Unit 6: Learning and Teaching for Outcomes

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 6: Learning and Teaching for Outcomes

## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretary’s Message</td>
<td>iv</td>
</tr>
<tr>
<td>How to use the study guide</td>
<td>1-4</td>
</tr>
<tr>
<td><strong>Unit introduction</strong></td>
<td>1-13</td>
</tr>
<tr>
<td>- The Context</td>
<td></td>
</tr>
<tr>
<td>- Duration</td>
<td></td>
</tr>
<tr>
<td>- Prerequisites</td>
<td></td>
</tr>
<tr>
<td>- Learning tips</td>
<td></td>
</tr>
<tr>
<td>- The learning model</td>
<td></td>
</tr>
<tr>
<td>- Resources</td>
<td></td>
</tr>
<tr>
<td>- About this unit</td>
<td></td>
</tr>
<tr>
<td>- The context</td>
<td></td>
</tr>
<tr>
<td>- Unit learning outcomes</td>
<td></td>
</tr>
<tr>
<td>- The modules</td>
<td></td>
</tr>
<tr>
<td>- References</td>
<td></td>
</tr>
<tr>
<td>Module 1: Learning and Teaching Fundamentals</td>
<td>1-54</td>
</tr>
<tr>
<td>Module 2: Learning in an Outcomes Environment</td>
<td>1-40</td>
</tr>
<tr>
<td>Module 3: Learning and Teaching Strategies</td>
<td>1-34</td>
</tr>
<tr>
<td>Module 4: The Classroom</td>
<td>1-46</td>
</tr>
<tr>
<td>Unit Summary</td>
<td>1-3</td>
</tr>
<tr>
<td>Where to go from here?</td>
<td>1</td>
</tr>
<tr>
<td>Accreditation and Certification</td>
<td>1-11</td>
</tr>
<tr>
<td>- The Context</td>
<td></td>
</tr>
<tr>
<td>- Some definitions</td>
<td></td>
</tr>
<tr>
<td>- Ways this unit can assist you</td>
<td></td>
</tr>
<tr>
<td>- Accreditation requirements</td>
<td></td>
</tr>
<tr>
<td>- Certification requirements</td>
<td></td>
</tr>
<tr>
<td>- Self-assessment of progress</td>
<td></td>
</tr>
<tr>
<td>Learning Contract</td>
<td>1-8</td>
</tr>
<tr>
<td>Final Steps</td>
<td>1-2</td>
</tr>
</tbody>
</table>
Secretary’s message

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 13 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 1-13 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?

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

Step 4
Read page 12 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 4-9 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

Your head teacher, inspector, inservice coordinator, reform coordinator or provincial materials supply officer may be able to help

When you have them, go to Step 8

Yes

Step 8
You are ready to start
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.
Study Pathway Planner for Improving Qualifications...

Step 1
Read pages 1-13 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
Do self-assessment on pages 10-11 of Accreditation and Certification

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 4-9 of Unit Introduction?
- Yes
- No

Step 8
You are ready to start

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
Your head teacher, inspector, inservice coordinator, reform coordinator or provincial materials supply officer may be able to help

When you have them, go to step 8

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 4 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 4-9. 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.
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>
</tr>
</thead>
<tbody>
<tr>
<td>- Find out more about</td>
<td></td>
</tr>
<tr>
<td>- Use information to create knowledge</td>
<td></td>
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<tr>
<td>- Do tasks</td>
<td></td>
</tr>
<tr>
<td>- Practise skills</td>
<td></td>
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<tr>
<td>- Apply new knowledge</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Share (Tok tok wantaim)</th>
<th>Reflect (Tingim bek)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Talk to others about what you are learning</td>
<td></td>
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<tr>
<td>- Discuss findings with a colleague, learning partner or group acting as a critical friend(s). Learning in cooperation increases 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>
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</tr>
<tr>
<td>- Think critically about what you have learnt, done and shared</td>
<td></td>
</tr>
<tr>
<td>- Think about changes to your practice</td>
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<tr>
<td>- Think about changes to your beliefs and attitudes</td>
<td></td>
</tr>
</tbody>
</table>

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.


5. Arts, Lower Primary Syllabus, 2004, Department of Education, Papua New Guinea


11. Health, Lower Primary Syllabus, 2004
Department of Education,
Papua New Guinea

12. Health Teacher Guide, Lower Primary,
2004, Department of Education,
Papua New Guinea

13. Language, Upper Primary Syllabus, 2003,
Department of Education,
Papua New Guinea

14. Language Teachers Guide, Upper Primary,
2003, Department of Education,
Papua New Guinea

15. Language, Lower Primary Syllabus, 2004,
Department of Education,
Papua New Guinea

16. Language Teacher Guide, Lower Primary,
2004, Department of Education,
Papua New Guinea
<table>
<thead>
<tr>
<th>Number</th>
<th>Title 1</th>
<th>Title 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>17. Making a Living, Upper Primary Syllabus 2003, Department of Education, Papua New Guinea</td>
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<tr>
<td>No.</td>
<td>Title</td>
<td>Author</td>
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</tr>
<tr>
<td>23</td>
<td>Personal Development, Upper Primary</td>
<td>Department of Education</td>
</tr>
<tr>
<td>24</td>
<td>Personal Development Teachers Guide, Upper Primary</td>
<td>Department of Education</td>
</tr>
<tr>
<td>25</td>
<td>Physical Education, Lower Primary</td>
<td>Department of Education</td>
</tr>
<tr>
<td>26</td>
<td>Physical Education Teacher Guide, Lower Primary</td>
<td>Department of Education</td>
</tr>
<tr>
<td>27</td>
<td>Science, Upper Primary Syllabus</td>
<td>Department of Education</td>
</tr>
</tbody>
</table>
29. Social Science, Upper Primary Syllabus, 2003, Department of Education, Papua New Guinea


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 Learning and Teaching. It tries to make explicit the notion that students learn in different ways and teachers should use a variety of appropriate learning activities and teaching methods to give all students a chance to learn.

The unit also makes links with the National Curriculum Statement (2002) and the primary teacher guides in relation to learning and teaching methods. You explore how the focus in learning and teaching is shifting from teacher directed to more student-centered approaches.

You also consider how learning and teaching is fostered in an outcomes environment, and the implications for your practice in your current position. The main object of the last part of this unit is to help you increase your familiarity with the range of teaching approaches and methods that are available to teachers today.
Unit learning outcomes

Learning outcomes are statements about the knowledge, understandings, and skills you achieve and be able to demonstrate when you have worked through the unit. These statements are learner-centred and written in a way that enables them to be demonstrated, assessed or measured.

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

1. explain the relationship between the parts of the teaching-learning cycle
2. analyse the advice the National Curriculum Statement (2002), the primary syllabuses and the teacher guides provide about learning and teaching
3. demonstrate examples of student-centred learning approaches and teaching strategies
4. discuss ways of implementing a range of classroom management tools
5. discuss the characteristics of a classroom that fosters student-centred learning
6. explain to others, issues relating to access, equity and participation (inclusive curriculum) and the implications for classroom practice
7. explain the implications of Gardner’s Multiple Intelligences and Bloom’s levels of thinking for classroom practice.
The Modules

In order to help you achieve unit learning outcomes, *Unit 6: Learning and Teaching for Outcomes* is developed through four modules.

The modules are not linked. This means that you can do them in any order you like.

**Module 1: learning and teaching fundamentals**
This introductory module, provides general background information about teaching and learning approaches/practices promoted by the primary reform curriculum. You compare the learning and teaching approaches promoted by the *National Curriculum Statement* (2002), the primary syllabuses and the teacher guides and make connections to your current practices.

**Module 2: Learning in an outcomes environment**
In this module you explore the current perspectives on the nature of learning promoted in an outcomes environment. You compare and contrast the different learning styles then and current. You further explore how the current learning styles are shifting to student-centred approaches and how these approaches may be fostered in an outcomes learning and teaching environment. The module further focuses on the two areas that are responsive to a wide range of learning styles—Gardner’s multiple intelligences and Bloom’s six thinking levels—and the implications for classroom practice. You consolidate your understanding by making connections between the wide range of learning styles and your current practice in the classroom.

**Module 3: Learning and teaching strategies**
The focus for this module is to give you an insight into the range of teaching methods/approaches compatible with those promoted by the reform curriculum and consider ways of applying the use of these in your classroom.

This helps you to identify areas in your practice you can modify so that your own learning and teaching approaches are compatible with the requirements of the curriculum reform.

**Module 4: The classroom**
In this module you explore the characteristics that foster student-centred learning in the classroom, while taking into consideration other classroom issues such as equity, access, participation and so on, and ideas for addressing them.

You further explore ideas about how to successfully manage student-centred classrooms and the importance of working with parents and community in order to promote student-centred learning approaches.

This helps you manage your classrooms more effectively, thus implementing the student-centred approaches successfully.
References

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

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


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


McGarth, H and Noble, T, 1995, *Seven ways at once,* Longman, Australia


Papua New Guinea Education Institute, 2000, *Teaching and Learning in the primary school Foundation Course*, Papua New Guinea
Unit 6: Learning and Teaching for Outcomes

Module 1: Learning and Teaching Fundamentals

Contents

<table>
<thead>
<tr>
<th></th>
<th>Page/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Introduction</td>
<td>2</td>
</tr>
<tr>
<td>Module Learning Outcomes</td>
<td>3</td>
</tr>
<tr>
<td>Section 1: The Context</td>
<td>4</td>
</tr>
<tr>
<td>Section 2: Learning and Teaching: What Do the National Curriculum Statement, Syllabuses and Teachers Guides Say?</td>
<td>12</td>
</tr>
<tr>
<td>Section 3: Learning and Teaching in an Outcomes Environment</td>
<td>28</td>
</tr>
<tr>
<td>Section 4: Learning and Teaching Practices in Your School</td>
<td>38</td>
</tr>
<tr>
<td>Module Summary (and additional space for your notes)</td>
<td>44</td>
</tr>
<tr>
<td>Additional reading</td>
<td>47</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 1
Learning and Teaching Fundamentals

Module Introduction

Welcome to Module 1: Learning and Teaching Fundamentals

In the current reform of education, one change that most directly affects the classroom is the adoption of reform curriculum materials. The primary syllabuses promote the practices and philosophy of ‘Outcomes-based Education’. Outcomes-based education places the learner and their needs as the ‘hub’ of curriculum planning and teaching. Lessons can now be directed to help students develop specific identified outcomes (per syllabus) using whatever context best suits outcome development and student interest.

