes you will need to make when implementing an outcomes-based education in your classroom, school or province.

• In the light of your learning in this section of the module, list three changes you may have to make, in the table below.

<table>
<thead>
<tr>
<th>I need to change .....</th>
</tr>
</thead>
<tbody>
<tr>
<td>From ....</td>
</tr>
</tbody>
</table>

Hint: Be honest and realistic in responding to this task so that you can become effective in your work situation. Your response will very much be a personal response.
For each of the above, reflect on how you plan to acquire the knowledge and skills to make the changes you are planning to make.

- Use the table to record your thoughts.

<table>
<thead>
<tr>
<th>What do I need to know?</th>
<th>How can I learn what I need to know?</th>
<th>How will I use this information?</th>
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</tbody>
</table>
For each change you wish to make list up to five (5) steps you intend to make.

<table>
<thead>
<tr>
<th>Changes I plan to make …</th>
<th>My plan of action ……</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

Hint: This is only the beginning, but you need to start thinking about OBE and ways you need to prepare yourself for the change. Be honest and realistic about it.
Section 3: Programming approaches

The National Curriculum Statement describes the significant outcomes of education when students complete their schooling or exit outcomes. It also identifies the overall goals and aims for each level of schooling.

Each syllabus identifies the subject learning outcomes that contribute to students’ achievement of the overall goals and aims of education.

Teachers design teaching programs to assist students to learn. Teacher guides provide examples of how teachers might do this. You will find references to and details of teacher guides in Primary In-service Units 2 - 8. The design of appropriate teaching and learning programs is a vital part of every teacher’s work.

A program consists of a number of units of work. Each unit of work is elaborated into a sequence of lessons. Units of work usually have a particular theme or topic or organiser. A teaching program might consist of one unit of work or many units of work. The program might take a few weeks or a year or more to complete.

Most teaching programs usually have:

- A rationale – an explanation about why this program exists
- Purpose - statements that identify what the program will achieve
- Outcomes-statements that indicate what students are able to know and do after studying the program
- Assessment guidelines – an indication of how and when the teacher intends to assess student learning
- Teaching/learning strategies – an indication of how the students are helped to achieve the outcomes
- Content statements – statements that indicate broad areas of content – knowledge, skills and attitudes that will help students achieve the outcomes.

Teachers program in different ways. Three examples are given below. (Adapted from Professional Reading Series 1-3)

Working with a colleague, look at each example closely and read the information that follows.
Example 1: Programming using a content-based approach

In this approach, the teacher first decides on the knowledge, skills and attitudes (content). Often the teacher starts with a particular topic such as Water or Healthy Living. The teacher selects a topic usually because it is interesting. The teaching program consists of a series of topics and each topic is an end in itself. The knowledge and skills selected by one teacher for a topic may vary considerably from that selected by another teacher or from textbook to textbook. In a content-based approach, teachers usually teach within a subject, keep to time allocations and the program can be quite inflexible. Assessment is usually at the end of a topic (a topic test), marks or grades are given and students are ranked on the basis of the marks or grades (ie, norm-referenced).

Does this example describe the way you program? Think about any similarities and differences.
Example 2: Programming using an activity-based approach

In this approach the learning activities are considered first. Here teachers are concerned with emphasising how students learn rather than what students learn. For instance, a science program could just consist of a range of practical activities which students work through. Assessment is often based on how students perform these activities rather than what they have learned.

A combination of an activity-based and a content-based approach is common.

These approaches use objectives to define the content studied during the course of the program. In a content-based or activity-based approach, the objectives usually do not relate to any higher order outcome(s) but are ends in themselves.

Does this example describe the way you program? Think about any similarities and differences.
Example 3: Programming using an objectives-based approach

In this approach themes or topics (organisers) are considered first from an overview of the syllabuses. Then objectives that fit the theme or topic are selected. This lends itself to integration between subjects. In this approach, teachers are concerned with emphasising what students learn, how they learn and whether they have learned. Assessment is often done at the end of a theme or a topic (summative assessment).

Does this example describe the way you program? Think about any similarities and differences.

- Do any of the three examples match the way you program?
- If yes, which one?

If not, draw a sketch here to show how you program. Use the template provided here. Add or delete boxes, as required. You may wish to use another structure to show the way you program.
Unit 1  Philosophy of Curriculum Reform

- How does your colleague program?

- If not, arrange a meeting with two other colleagues to find out their approaches to programming. Record the ways others program and why they program that way.

- Does your school provide a template or a set of steps for planning and programming?

- Does your school/province provide readymade units of work?

Reflect on the variety of ways teachers plan and program.
Now, working with a colleague, look at Example 4 and the notes that follow.

**Example 4: Programming using an outcomes-based approach**

The diagram shows the steps involved in one way of programming.
In this approach, teachers consider first what students need to know and do (outcomes) on the completion of a program. The outcomes may be selected from one subject or a number of subjects. The main purpose of the teaching program is to help students achieve the selected outcomes. Teachers may then identify a theme or topic appropriate to the selected outcomes. The theme or topic acts as a suitable organiser for teaching the knowledge and skills. Teachers decide how best to assist students to achieve the selected outcome(s) and select the kinds of learning and assessment activities that will help the students to learn and demonstrate their learning. Teachers will then select the content that is relevant to the outcome(s) and the school context. Teachers ensure that the program takes into account the local context and the needs of the community.

It is also possible to start with identifying a theme or topic from an overview of the outcomes for the grade, as Step 1. This is followed by selection of appropriate outcomes as step 2.

Planning becomes a process of anticipating possible activities rather than predetermining specific activities. As a result, content is seen as a support base for students’ achievement of the outcomes, rather than as an end in itself.

Outcomes-based approach - Approach in teacher guides

Outcomes-based programming is a reflective process in which content, teaching, learning and assessment activities are integrated around the selected outcomes. At each step of the process, the teacher reflects on the ways these elements influence each other and make adjustments to content, activities and sequencing, if needed.

Teachers program activities so that all students have an opportunity to achieve the outcomes. Outcomes-based programs are usually flexible to allow all students time and the opportunity to achieve the outcomes. Teachers prepare assessment activities at the same time as the learning activities and these are an integral part of the teaching-learning program. Assessment criteria are often jointly constructed by teacher and
students or at least negotiated with students. Criterion-referenced assessment is most appropriate in an outcomes-based approach. Teachers use assessment information to help students to achieve the outcomes and not to compare their performance with that of other students.

The National Curriculum Statement (2002) and subject syllabuses promote an outcomes-based approach at all levels of school education.

Reflect on the following. Record your thoughts. Work with a colleague.

- Every teaching program requires careful planning and a teacher needs to consider a range of factors that can have a positive or negative impact on student learning. What are some of the factors you would consider?

- What are the significant similarities and differences between outcomes-based programming and the other approaches illustrated in this section? Record your response in the table below.

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

- How does outcomes-based programming provide a better focus for learning and teaching programs than the other approaches illustrated in this section? Some ideas are given as examples. Complete the sentences and add some ideas of your own.
Unit 1  Philosophy of Curriculum Reform

Outcomes-based programming:

Focuses on ........................................

Makes explicit .................................

 Assumes all students ......................

 Helps teachers reflect on ..............

 Helps students to ............................

 ..................................................  

 ..................................................

Hint: If you are not sure, refer back to pages 43-45 of Module 2.

Outcomes-based planning and programming is the focus for In-service Unit 5
Module Summary

Gutpela! You have reached the end of this module.

Outcomes-based education may be a new concept for you. This module has dealt with the reasons for introducing an outcomes-based approach and the ways it is being introduced in Papua New Guinea. The expected benefits are found in the National Curriculum Statement (2002).

Planning and programming using outcomes may be similar in some ways to some approaches you and your colleagues are using, but it is also different from them.

You now have some idea about outcomes-based education and its possible impact on your practices. This knowledge will help you to understand the structure and contents of the lower and upper primary syllabuses.

You should by now have developed certain knowledge, understandings, insights and skills as they relate to the reform agenda and how to apply them in the context of your work. All the work you have done and your reflections should help you perform better in your work context.

At this point let us review your progress by assessing the extent to which you can now demonstrate each module outcome.

The outcomes for the module are copied here. For each of the outcomes how do you assess yourself - Yes, No or Not sure?

<table>
<thead>
<tr>
<th>Can you:</th>
<th>Yes/No/Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. explain the reasons for Papua New Guinea adopting an outcomes-based</td>
<td></td>
</tr>
<tr>
<td>education?</td>
<td></td>
</tr>
<tr>
<td>2. identify the intended benefits of outcomes-based education?</td>
<td></td>
</tr>
<tr>
<td>3. identify and explain Papua New Guinea’s approach to implementing</td>
<td></td>
</tr>
<tr>
<td>outcomes-based education?</td>
<td></td>
</tr>
<tr>
<td>4. discuss the similarities and differences between outcomes-based</td>
<td></td>
</tr>
<tr>
<td>programming and other programming approaches?</td>
<td></td>
</tr>
</tbody>
</table>

If you answered ‘yes’ to all of them, then you have done very well. Think about the kinds of evidence that will support your answer. If you have said ‘no’ or are ‘not sure’ to of any, then it may be worth your while to go over the appropriate sections of the module again and have another go at repeating the tasks.
Remember these module outcomes help you to achieve the outcomes of the unit. Refer back to the outcomes of the unit in the Unit Introduction and reflect on where you are in relation to those outcomes.

If seeking academic credit, you were advised to keep a running record of any evidence you may have for particular unit outcomes. If you have not been doing this, go back over the module and jot down in your Learning Contract, what you might consider to be evidence for the unit outcomes for which you have agreed to provide evidence.

Additional space for your notes
Unit 1:
Philosophy of Curriculum Reform

Module 4: Dimensions of change - what are the implications?

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<td>3</td>
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<td>Section 2: What would you do?</td>
<td>9</td>
</tr>
<tr>
<td>Module summary (and additional space for your notes)</td>
<td>33</td>
</tr>
</tbody>
</table>

Name: ........................................................ File Nº:....................................................

Date commenced: ...................................... Date completed:.....................................

I have sighted this study guide as evidence of completion of agreed tasks by
..............................................................................................................................................(insert name)

Assessor: ..................................................... Date: .......................................................
Module 4: Dimensions of change – what are the implications?

Module introduction

Welcome to Module 4: Dimensions of change - what are the implications? In this module, the focus is an exploration of the implications of reform for you in your present teaching, supervisory or advisory role.

We recommend that you complete Modules 1, 2 and 3 before this module, so that you are in a position to understand and appreciate the dimensions of change for primary education and explore their implications for your practice.

You need access to the National Assessment and Reporting Policy, 2003, to undertake this module.

If you are seeking academic credit, make sure you have completed the self-assessment in the Accredidation and Certification section before you start this module. As you work through this module, keep a running record of sections, parts and pages of the module where you can identify evidence for particular unit outcomes. You may wish to record such information in your Learning Contract, found towards the end of the study guide.

Module learning outcomes

When you have completed this module, you, the learner, can (are able to)

1. relate the PNG Education Reform process to your own work situation
2. identify the depth and breadth of changes, if any, you need to make to your current practices
3. develop and share an action plan to apply your learning to your work situation.
Section 1 - Your role

You may be a teacher, an officer with advisory, administrative and supervisory responsibilities such as a senior teacher, a head teacher, an inspector or a provincial education officer, an inservice coordinator or a reform coordinator. Some of you undertaking this course may have other roles and responsibilities.