Choices about what to teach are some of the most important decisions that teachers make. While the National Curriculum Statement and the primary syllabus gives general guidance, teachers make the final decisions for day-to-day instruction. Enhanced student performance is anticipated as students become more engaged in areas of interest and their own learning.

This module begins by helping you understand the context of learning and teaching practices compatible with outcomes-based education. We do this by exploring what the National Curriculum Statement and the primary syllabuses and teachers guides say in relation to learning and teaching.

To do this module you need access to all primary syllabuses and teacher guides, the National Curriculum Statement. These are shown on pages 4-9 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.
Module Learning Outcomes

When you have worked through this module, you, the learner, can:

1. demonstrate your understanding of outcomes-based education
2. explain the relationship between the parts of the teaching and learning cycle
3. compare and contrast key messages on learning and teaching each key curriculum document promotes (National Curriculum Statement, syllabuses, teacher guides)
4. discuss and apply the learning and teaching principles in your practice
5. identify areas of change within your own learning and teaching practices and construct a plan of action to implement these changes
6. apply a range of student-centred learning and teaching strategies each syllabus and teacher guide promotes.
Section 1: The Context

Read these notes
Concerns that the education system cannot adequately prepare students for life and work in the 21st Century have prompted people across the globe to explore new ways of designing education. The shift toward outcome-based education reflects a belief that the best way for individuals and organizations to get where they’re going is first to determine where they are and where they want to be – then plan backwards to determine the best way to get from here to there.

Proponents of the outcomes approach in education assume there are many ways to arrive at the same results: the important thing is that students do, in fact, achieve them.

1.1 What is an outcomes-based education?

According to the National Curriculum Statement (page 5):

An outcomes-based curriculum identifies the knowledge, skills, attitudes and values that all students should achieve or demonstrate at a particular grade in a particular subject.

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

What it means here is that teachers, either individually or collaboratively, have the flexibility to devise programs and units of work that meet the differing needs of students at all levels of schooling in a broad range of settings in Papua New Guinea.

Furthermore, 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 focusing on learning processes, knowledge of students and their lives, methods of teaching and classroom management, and the design of materials, plans and programmes all for the purpose of facilitating learning.

Primary Inservice Unit 1, Philosophy of Curriculum Reform: Module 2 – page 47)
Think about the learning processes with which you engage your students.

- Record your thoughts here.

- To what extent are your decisions about instructions guided by a consideration of the use of the most appropriate approach or teaching method that will enhance students’ efforts to achieve the desired end results of education?

- What are the implications of outcomes approach for your current practice?

_HINT: Be honest. If you are still uncertain, re-read the information again before responding._

**One of the five practices of OBE mentioned in Unit 1, Module 2 (pages 49-50) is to “deliver instruction (i.e., teach/learn with outcomes in focus). This involves:**

- making sure students have the necessary prerequisite knowledge and skills at the start of instruction

- acknowledging students’ prior learning and providing more challenging work for such students

- 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
Unit 6  Learning and Teaching for outcomes

- 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.

If you wish to learn more about the concept of OBE, read Primary Inservice Unit 1, Philosophy of Curriculum Reform: Module 2: Section 2 (pages 43-46) and Section 3 (pages 47-50).

Think about these questions in the context of what you have read above and respond to each.

- How do you make the purpose for learning clear to students?

- How do you organise a range of learning experiences to allow time for individual students to grasp new concepts?

- What opportunities do you provide for independent as well as collaborative learning?

- What opportunities do you give your students to engage in meaningful and challenging tasks?

- How do the learning experiences you provide recognise students’ levels of development and facilitate their progress to the next level?

HINT: Personal responses are required on the basis of your current practices.

1.2 The challenge to learning and teaching

Read these notes

In an OBE approach, you cannot assume that all students will learn equally well from one particular strategy such as small group discussion, and you cannot assume that all students will learn the same things in any fixed period of time.

If you are to help all students to achieve the outcomes related to what you teach, you must be flexible in the way that you teach and in the expectations that you have for each student at any particular time.
You must accept that, in most lessons, students will be at different stages of learning and, therefore, that they will be concurrently working towards different short-term outcomes.

In order to help each of the students in your class (within the constraints of a traditional school system), you will need to be innovative, and you will probably find that you will not be using whole-class instruction very often.

One way to be flexible is to create an organisational structure that will allow:

- some whole-class instruction (for example, to revise prerequisite knowledge and to outline new areas of study)
- some group instruction (for students who are at equivalent stages in their progress towards common outcomes)
- some individual instruction (for students who are learning substantially faster or more slowly than others in the class)

When teaching is focused on students’ achievement of particular outcomes, it is necessary to consider the knowledge, skills, attitudes and conceptions that students have prior to instruction.

Consider your students’ developmental level and the other factors that influence the rate at which they learn and record your response to each question.

• What particular factors influence your approach to teaching?

• Why is it significant that these factors be considered?

• How do you accommodate different learning styles, and paces, in your classroom?
• How is students’ learning made continuous from one developmental phase to the next?

_HINT: Personal responses are required on the basis of your current practices._

Complete the PMI chart on what you have learned so far about learning and teaching in an outcomes environment.

• In the plus column, list down three positive points/encouraging things about learning and teaching practices. In the minus column, list three negative points.

• In the last column, list down three interesting things about learning and teaching practices in an outcomes environment.

<table>
<thead>
<tr>
<th>Plus</th>
<th>Minus</th>
<th>Interesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
<td>1.</td>
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<td>2.</td>
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<tr>
<td>3.</td>
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</tbody>
</table>

Share your completed chart with a colleague and discuss the contents of each column.

• Write down the differences and similarities you identify in your charts and any issues here.
1.3 The Revised Teaching and Learning cycle

Read these notes and discuss the questions in each of the parts of the teaching and learning cycle.

The teaching and learning cycle, shown here, has three parts. If you look at the highlighted part – teaching and learning – in this diagram, you will see five questions which a teacher is likely to consider as learning and teaching takes place in the classroom. There may be other questions teachers ask themselves from time to time.

**The Revised Teaching and Learning Cycle**

**PLANNING and PROGRAMMING**
Where can I find out about:
- the students?
- what to teach?
- what resources are available?
- an appropriate learning model?
- assessment requirements?
- sharing student achievement information/progress?

**TEACHING and LEARNING**
What will tell me:
- what to teach each day?
- how to teach?
- if what I am doing is working?
- whether all students are progressing?
- who needs help?

**ASSESSING and REPORTING**
What will tell me:
- what I need to assess?
- how to assess?
- how to find out if students are progressing?
- how to report information about student learning?
- if what I’m doing fits in with the rest of the school?

Through these five questions, the teacher thinks about not only what to teach, but also about what learning and teaching strategies (models) to use, whether the approaches studied are effective. Student progress is paramount in the teacher’s mind.

Think about the questions in the teaching and learning component of the teaching and learning cycle, then write down your thoughts here.
• Think about the relationship between the three parts of the teaching and learning cycle. What implications does this have for your practice? Record your thoughts here.

HINT: Choose some information from the 3 parts of the teaching and learning cycle to help you respond.

1.4 The foundations for refining current teaching practices

Read these notes and discuss with a colleague

One of the purposes of education is to provide children with the skills and knowledge needed to function capably as adults. With the world changing rapidly, the abilities acquired in schools today need to be reassessed, as do the ways in which students are expected to learn. And when the content of the curriculum changes, ways in which the curriculum is delivered must change correspondingly.

Effective teaching and effective student learning have been a central focus of current educational reform movements. It is with quality teaching in mind that we review and attempt to consolidate empirically-supported effective teaching principles from diverse theories (behavioural, cognitive, social-learning, etc.) The reform curriculum calls for learning to be an interactive process, and for students to be actively involved in tasks that are achievable, useful, relevant, and challenging. In this context, we acknowledge the need for teachers to understand the range and complexity of teaching approaches the reform curriculum requires.

Reflect on what you have read and respond to these questions. Record your thoughts here:

• What type of teaching approaches do you currently use in your classroom?

• Why?

• What factors have caused you to create your present teaching style?
• How can you build into your classroom practice a range of teaching strategies as recommended by the primary syllabuses and teachers guides?

• What is your main goal for your students?

• Is there anything you would like to change about your teaching? If yes, list one.

• What have you done about changing it?

• How do you keep up-to-date in your teaching? (reading, research, workshops)

• Is the content that you teach relevant to students’ needs? (Do you update and prune?)

*HINT: Relate the information you read to your current practice. Respond on the basis of this.*
Section 2: Learning and teaching: what do the National Curriculum Statement, syllabuses and teachers guides say?

2.1. What does the National Curriculum Statement (2002) say?

Read Section 5.4 of the National Curriculum Statement, pages 25 – 29.

The major messages about learning and teaching are listed under each of the areas listed in this mind map.

Summarise the information you have read in the form of a mind map.

- Complete the mind map below by identifying key ideas

HINT: Information from the reading will help you complete your mind map.
Use your mind map to share the information with a group of colleagues.

- Discuss the implications this information has for your practices. Record your discussion points here.

2.2. What do the syllabuses and teachers guides say?

The primary syllabuses, grades 3 – 8 provide advice on learning and teaching approaches in an outcomes environment.

- Read the indicated pages of each syllabus and teacher guide.
  Upper Primary Arts Syllabus: pages 5-7,
  Upper Primary Arts Teachers Guide: pages 7-9
  Lower Primary Arts Syllabus: pages 7-10
  Lower Primary Arts Teacher Guide: pages 7-12

- List new ideas, concepts or information about this subject.

Think about the following aspects of learning and teaching described in the primary Arts teacher guide.

What are the implications for your current practice? Record your thoughts here regarding:

- student-centred learning (UP, page 7; LP, pages 7-9)

- placing emphasis on skills development within the Arts subject
  (UP, page 7)
- organising and planning (UP, page 8)

- multi-grade (LP, pages 11-12)

HINT: Personal responses are required.

Read the indicated pages of each syllabus and teacher guide and record your responses to the questions that follow.