If you are a classroom teacher, you are a very important person as the implementer of the reform curriculum. In order for you to become an effective implementer, you should critically review your current practices and identify those practices that are compatible with the reform and those which are not. For example, if your are a student-centred teacher who has set up a safe and student friendly classroom, then this fits in well with the new approach. On the other hand, if your only way of assessing your students is by paper and pen tests, then this does not fit in well with the advice in the reform syllabuses. The new syllabuses for primary years provide outcomes, the end points of schooling, for each of the grades 3, 4, 5, 6, 7 and 8 and not objectives as in the past.

The National Assessment and Reporting Policy 2003 identifies, on page 8, your particular assessment and reporting responsibilities as a classroom teacher.

Read page 8.

Reflect on the implications of your assessment and reporting responsibilities for the way you plan, program, teach and assess your students, report their achievement and the way you evaluate your programs.

• In particular, reflect on the following responsibilities, and record your thoughts.

Teachers have a responsibility to:

- discuss with students the assessment, recording and reporting procedures that meet the learning needs of individuals and groups of students

- develop students’ knowledge, skills and understanding of effective assessment and reporting methods

- maintain and share relevant records of student progress whilst maintaining confidentiality, where appropriate.

If you are a senior teacher or assessment coordinator, you have a responsibility to assist the head teacher in implementing reform. Depending on your level of responsibility, this may require you to provide curriculum, pedagogical and administrative leadership to teachers and advice and support to the head teacher.
The *National Assessment and Reporting Policy, 2003*, identifies, on page 8, your particular assessment and reporting responsibilities. You need to make yourself familiar with the outcomes approach to education so that you can implement it effectively in your teaching and assist others to do so.

Read page 8.

Reflect on the implications of your assessment and reporting responsibilities for the way you plan, program, teach and assess your students, report their achievement and the way you evaluate your programs.

- In particular, reflect on the following responsibilities. Record your thoughts.

School assessment coordinators have a responsibility to:

- facilitate the development and implementation of the school’s assessment and reporting policy and programs

- works with other teachers to contribute to a coordinated whole school approach to assessment and reporting

- lead in identifying and developing good assessment and reporting practice.

If you are a head teacher, you are responsible for the implementation of the reform curriculum in your school. This may require you to provide curriculum leadership and support and advice to teachers with the implementation process, have a plan and timeline for implementation of reform, and work with secondary schools to make the transition as smooth as possible.

The *National Assessment and Reporting Policy, 2003*, identifies, on page 8, your particular assessment and reporting responsibilities as a head teacher. Your understanding of an outcomes-based curriculum is critical for effective implementation of the new syllabuses and new policies of DoE, in your school.

Read page 8.

Reflect on the implications each of your assessment and reporting responsibilities for the way you plan, program, teach and assess your students, report their achievement and the way you evaluate your programs.
If you are an inspector, you have an advisory role as well as a curriculum monitoring and assessment roles in the primary school sector. This means that you are expected to have a working knowledge of all the subject syllabuses, teacher guides and other teacher resources, outcomes-based education, multi-grade teaching, bilingual education, the links between elementary, lower primary, upper primary and lower secondary sectors, the transition from elementary to primary, and primary to secondary, and the rationale and contents of the reform agenda.

The National Assessment and Reporting Policy 2003 identifies, on page 9, your particular assessment and reporting responsibilities as an inspector. This also means that you need to critically view your current practices as an inspector in the light of the changes in curriculum, pedagogy, assessment, and so on to be effected in schools by teachers and their supervisors.

Read page 9.

Reflect on the implications of each of your assessment and reporting responsibilities for the way you carry out your inspectorial duties.

- Record your thoughts here.
If you are a district education office or provincial education officer, you have district- or province-wide responsibilities for different aspects of the reform curriculum including an outcomes orientation to the curriculum.

The National Assessment and Reporting Policy, 2003, identifies, on page 9, your particular assessment and reporting responsibilities. You work with all of the groups mentioned above and others and interact and intersect with them in different ways.

Read page 9.

Reflect on the implications of each of your assessment and reporting responsibilities for the way you carry out your district or provincial duties.

- Record your thoughts here.

The first step in all of the above situations is to critically view your current practices and identify those practices that are compatible with reform and those which are not. This is not about abandoning good practices but is about acknowledging them and building upon them.

Using your understanding of the rationale for the reform, and the major dimensions of change which are reflected in the Primary Education Handbook (2000), the National Curriculum Statement (2002), the National Assessment and Reporting Policy, 2003, and the information regarding OBE, list six of your practices in your present capacity in the table below.

If possible, work with another person at your level of operation.

For example, if you are a teacher, make a list of your current practices working with a colleague. You should consider how you program, teach, assess, review your program, what resources you use, and so on.

If you are an inspector, make a list of your practices working with another inspector. You should consider how you carry out your advisory, monitoring and supervisory responsibilities.

- Assess the extent to which each practice is compatible with reform curriculum. Then identify those practices that in your view are possibly compatible with the reform curriculum, by placing a tick in the right hand column.
Discuss with a colleague up to three (3) critical changes you will need to make to become more consistent with the expectations of the reform curriculum.

- Enter the changes you are planning to make in the following table.

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<thead>
<tr>
<th>I need to change .....</th>
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<tbody>
<tr>
<td>From ....</td>
<td>To ....</td>
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</table>

Hint: Be honest and realistic in responding to this task so that you can become effective in your work situation. Your response will very much be a personal response.
Reflect on how you will acquire the knowledge and skills to make the changes you plan to make.

For example, if you have been programming by objectives and now wish to program using outcomes how would you learn to do it? You may ask a friend to show you how to do it, or you may do a unit on programming, or do both.

For each change you wish to make list up to five (5) steps you intend to make.

If you are seeking academic credit, you may wish to negotiate some or all of your plans with the assessor, carry them out and then present them as evidence for achievement of particular unit outcomes.

<table>
<thead>
<tr>
<th>Changes I plan to make ….</th>
<th>My plan of action …</th>
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<tr>
<td>1.</td>
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<td>4.</td>
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<td></td>
<td>5.</td>
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</tbody>
</table>

Hint: Be honest and realistic in responding to this task so that you can become effective in your work situation. Think of the resources you have available at your disposal. Your response here will very much be a personal response.
Section 2 - What would you do?

Four scenarios are provided in the next few pages.

If you are a teacher, go to Scenario 1.
If you are a senior teacher or coordinator, go to Scenario 2.
If you are a head teacher, go to Scenario 3.
If you are an inspector or an education officer, go to Scenario 4.

Read the selected scenario carefully and then follow the instructions.

You need to respond to only one scenario.

Scenario 1

A new teacher has arrived at your school.

This teacher is not very familiar with the reform curriculum. Your head teacher has asked you to induct the new teacher about the reform - the rationale for the reform, the main features of the structural and curriculum reform and a brief overview of the National Curriculum Statement (2002) and the National Assessment and Reporting Policy 2003, and outcomes-based education.

• Draw up a plan, including a timeline (in terms of weeks or months), for inducting the new teacher, showing the steps you would take, and the processes (ie, the strategies and activities) and the sequence (ie, the order of activities) you would use. In doing this reflect on your own experiences in trying to understand and apply reform. Think about what worked for you and what did not.

• Look through the National Curriculum Statement (2002) and the National Assessment and Reporting Policy 2003, with a colleague. Think about ways of introducing the two documents to the teacher.

• Take notes on any significant information that you need to consider in completing this task. You may wish to record your notes as a mind map or concept map.

• Use pages 31-32 of this module to draw up the plan.

Hint: Make sure your plan provides all the details asked for above.

Share the plan with a group of teachers/colleagues.

• Discuss your plan and modify it, if required, so that it becomes the ‘blueprint’ (model) for inducting teachers new to reform curriculum.
Reflect on what you have learned through the above activity.

- Was the process useful? If yes, why? If not, why not? Write your thoughts down.

Scenario 2

You are a senior teacher or a coordinator at your school.

Your head teacher has asked you to coordinate the reform activities of your school. This is to include an introduction to the National Curriculum Statement (2002), the National Assessment and Reporting Policy 2003, and outcomes-based education. You are also being asked to provide a plan of how you intend to coordinate the activities to your head teacher. This means that you will have to take stock of how far the school has progressed in implementing the reform curriculum, translate the requirements of the reform into practical strategies and plan to implement the reform systematically.

- Draw up a plan, including a timeline (in terms of months or years), for coordinating reform in your school, showing the steps you would take, and the processes (ie, the strategies and activities) and the sequence (ie, the order of activities) you would use. In doing this reflect on your own experiences in trying to understand and apply reform. Think about what worked in your school and what did not.

- Look through the National Curriculum Statement (2002) and the National Assessment and Reporting Policy 2003, with a colleague. Think about ways of introducing the two documents to the teacher.

- Take notes on any significant information that you need to consider in completing this task. You may wish to record your notes as a mind map or concept map.

- Use pages 31-32 of this module to draw up the plan.

Hint: Make sure your plan provides all the details asked for above.
Share the plan with a group of teachers/colleagues.

- Discuss your plan and modify it, if required, so that it becomes a ‘blueprint’ (model) for coordinating reform implementation in a school.

Hint: Let colleagues critique it, but make sure that they have the background information which is guiding your plan. Make adjustments, if appropriate, on basis of the comments made.

Reflect on what you have learned through the above activity.

- Was the process useful? If yes, why? If not, why not? Write your thoughts down.

Hint: Make a list of the major concepts and skills you have acquired or further developed. Be honest about your response. You are not doing this course to please others, you are doing it for your own benefit.

Scenario 3

You are the head teacher of a primary school.

Your inspector has asked you to organise a cluster schools meeting and make a presentation about the rationale for reform, the main features of the reform and how your school is introducing or continuing to progress with the reform. In your presentation you are to include issues to do with reform and some constructive strategies that have worked for your school, and an introduction to the National Curriculum Statement (2002), the National Assessment and Reporting Policy 2003 and outcomes-based education.

Here is some information to help you.


- Read it with a colleague.

Under current policy each primary school is required to develop an inservice plan. This plan should include strategies to support the implementation of curriculum reform. This may require the nomination of a teacher to take responsibility for the management of curriculum reform inservice issues in the school. The teacher could have a coordination and communication role.

The quality of the leadership of primary school head teachers is critical to the success of curriculum reform inservice in their schools. They need to support and supervise their staff as they implement the reform curriculum and provide leadership in the provision of reform curriculum inservice training for their staff. They also need to participate in the inservice training that will be provided for them under this Plan and ensure that the school has an inservice plan that enables all teachers to participate in relevant reform curriculum inservice activities.
Head teachers will also need to work with each other, and with inspectors and Elementary school staff to implement cluster-based inservice programs that will be funded and promoted under this Plan.

Think about what this means for your role and the progress you have made with implementation of the reform.

Go to the National Curriculum Statement (2002). Look through the document with a colleague.

- Take notes on any significant information that you need to consider in completing this task. You may wish to record your notes as a mind map or concept map.

Pages 7-11 of the National Assessment and Reporting Policy 2003 describes the ‘roles and responsibilities of the various individuals and groups of people responsible for school education. You may have multiple roles in this context.