- Upper Primary Mathematics Syllabus: pages 5-6
- Upper Primary Mathematics Teachers Guide: pages 9-11
- Lower Primary Mathematics Syllabus: pages 5-8
- Lower Primary Mathematics Teacher Guide: pages 9-17

• List the examples of student-centred learning approaches suggested specifically for Mathematics.

• Are you familiar with these approaches? If not, why?

• Think about the implications of this for your practice and record your thoughts here.

• The Mathematics Syllabus emphasises an integrated approach to learning and teaching.
  - Discuss with a colleague, your current teaching practices. To what extent do you use integration in your teaching? List some examples here.

HINT: Relate information you read to your teaching practices and respond appropriately.

There are three learning and teaching approaches recommended for this subject. Read about each approach and study the examples.

Approach 1:
The 5Es teaching and learning approach, (see page 9 of the Science Teacher Guide)

How does this example relate to your practice? Is this something you do?

HINT: The response to this question will depend on your particular situation.

Approach 2:
The interactive teaching and learning approach, (see page 10 of the Science Teacher Guide).

Let us consider outcome 6.2.1 from the strand: Living Things and the sub-strand: Nature of Living Things.

Outcome 6.2.1 reads: identify the basic structure of living things that allow them to function in their environment.

Read the example on pages 10 and 11 of the Science Teacher Guide.

- Work with a colleague to complete the activity and record your responses in the table below.
  - Write examples of what could happen at each phase identified in this approach. Fill in both columns. Your responses should evolve around outcome 6.2.1.

<table>
<thead>
<tr>
<th>Phase of the approach</th>
<th>What can the teacher do?</th>
<th>What can the student do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td></td>
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<tr>
<td>Exploration</td>
<td></td>
<td></td>
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<tr>
<td>Students’ questions</td>
<td></td>
<td></td>
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<tr>
<td>Investigations</td>
<td></td>
<td></td>
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<tr>
<td>Reflections</td>
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</tbody>
</table>
Approach 3

Read about Approach 3: *Predict, Observe, Explain* on pages 11-12 of the Science Teacher Guide.

- List here any new information you have come across.

Remember, these three approaches encourage student-centred learning.

- Think about how you can strengthen the use of these strategies in your classroom teaching. List your thoughts here.

Read pages 8-17 of the Environmental Studies Teacher Guide and record your responses to the questions that follow.

- List the teaching and learning strategies (pages 13-16) that you have not used in your teaching before.

- Describe how you could begin to use some of these new strategies.
Read the following pages.
Upper Primary Social Science Syllabus, pages 4-5,
Upper Primary Social Science Teachers Guide, pages 11-16
Lower primary Community Living Syllabus, pages 7-9
Lower Primary Community Living Teacher Guide, pages 7-13

- Think about these questions and respond to each.
  - What changes do you have to make to accommodate the advice from the Social Science and Community Living syllabuses?

- What are the major challenges you face now? List them here.

HINT: Relate information you read to your teaching practices and respond appropriately.

The Social Science Teacher Guide recommends a range of learning and teaching strategies.

- List 5 of the strategies you are not familiar with in the table below and discuss them with a colleague. Write the implications for your classroom practice in the table.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Implications for my practice</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
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<td>5.</td>
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</tbody>
</table>

HINT: Your response will depend on your personal situation.
• Which of these strategies are also described in the Community Living Teacher Guide?


The Making a Living Syllabus highlights five aspects.

• What are the implications of each for your practices? Think about how you currently address them in your teaching and provide examples. Record your thoughts.
  - Inclusive curriculum
  - Relevance
  - Student-centred learning
  - Lifelong learning
  - Integration

_HINT: Your responses will depend on your individual situation._

_Discuss and compare your responses with a colleague._

• Record the similarities and differences in your responses.
## Unit 6 Learning and Teaching for Outcomes

<table>
<thead>
<tr>
<th>Ways of learning</th>
<th>Implication for my practice</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
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<td>3.</td>
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</tbody>
</table>

The Making a Living Teachers Guide (page 60) provides examples of a range of learning and teaching strategies that promote student-centred learning. This subject also requires teachers to use a range of teaching strategies in their units of work.

Read the information on page 60 and discuss with colleagues and complete this activity.

- Indicate, by ticking, the extent to which you do the following;

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Applicable to you (tick one only)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Often</td>
</tr>
<tr>
<td>a) build on your students’ prior knowledge</td>
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<tr>
<td>b) involve the community and its resources in students’ learning</td>
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<tr>
<td>c) provide opportunities for students to go out into the community to learn</td>
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<tr>
<td>d) provide opportunities for problem solving, decision-making, and taking action</td>
<td></td>
</tr>
<tr>
<td>e) provide students with opportunities to reflect on their own learning: knowledge, skills, values and attitudes</td>
<td></td>
</tr>
</tbody>
</table>

**HINT:** Relate information you read to your teaching practices and respond appropriately.
Reflect on your own needs.

- Think about the areas you need support in and write your thoughts here.

_HINT: Revisit your current classroom practices and respond on the basis of your personal situation._

The Making a Living Teacher Guide (pages 60-66) further recommends the use of the process skills of investigation, implementation and evaluation and a range of common teaching methods as essential and fundamental for teaching Making a Living.

- Which of the methods described on these pages have you used in your teaching?

- How could you increase the number of methods you use?

_HINT: Personal responses are required here depending on your situation._

Read the Upper Primary Personal Development Syllabus, pages 5-7 and Upper Primary Personal Development Teachers Guide, pages 5-11.

- The Personal Development syllabus recommends specific teaching strategies which will support the achievement of subject outcomes.

- Read the information (pages 5-7) and meet with a group of colleagues who are not studying this inservice unit.

- Tell them about the recommended teaching strategies for personal development.

- Discuss and provide examples of how the following aspects are/can be addressed in your teaching. Record your discussion points and examples regarding:
  - inclusive curriculum
  - relevance
- student-centred learning

- integration.

Read the section about teaching strategies in the Personal Development Syllabus, (page 7) and think about the implications this information has for your current teaching practice.

• List three implications here.

1. 

2. 

3. 

In order to enhance effective and efficient learning for students, Personal Development promotes three approaches.

• Read about each approach in the Personal Development Teacher Guide (pages 5-9).

List the four steps in this approach; provide examples of each and indicate (tick yes/no) if you have ever used each in your teaching.

<table>
<thead>
<tr>
<th></th>
<th>Steps involved</th>
<th>Examples</th>
<th>Yes/No</th>
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<tbody>
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<tr>
<td>4</td>
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</tbody>
</table>
Approach 2: Inquiry-based approach (pages 7-8)
This approach is presented in four phases and sequenced in a way that student activities progress as they move from one phase to another.

List the four phases, write a brief description of what is involved in each phase and indicate (tick yes/no) if you have ever done this in your teaching.

<table>
<thead>
<tr>
<th>Brief description of the phase</th>
<th>Some examples</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<td>4</td>
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</tbody>
</table>

Approach 3: Three-step approach: Orienting, Enhancing, Synthesising (OES) (page 9) There are three phases to this approach.

List the three phases, write a brief description of what is involved in each phase and indicate (tick yes/no) if you have ever done this in your teaching.

<table>
<thead>
<tr>
<th>Brief description of the phase</th>
<th>Some examples</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

HINT: Relate information you read to your current teaching practice. Examples will come from your professional experience.

Share the information you have read with a group of colleagues (perhaps in the form of a short presentation).

- Discuss and list any issues raised and possible solutions suggested relating to the use of these approaches.
The Personal Development Teacher Guide also provides some information about *learning and teaching tools and examples* to support the strategies.

- Read about these (pages 10-11).

**Read the Health Syllabus, pages 6-10, and the Health Teacher Guide, pages 8-16.**

- Describe to a colleague how you could use the ‘guided discovery’ approach in teaching.

- Prepare notes to explain to parents what happens in a *Health-Promoting School* (Teacher Guide pages 15-16)

**Read the Physical Education Syllabus, pages 6-7 and the Physical Education Teacher Guide, pages 6-10.**

- Describe how the teaching approach ‘*practice and rehearsal*’ can be used in physical education lessons.
Read

Upper Primary Language Syllabus: pages 6-10,
Upper Primary Language Teacher Guide: pages 14-31
Lower Primary Language Syllabus: pages 6-7
Lower primary Language Teacher Guide: pages 10-35

• What are the specific messages relating to the learning and teaching of language subject?

• Make some notes to help you explain what the language syllabuses say about integration.

Read about the whole language approach for teaching of language in upper primary grades (UP Language Teacher Guide, page 3).

• What does this mean for your teaching? Provide an example to help explain your thinking.

The language teacher guides provide information on a number of strategies.

<table>
<thead>
<tr>
<th>Lower Primary Teacher Guide</th>
<th>Upper Primary Teacher Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilingual and bridging strategies; pages 10-11</td>
<td>General strategies; pages 14-18</td>
</tr>
<tr>
<td>Language functions and genres; pages 11-29</td>
<td>Language strategies; pages 18-19</td>
</tr>
<tr>
<td>Learning strategies; pages 30-33</td>
<td>Reading strategies; pages 19-27</td>
</tr>
<tr>
<td>Reading strategies; page 33</td>
<td>Writing strategies; pages 28-31</td>
</tr>
<tr>
<td>Writing strategies; pages 34-35</td>
<td></td>
</tr>
</tbody>
</table>
• Read the sections on teaching writing again (LP, pages 34-35; UP, pages 28-31). What could you tell a colleague about the links between lower and upper primary strategies for teaching writing?

Think about the generalist and integrated approaches to learning and teaching that are encouraged by the primary syllabuses and the implications for your current teaching practice?

• List some implications here.

Do a survey of your colleagues to find out the range of learning and teaching approaches they currently use.

• You can do this by arranging to observe their lessons, or look at their daily lesson plans/programs for each subject. (If you are a non-teacher, you may wish to examine a teacher’s plans and programs).

• In your survey, look for evidence of the range of teaching strategies and learning approaches used.

• Record your findings in this table.

<table>
<thead>
<tr>
<th>Colleagues</th>
<th>The approach(es) used</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>C 1</td>
<td></td>
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<tr>
<td>C 2</td>
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<td>C 3</td>
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<td>C 4</td>
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<td>C 5</td>
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</table>
HINT: Your survey will give you the information to complete the table. How you collect the information will vary with your situation.

- What can you comment about your findings? In your statement indicate the commonly used approaches. Explain why you think this is the case.

HINT: Your comments should focus on the commonly used approaches found in your survey, the reasons why they are commonly used and consistency with reform requirements.

Share your findings with your colleagues.

- Discuss the extent to which upper primary teachers in your school are implementing the teaching approaches in the reform curriculum. Use these questions to guide your discussion.

1. Are school practices contradictory or consistent with the reform requirements?
2. What perceptions do you have about learning and teaching?
3. What do your findings reflect about teachers’ teaching practices/philosophies?
4. List reasons why this is happening.
5. What changes could be made at:
   - class level?
   - school level?

HINT: Your discussion should try to find reasons for what exists.
Record three (3) critical changes you will need to make, to become more consistent with the expectations of the reform curriculum in terms of your teaching approaches.

<table>
<thead>
<tr>
<th>I need to change</th>
</tr>
</thead>
<tbody>
<tr>
<td>From ....</td>
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<tr>
<td>1.</td>
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</table>

Reflect on how you will acquire the knowledge and skills to make the changes you plan to make.

- For each change you wish to make, list up to four (4) steps you intend to take.

<table>
<thead>
<tr>
<th>Changes I plan to make</th>
<th>My plan of action …</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
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</table>
3.1 Learning and teaching principles

The Department of Education promotes the practices and philosophy of ‘Outcomes-based Education’. Outcomes-based education places the learner and their needs as the focus of curriculum planning and learning and teaching methods used in our lessons.

We may well claim that this is nothing new for effective teachers and this may be true, however…lessons can now be directed to helping students develop specific identified outcomes (per syllabus) using whatever context we believe best suits outcome development and student interest.

We must acknowledge that today we face particular challenges in teaching. Our teaching approaches should lead students away from passive, textbook-based, rote and prescriptive learning. We need to lead and guide our students so that they realise that the first resource in understanding a concept, or solving a problem, or undertaking a project, is not a textbook or section of a manual – it is in their brain, their own intelligence and their own capability for independent thought and analysis. This is the huge intellectual and thinking development that we must facilitate.

In brief, the teacher’s role is that of a “guide by the side”, a facilitator of learning.

Think about the sort of judgements you will have to make to ensure an outcomes approach to education is embedded in your programs, units of work and activities.

These questions will help focus your thoughts.

- Is there a clear focus on learning outcomes in your programs?

- Are students aware of the reasons for learning what they are learning?

- Do you apply current knowledge of child and adolescent development?

- Are students given opportunities for self-assessment so that they can monitor their own progress?
Unit 6 Learning and Teaching for outcomes

- Do you use a wide range of teaching strategies used to cater for the developmental differences, prior knowledge and skills of students?

- Do you have a learner-centred approach to learning and teaching?

- Are different backgrounds, interests, prior understandings, experiences and learning styles of students valued?

- Are students given opportunities to progress and demonstrate learning outcomes in more than one context?

- Is there sufficient flexibility in the curriculum to cater for the different characteristics and learning needs of students?

- Does your planning of experiences promote learning and assessment at the same time?

- Do you have clear expectations of student performance?

HINT: Your responses should be based on your personal situation.

Overall, a student-centred approach to learning and teaching is advocated for by the National Curriculum Statement, the primary syllabuses and the primary teachers guides.

We can strengthen our understanding of learner-centred approach to learning and teaching by looking at five key principles.
Read each principle, answer the reflective questions and discuss them with a colleague.

1. **Effective 'learning and teaching' is based on understanding of the learner.**

Understanding the learner means:
- we recognise and support the holistic development of the learner – intellectually, emotionally, spiritually, socially and physically.
- we identify and build on the learner’s past and present experiences
- we take into account the learner’s needs, interests and abilities
- we recognise the learner’s preferred learning styles, and help them develop other learning styles.

List three examples of what you currently do that shows you understand your students:

1. 
2. 
3. 

• To what extent do you use your students’ past experiences and current understanding as a base on which to build your lessons?

• If your current practices are not consistent with this principle, what two things could you do to address this principle?

1. 
2. 

_HINT: Personal responses are required here._

2. **Effective 'learning and teaching' requires active construction of meaning**

Active construction of meaning happens when learners:
- actively participate in learning activities
- explore and use concrete materials
- build knowledge and understanding by linking the unknown to the known
- make choices in their own learning
- take appropriate risks and learn from ‘mistakes’
- develop a range of thinking skills and processes.

How do you link students’ knowledge and understanding from the known to the unknown?

- How do you provide choice in your students’ learning?

- How do you react when a student makes a ‘mistake’?

- How do you treat students’ opinions and ideas, or their feelings on the content or process of your lessons?

HINT: Personal responses are required here.

3. **Effective 'learning and teaching' enhances and is enhanced by a supportive and challenging environment.**

   In a supportive and challenging environment there is an emphasis on:
   - care, support and quality relationships based on mutual respect
   - the valuing of effort, building self-esteem, and encouraging learners to be responsible and independent
   - experiences that motivate learners and promote enjoyment, achievement and satisfaction from learning
   - experiences that reflect an appreciation of different views, opinions, values and beliefs.

Describe the environment (feeling) in your classroom?
• Ask 3 of your students to describe the feeling in your classroom. Record their responses here.

Student 1:

Student 2:

Student 3:

• Compare your description and your students’ responses and make a comment? What implications does this have for you and your students?

_HINT: A personal response is required here._

4. **Effective 'learning and teaching' is enhanced through worthwhile learning partnerships.**

Worthwhile learning partnerships develop when:
- students and teachers seek knowledge together
- teachers are active learners, and learners have the opportunity to teach others
- students and teachers show their enthusiasm and commitment to learning
- school administrators, parents and other members of the community participate in the learning and teaching process.

List two examples to demonstrate the opportunities your school provides for parents and members of the community to participate in the learning and teaching processes?

1.

2.
• How do you help students to use newly acquired skills and knowledge in real life situations in their own community? List 2 examples:

1. 

2. 

HINT: Personal responses are required here.

5. **Effective 'learning and teaching' shapes and responds to social and cultural contexts.**

Social and cultural contexts are the events, people, language, behaviour, attitudes, beliefs, that occur in one particular place. So, for example, the social and cultural context of a village in the remote Highlands of PNG is different from the social and cultural context of a settlement in Port Moresby, and that is different from the context of a bank in Goroka, or a church in Boroko. In each of these places we talk, dress, and behave in different ways.

Learners should

• learn how to behave, act, talk, write, and dress in a range of social and cultural contexts

• learn that all social and cultural contexts are valuable and important

• learn to value the diversity of Papua New Guinea societies.

**How do you promote diversity and inclusivity in and beyond your classroom?**

• In what ways is your teaching fair to all students?

• Might some aspects of your teaching be unfair to some students? How might you address this?
Describe what a current classroom would look like if effective learning and teaching principles were being used. Record your thoughts in this diagram.

Looks like ……..  
Feels like……  
Sounds like……

HINT: Personal response is required here.

The statements you have just read represent a summary of the principles of student-centred learning and teaching.

- Now analyse your own beliefs and assumptions about learning and teaching. To do this, circle one marker only (strongly disagree or agree or strongly disagree) on each line.

For example, consider statement 1: Learning and teaching are central to all that happens in schools. If you strongly disagree with this statement, then you should circle “strongly disagree”, the first marker. If you agree with the statement but still have some questions about this statement, then you should circle “agree”, the second marker. If you feel that this statement is very true and that is what all teachers should go by, then you should circle “strongly agree”, the third marker.
Learning and teaching are central to all that happens in my school.

Strongly disagree  agree  strongly agree

Learning and teaching are not restricted to what goes on in single classrooms.

Strongly disagree  agree  strongly agree

Knowledge about curriculum, learning and teaching, and assessment must be continually shared and exchanged.

Strongly disagree  agree  strongly agree

Up-to-date ideas and developments must be continually researched, debated and adapted through on-going professional learning.

Strongly disagree  agree  strongly agree

Professional learning must occur in the workplace.

Strongly disagree  agree  strongly agree

Teachers can provide evidence of and make sound judgements about the quality of their own teaching and the quality of learning in their classrooms.

Strongly disagree  agree  strongly agree

Individual personal learning is enhanced by collaborative effort.

Strongly disagree  agree  strongly agree

_HINT:_ Your analysis will depend very much on your own personal and professional perceptions about learning and teaching approaches.

**Share your analysis with a colleague or other teachers and discuss any issues that arise.**

- Record how you addressed the issues that arose.

_HINT:_ Your discussions should focus on strategies to address issues which arise.
Gathering information on student learning.

Work with a colleague to develop and share responses to the following:

- Discuss how well your students currently achieve:
  - academically
  - socially
  - attitudinally?

- Assess your achievement as their teachers by giving a score out of ten for each measure.
  - Academically * ____/ 10____
  - Socially * ____/ 10____
  - Attitudinally * ____/ 10____

**HINT: Your response here will depend on many factors in your school.**

- On what basis are your perceptions formed?

- How do you know the extent to which you achieve these results (outcomes)? List three things as evidence.
  1.
  2.
  3.

- Does this reflect an ideal of what you would like to work towards?

**HINT: Personal response is required here.**

How could you change the learning activities for your students, in order to achieve your ideal objective?

- Place under headings “more” or “less”.

More……. | Less …..
---|---
Eg: more small group work. | Less copying notes from the board.

HINT: Your response here will be based on your professional judgement, partly depending on questions 1 & 2.

* How might you go about getting the information that will help you more accurately answer these questions?

HINT: Personal responses are required here.

Organise a session with your school colleagues and share the information about student learning you obtained.

* What are the implications for your school? For example, are there specific groups of students with significantly different achievement levels?

* What do the results show about the school’s learning and teaching practices/philosophies?

* What improvements might you need to make at:
  - class level?
  - grade level?
  - school level?

HINT: Your responses will be based on the context/situation of your school and your responses to the above questions.
4.1 Where are we?

Consider these questions and record your thoughts here. Share your answers with a colleague.

- What changes have there been in your thinking about learning and teaching? Why?

- What is the connection between what you do and what you say you do?

- What changes have there been in your thinking about:
  - what you teach?
  - how you teach it?
  - what you construct as learning opportunities for students?
  - how you prepare students for life-long learning?