Select the appropriate sections and read them with a colleague.

- Take notes on any significant information that you need to consider in completing this task.

The three policy documents you have used make explicit some of the reform expectations of the Department of Education.
Draw up a plan for your presentation including the processes (ie, strategies and activities), sequence (ie, the order of activities) and resources you would use.

- In doing this reflect on your own experiences in trying to understand and introduce/ maintain reform in your school. Think about what worked for you and your school and what did not.
- Use pages 31-32 to draw up the plan.

*Hint: Make sure your plan provides all the details asked for above.*

Share the plan with a group of teachers/colleagues.

- Discuss your plan and modify it, if required, so that it becomes a ‘blueprint’ (model) for presenting information about reform curriculum.

*Hint: Let colleagues critique it, but make sure that they have the background information that is guiding your plan. Make adjustments, if appropriate, on basis of the comments made.*

Reflect on what you have learned through the above activity.

- Was the process useful? If yes, why? If not, why not? Write your thoughts down.

*Hint: Make a list of the major concepts and skills you have acquired or further developed. Be honest about your response. You are not doing this course to please others. It is for your own benefit.*

Scenario 4

You are a primary school inspector or an education officer (eg. district education officer, provincial reform coordinator, curriculum coordinator, inservice coordinator).

You are about to attend a meeting of inspectors at the provincial level. You have been asked to present a short paper on how the implementation of reform curriculum is progressing in your district or province. In your presentation you are expected to include issues to do with reform for your district or province and some constructive strategies that have worked for you and particular primary schools in your district or province. You are also to include an introduction to the National Curriculum Statement (2002), the National Assessment and Reporting Policy 2003 and outcomes-based education.
Here is some information to help you.

This information is taken from *Inservice Management Plan, 2001-2005*, Papua New Guinea Department of Education. The extract below may be found on page 10 of this document.

- Read the extract carefully with a colleague.

*Senior primary school inspectors and primary school inspectors have a key role in supporting the implementation of this Plan. They will need to:*
- support and encourage school staff to undertake training
- assess the extent to which head teachers are meeting the obligations under the Plan
- identify head teachers and teachers who can act as trainers
- assist in the selection of appropriate teachers to participate in inservice
- participate in training to build their knowledge
- assist provinces to develop and implement provincial inservice plans
- act as trainers for particular initiatives
- monitor the implementation of inservice activities and evaluate their outcomes.

On pages 10 and 11, provincial responsibilities are outlined.

**Go to the National Curriculum Statement (2002). Look through the document with a colleague.**

- Take notes on any significant information that you need to consider in completing this task. You may wish to record your notes as a mind map or concept map.

Pages 7-11 of the *National Assessment and Reporting Policy, 2003*, describes the ‘roles and responsibilities’ of the various individuals and groups of people responsible for school education.

You may have multiple roles in this context.
Select the appropriate sections and read them with a colleague.

- Take notes on any significant information that you need to consider in completing this task. You can present your notes in a way that make sense to you.

Here is some additional information to broaden your thinking. This information is extracted from *The State of Education in Papua New Guinea* (March, 2002) and its update of March 2003, produced by Facilitating and Monitoring Unit and published by the Department of Education.

Read the information provided with a colleague.

**PRIMARY EDUCATION**

**Access**

Enrolments in grade 7 at the primary schools has been rising at about 5000 per year, which is slightly less than the original targets in the National Education Plan. The enrolments in the high schools have been dropping accordingly. This is illustrated in the chart below.

![Graph showing enrolments in grade 7 and high schools](chart.png)

The Grade 6 to 7 transition rate has also been rising although the rate of increase has been slowing down. The following tables and charts show the transition rates by province for the most recent cohort available and the increase over the years.
### Table 3: Grade 6 to 7 transition by province, 2000 to 2001

<table>
<thead>
<tr>
<th>Province</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>68.0%</td>
<td>75.4%</td>
<td>71.5%</td>
</tr>
<tr>
<td>Gulf</td>
<td>64.5%</td>
<td>67.4%</td>
<td>65.8%</td>
</tr>
<tr>
<td>National Capital</td>
<td>104.7%</td>
<td>99.5%</td>
<td>102.1%</td>
</tr>
<tr>
<td>Central</td>
<td>76.4%</td>
<td>77.1%</td>
<td>76.7%</td>
</tr>
<tr>
<td>Milne Bay</td>
<td>77.1%</td>
<td>73.5%</td>
<td>75.3%</td>
</tr>
<tr>
<td>Oro</td>
<td>65.8%</td>
<td>72.4%</td>
<td>68.9%</td>
</tr>
<tr>
<td>Southern Highlands</td>
<td>79.1%</td>
<td>92.4%</td>
<td>84.2%</td>
</tr>
<tr>
<td>Eastern Highlands</td>
<td>63.3%</td>
<td>56.8%</td>
<td>60.7%</td>
</tr>
<tr>
<td>Simbu</td>
<td>62.0%</td>
<td>54.4%</td>
<td>59.1%</td>
</tr>
<tr>
<td>Western Highlands</td>
<td>70.3%</td>
<td>69.8%</td>
<td>70.1%</td>
</tr>
<tr>
<td>Enga</td>
<td>80.7%</td>
<td>74.4%</td>
<td>78.2%</td>
</tr>
<tr>
<td>Morobe</td>
<td>64.8%</td>
<td>60.9%</td>
<td>63.0%</td>
</tr>
<tr>
<td>Madang</td>
<td>65.5%</td>
<td>60.8%</td>
<td>63.5%</td>
</tr>
<tr>
<td>Saundaun</td>
<td>71.2%</td>
<td>57.7%</td>
<td>65.2%</td>
</tr>
<tr>
<td>East Sepik</td>
<td>64.5%</td>
<td>59.0%</td>
<td>61.9%</td>
</tr>
<tr>
<td>Manus</td>
<td>82.2%</td>
<td>77.5%</td>
<td>79.9%</td>
</tr>
<tr>
<td>New Ireland</td>
<td>81.7%</td>
<td>85.0%</td>
<td>83.3%</td>
</tr>
<tr>
<td>East New Britain</td>
<td>85.2%</td>
<td>71.8%</td>
<td>83.3%</td>
</tr>
<tr>
<td>West New Britain</td>
<td>90.7%</td>
<td>86.0%</td>
<td>88.6%</td>
</tr>
<tr>
<td>North Solomons</td>
<td>69.5%</td>
<td>72.4%</td>
<td>70.9%</td>
</tr>
<tr>
<td>Kiunga Lake Murray</td>
<td>83.2%</td>
<td>76.9%</td>
<td>80.4%</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>73.5%</td>
<td>71.8%</td>
<td>72.7%</td>
</tr>
</tbody>
</table>

### Table 4: Grade 6 to 7 transition rates by gender and year, 1987 to 2000 cohorts

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987 to 1988</td>
<td>40.1</td>
<td>34.2</td>
<td>37.5</td>
</tr>
<tr>
<td>1988 to 1989</td>
<td>38.4</td>
<td>31.4</td>
<td>35.5</td>
</tr>
<tr>
<td>1989 to 1990</td>
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<td>33.8</td>
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<td>1990 to 1991</td>
<td>37.3</td>
<td>33.3</td>
<td>35.3</td>
</tr>
<tr>
<td>1991 to 1992</td>
<td>41.9</td>
<td>35.9</td>
<td>39.3</td>
</tr>
<tr>
<td>1992 to 1993</td>
<td>43.1</td>
<td>38.8</td>
<td>41.3</td>
</tr>
<tr>
<td>1993 to 1994</td>
<td>49.2</td>
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<td>1995 to 1996</td>
<td>52.1</td>
<td>47.7</td>
<td>50.2</td>
</tr>
<tr>
<td>1996 to 1997</td>
<td>58.4</td>
<td>54.6</td>
<td>56.7</td>
</tr>
<tr>
<td>1997 to 1998</td>
<td>69.4</td>
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<td>67.8</td>
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<td>1998 to 1999</td>
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<tr>
<td>1999 to 2000</td>
<td>73.7</td>
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</tr>
<tr>
<td>2000 to 2001</td>
<td>73.5</td>
<td>71.8</td>
<td>72.7</td>
</tr>
</tbody>
</table>
Figure 3: Grade 6 to 7 transition by year and gender, 1988 to 2001

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>68.0%</td>
<td>75.4%</td>
<td>71.5%</td>
</tr>
<tr>
<td>Gulf</td>
<td>64.5%</td>
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<tr>
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<td>76.7%</td>
</tr>
<tr>
<td>Milne Bay</td>
<td>77.1%</td>
<td>73.5%</td>
<td>75.3%</td>
</tr>
<tr>
<td>Oro</td>
<td>65.8%</td>
<td>72.4%</td>
<td>68.9%</td>
</tr>
<tr>
<td>Southern Highlands</td>
<td>79.1%</td>
<td>92.4%</td>
<td>84.2%</td>
</tr>
<tr>
<td>Eastern Highlands</td>
<td>63.3%</td>
<td>56.8%</td>
<td>60.7%</td>
</tr>
<tr>
<td>Simbu</td>
<td>62.0%</td>
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<td>59.1%</td>
</tr>
<tr>
<td>Western Highlands</td>
<td>70.3%</td>
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<tr>
<td>Enga</td>
<td>80.7%</td>
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<tr>
<td>Morobe</td>
<td>64.8%</td>
<td>60.9%</td>
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<tr>
<td>Madang</td>
<td>65.5%</td>
<td>60.8%</td>
<td>63.5%</td>
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<tr>
<td>Sandaun</td>
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<td>65.2%</td>
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<tr>
<td>East Sepik</td>
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</tr>
<tr>
<td>New Ireland</td>
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<td>85.0%</td>
<td>83.3%</td>
</tr>
<tr>
<td>East New Britain</td>
<td>85.2%</td>
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<td>85.4%</td>
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<tr>
<td>West New Britain</td>
<td>90.7%</td>
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</tr>
<tr>
<td>North Solomons</td>
<td>69.5%</td>
<td>72.4%</td>
<td>70.9%</td>
</tr>
<tr>
<td>Kiunga / Lake Murray</td>
<td>73.5%</td>
<td>71.8%</td>
<td>72.7%</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>73.5%</td>
<td>71.8%</td>
<td>72.7%</td>
</tr>
</tbody>
</table>

Teacher training

Pre-service

There are seven Primary Teachers Colleges that continue to offer primary teacher training preparing teachers for grade 3 to 8. Following the successful trialling of a two year trimester program at Madang Teachers College in 2001, all other colleges have decided to follow suit and the teacher training is now carried out over two years, with each year divided into three semesters. The acceptance of the change by both staff and students has been encouraging.

Given the fact that most of the students entering the program have successfully completed grade 12 or equivalent, the switch in duration did not have serious implications on standard. The colleges were able to successfully trim the curriculum focussing on the essentials to accommodate the program in two years.

The change from a three year (six semester) program to a two year (six trimester) program has reduced the unit cost of producing a primary teacher by 33%. This also means less burden for the parents as now they have to support the students and pay the college fee for two years instead of three. Additionally the change has resulted in increasing the enrolment capacity of the colleges by 50%. The additional bed space is of crucial significance for pre-service teachers training as well as the regionalisation of DEPI program.
The table below shows a breakdown of the 2002 Primary Teachers College enrolments.