- What do you now think about the importance of quality instruction and student learning outcomes?
- What do you now think about the learning and teaching relationships you have with others?

- What do you now think about the learning environment?

_HINT: Reflect on your current practices – personal responses are required for all questions._

**Now read these notes and discuss with a colleague**

The diagram may help you to locate yourself and your school in terms of current reform requirements and what you would like to gain from changes to current practices. As you consider these questions you might ask why things have come to be the way they are.

- What do we/I believe...?
- What has happened? What has changed?
- What will help inform us?
- Departmental policies and procedures?
- What existing condition will help us bring about changes to learning and teaching practices?
- What do we/I know?
- Teaching and Learning
- What do we/I do?
- What else can we/I do?
- Where does it fit into teaching and learning?
- What are my/our current practice(s)?
- Currently? Ideally?
- What are my outcomes?
- What has happened?
- What schooling is about
- about the learning process
- my role as a teacher/supervisor
Use this checklist to observe the following within your school (if you are a non-teacher do your observation at a nearby school).

<table>
<thead>
<tr>
<th>Practice</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>The role of the teacher in the classroom</td>
<td></td>
</tr>
<tr>
<td>The role of the students</td>
<td></td>
</tr>
<tr>
<td>The types of subject material used</td>
<td></td>
</tr>
<tr>
<td>The teaching strategies used</td>
<td></td>
</tr>
<tr>
<td>The sort of learning experiences provided</td>
<td></td>
</tr>
<tr>
<td>Your colleagues’ underlying assumptions/perceptions about how their students learn</td>
<td></td>
</tr>
<tr>
<td>Ways learning outcomes are assessed</td>
<td></td>
</tr>
<tr>
<td>Do they reflect the learning tasks and teaching approaches used in class?</td>
<td></td>
</tr>
<tr>
<td>Implications for unsuccessful students</td>
<td></td>
</tr>
<tr>
<td>Power sharing in the classroom</td>
<td></td>
</tr>
<tr>
<td>Features of classroom communication (one way? Inclusive?)</td>
<td></td>
</tr>
<tr>
<td>Way classrooms are laid out (common pattern or varied?)</td>
<td></td>
</tr>
</tbody>
</table>

*HINT: All responses will be based on your observations.*

**Share your findings with a colleague.**

- Do your findings indicate your school is already using reform strategies?
• Prepare a mini presentation for your other colleagues in a staff meeting. Plan to talk about the 5 most important things you have found out. Use this space below to organise your notes. You may wish to do it as a mind map or another structure. This is alright.

i

ii

iii

iv

v

**HINT:** Your notes should be organised in the form of main ideas and support details.

### 4.2 Teachers and Change

**Read the following**

Change in schools is not an easy process. Michael Fullan (1993) describes the process of school reform as being like “changing the tyre on a car while the car is still moving”. However it is necessary as well as inevitable. We constantly face change both on a professional and personal level.

The key to getting any group to change their behaviour is to ensure that they have a common mental map, not only of what is being envisaged but also of why the old ways will no longer suffice. We need to think of change as a journey, and learn to manage the journey.

An important aspect of managing change to learning and teaching is assessing the present situation.

**Work with a colleague to analyse the current situation in your school.**

You may find the following chart helpful for your analysis.

List three (3) aspects of the present situation which you would KEEP.

1. ☐

2. ☐

3. ☐
List three (3) aspects of the present situation which you would THROW AWAY.

1. ☐
2. ☐
3. ☐

List three (3) aspects which do not exist in the present situation which should be CREATED.

1. ☐
2. ☐
3. ☐

_HINT: Your response will depend on your assessment and professional judgement in relation to your current situation within your school or a school you supervise._

**Discuss with your colleagues how to create the 3 aspects you indicated.**

Use this form to help you plan.

<table>
<thead>
<tr>
<th>Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed actions – WHAT do you need to do?</td>
</tr>
<tr>
<td>Timeline – WHEN do you intend to do it?</td>
</tr>
<tr>
<td>WHO will initiate the action?</td>
</tr>
<tr>
<td>WHAT resources do you need or will you use?</td>
</tr>
</tbody>
</table>

_HINT: This will very much depend on your professional intention and the initiatives you would like to take._
Share your responses and your proposed action plan with colleagues and discuss.

Note down significant comments/points made.
Module Summary

In this module you have covered the following main points:

• the contexts of learning and teaching
• what the curriculum documents says about learning and teaching
• specific student-centred approaches that can be used in different subject areas
• some effective learning and teaching principles
• analyses of learning and teaching practices in your school.

In doing so you have worked your way through parts of the fourteen primary syllabuses and teacher guides and done many tasks and activities specially designed to make it easy for you to learn and apply your learning.

You should by now have developed certain knowledge, understandings, insights and skills to help you to perform well in your work.

Now that you have completed the module, let us review your learning. Check whether you feel you have achieved the outcomes of the module.

<table>
<thead>
<tr>
<th>Can you:</th>
<th>Yes/No/ Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. demonstrate your understanding of outcomes-based education?</td>
<td></td>
</tr>
<tr>
<td>2. explain the relationship between the parts of the teaching and learning cycle?</td>
<td></td>
</tr>
<tr>
<td>3. compare and contrast key messages on learning and teaching each key curriculum document (<em>National Curriculum Statement, syllabuses, teacher guides</em>) promotes?</td>
<td></td>
</tr>
<tr>
<td>4. discuss and apply a range of learning and teaching principles in your practice?</td>
<td></td>
</tr>
<tr>
<td>5. identify areas of change within your own learning and teaching practices and construct a plan of action to implement these changes?</td>
<td></td>
</tr>
<tr>
<td>6. apply a range of student-centred teaching strategies each syllabus and teacher guide promotes?</td>
<td></td>
</tr>
</tbody>
</table>
Remember these module outcomes help you to achieve the outcomes of the unit. Refer back to the outcomes of the unit (listed in the Unit Introduction) and reflect on where you are in relation to those outcomes.

If you are 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
(Additional reading – read in your own time)

Read 'Why Teachers Must Become Change Agents' by Fullan at the end of this module.

After you have read the text, consider the following:
• The changes which you would make to the way teachers are trained.

• The difference are you trying to make personally?

On page 5 of the reading, Fullan lists 12 guidelines for action consistent with this new idea of “interactive professionalism”.

• Select 1 or 2 actions which you could implement tomorrow. If you adopted this course of action what would be the result?

Quality Teaching Quality Learning

Read the two statements below and discuss with a colleague.

Statement 1: Quality teaching

Quality teaching depends on the creation of a learning environment which promotes and supports the learning of all students.

Quality teaching is characterised by teachers who:

1. can apply a wide range of organisational and instructional strategies which are appropriate to student learning styles and educational need, the subject being taught and the school context, in a disciplined and purposeful classroom;

2. monitor individual student learning, give relevant feedback, and plan according to the needs of individuals, groups and the whole class;

3. foster independent learning, give students a language to talk about it, and expect students to take responsibility for their learning;

4. develop ethical relationships based on good communication skills and respect for all students as individuals and expect respect in return;

5. have an up-to-date knowledge and are enthusiastic proponents of curriculum content;
6. critically reflect on their practice and demonstrate their commitment to lifelong learning by seeking out appropriate collegial support and furthering their own professional development;

7. can articulate their beliefs about learning and the principles which underpin their teaching;

8. believe in the ability of all students to learn, expect all students to learn, and convey this expectation to individuals, the class and the community;

9. actively engage students in learning experiences which deal with issues which students regard as important to their lives, and

10. help students to make connections, to understand relationships within and between content areas, and to deal with general principles as well as individual facts.


Statement 2: Quality learning

Quality learning is most likely to occur when students:

1. are actively and purposefully engaged with issues and activities they regard as important;

2. are willing to try new things and to take risks in applying strategies to solve problems in conventional and creative ways;

3. are involved in the planning of their work and take responsibility for their learning;

4. believe in their own ability to learn and are able to discuss and reflect on their own learning;

5. want to work independently and in groups and are given support to do so;

6. are committed and self-motivated and can seek out appropriate resources and help from a variety of sources;

7. appreciate, respect and care for the concerns, views and feelings of others; know that their family and community members are welcome in the school;
8. are able to discuss issues which are said to underpin our society such as democracy, fairness, equity and justice and relate them to their own lives; and

9. are able to develop positive relationships with teachers, students and other adults.

Quality teaching quality learning, A discussion paper for teachers, principles and parents, NSW Department of School Education (1994)
Teacher education programs must help teaching candidates to link the moral purpose that influences them with the tools that will prepare them to engage in productive change.

Teaching at its core is a moral profession. Scratch a good teacher and you will find a moral purpose. At the Faculty of Education, University of Toronto, we recently examined why people enter the teaching profession (Stiegelbauer 1992). In a random sample of 20 percent of 1,100 student teachers, the most frequently mentioned theme was “to make a difference in the lives of students”. Of course, such statements cannot be taken at face value because people have a variety of motives for becoming teachers. Nonetheless, there is a strong kernel of truth to this conclusion.

What happens in teacher preparation, the early years of teaching, and throughout the career, however, is another story. Those with a clear sense of moral purpose often become disheartened, and those with a limited sense of purpose are never asked to demonstrate their commitment. In an extensive study of teacher burnout, Farber (1991) identifies the devastating effects of the growing “sense of inconsequentiality” that often accompanies the teacher’s career. Many teachers, says Farber, begin their careers “with a sense that their work is socially meaningful and will yield great personal satisfactions”. This sense dissipates, however, as “the inevitable difficulties of teaching...interact with personal issues and vulnerabilities, as well as social pressure and values, to engender a sense of frustration and force a reassessment of the possibilities of the job and the investment one wants to make in it” (1991, p.36).

A Natural Alliance

Certainly calls for reestablishing the moral foundation of teaching are warranted, but increased commitment to the one-to-one and classroom levels alone is a recipe for moral martyrdom. To have any chance of making teaching a noble and effective profession- and this is my theme here-teachers must combine the mantle of moral purpose with the skills of change agentry.

Moral purpose and change agentry, at first glance, appear to be strange bedfellows. On closer examination they are natural allies (Fullan 1993).

Stated more directly, moral purpose—or making a difference—concerns bringing about improvements. It is, in other words, a change theme. In addition to the need to make moral purpose more explicit, educators need the tools to engage in change productively. Moral purpose keeps teachers close to the needs of children and youth; change agentry causes them to develop better strategies for accomplishing their moral goals.

Those skilled in change appreciate its volatile character, and they explicitly seek ideas for coping with and influencing change toward some desired ends. I see four core capacities for building greater change capacity: personal vision-building, inquiry, mastery and collaboration (see Senge 1990 and Fullan 1993). Each of these has its institutional counterpart: shared vision-building: organisational structures, norms, and practices of inquiry: the development of increased repertoires of skills and know-how among organisational members: and collaborative work cultures.

But we are facing a huge dilemma. On the one hand, schools are expected to engage in continuous renewal, and change expectations are constantly swirling around them. On the other hand, the way teachers are trained, the way the educational hierarchy operates, and the way political decision makers treat educators results in a system that is more likely to retain the status quo. One way out of this quandary is to make explicit the goals and skills of change agentry, one that works simultaneously on individual and institutional development. One cannot wait for the other.

Personal Vision-Building

Working on personal vision means examining and re-examining why we came into teaching. Asking ‘What difference am I trying to make personally?’ is a good place to start.

For most of us, the reasons are there, but possibly buried. For the beginning teacher, they may be
underdeveloped. It is time to make them front and centre. Block emphasises that “creating a vision forces us to take a stand for a preferred future” (1987, p.102). To articulate our vision of the future “is to come out of the closet with our doubts about the organisation and the way it operates” (p. 105).

Personal vision comes from within. It gives meaning to work, and it exists independently of the organisation or group we happen to be in. Once it gets going, it is not as private as it sounds. Especially moral occupations like teaching, the more one takes the risk to express personal purpose, the more kindred spirits one will find. Paradoxically, personal purpose is the route to organisational change. When it is diminished, we see in its place group-think and a continual stream of fragmented, surface changes acquired uncritically and easily discarded.

Inquiry
All four capacities of change are intimately interrelated and mutually reinforcing. The second one—inquiry—indicates that formation and enactment of personal purpose are not static matters but, rather, a perennial quest. Pascale (1990) captures this precisely: “The essential activity for keeping our paradigm current is persistent questioning. I will use the term inquiry. Inquiry is the engine of vitality and self-renewal” (p. 14, emphasis in original).

Inquiry is necessary for forming and reforming personal purpose. While the latter comes from within, it must be fueled by information and ideas in the environment. Inquiry means internalising norms, habits and techniques for continuous learning. For the beginner, learning is critical because of its formative timing. Lifelong learning is essential because in complex, everchanging societies mental maps “cease to fit the territory” (Pascale 1990, p. 13). Teachers as change agents are career-long learners, without which they would not be able to stimulate students to be continuous learners.

Mastery
Mastery is a third crucial ingredient. People behave their way into new visions and ideas, not just think their way into them. Mastery is obviously necessary for effectiveness, but it is also means for achieving deeper understanding. New mind-sets arise from mastery as much as the reverse.

It has long been known that expertise is central to successful change, so it is surprising how little attention we pay to it beyond one-shot workshops and disconnected training. Mastery involves strong initial teacher education and career-long staff development, but when we place it in the perspective of comprehensive change, it is much more than this. Beyond exposure to new ideas, we have to know where they fit, and we have to become skilled in them, not just like them.

To be effective at change, mastery is essential both in relation to specific innovations and personal habit.

Collaboration
There is a ceiling effect to how much we can learn if we keep to ourselves (Fullan and Hargreaves 1991). The ability to collaborate on both a small and large scale is becoming one of the core requisites of postmodern society. Personal strength, as long as it is open-minded (that is, inquiry-oriented), goes hand in hand with effective collaboration—in fact, without personal strength collaboration will be more form than content. Personal and group mastery thrive on each other in learning organisations.

In sum, the moral purpose of teaching must be reconceptualised as a change theme. Moral purpose without change agency is martyrdom; change agency without moral purpose is change for the sake of change. In combination, not only are they effective in getting things done, but they are good at getting the fight things done. The implications for teacher education and for redesigning schools are profound.

Societies Missed Opportunity
Despite the rhetoric about teacher education today, there does not seem to be a real belief that investing in teacher education will yield results. With all the problems demanding immediate solution, it is easy to overlook a preventative strategy that would take several years to have an impact.

Currently, teacher education—from initial preparation throughout the career—is not geared toward continuous learning. Teacher education has
the honour of being the worst problem and the best solution in education. The absence of a strong publicly stated knowledge base allows the misconception to continue that any smart person can teach. After visiting 14 colleges of education across the US, Kramer (1992) concludes:

Everything (a person) needs to know about how to teach could be learned by intelligent people in a single summer of well-planned instruction (p.24).

In a twisted way, there is some truth to this observation. It is true in the sense that many people did and still do take such minimal instruction and manage to have a career in teaching. It is true also that some people with a strong summer program would end up knowing as much or more as others who take a yearlong program. In her journey, Kramer found plenty of examples of moral purpose-caring people, committed to social equality.

What she found wanting was an emphasis on knowledge and understanding. Caring and competence are of course not mutually exclusive (indeed this is the point), but they can seem that way when the knowledge base is so poorly formulated.

Teacher education institutions themselves must take responsibility for their current reputation as laggards rather than leaders of educational reform. I will not take up the critical area of recruitment and selection in the profession (for the best discussion, see Schlechty 1990, chapter 1). In many ways an “if you build it, they will come” strategy is called for. It is self-defeating to seek candidates who turn out to be better than the programs they enter. What is needed is a combination of selection criteria that focus on academics as well as experience (related, for example, to moral purpose), sponsorship for underrepresented groups, and a damn good program.

Teacher educators like other would-be change agents must take some initiative themselves. Examples are now happening on several fronts. At the University of Toronto, we embarked on a major reform effort in 1988. With a faculty of some 90 staff and 1,100 full-time students in a one year post-baccalaureate teacher certification program, we piloted a number of field-based options in partnerships with school systems (see University of Toronto, Making a Difference Video, 1992a). In 1991 I prepared a paper for our strategic planning committee, taking as a starting point the following premise: Faculties of Education should not advocate things for teachers and schools that they are not capable of practicing themselves. Using a hypothetical “best of education in the country” metaphor, I suggested that such a faculty would:

1. commit itself to producing teachers who are agents of educational and social improvement,
2. commit itself to continuous improvement through program innovation and evaluation,
3. value and practice exemplary teaching,
4. engage in constant inquiry,
5. model and develop lifelong learning among staff and students,
6. model and develop collaboration among staff and students,
7. be respected and engaged as a vital part of the university as a whole,
8. form partnerships with schools and other agencies,
9. be visible and valued internationally in a way that contributes locally and globally,
10. work collaboratively to build regional, national, and international networks (Fullan 1991).

To illustrate, consider items 3 and 6. It would seem self-evident that faculties of education would stand for exemplary teaching among their own staff. Faculties of education have some excellent (and poor) teachers, but I would venture to say that hardly any have effective institutional mechanisms for improving their own teaching. Regarding item 6, many faculties of education advocate collaborative work culture for schools, and some
participate in professional development schools. This leads to two embarrassing questions. First, to what extent are teacher preparation programs designed so that student teachers deliberately develop and practice the habits and skills of collaboration? Even more embarrassing, to what extent do university professors (arts and science, as well as education) value and practice collaboration in their own teaching and scholarship?

**Key Images for Teacher Participation**

With such guiding principles, and some experience with them through our pilot projects, we at the University of Toronto have recently begun redesigning the entire teacher preparation program. Our Restructuring Committee has proposed that:

Every teacher should be knowledgeable about, committed to, and skilled in:

1. working with all students in an equitable, effective and caring manner by respecting diversity in relation to ethnicity, race, gender, and special needs of each learner;
2. be active learners who continuously seek, assess, apply, and communicate knowledge as reflective practitioners throughout their careers;
3. developing and applying knowledge of curriculum, instruction, principles of learning, and evaluation needed to implement and monitor effective and evolving programs for all learners;
4. initiating, valuing and practicing collaboration and partnerships with students, colleagues, parents, community, government, and social and business agencies;
5. appreciating and practicing the principles, ethics and legal responsibilities of teaching as a profession;
6. developing a personal philosophy of teaching which is informed by and contributes to the organisational, community, societal and global contexts of education (University of Toronto, B.Ed. Restructuring Committee, 1992b).

We are now developing the actual program, curriculum and teaching designs. Everything we know about the complexities of change applies in spades to the reform of higher education institutions. Nonetheless, after four years, we have made good progress and look forward to the next four years as the ones when more comprehensive and systematic reform will be put into place (see also Goodlad 1991, Howey 1992, and the third report of the Holmes Group, forthcoming).

To summarise: Faculties of education must redesign their programs to focus directly on developing the beginner’s knowledge base for effective teaching and the knowledge base for changing the conditions that affect teaching. Sarason puts it this way: "Is it asking too much of preparatory programs to prepare their students for a 'real world' which they must understand and seek to change if as persons and professionals they are to grow, not only to survive" (in press, p. 252, my emphasis). Goodlad (1991) asks a similar question: “Are a large percentage of these educators thoroughly grounded in the knowledge and skills required to bring about meaningful change?” (p. 4). The new standard for the future is that every teacher must strive to become effective at managing change.

**Redesigning Schools**

One of the main reasons that restructuring has failed so far is that there is no underlying conception that groups what would happen within new structures. Restructuring has caused changes in participation, in governance, and in other formal aspects of the organisation, but in the majority of cases, it has not affected the teaching-learning core and professional culture (Berends 1992, Fullan 1993). To restructure is not to reculture.

The professional teacher, to be effective, must become a career-long learner of more sophisticated pedagogies and technologies and be able to form and reform productive collaborations with colleagues, parents, community agencies, businesses, and others. The teacher of the future, in other words, must be equally at home in the classroom and in working with others to bring about continuous improvements.
I do not have the space to elaborate—indeed many of the details have not been worked out. The general directions, however, are clear. In terms of pedagogy, the works of Gardner (1991) and Sizer (1992)—in developing approaches to teaching for understanding—exemplify the kinds of knowledge and skills that teachers must develop and enlarge upon throughout their careers.