Table 5: Primary Teachers College enrolment by gender – 2002

<table>
<thead>
<tr>
<th>Total enrolment</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>% age female</td>
<td>42%</td>
<td>42%</td>
<td>44%</td>
<td>42%</td>
</tr>
</tbody>
</table>

* No year three at Madang Teachers College

The percentage of females remains well below that of males. This could be due to Grade 12 being the entry requirement. There is still a problem regarding female participation at the upper secondary level.

East New Britain and Southern Highlands have the highest number of students enrolled for teacher training. Provinces with the least number of students enrolled in teacher training are Oro, Gulf Western.

There were 164 staff in the Primary Teachers College, which allows a staff student ration of 1:14, while the approved ratio remains 1:12. Close to 80% of the staff are male. With increasing enrolment of female students, the Department intends to actively canvass for female applicants for teaching positions in teachers colleges. 7% of the staff come under the category of volunteer and overseas contract officers.

With assistance from the AusAid sponsored Primary and Secondary Teacher Education Project (PASTEP), the curriculum at the teachers colleges has been refined and upgraded. The colleges have received substantial quantities of teaching aids and materials under the resource procurement activity of the project. Two Learning Centres funded under the Virtual Colombo Plan have been established at Balob and Madang Teachers Colleges.

**In-service**

Qualification upgrading of primary school teachers is an ongoing task. It is estimated that close to 10,000 teachers in the field are without diploma level qualifications which is currently the entry requirement to primary teaching. The Diploma in Education, Primary (Inservice), commonly known as DEP(I) program has in the past been offered through PNG Education Institute. As of 2002 the program is regionalized to promote access and cost effectiveness.

As a result of regionalisation, batches of DEP(I) students were enrolled at Madange and Holy Trinity Teachers Colleges. Because of space limitation the group that was supposed to be enrolled at Kabaleo Teachers College were accommodated at Kokopo Business College. PNGEI staff continued to teach the program at Holy Trinity and Kokopo, while the Madang students were taught by the staff at the Madang Teachers College.
The response from the students enrolled at the regional institutions have been quite positive. The arrangement has helped boost the female enrolments in the programs. Judging by the experience so far, regionalisation of the in-service programs is the way forward as it offers greater access to field teachers to upgrade their competence and qualification.

Similar to the pre-service training curriculum, the Department is embarking on establishing National Curriculum Guidelines for the Inservice DEPI program. This will allow each of the participating institutions to develop their own curriculum based on the national guidelines and criteria.

The normal DEP(I) program offered at PNGEI does not include the research component, which is part of the curriculum requirement for graduation. Students are expected to design the research and carry it out in the field the following year, as part of an internship program under guidance from PNGEI staff. This had the disadvantage of delaying the completion of the program by at least a year.

The DEP(I) students at Madang were allowed to undertake the research projects during their on-campus program. This approach has worked very well and could be a model to follow, as this saves both time and cost. The regionalisation of the program will reduce the cost of the program and make it more teacher-friendly in terms of the cost, as the program is run on a user pay mode.

Together with the normal DEPI program, PNGEI ran a parallel Certificate Program in Special Education for teachers in primary schools and Special Education Resource Centers. It is anticipated that the program will be upgraded to diploma level in the near future.

Negotiations are underway with the University of Goroka for accreditation of the DEPI program. A Memorandum of Agreement has been signed for this purpose by University of Goroka and the PNG Education Institute.

**Curriculum**

At the lower primary level the syllabi have been reviewed and it is hoped that revised editions will be ready for the Board of Studies by May, 2004, with distribution scheduled for early in 2005.

Teachers’ guides for this syllabi will be developed in 2004 and these, with an Implementation Support Package, will be sent to schools in 2005.

Progress has been rather more rapid at the upper primary level and the syllabi are due to be distributed in April, 2003. There is, again, an Implementation Support Package to accompany the syllabi that will be distributed at the same time.

The distribution of materials continues to be an enormous problem. Late in 2001 and in 2002 CRIP funded a review of curriculum materials storage and distribution systems and practices throughout the country. The report provided a detailed analysis
of the effectiveness, or otherwise, of the distribution systems in the country. A national workshop was held in late 2002 to review the findings and to use this as the basis for a new national distribution and storage policy to be adopted nationally. This will provide the basis for major curriculum materials distribution in 2003 and 2004.

**Standards**

The Australian Council for Educational Research (ACER) has completed a study of the feasibility of implementing curriculum standards monitoring test in PNG. The report recommended the development of a test which assesses standards in mathematics and literacy at grades 2, 5 and 8. The test would sample the performance of students in each of the four regions and would be conducted every two or three years. The objective would be to monitor standards over a period of at least ten years. The Department has accepted the program to be funded through CRIP. It is hoped that it will provide more information than simply data concerning education standards. This will be carried out in 2003, subject to the availability of funds.

CRIP is also funding a series of impact studies to evaluate key elements of the education reform process. The first of these studies is a five year longitudinal study of the impact of the reform on students, schools and communities. The study, which is led by the University of Woolongong, involves teams of researchers visiting fourteen school sites around the country to gather information. The research teams will be looking at the impact that the reform curriculum has had on learning outcomes at both the elementary and primary levels as well as the impact of vernacular education on literacy and numeracy in the primary schools. The researchers are required to provide six-monthly reports to an Impact Study Steering Committee.

A second impact study has been conducted to assess the effectiveness of workshops run to train teachers in strategies for bridging to English for children in grades 3 to 5. The National Research Institute carried out this study and found that although the training benefited teachers the workshops were not necessarily the best way in which to provide the training. There were problems of distance to travel for the workshops with related cost concerns. It was considered that there it was important to have in school supervisors to assist teachers in implementing the new curriculum. CRIP will be using these findings to develop the new lower primary in-service program.

The standards at grade 8 still cause concern for many and it is important that the Department, through the Measurement Services Unit, continues to monitor these. It has been reported in the past that the high schools have achieved better results in the Certificate of Basic Education (COBE) grade 8 examinations than the primary schools. A difference would be expected because the students attending high schools have been selected, whilst all those in primary schools have proceeded directly from grade 6 to grade 7.

The most recent results available are for the years 2000 and 2001. The results show that the high schools still perform better at grade 8 in numeracy and general skills but that the difference in literacy skills is minimal. It is important to note that only ten provinces returned data in 2000. Nothing should be read into the fact that the mean literacy mark has dropped between 2000 and 2001. The table and charts below illustrate these figures.
Table 6: COBE mean marks for 2000 and 2001 by type of school and subject

<table>
<thead>
<tr>
<th></th>
<th>Year 2000</th>
<th>Year 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Literacy</td>
<td>Numeracy</td>
</tr>
<tr>
<td>Primary</td>
<td>30.1</td>
<td>22.8</td>
</tr>
<tr>
<td>Secondary</td>
<td>30.1</td>
<td>25.2</td>
</tr>
<tr>
<td>PNG</td>
<td>30.1</td>
<td>23.5</td>
</tr>
</tbody>
</table>

Figure 4: 2000 COBE results by subject and type of school

Figure 5: 2001 COBE results by subject and type of school

Of possible greater concern for the system should be the huge variation that there is between provinces. The table and the two charts below show, for literacy and numeracy skills, the mean marks for the provinces for which information is available for analysis.

Table 7: COBE mean marks by province, subject and type of school, 2001

<table>
<thead>
<tr>
<th></th>
<th>Literacy Skills</th>
<th>Numeracy Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
<td>Secondary</td>
</tr>
<tr>
<td>Western</td>
<td>21.5</td>
<td>30.8</td>
</tr>
<tr>
<td>Gulf</td>
<td>24.3</td>
<td>23.3</td>
</tr>
<tr>
<td>Central</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milne Bay</td>
<td>27.5</td>
<td>33.8</td>
</tr>
<tr>
<td>Oro</td>
<td>25.6</td>
<td>29.6</td>
</tr>
<tr>
<td>SHP</td>
<td>28.6</td>
<td>21.9</td>
</tr>
<tr>
<td>EHP</td>
<td>30.3</td>
<td>27.7</td>
</tr>
<tr>
<td>Simbu</td>
<td>29.4</td>
<td>27.7</td>
</tr>
<tr>
<td>WHP</td>
<td>29.9</td>
<td>30.1</td>
</tr>
<tr>
<td>WSP</td>
<td></td>
<td></td>
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<tr>
<td>ESP</td>
<td>26.8</td>
<td>31.5</td>
</tr>
<tr>
<td>Madang</td>
<td>27.1</td>
<td>28.3</td>
</tr>
<tr>
<td>Morobe</td>
<td>28.3</td>
<td>30.4</td>
</tr>
<tr>
<td>WNBP</td>
<td>25.3</td>
<td>26.0</td>
</tr>
<tr>
<td>ENBP</td>
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<td>32.3</td>
</tr>
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<td>27.1</td>
</tr>
<tr>
<td>NSP</td>
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</tr>
<tr>
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<td>30.1</td>
<td>27.8</td>
</tr>
<tr>
<td>NCD</td>
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<td>25.6</td>
</tr>
<tr>
<td>Enga</td>
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<tr>
<td>KLM</td>
<td>23.2</td>
<td>34.4</td>
</tr>
</tbody>
</table>
The table and chart below show the mean literacy, numeracy and general skills marks by gender in 2001. The scores follow the pattern observed in previous years in that girls perform equally as well as, if not better than, boys on average in Literacy Skills but boys perform better than girls in Numeracy and General Skills. Again, there are large differences between the provinces.

Table 8: COBE mean marks by subject and gender, 2001

<table>
<thead>
<tr>
<th></th>
<th>Literacy</th>
<th>Numeracy</th>
<th>General Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>28.0</td>
<td>24.3</td>
<td>28.3</td>
</tr>
<tr>
<td>Female</td>
<td>28.7</td>
<td>21.9</td>
<td>26.9</td>
</tr>
</tbody>
</table>
The 2001 COBE examinations results have also been analysed by age. The results suggest that the younger children, those that enter school at a younger age, perform better than the older children. This is a similar conclusion to that reached in regards to the School Certificate Examination.

Figure 9: COBE Literacy mean marks by age, 2001  
Figure 10: COBE Numeracy mean marks by age, 2001

**Inspections**

The Inspections and Guidance Division has experienced enormous problems in recent years in financing the visits of inspectors to schools. The situation eased in 2000 and 2001 with significant sums of money being made available through the Government Assistance to Quality Education Program. However, in 2002 there was no funding made available and the bureaucratic processes of allocation of funds and problems created through non-acquittals of previous operational funds did not allow the Division to operate effectively. In addition, the centralisation of the major travel items and the completion of the World Bank project meant that the Division was again desperately short of funding. This did not however affect individual inspectors who carried out their work with changes in approaches and support from provinces and with their work with their own personal resources. Quality Initiatives in PNG Education funds were used to carry out inspection visits but not advisory visits.

The recommendations included in the Tololo Review of October, 1995 are being implemented to give a greater emphasis to school-based appraisal. This was trialled in four provinces in 2000 – NCD, Central, East New Britain and Western Highlands. It is now being extended to all provinces and a School Based Supervision and Management Reform Handbook, after further trialling, is being produced.