Beyond better pedagogy, the teacher of the future must actively improve the conditions for learning in his or her immediate environments. Put one way, teachers will never improve learning in the classroom (or whatever the direct learning environment) unless they also help improve conditions that surround that classroom. Andy Hargreaves and I developed 12 guidelines for action consistent with this new conception of “interactive professionalism:”

1. locate, listen to, and articulate your inner voice;
2. practice reflection in action, on action, and about action;
3. develop a risk-taking mentality;
4. trust processes as well as people;
5. appreciate the total personal in working with others;
6. commit to working with colleagues;
7. seek variety and avoid balkanization;
8. redefine your role to extend beyond the classroom;
9. balance work and life;
10. push and support principals and other administrators to develop interactive professionalism;
11. commit to continuous improvement and perpetual learning;
12. monitor and strengthen the connection between your development and students’ development (Fullan and Hargreaves 1991).

We also developed eight guidelines for principals that focus their energies on reculturing the school toward greater interactive professionalism to make a difference in the educational lives of students. However, as important as principals can be, they are a diversion (and perhaps a liability) as far as new conceptions of the professional teacher are concerned. In a real sense, what gives the contemporary principalship inflated importance is the absence of leadership opportunities on the part of teachers (Fullan 1993).

A New Professionalism

Teacher professionalism is at a threshold. Moral purpose and change agency are implicit in what good teaching and effective change are about, but as yet they are society’s (and teaching’s) great untapped resources for radical and continuous improvement. We need to go public with a new rationale for why teaching and teacher development are fundamental to the future of society.

Above all, we need action that links initial teacher preparation and continuous teacher development based on moral purpose and change agency with the corresponding restructuring of universities and schools and their relationships. Systems don’t change by themselves. Rather, the actions of individuals and small groups working on new conceptions intersect to produce breakthroughs (Fullan 1993). New conceptions, once mobilised, become new paradigms. The new paradigm for teacher professionalism synthesises the forces of moral purpose and change agency.

References


Fullan, M (1991) “The Best Faculty of Education in the Country: A Fable” Submitted to the Strategic Planning Committee. Faculty of Education, University of Toronto.
Module 1  Learning and Teaching Fundamentals  Page 54


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## Unit 6: Learning and Teaching for Outcomes

### Module 2: Learning in an Outcomes Environment

<table>
<thead>
<tr>
<th>Contents</th>
<th>Page/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Introduction</td>
<td>2</td>
</tr>
<tr>
<td>Module Learning Outcomes</td>
<td>3</td>
</tr>
<tr>
<td>Section 1: How Learning Takes Place</td>
<td>4</td>
</tr>
<tr>
<td>Section 2: Gardner’s Multiple Intelligences</td>
<td>17</td>
</tr>
<tr>
<td>Section 3: Bloom’s Six Thinking levels</td>
<td>28</td>
</tr>
<tr>
<td>Module Summary (and additional space for your notes)</td>
<td>37</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
Learning in an outcomes environment

Module Introduction

Welcome to Module 2: Learning in an outcomes environment

The primary aim of all teachers should be to help their students to learn. In order to do this effectively, it is obviously necessary to know something about the nature of the learning process, ie. to have a basic grounding in the psychology of learning.

Furthermore, it is generally recognised that different students have different learning needs, bring their own individual knowledge, experiences and resources to the learning process, and learn in different ways. Thus, it is necessary for all teachers to be more aware of these different possible learning styles, and to try to cater for as many of them as possible when planning their instructional programs.

This module begins with a discussion of what learning involves. We examine some of the different learning styles that students can adopt and acknowledge the importance of appreciating that students have their own individual needs, and bring their own individual knowledge, skills, attitudes and values to the learning process.

The next section of the module focuses on Gardner’s Multiple Intelligences. This helps you understand that different students have different strengths and they learn best in different ways. The final section of the module focuses on Bloom’s six levels of thinking and how these skills align with the emphasis being placed by the education reform on the development of children’s thinking skills as well as their independent learning skills, problem solving skills, and language skills. This helps you learn ways of developing these skills and their application in classrooms.

You do not need access to any specific resource shown on pages 4-9 of the Unit Introduction, however, all activities in this module relate to your current practice.

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.
Module Learning Outcomes

When you have worked through this module, you, the learner, can:

1. compare and contrast a range of learning styles
2. demonstrate understanding of student-centred learning approaches
3. discuss the implications of the current required learning styles for classroom practice
4. apply the principles of student-centred learning to classroom practice or monitor their application in the school you supervise
5. explain Gardner’s multiple intelligences and relate its relevance to learning and teaching in your classroom or in the school(s) you supervise
6. explain Bloom’s levels of thinking and relate its relevance to learning and teaching in your classroom or in the school(s) you supervise
7. apply your knowledge of Gardner’s Multiple Intelligences and Bloom’s six levels of thinking to plan or monitor activities in your classroom.
Section 1: How learning takes place

1.1 Shifting the paradigm

Learning styles

Read these notes and discuss with a colleague

Learners can and do learn in more than one way, but all of us have ways of learning which we prefer. There are learning activities that are familiar and comfortable, useful, relevant and non-threatening. We have ways of learning that we like because they work for us.

Differences in learning styles result from psychological and cognitive factors. They are not determined by ethnic or cultural background. In all language, culture and ethnic groups you will find a range of learning styles.

It is important for you to develop an awareness of your own learning preferences. Often these are habitual (we do them unconsciously). We need to develop those strategies of learning which work best for us. We also need to become familiar with other ways of learning, approaches and strategies which others use.

Each student has a preferred style of learning, and these vary. Some prefer to learn by interacting with other people, talking and listening, watching and listening to the media or working with others in a group. These types of learners are called communicative learners.

Some may prefer to learn by having an expert (for example, you as the teacher) explain things, writing things down, following instructions or using course books or study notes. These types of learners are authority-focussed learners.

Others may prefer to learn by participating in activities, using visuals, being involved in hands-on activities (learning by doing) or experimenting. These types of learners are the concrete learners.

And yet another group may prefer to learn by studying rules and regulations, learning alone and analysing mistakes and solving problems. These types are analytical learners.

Think about how you approach learning something new. These questions will help you.

• What strategies have you used in past learning situations?

• How have you organised your learning in the past?
• How have you tried to maximise learning success for yourself?

• How have you tried to remember things?

• What things have made learning difficult for you?

• When have you abandoned an attempt to learn? Why?

• How would you classify yourself as a learner?

_HINT: Personal responses would indicate your reflective thinking._

**Initiate a group discussion to evaluate your current practice.**

Use these discussion questions to analyse current programs to determine areas for improvement. Write down your discussion points and provide examples where necessary. Does your current practice:

- reflect new learning and growth? How?

- represent quality education? How?

- reflect enhancement of student achievement? How?

What do you think are the issues that need to be addressed most urgently within your teaching practice or that of the teachers you supervise? Write down your thoughts here.
1.2 Informal Learning Styles

Read these notes and discuss with your colleague.

A lot of our learning in life takes place informally. It is not in a school type of situation and it is not necessarily done in planned ways, for example, babies learning to speak, learning to walk, children learning to swim or paddle a canoe or climb a tree.

A study of how traditional Aborigines in the north of Australia come to know things has listed major features of their informal learning as:

- learning by observing
- learning by doing
- learning by imitation
- learning by personal trial-and-error
- learning through real-life performances
- learning by persistence and repetition.

More Aboriginal learning is done by looking and watching than through talk. They learn by doing rather than by hearing or talking about things. They learn by imitating or copying, and by trying things for themselves rather than by someone combining talk and demonstration. They learn more through doing real things rather than practising in pretend situations. When they are learning they do something over and over again until they do it well.

Informal styles of learning apply to cultures other than the Australian Aborigines. In Papua New Guinea in village situations people use similar informal learning styles.

How can you use features of informal learning in your teaching practice? Record your responses here:

<table>
<thead>
<tr>
<th>Features of informal learning</th>
<th>Implications for my practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>learning by observing</td>
<td></td>
</tr>
<tr>
<td>learning by doing</td>
<td></td>
</tr>
<tr>
<td>learning by imitating</td>
<td></td>
</tr>
<tr>
<td>learning by personal trial and error</td>
<td></td>
</tr>
<tr>
<td>learning through real-life performance</td>
<td></td>
</tr>
<tr>
<td>learning by persistence and repetition</td>
<td></td>
</tr>
</tbody>
</table>

HINT: Responses are based on personal experience
1.3 Formal Learning Styles

In Papua New Guinea, the schooling process is one that has come from a western country and brings with it Western ideas of formal learning. Formal learning is often done in situations that are not natural, and with lots of talking, for example, talking in a classroom about how to catch fish rather than going down to the beach or river and doing it.

It is important when teaching people that we understand how they best learn things and try and fit our way of teaching to their preferred ways of learning. However, if children are going to continue with their learning by entering into formal schooling, then teachers need to think of ways to help the students move from being competent learners within their own culture to being competent learners in a western style education system.

A particular style of learning is neither ‘good’ nor ‘bad’ in itself, but is effective if it helps the learner adapt to his or her situation and survive in it.

Observe a group of children at play or in school. Make a list of the kinds of things you think they are learning consciously (eg. learning the rules of a game) and unconsciously (eg. accidental injury). Record your observations in this table.

<table>
<thead>
<tr>
<th>Things learned consciously</th>
<th>Things learned unconsciously</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: Information recorded here is based on personal/individual observations.
Based on your observations, discuss the following questions and write down your responses for each.

- How are all students’ learning experiences enriched by inclusion of their cultures and languages in the curriculum?

- How are links made between in-school learning and out-of-school learning?

- Are students given opportunities to learn through play, hands-on and concrete experiences?

- How do students demonstrate their learning (outcomes)?

Share your responses with a colleague with whom you talked earlier. Talk about ways you can bring about change to the way students are engaged in learning activities. List the most obvious changes you feel you need to make.

HINT: Your list here will be the record of your discussions.

1.4 Learning in the past

Read the notes about learning in the past and discuss with a colleague.

In the past, the goal of education was to get students to know information. Curriculum described the information that students needed to know at each level, as well as the particular skills and attitudes that were related to this information. Teachers encouraged students to memorise the information, and learn the related skills and attitudes, so that they could pass examinations.

(Papua New Guinea Education Institute, 2000)
Discuss with a colleague the differences between the approaches to learning in the past and the approaches encouraged by the current outcomes approach.