The ongoing training of inspectors at the primary level is an important issue and the Curriculum Reform Implementation Project continues to provide workshops to equip the Inspectors with information about the reform curriculum and teaching methods, as well as the change in focus towards skills development and outcomes-based curriculum. The Division also continues to co-sponsor inspectors who are willing to meet tuition fees and other related fees by maintaining them on full salary whilst they are at the University of Goroka.
Key statistics

Enrolment rates

The usual enrolment rate that is used has in the past been for grades 1 to 6. This is grade 1 to 6 enrolment as a percentage of the 7 to 12 year age group. The table below includes children enrolled in grades 1 and 2 in both the elementary and the primary sectors.

Table 9: Grade 1 to 6 enrolment rates by gender and province, 2001

<table>
<thead>
<tr>
<th>Province</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>Gulf</td>
<td>64%</td>
<td>58%</td>
<td>61%</td>
</tr>
<tr>
<td>National Capital</td>
<td>87%</td>
<td>89%</td>
<td>88%</td>
</tr>
<tr>
<td>Central</td>
<td>92%</td>
<td>92%</td>
<td>92%</td>
</tr>
<tr>
<td>Milne Bay</td>
<td>81%</td>
<td>89%</td>
<td>85%</td>
</tr>
<tr>
<td>Oro</td>
<td>73%</td>
<td>71%</td>
<td>72%</td>
</tr>
<tr>
<td>Southern Highlands</td>
<td>56%</td>
<td>47%</td>
<td>52%</td>
</tr>
<tr>
<td>Eastern Highlands</td>
<td>77%</td>
<td>69%</td>
<td>74%</td>
</tr>
<tr>
<td>Simbu</td>
<td>84%</td>
<td>71%</td>
<td>78%</td>
</tr>
<tr>
<td>Western Highlands</td>
<td>76%</td>
<td>71%</td>
<td>74%</td>
</tr>
<tr>
<td>Enga</td>
<td>66%</td>
<td>54%</td>
<td>60%</td>
</tr>
<tr>
<td>Morobe</td>
<td>72%</td>
<td>66%</td>
<td>69%</td>
</tr>
<tr>
<td>Madang</td>
<td>67%</td>
<td>62%</td>
<td>65%</td>
</tr>
<tr>
<td>Sandaun</td>
<td>73%</td>
<td>63%</td>
<td>68%</td>
</tr>
<tr>
<td>East Sepik</td>
<td>73%</td>
<td>67%</td>
<td>70%</td>
</tr>
<tr>
<td>Manus</td>
<td>89%</td>
<td>90%</td>
<td>89%</td>
</tr>
<tr>
<td>New Ireland</td>
<td>79%</td>
<td>79%</td>
<td>79%</td>
</tr>
<tr>
<td>East New Britain</td>
<td>92%</td>
<td>91%</td>
<td>91%</td>
</tr>
<tr>
<td>West New Britain</td>
<td>84%</td>
<td>81%</td>
<td>83%</td>
</tr>
<tr>
<td>North Solomons</td>
<td>96%</td>
<td>94%</td>
<td>95%</td>
</tr>
<tr>
<td>Kiunga / Lake Murray</td>
<td>88%</td>
<td>79%</td>
<td>84%</td>
</tr>
<tr>
<td>Total</td>
<td>75%</td>
<td>70%</td>
<td>73%</td>
</tr>
</tbody>
</table>

The overall rate is rather lower than might have been excepted but this is not unexpected given the problems experienced with data collection in 2001 as explained in the introduction.

The grade 3 to 8 enrolment rates will become more relevant as the education reform progresses. The table below includes grade 7 and 8 students in both the primary schools and the high schools.
### Table 10: Grade 3 to 8 enrolment rates by gender and province, 2001

<table>
<thead>
<tr>
<th>Province</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>73.4%</td>
<td>72.0%</td>
<td>72.7%</td>
</tr>
<tr>
<td>Gulf</td>
<td>49.7%</td>
<td>44.2%</td>
<td>47.1%</td>
</tr>
<tr>
<td>National Capital</td>
<td>82.2%</td>
<td>83.3%</td>
<td>82.7%</td>
</tr>
<tr>
<td>Central</td>
<td>71.7%</td>
<td>67.8%</td>
<td>69.9%</td>
</tr>
<tr>
<td>Milne Bay</td>
<td>66.2%</td>
<td>74.4%</td>
<td>70.1%</td>
</tr>
<tr>
<td>Oro</td>
<td>56.3%</td>
<td>56.7%</td>
<td>56.5%</td>
</tr>
<tr>
<td>Southern Highlands</td>
<td>38.9%</td>
<td>30.6%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Eastern Highlands</td>
<td>57.6%</td>
<td>47.9%</td>
<td>53.2%</td>
</tr>
<tr>
<td>Simbu</td>
<td>63.2%</td>
<td>48.2%</td>
<td>56.4%</td>
</tr>
<tr>
<td>Western Highlands</td>
<td>56.1%</td>
<td>50.5%</td>
<td>53.5%</td>
</tr>
<tr>
<td>Enga</td>
<td>52.3%</td>
<td>40.3%</td>
<td>46.8%</td>
</tr>
<tr>
<td>Morobe</td>
<td>55.8%</td>
<td>49.5%</td>
<td>52.9%</td>
</tr>
<tr>
<td>Madang</td>
<td>55.0%</td>
<td>49.5%</td>
<td>52.4%</td>
</tr>
<tr>
<td>Sandaun</td>
<td>51.3%</td>
<td>41.7%</td>
<td>46.8%</td>
</tr>
<tr>
<td>East Sepik</td>
<td>52.7%</td>
<td>47.3%</td>
<td>50.1%</td>
</tr>
<tr>
<td>Manus</td>
<td>72.9%</td>
<td>75.0%</td>
<td>73.9%</td>
</tr>
<tr>
<td>New Ireland</td>
<td>66.4%</td>
<td>70.0%</td>
<td>68.1%</td>
</tr>
<tr>
<td>East New Britain</td>
<td>77.9%</td>
<td>76.9%</td>
<td>77.4%</td>
</tr>
<tr>
<td>West New Britain</td>
<td>66.9%</td>
<td>61.7%</td>
<td>64.4%</td>
</tr>
<tr>
<td>North Solomons</td>
<td>84.6%</td>
<td>84.9%</td>
<td>84.8%</td>
</tr>
<tr>
<td>Kiunga / Lake Murray</td>
<td>79.8%</td>
<td>69.3%</td>
<td>74.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>59.1%</td>
<td>53.9%</td>
<td>56.7%</td>
</tr>
</tbody>
</table>

### Retention rates

Retention rates continue to be poor with almost half the children who enrol in grade 1 dropping out before they have completed grade 6. The figures for the most recent cohort available are shown in the table below. The national figure is similar to that of previous years. The figures in this table include children who received their education at both the elementary and the community schools. It is, unfortunately, not possible to provide comparative retention figures for the two groups of children. Nevertheless, there is not as yet any evidence to suggest the improvement in retention that was hoped for as a result of the introduction of elementary education.

The highlands provinces again have the worst retention rates. Girls perform slightly less well than boys.
Table 11: Grade 1 to 6 retention, 1996 to 2001, by gender and province

<table>
<thead>
<tr>
<th>Province</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>75.7%</td>
<td>76.2%</td>
<td>75.9%</td>
</tr>
<tr>
<td>Gulf</td>
<td>43.9%</td>
<td>41.4%</td>
<td>42.8%</td>
</tr>
<tr>
<td>National Capital</td>
<td>88.6%</td>
<td>89.8%</td>
<td>89.2%</td>
</tr>
<tr>
<td>Central</td>
<td>64.0%</td>
<td>59.6%</td>
<td>61.9%</td>
</tr>
<tr>
<td>Milne Bay</td>
<td>61.9%</td>
<td>67.4%</td>
<td>64.6%</td>
</tr>
<tr>
<td>Oro</td>
<td>57.0%</td>
<td>57.0%</td>
<td>57.0%</td>
</tr>
<tr>
<td>Southern Highlands</td>
<td>48.0%</td>
<td>36.2%</td>
<td>42.4%</td>
</tr>
<tr>
<td>Eastern Highlands</td>
<td>41.6%</td>
<td>31.5%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Simbu</td>
<td>42.6%</td>
<td>28.2%</td>
<td>35.9%</td>
</tr>
<tr>
<td>Western Highlands</td>
<td>49.1%</td>
<td>44.7%</td>
<td>47.1%</td>
</tr>
<tr>
<td>Enga</td>
<td>38.9%</td>
<td>50.6%</td>
<td>42.7%</td>
</tr>
<tr>
<td>Morobe</td>
<td>55.9%</td>
<td>53.6%</td>
<td>54.9%</td>
</tr>
<tr>
<td>Madang</td>
<td>55.4%</td>
<td>57.5%</td>
<td>56.3%</td>
</tr>
<tr>
<td>Sandaun</td>
<td>56.4%</td>
<td>47.5%</td>
<td>52.4%</td>
</tr>
<tr>
<td>East Sepik</td>
<td>54.7%</td>
<td>52.7%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Manus</td>
<td>70.4%</td>
<td>77.6%</td>
<td>73.7%</td>
</tr>
<tr>
<td>New Ireland</td>
<td>72.4%</td>
<td>70.3%</td>
<td>71.4%</td>
</tr>
<tr>
<td>East New Britain</td>
<td>73.2%</td>
<td>73.8%</td>
<td>73.5%</td>
</tr>
<tr>
<td>West New Britain</td>
<td>55.3%</td>
<td>64.0%</td>
<td>58.9%</td>
</tr>
<tr>
<td>North Solomons</td>
<td>107.9%</td>
<td>100.3%</td>
<td>104.1%</td>
</tr>
<tr>
<td>Kiunga / Lake Murray</td>
<td>73.6%</td>
<td>68.3%</td>
<td>71.1%</td>
</tr>
<tr>
<td>Total</td>
<td>55.8%</td>
<td>53.7%</td>
<td>54.8%</td>
</tr>
</tbody>
</table>

As the country moves closer to it’s principal objective in education - that of allowing every child an opportunity of completing nine years of basic education the grade 1 to 8 retention rate is going to become increasingly important. The table below shows the figures by province and gender for the latest available cohort. The national figure show that about 35% of children who started grade 1 in 1994 completed grade 8 in 2001. This figure is comparable with those of previous years.
Table 12: Grade 1 to 8 retention, 1994 to 2001, by gender and province

<table>
<thead>
<tr>
<th>Province</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>60.4%</td>
<td>42.0%</td>
<td>51.5%</td>
</tr>
<tr>
<td>Gulf</td>
<td>32.5%</td>
<td>34.1%</td>
<td>33.2%</td>
</tr>
<tr>
<td>National Capital</td>
<td>81.4%</td>
<td>75.7%</td>
<td>78.6%</td>
</tr>
<tr>
<td>Central</td>
<td>43.8%</td>
<td>39.5%</td>
<td>41.8%</td>
</tr>
<tr>
<td>Milne Bay</td>
<td>41.1%</td>
<td>46.8%</td>
<td>43.8%</td>
</tr>
<tr>
<td>Oro</td>
<td>32.4%</td>
<td>39.7%</td>
<td>35.7%</td>
</tr>
<tr>
<td>Southern Highlands</td>
<td>44.9%</td>
<td>33.3%</td>
<td>39.6%</td>
</tr>
<tr>
<td>Eastern Highlands</td>
<td>23.4%</td>
<td>17.2%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Simbu</td>
<td>30.7%</td>
<td>20.3%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Western Highlands</td>
<td>25.0%</td>
<td>21.4%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Enga</td>
<td>32.4%</td>
<td>22.6%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Morobe</td>
<td>32.1%</td>
<td>28.4%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Madang</td>
<td>35.7%</td>
<td>32.7%</td>
<td>34.4%</td>
</tr>
<tr>
<td>Sandaun</td>
<td>32.2%</td>
<td>19.8%</td>
<td>21.7%</td>
</tr>
<tr>
<td>East Sepik</td>
<td>33.1%</td>
<td>26.1%</td>
<td>29.8%</td>
</tr>
<tr>
<td>Manus</td>
<td>64.3%</td>
<td>62.7%</td>
<td>63.6%</td>
</tr>
<tr>
<td>New Ireland</td>
<td>49.0%</td>
<td>52.3%</td>
<td>50.5%</td>
</tr>
<tr>
<td>East New Britain</td>
<td>43.7%</td>
<td>47.3%</td>
<td>45.4%</td>
</tr>
<tr>
<td>West New Britain</td>
<td>41.4%</td>
<td>35.3%</td>
<td>38.5%</td>
</tr>
<tr>
<td>North Solomons</td>
<td>46.1%</td>
<td>52.5%</td>
<td>49.2%</td>
</tr>
<tr>
<td>Kiunga / Lake Murray</td>
<td>67.2%</td>
<td>60.9%</td>
<td>64.5%</td>
</tr>
<tr>
<td>Total</td>
<td>37.2%</td>
<td>33.4%</td>
<td>35.5%</td>
</tr>
</tbody>
</table>

Teacher-pupil ratios

Teacher-pupil ratios in the primary sector have been rising slightly in recent years reflecting the reported severe shortage of teachers in some areas. In addition, there are still a number of schools that have got grade 7 and 8 classes but have not yet shed their grade 1 and 2 classes.
Table 13: Primary school teacher pupil ratios by province, 2001

<table>
<thead>
<tr>
<th>Province</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western</td>
<td>31.5</td>
</tr>
<tr>
<td>Gulf</td>
<td>40.8</td>
</tr>
<tr>
<td>National Capital</td>
<td>34.5</td>
</tr>
<tr>
<td>Central</td>
<td>28.8</td>
</tr>
<tr>
<td>Milne Bay</td>
<td>34.6</td>
</tr>
<tr>
<td>Oro</td>
<td>37.2</td>
</tr>
<tr>
<td>Southern Highlands</td>
<td>43.3</td>
</tr>
<tr>
<td>Eastern Highlands</td>
<td>44.7</td>
</tr>
<tr>
<td>Simbu</td>
<td>31.2</td>
</tr>
<tr>
<td>Western Highlands</td>
<td>36.1</td>
</tr>
<tr>
<td>Enga</td>
<td>39.6</td>
</tr>
<tr>
<td>Morobe</td>
<td>40.7</td>
</tr>
<tr>
<td>Madang</td>
<td>37.4</td>
</tr>
<tr>
<td>Sandaun</td>
<td>32.4</td>
</tr>
<tr>
<td>East Sepik</td>
<td>42.6</td>
</tr>
<tr>
<td>Manus</td>
<td>23.6</td>
</tr>
<tr>
<td>New Ireland</td>
<td>24.7</td>
</tr>
<tr>
<td>East New Britain</td>
<td>29.7</td>
</tr>
<tr>
<td>West New Britain</td>
<td>28.6</td>
</tr>
<tr>
<td>North Solomons</td>
<td>30.5</td>
</tr>
<tr>
<td>Kiunga / Lake Murray</td>
<td>34.3</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>35.5</td>
</tr>
</tbody>
</table>

Of greater concern than the overall teacher-pupil ratio is the ratios by grade. These are shown in the table below. The average grade 1 class has more than 50 children. This figure is slightly higher than the previous year and initial figures from 2002 suggest that it will rise further. The reasons for this still need to be explored but may be related to the fact that elementary schools have yet to be opened in some of the most remote parts of the country. It is these areas that have the greatest difficulty in attracting teachers.

The teacher-pupil ratio in the upper primary grades is only 21.8. This figure suggests that some provinces are still deploying too many teachers in these classes.

Table 14: Teacher pupil ratios by grade, 2001

<table>
<thead>
<tr>
<th>Grade</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1</td>
<td>51.2</td>
</tr>
<tr>
<td>Grade 2</td>
<td>45.3</td>
</tr>
<tr>
<td>Grade 3</td>
<td>40.0</td>
</tr>
<tr>
<td>Grade 4</td>
<td>36.9</td>
</tr>
<tr>
<td>Grade 5</td>
<td>34.3</td>
</tr>
<tr>
<td>Grade 6</td>
<td>31.0</td>
</tr>
<tr>
<td>Grade 7 / 8</td>
<td>21.8</td>
</tr>
</tbody>
</table>

Of greater concern than the overall teacher-pupil ratio is the ratios by grade. These are shown in the table below. The average grade 1 class has more than 50 children. This figure is slightly higher than the previous year and initial figures from 2002 suggest that it will rise further. The reasons for this still need to be explored but may be related to the fact that elementary schools have yet to be opened in some of the most remote parts of the country. It is these areas that have the greatest difficulty in attracting teachers.

The teacher-pupil ratio in the upper primary grades is only 21.8. This figure suggests that some provinces are still deploying too many teachers in these classes.
Take down notes on the issues that are still relevant for your work.

Hint: The different provinces are at different stages of implementing reform. So your response will be particular to your work situation and particular to your province.

The above readings from the three policy documents make clear the important aspects of the reform. The reading from the *State of Education in Papua New Guinea* helps you to see the progress being made regarding the reform and the constraints that inhibit implementation and possible ways of moving forward.

**Having read the information above, and having identified issues relevant for your work/province, draw up a plan for your presentation including the processes (ie, strategies and activities), sequence (ie, order of activities) and resources (ie, print, human and other kinds) you would use.**

- In doing this reflect on your own experiences in trying to understand and introduce/maintain reform in your district.
- Think about what worked for you and your district and what did not.
- Think about new ways of approaching some of the issues you are facing.
- Use pages 31-32 to draw up the plan.

Hint: Make sure your plan provides all the details asked for above.

**Share the plan with a group of teachers/colleagues.**

- Discuss your plan on pages 31-32 and modify it, if required, so that it becomes a ‘blueprint’ (model) for presenting information about reform curriculum at your level of operation.

Hint: Let colleagues critique it, but make sure that they have the background information which is guiding your plan. Make adjustments, if appropriate, on basis of the comments made.
Reflect on what you have learned through the above activity.

- Was the process useful? If yes, why? If not, why not? Write your thoughts down.

*Hint*: Make a list of the major concepts and skills you have acquired or further developed. Be honest about your response. You are not doing this course to please others. It is for your own benefit.
The plan for one of Scenarios 1-4

A suggested template

Scenario:

<table>
<thead>
<tr>
<th>Activity/Strategy eg. a survey</th>
<th>Steps eg. design survey</th>
<th>Timing eg. week 1, term 1 week 2, term 1, etc</th>
<th>Resources eg. print, human, etc.</th>
<th>Responsibility eg. yumi yet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</table>
Additional space for your plan
Module Summary

Congratulations! You have reached the end of this module and the end of the unit.

In this module you examined and explored your role(s) as outlined in the *Inservice Management Plan, 2001-2005*, the *National Curriculum Statement* (2002) and the *National Assessment and Reporting Policy 2003*. You selected one of four scenarios provided to draw up an appropriate action plan.

You should by now have developed certain knowledge, understandings, insights and skills as they relate to the reform agenda and how to apply them in the context of your work. All the work you have done and your reflections should help you to perform better in your work context.

At this point let us review your progress by assessing the extent to which you can now demonstrate each outcome.

The outcomes for the unit are copied here. For each of the outcomes how do you assess yourself - Yes, No or Not sure?

<table>
<thead>
<tr>
<th>Can you:</th>
<th>Yes/No/ Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. relate the PNG Education Reform process to your own work situation?</td>
<td></td>
</tr>
<tr>
<td>2. identify the depth and breadth of changes, if any, you need to make to your current practices?</td>
<td></td>
</tr>
<tr>
<td>3. develop and share an action plan to apply your learning to your work situation?</td>
<td></td>
</tr>
</tbody>
</table>

If you answered ‘yes’ to all of them, then you have done very well. Think about the kinds of evidence that will support your answer. If you have said ‘no’ or ‘not sure’ to any, then it may be worth your while to go over the appropriate sections of the module again and have another go at repeating the tasks.

Remember these *module outcomes* help you to achieve the outcomes of the unit. Refer back to the outcomes of the unit in the *Unit Introduction* and reflect on where you are in relation to those outcomes.

If seeking academic credit, you were advised to keep a running record of any evidence you may have for particular unit outcomes. If you have not been doing this, go back over the module and jot down in your *Learning Contract*, what you might consider to be evidence for the unit outcomes for which you have agreed to provide evidence.
Additional space for your notes
Unit 1:
Philosophy of Curriculum Reform

Unit Summary
Unit Summary

Congratulations! You have completed this unit.

At this point, let us review your learning journey.

Those of you seeking academic credit commenced your learning by completing the self-assessment. Then you went on to negotiate your Learning Contract.

You may or may not have gained any recognition of prior learning for your experience or previous study.

The modules within the unit are:

Module 1: Curriculum Reform - what is the rationale?
Module 2: Outcomes-based education– what is it?
Module 3: Why outcomes-based education in Papua New Guinea?
Module 3: Dimensions of Change - what are the implications?

In completing this unit, you explored the Primary Education Handbook (2000) - a historical document to do with reform, two significant policy documents – the National Curriculum Statement (2002) and the National Assessment and Reporting Policy, 2003, the concept of outcomes-based education (OBE) and planned an action plan to apply your learning to your work situation.

The focus throughout the unit required you to learn, do, share and reflect in the context of your work situation.

At this point let us review your progress. One way of doing this is by assessing the extent to which you can now demonstrate each outcome.

The outcomes for the unit are copied here. If you gained RPL for some of the outcomes, put a ‘tick’ in the right hand box in the table below for those outcomes.

For the other outcomes how do you assess yourself - Yes, No or Not sure?

<table>
<thead>
<tr>
<th>Can you:</th>
<th>Yes/No/ Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. describe key aspects of the education reform in Papua New Guinea?</td>
<td></td>
</tr>
<tr>
<td>2. describe the aims of the primary curriculum for Papua New Guinea?</td>
<td></td>
</tr>
<tr>
<td>3. explain the links between elementary, lower primary and upper primary sectors of schooling in terms of learning areas, subjects and focuses?</td>
<td></td>
</tr>
</tbody>
</table>
4. evaluate outcomes-based education as a system for planning, programming, teaching, learning, assessing and reporting student learning?

5. assist a colleague to understand why PNG is shifting its focus from objectives to outcomes?

6. identify the implications of the advice provided in the National Curriculum Statement (2002) and the National Assessment and Reporting Policy, 2003, for your role?

7. develop and share an action plan to adapt your duties/responsibilities to the reform requirements in your work situation?

If you answered ‘yes’ to all of them, then you have done very well. Think about the kinds of evidence which will support the achievement of each of the outcomes. If you have said ‘no’ or ‘not sure’ to some, then it may be worth your while to go over the appropriate sections of the module again and have another go at repeating the tasks, and/or reflecting on your difficulties and seeking help.

A second way of assessing your progress is by completing the self-assessment in the Accreditation and Certification section again. Use a different coloured pen to place a tick on each continuum to show what you know now.

Compare your assessment of your own knowledge and skills before and after you completed this unit.

- Where have you shown the most growth?
- In which areas might you need to consolidate your learning or seek further assistance?
- Are these other areas that have now become apparent as learning priorities for you?

If you are satisfied that you are ready for assessment, go to your assessor and start the processes of assessment, if seeking academic credit. The demonstration of the negotiated unit outcomes through this Study Guide and any other negotiated materials form the basis for assessment.

If you have been studying on your own or with a colleague, then you may consider enrolling with PNGEI for external assessment. Information regarding this is in the Accreditation and Certification section.

Good luck with the assessment processes and the assessment outcome.
Where to from here?

How can I build on what I have learnt?

If you want to learn more about the curriculum reform and what it means for teachers, think about these things.

- study one of the other primary in-service units
- try to help another teacher with their learning
- take on special school responsibilities
  - develop the school assessment schedule
  - become the community liaison officer
  - become the school in-service coordinator
  - team teach with a colleague
- look for opportunities beyond your school
  - supporting others in a nearby school
  - at the cluster or district level
- develop resources
  - for your own use
  - for the use of others in your school
  - for others beyond the school

It is important for all teachers to have some professional development plans. Remember you can improve your skills and understandings by learning, doing, sharing and reflecting.

What are you going to do?
Inservice Units to Support the Implementation of the Primary Reform Curriculum

Unit 1:
Philosophy Of Curriculum Reform

Accreditation and Certification

Contents
Page/s
Accreditation and Certification 1-11
❖ The Context 2
❖ Some definitions 4
❖ Ways this unit can assist you 5
❖ Accreditation requirements 7
❖ Certification requirements 8
❖ Self-assessment of progress 10
The Context

Duration
Each unit has four modules. It will take you around 48 hours to complete a unit. You will need to work through this study guide completing the Learn, Do, Share and Reflect activities, doing any extra reading and, if you choose to seek accreditation, meeting the assessment requirements.

If you receive Recognition of Prior Learning called RPL (see page 5 of Learning Contract) it may take you less than 48 hours to complete the unit. This is acceptable to PNGEI because you have already met some of the requirements through your previous studies or work. If you have not done any academic studies lately, it may take you somewhat longer.

If you seek accreditation, you need to negotiate an expected completion date, as part of your learning contract. By this date you should have completed all assessment requirements and be ready to be assessed. Your assessor may also have been assessing you on a regular basis.

Learning tips
The Study Guide helps you do each module. Each module includes learning, doing, sharing and reflecting activities. These are all designed to help you achieve the learning outcomes of the unit. The Study Guide is also your workbook and learning journal. If you seek accreditation, you will need to submit the completed study guide to your assessor.

If you are studying off campus
This unit lets you study at home. There are many advantages to studying off campus:
- you study close to your home
- you can plan your study time to fit in with work or family commitments
- you can relate your study to your present job, to improve your learning.

There are also challenges. Learning this way needs discipline and motivation. Here are some tips for studying off campus.

Plan
Give priority to study sessions with a colleague. Make sure you allow enough time to travel to your meeting place, if you have to travel.

Make a study schedule and stick to it. Set specific days and times each week for study and keep them free from other activities.

In your learning contract note due dates for particular tasks. In your study guide, for those activities where you are expected to work with others and share ideas, make note of appointments, your meeting place, time and so on, and plan for them.
Manage your time
Set aside a reasonable amount of time each week for your study program. If the bulk of
the unit is done during NIST Week or PIST Week or another block of time, you may still
have to complete certain activities in your own time.

Work in productive ways; discuss these with a colleague, your learning group or
assessor.

Be organised
For your study, you will need the resources listed on pages 4-8. Resource 1 was sent to
provinces in 2000 for distribution to schools. All other resources were sent to schools
during 2003-2005. If you cannot find them in your school, ask your head teacher or
the district inspector. Without these resource documents you won’t be able to complete
this unit. Once you have collected them, keep all your study materials organised in one
place. Work through the unit systematically.

Find a good place to study
Most people need quiet and order to study effectively, so try to find a suitable place to
do your work.

Ask for help if you need it
This is the most vital part of studying off campus. No matter what the difficulty is, ask
for help straight away. Colleagues can help you in many ways. Some ways are described
on page 4.

Don’t give up
You can access this unit in different ways. Once you have chosen your pathway, you
should set up your support network and start to use it. Seek help when you need it and
don’t give up.
Some definitions

Colleagues, other teachers and education staff can help you in different ways. These include helping you by being a learning partner, a critical friend, a mentor, an imparter (facilitator) or an assessor.

A learning partner is a colleague with whom you have agreed to study. You may negotiate an arrangement to help you both to clarify ideas, brainstorm ideas and discuss plans and processes, and to generally support each other throughout your learning journey. This doesn’t mean that you provide joint responses to the tasks and activities with your learning partner. You should make your own responses and they should be based on your own experiences, needs and context of work.

A critical friend is a colleague you trust and with whom you can work well. Critical friends give constructive feedback, ask thought-provoking questions, help you look at issues from different perspectives and help support change actions.

A mentor is a person who has a professional interest in you, is so willing to be a friend, guide, counsellor and/or a sounding board (that is, listens and responds to your ideas, issues and so on). A mentor may or may not be a colleague.

An imparter facilitates learning and provides input into the learning process. An imparter may not be approved to assess on behalf of PNGEI or TE&SDD.

An assessor is a person trained and approved by an authority such as PNGEI or TE&SDD, to facilitate learning, assess achievement and recommend an achievement grade in the context of the provision of this unit.

See page 3 of the Learning Contract for more information about the assessor.
Ways this unit can assist you

• **If self-improvement is your main goal ……**
  If self-improvement is your main goal, you will be able to help yourself in the following ways:

1. lainim yu yet or with a colleague
2. lainim wantaim in groups, over time, as the need arises, or in a structured way with a facilitator.

There may be other ways too of meeting your needs.

The learning outcomes for the unit, the self-assessment of progress, the learning model – *Learn, Do, Share and Reflect* – you’ll use, as well as the learning outcomes for each module can all help to guide and direct your learning journey.

Later on, if you would like to do some formal learning and would like to claim credit points for the work you do through this unit, you can enrol with PNGEI for external assessment as determined by PNGEI. The external assessment will be a task set by PNGEI for you to complete, not an examination.

• **If furthering your qualifications while improving yourself is your main goal ……**
  If furthering your qualifications while improving yourself is your main goal, you will need to study the unit and meet the assessment and accreditation requirements of PNGEI. For this you must work with an assessor.

Three modes of learning are suggested here.

**Model 1: Self-learning for self-improvement**
This mode is described on page 7. You may wish to study by yourself or with the help of a colleague or in a group situation. If you wish to seek potential credit points, then you will need to enrol with PNGEI for external assessment. For this you will need to complete a task.

**Mode 2: Off Campus face-to-face (with an external assessor)**
This means lainim wantaim in groups over a period of time to make up around 48 hours in a structured way:

- school-based or cluster-based (for example, 2 hours a week over a number of weeks)
- during NIST or PIST week as a one week course with follow up sessions
- as a one week course, including evening sessions.

**Mode 3: On Campus face-to-face (with an internal assessor)**
This means attending a PNGEI regional centre or a PNGEI Study Site, if they offer this unit as part of a course, and by meeting PNGEI assessment and accreditations requirements.
PNGEI regional centres are:

- Gaulim Teachers’ College - New Guinea Islands region
- Kabaleo Teachers’ College - New Guinea Islands region
- Madang Teachers’ College - Momase region
- Holy Trinity Teachers’ College - Highlands region
- PNGEI - Southern region

PNGEI Study Sites are located in Daru, Balimo, Suki, Kiunga, Alotau, Samarai, Bolubolu, Losuia, Rabaraba, Popendetta, Kupiano, Berina, Wau, Bulolo, Kerema, Kilion, Baimuru, Vanimo, Aitape, Wewak and Maprik.

For Modes 2 and 3 above, you will need to negotiate a learning contract with the assessor who will:
- approve and oversee your learning contract and any learning plan
- assess your work
- recommend an achievement grade to PNGEI.
Accreditation Requirements

The following describes the accreditation arrangement that has been negotiated with PNGEI for potential credit points towards DEP(I) or other qualifications including Certificate in Elementary Teacher Training (CETT), Diploma in Vocational Education (DOVET), Diploma in Special Education or further education.

All modes of study – self-learning, off campus face-to-face learning and on campus face-to-face learning—are acceptable to PNGEI.

**Mode 1: Self-learning**
In the self-learning mode, you are eligible for credit points only if you do an external assessment through PNGEI. A learning contract is not required for this. If you don’t succeed the first time, you will have two more chances to enrol and pass the unit.

A pass means four (4) credit points for every unit you pass.

**Mode 2: Off Campus face-to-face**
If studying at a location away from PNGEI, but supervised by an assessor, then you must undertake assessment, if you are seeking academic credit.

Four (4) credit points are earned per unit for achievement of HD, D, C or P.
A fail (F) or an unfulfilled (UF) grade means no credit points. However, you can present yourself for external assessment at a later stage. You will have two chances to pass the unit through external assessment.

**Mode 3: On Campus face-to-face**
If studying on campus at a PNGEI regional centre or a study site established by PNGEI supervised by an assessor, then you must undertake assessment.

Four (4) credit points are earned per unit for achievement of HD, D, C or P.
A fail (F) or an unfulfilled (UF) grade means no credit points. However, you can re-enrol and attempt the course a second time.

Please note that any credit points earned are awarded only when you enrol for an appropriate course with PNGEI. Admission to courses will be according to PNGEI regulations. The higher your achievement grade (for example, HD, D) for a unit, the better your chances are for being admitted to PNGEI courses to further your qualifications.

If you complete all nine units successfully, you earn 36 credit points.
Certification requirements

The Certification Authority for academic credit is PNGEI. If you are seeking academic credit, you will need to:
- negotiate a learning contract
- enrol at PNGEI and pay course fees
- meet the assessment requirements.

Assessment requirements

Assessment has three components.

1. **Self-assessment - compulsory, but not for academic credit**
   Self-assessment allows you to assess what you know and what you do not. This is not designed to be a rigorous challenge for Recognition of Prior Learning (RPL), but rather to motivate and sustain your interest. You should do the self-assessment again once you have reached the end of the unit, to assess and appreciate for yourself the progress you have made.

   Self-assessment is compulsory in the sense that you will need to show your assessor that you have done it, at the beginning and at the end of the unit.

2. **The process of learning - compulsory, but not for academic credit**
   We ask you to complete various tasks throughout this unit. The tasks include learning, doing (eg. investigating, surveying, etc.), sharing findings and information with others, and reflecting on the implications of the new knowledge and skills you have gained for your practice. The learning contract that you’ll negotiate with your assessor will specify the range of tasks you will be expected to complete.

   This component of assessment is compulsory in the sense that you will need to show your assessor that you have done the tasks specified in the negotiated Learning Contract.

   If you want to, you can use the work you do on the tasks, as appropriate, as evidence that you can demonstrate the outcomes.

3. **The results of learning - evidence to demonstrate achievement of outcomes, required for academic credit**
   If you are seeking academic credit, you need to provide evidence that you can demonstrate the achievement of outcomes. Successful completion of the unit leads to an award of High Distinction (HD), Distinction (D), Credit (C) or Pass (P), based on the achievement of the outcomes. It is up to you to provide evidence that you have achieved the outcomes.

   Some of the evidence could come from your investigations and action. Some could come from your reflections. Wherever it comes from, however, you will need to identify the evidence and relate it to particular outcomes for your assessor.
The learning contract (see pages 1-8 of the next section)

We ask you to negotiate a learning contract with your assessor. This contract is designed to help you and the assessor to identify the knowledge and skills you already have and those that will need developing through the unit. It helps to personalize your learning. It also helps you to devise, with your assessor, ways you can demonstrate the learning outcomes you achieve.

You will find a blank copy of the learning contract for this unit in the next section, pages 1-8.

Enrolment and payment of fees

Mode 1: Self-learning
If you are seeking academic credit through external assessment, you should enrol directly with PNGEI at the beginning of a trimester. You can do this when you are ready to be assessed. There are three trimesters in a year. You must pay a course fee when you enrol. You can get information about course fees from PNGEI.

Mode 2: Off Campus face-to-face
If studying in your province with an assessor (ie. off campus face-to-face), you should enrol in the province with the assessor and pay the course fees to PNGEI account with Westpac Bank, Programs Account No. 007-00931201. You can get information about course fees from PNGEI.

Then, send your enrolment form and receipt of payment of the course fees to: Head, School of Education Studies, Primary Unit, PNGEI, PO Box 1791, Boroko, NCD, PNG.

Mode 3: On Campus face-to-face
If studying at a PNGEI regional centre or a PNGEI study site with an assessor (that is, on campus face-to-face), you should enrol with the regional centre or study site and pay the course fees to PNGEI account with Westpac Bank, Programs Account No. 007-00931201. You can get information about course fees from PNGEI.

You should then provide receipt of payment of the course fees to the course coordinator at the regional center or study site. The coordinator will then send your enrolment form and receipt of payment to: Head, School of Education Studies, Primary Unit, PNGEI, PO Box 1791, BOROKO, NCD, PNG.
Self-assessment of progress

Completing this task is a compulsory part of the assessment schedule. However, no marks will be allocated.

Twelve statements, numbered 1 to 12 are given below. Each statement is followed by a continuum with four markers identified on it. To assess yourself, mark where you are now, on each continuum, based on what you know at the beginning of the unit.

For example, look at Statement 1, ‘I understand the rationale for reforming the curriculum’. If you know a lot about the rationale for the reform, then you should make a tick close to ‘very well’, the third marker. If you know only a little bit about it, or aren’t sure what it is all about, then put your tick close to ‘little’, the first marker. If you feel you have given a lot of thought to curriculum reform and have been implementing it, and are in a position to help others, then you should place the tick close to ‘can help others’, the fourth marker. Think about what evidence you could show to justify your self-assessment, if you were asked.

Now do this task as best as you can in order to maximise your learning.

1. I understand the rationale for reforming the curriculum.

2. I understand the main features of the reform curriculum.

3. I know how the elementary, lower primary and upper primary sectors are linked in the reform context.

4. My understanding of the values underpinning curriculum reform may be described as

5. I know the importance and the implications of the national curriculum principles found in the National Curriculum Statement (2002).
6. I understand the links between elementary, lower primary and primary subjects.

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<th>little</th>
<th>moderately</th>
<th>very well</th>
<th>can help others</th>
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7. My ability to understand and apply outcomes-based learning, teaching, assessing and reporting may be described as

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<th></th>
<th>limited</th>
<th>adequate</th>
<th>very good</th>
<th>can help others</th>
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8. I know the importance and the implications of the assessment and reporting principles identified in the *National Assessment and Reporting Policy, 2003.*

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<th>moderately</th>
<th>very well</th>
<th>can help others</th>
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9. I understand what I should do in my present capacity to implement outcomes-based education.

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<th>little</th>
<th>moderately</th>
<th>very well</th>
<th>can help others</th>
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10. My ability to provide leadership in the implementation of reform curriculum may be described as

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<th>limited</th>
<th>adequate</th>
<th>very good</th>
<th>can help others</th>
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11. I understand why Papua New Guinea is adopting an outcomes-based approach.

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<th>little</th>
<th>moderately</th>
<th>very well</th>
<th>can help others</th>
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12. I understand how Papua New Guinea is implementing outcomes-based approach in curriculum reform.

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<th>little</th>
<th>moderately</th>
<th>very well</th>
<th>can help others</th>
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On completing the unit, you need to do the *self-assessment* again to see for yourself what progress you have made by doing all the learning activities.
Inservice Units to Support the Implementation of the Primary Reform Curriculum

Unit 1:
Philosophy of Curriculum Reform

Learning Contract

The learning contract is only required if you seek academic credit through PNGEI in the off campus or on campus face-to-face modes.

The learning contract provided here is a sample for your information. Your assessor can provide a copy of the learning contract with PNGEI insignia on it, if you need one.
Learning Contract

The learning contract is only required if you seek academic credit through PNGEI in the off campus or on campus face-to-face modes.

The learning contract provided here is a sample for your information. Your assessor can provide a copy of the learning contract with PNGEI insignia on it, if you need one.

Use this learning contract as a basis for discussion with your assessor before you begin this unit. During this discussion, you and your assessor will negotiate

• the outcomes, if any, for which you may seek recognition of prior learning (RPL)
• the activities you will undertake on your own
• the activities you will undertake as part of a group or with a colleague
• the evidence you will show to prove that you have met the learning outcomes of the unit.

Complete the learning contract before you start your study. Give a copy of the agreed contract to your assessor.

Any later changes to the contract should be re-negotiated, agreed upon, and signed off by both you and the assessor.

Learner: Name: ____________________________ Sex: M/F □  
File No. ____________________________  
Position/Location: ____________________________

Assessor: Name: ____________________________ Sex: M/F □  
File No. ____________________________  
Position/Location: ____________________________

Expected completion date: ____________________________
Assessor Information

Who is an assessor?

An assessor is
- a skilled, experienced educator with professional integrity and good communication skills
- acceptable to PNGEI as an assessor
- trained by TE&SD, PNGEI and Curriculum Reform Implementation Project (CRIP)
- nominated by the provinces, PNGEI and its regional centres.

What does the assessor do?

The assessor
- facilitates learning in the off-campus and on-campus face-to-face modes of delivery
- approves and overviews your learning contract and any learning plan
- checks that you have met all assessment requirements prior to assessment
- assesses your work
- recommends an achievement grade to PNGEI.

How do you find the nearest assessor?

- A list of assessors’ names, locations and contact details will be made available, as they are selected and trained. This list will come out in a PNGEI Circular to provincial education offices, district offices and head teachers of schools directly.
- This list will also be published in the PNGEI Handbook.

How are assessors paid?

- PNGEI-approved assessors trained to work in the off campus face-to-face mode (that is, external assessors) are paid an incentive as determined by the Governing Council of PNGEI.
- PNGEI staff trained as assessors to work in the on campus face-to-face mode (that is, internal assessors) work to PNGEI conditions.
Unit learning outcomes

Learning outcomes are statements about the knowledge, understandings, and skills you achieve and are able to demonstrate when you complete the unit. These statements are learner-centred and written in terms that enable them to be demonstrated, assessed or measured.

On successful completion of this unit, you, the learner, can (are able to)

1. describe key aspects of the education reform in Papua New Guinea
2. describe the aims of the primary curriculum for Papua New Guinea
3. explain the links between elementary, lower primary and upper primary sectors of schooling in terms of learning areas, subjects and focuses
4. evaluate outcomes-based education as a system for planning, programming, teaching, learning, assessing and reporting student learning
5. assist a colleague to understand why Papua New Guinea is shifting its focus from objectives to outcomes
6. identify the implications of the advice provided in the *National Curriculum Statement* (2002) and the *National Assessment and Reporting Policy, 2003*, for your role
7. develop and share an action plan to adapt your duties and responsibilities to the reform requirements on your work situation.
Recognition of Prior Learning (RPL)

This is the evidence I will use to show which learning outcomes I can already meet (recognition of prior learning or RPL). In the table below, I’ll list the number of the outcomes for which I am seeking RPL and the evidence I can show.

(For example, if you are claiming RPL for Outcome 1 you must demonstrate your knowledge of the key aspects of education reform in PNG. This can be done in a number of ways such as a presentation to a group on this topic, an article you had written for publication on the topic, studies you have undertaken previously. You should discuss this with your assessor. If the evidence you submit is satisfactory to the assessor, you will be deemed to have achieved Outcome 1.)

<table>
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<tr>
<th>Learning</th>
<th>Evidence</th>
<th>Satisfactory Outcome</th>
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We agree to the evidence to be provided as detailed above and we acknowledge RPL as certified above.

Learner Date

Assessor Date
## Negotiated Tasks

Now that there is agreement about recognition of prior learning, I undertake to do the tasks as listed below.

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<thead>
<tr>
<th>On my own</th>
<th>With others</th>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

We agree the tasks to be undertaken are as detailed above.

Learner: ........................................... Date: ________________________

Assessor: ........................................... Date: ________________________
Evidence for Assessment

This is the evidence I will use to show I have met the other learning outcomes when I have completed the unit. In the table below, I’ll list the number of the outcomes for which I am showing evidence (for example, Outcomes 1, 2, 3 and so on) and the kind of evidence I’ll use to show achievement of these outcomes.

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>Evidence</th>
<th>Satisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Assessor’s signature)</td>
</tr>
</tbody>
</table>

We agree that the evidence to be produced for assessment of learning outcomes is as detailed above.

Learner ___________________________ Date ________________

Assessor __________________________ Date ________________
Declaration

I declare that the work I have provided as evidence of achieving outcomes is as negotiated with my assessor and is consistent with my learning contract.

I have acknowledged all sources of information that have contributed to my work.

Learner…………………………………............ Date……………………………

Assessor…………………………………............ Date……………………………

Sources of information (Human, print, other):

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Unit 1:
Philosophy of Curriculum Reform

Final Steps
Final Steps ...

Now you are almost ready to start work. To make sure you’ve done all your preparation for seeking academic credit, check the following.

<table>
<thead>
<tr>
<th></th>
<th>Yes/No/</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have done the initial self assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have negotiated my learning contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have access to the resource documents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand what I should do to meet the assessment requirements</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you have said ‘yes’ or ‘not applicable’, as appropriate, to the above, then you are ready to get into the modules of this unit. If you have said ‘no’ to any of them, then you should re-consider why you are doing this unit.

The modules are written in a ‘self-learning mode’. You are guided each step of the way. Follow the instructions and you will be able to complete the modules.

If you are seeking academic credit, then remember that you must work with an assessor or enrol for external assessment. The colleague you work with can also be your learning partner, mentor, critical friend or facilitator (imparter).

Gut lak long stadi bilong yu
PRIMARY REFORM CURRICULUM

UNIT 1: PHILOSOPHY OF CURRICULUM REFORM