- Use the points below to guide your discussion:
  - Do you think this is a good way to describe what happened in Papua New Guinea schools before the full reform began? Why?
  - Spend a few minutes describing to each other what your own schooling was like.
  - Next consider the things you learned at college about how to be a teacher.
  - Now talk about your current teaching practices. How do you pass information or knowledge on to students in your classroom?

- Summarise your responses by each of you completing the table below:

<table>
<thead>
<tr>
<th>Own schooling</th>
<th>Learning to be a teacher</th>
<th>Current teaching practices</th>
</tr>
</thead>
</table>

*HINT: Your response would be based on your own experiences.*

Share your table/chart with a your colleague and discuss any differences in your responses.

### 1.5 Current Learning

Read these notes about new ways of learning.

Now-a-days education has a different goal. Because the world is a constantly changing place, people need to keep learning new things throughout their lives. People need to know how to deal with constant change. Now the goal of education is to provide students with the skills to be independent learners, and to keep learning throughout life.
Here is the aim of education in Papua New Guinea:

*The aim of education in Papua New Guinea is to help all children become happy, healthy and useful members of society. Education helps them develop personally and spiritually, so they can lead a fulfilling life. It encourages them to think sensibly for themselves and to respect the thoughts of others. It encourages them to develop as individual members of a community. They learn to communicate with other people through written and spoken language, through mathematics, and through other ways such as pictures, music and movement. They learn how to develop Papua New Guinea’s physical and human resources, for the benefit of all.*

*A philosophy of education for Papua New Guinea says: the overall aims of formal education are to help the student develop the knowledge, skills and attitudes for effective communication, resource development, social development and spiritual development.* (The Primary Curriculum in Papua New Guinea, 1st Edition, 1999, page 9)

If we are to fulfil the aims of education we need to think about what students need to learn at school to prepare them for living in Papua New Guinea in the 21st Century.

**Work with a colleague to brainstorm a list of things that students need to learn at school. Use this chart to organise your list.**

<table>
<thead>
<tr>
<th>What will students have to understand about living in PNG?</th>
<th>What do we want students to learn?</th>
<th>How can we best help students to learn these things?</th>
</tr>
</thead>
</table>

**HINT:** You have read the short text, now make connections between this information and learning in the classroom. Responses will be based on your professional judgement.
Share your chart with a colleague and talk about it.

Use these questions to guide your discussion. Note down any significant points that arise during your discussion.

- What changes in society are impacting on your school community?

- What skills and knowledge will your students need for the future?

- What learning experiences (relating to real life) does your school currently provide?

- What do you believe about how students learn best?

- How do you put these beliefs into practice?

- What classroom practice and planning do you need to do in order to achieve desired learning outcomes?

- What strategies can you use?

1.6 What is student-centred learning?

Read these notes.

Student-centred approaches (also referred to as discovery, inductive learning, or inquiry learning) place a much stronger emphasis on the learner’s role in the learning process. Examples are co-operative learning and student research projects. When you are using student-centred approaches to teaching, you still set the learning agenda but you have much less direct control over what and how students learn.

Student-centred learning is considered a philosophy, as opposed to a methodology, and therefore no two classrooms are alike. Generally speaking, however, a student-centred teacher tries to create an environment which will motivate the children to discover new
skills and knowledge. Teachers are no longer supposed to transfer facts into passive students’ heads but rather facilitate their discovery of relevant information. As a result, teachers rarely stand in front of the class and teach a lesson. Instead, activity centres or stations may be set up around the room with the students moving from station to station, or students might be assigned to work together in groups on a project.

Relatively little whole-class teaching takes place; rather teachers use methods such as peer tutoring, individual and group projects, and teacher conferencing with one student while the rest of the class works alone.

**Work with a colleague to complete this activity.**

Much of the successful complex learning we do in our lives occurs outside of the formal classroom. In this activity, you are going to examine the processes we go through as learners when we learn outside the classroom. You will also consider the role that you as learners play in this learning in relation to the role that others play. By making explicit what you do naturally as learners you can begin to consider the implications for the classroom.

Think of something that you have learned to do. It can be anything – perhaps learning to play a new sport or a musical instrument, learning to use a microwave oven or learning to drive.

- Name the activity and list the steps you went through to learn this.

**Activity:**

**Steps:**

i

ii

iii

iv

v

**Use these reflecting questions as a framework to each write about your learning experience and note (note form) down your thoughts. Do not answer the questions directly.**

- Why did you decide to learn what you did?
- How did you feel about it?
- What was the first thing you did?
- Were you perfect the very first time you had a go at what you were learning?
- What did you do next?
- What did you do when you got stuck?
- Did you spend a lot of time on this task?
- Who did you want to be with you? Why?
• What sort of response/feedback did you want from them?
• What sort of response did you actually get?
• Did it help?
• Why?/Why not?
• What about negative feedback or no response at all? What effect did that have on you as a learner?
• What effect did that have on your desire or intention to continue learning?
• Did you reach a stage when you wanted to demonstrate how good you were?
• When?
• Who did you go to demonstrate this?
• Why?
• How did they respond?
• How did you want them to respond?
• How did you feel then?

HINT: Reflective questions will serve as a guide to writing your paragraph. Do not answer the questions directly.

Together discuss your learning experiences.

• As you listen to each other’s learning experience try to identify any common components in the experiences.

• As well as looking for common phases in your learning processes, consider the attitudes and feelings that you may have both experienced.

Think about some of the learning experiences your students had during a recent program.

• Imagine you were one of the students. How would he/she answer the same reflection questions?

HINT: You have to look from the perspective of a student.
This real life learning is also called *natural learning*. Natural learning can be applied in the classroom. Many of the principles of student-centred learning are based on natural learning, and how people learn in real life.

1.7 What are the implications for yourself in your present role?

**Read these notes and discuss with a colleague**

Learning is not a single process. It is open-ended and exploratory.

Learning must be led by the learners. There is no point in standing in front of your class and talking at them about how they should see the world or where their learning should be going.

Therefore, to improve learning
- use fun, interesting and relevant examples to illustrate a point
- use case studies
- ‘step up’ gradually to activities that are likely to be threatening
- use cooperative group work
- build in flexibility by providing broad learning goals within which students have choice.

We automatically register the familiar while simultaneously searching for and responding to new and different experiences.

So teachers/supervisors as facilitators of learning
- build a stable, familiar learning environment which is high in challenge and discovery
- provide processes to move the learning from:

- **Tacit Knowing** or understanding (saying ‘yes’)
- **Application** (how can I use this? What are the implications of this for .....?)
- **Analysis** (what do I really know/do?)
- **Synthesis** (what are the key ideas?)
- **Evaluation** (how do I know I have learned anything?)
- **Reflection** (how do I feel about what I have learned? What else do I want to learn?)

Learning is an active, on-going process. Follow through is crucial. A series of several lessons – with intervals between lessons in which people have a chance to try things (with some access to help or to other resources) – is much more powerful than even the most stimulating one-shot lesson.
Work with a colleague to complete this activity.

- Collect some previous lesson plans/weekly programs for a theme you have taught. As you examine them, use these questions to guide your discussion.
  - Did you teach topics within your theme in a series of lessons?
  - How did you structure your lessons? Did they follow the learning process indicated here?

- Look at the activities and the methods/strategies you used to teach your lessons.
  - Did these allow for your students to make choices?
  - What sort of activities were used as follow through?
  - Were students given opportunities to discover for themselves in between the series of lessons?
  - Were they given an opportunity to reflect and evaluate?

- Use this table to record examples of what you did at each stage of the learning process.

<table>
<thead>
<tr>
<th>Stages</th>
<th>Examples of what (activities) students did</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNOWING</td>
<td>What knowledge, skills and attitudes in particular were you trying to teach?</td>
</tr>
<tr>
<td>APPLICATION</td>
<td>What did you get your students to do to practise what they learned?</td>
</tr>
<tr>
<td>ANALYSIS</td>
<td>What opportunities did you provide for students to use their existing knowledge to do other activities?</td>
</tr>
<tr>
<td>SYNTHESIS</td>
<td>How did you get your students to expand on their understanding and apply it to real world situation?</td>
</tr>
<tr>
<td>REFLECTION</td>
<td>When in the process of learning and teaching did you allow them to express how they felt about what they learned?</td>
</tr>
<tr>
<td>EVALUATION</td>
<td>Did you provide opportunities for them to evaluate their own work?</td>
</tr>
</tbody>
</table>
HINT: Your own experiences will determine the responses you give for the discussion questions and the table.

Share the information with your other colleagues. Allow them to comment on the examples you have written for each stage. Note down their comments.

Think about some of the learning strategies recommended by some of the teachers guides and write responses to these questions.

• List six strategies here.

• Answer the following questions in relation to the six strategies
  - Are some of these learning processes evident in your teaching?
  
  - How could you successfully integrate these into your classroom work?
  
  - Would you need a mentor to help you do this?
  
  - What are some of the problems you might experience in implementing new practices?
Section 2: Gardner’s Multiple Intelligences

2.1 What is Multiple Intelligence?

Briefly answer the following questions:

- What is your favourite activity (What do you like to do the most?) eg. fish, talk, watch TV, sing, play soccer?
- What was your favourite subject at school?
- What subject did you prefer at college?
- What subject do you most enjoy teaching?
- Is there a link between your answers to the above four questions?

HINT: Personal responses are required.

Read these notes and discuss with a colleague.

For many years there was a strongly-held belief in both psychology and education that intelligence was a single underlying general-ability characteristic which accounted for differences in people’s behaviour and learning. It was assumed that everyone could be classified according to how much intelligence they had or how ‘smart’ they were. About fifteen years ago Howard Gardner began to develop a model of intelligence which abandoned the concept of one single characteristic, and proposed that there were seven different and separate kinds of intelligence. He argued that the concept of a single IQ score to symbolise all that the human mind is capable of puts unnecessary limitations on our understanding of human achievements. His model has had a major impact on the thinking of educators worldwide. Now, for many educators, the significant question is not “how smart is this student?” but “how is this student smart?” In other words “What are the relative strengths of this student across all seven intelligences?” (Papua New Guinea Education Institute, 2000)
Now complete the following with a colleague.

Think of a student in your class who:

<table>
<thead>
<tr>
<th>Category</th>
<th>Name of the student</th>
</tr>
</thead>
<tbody>
<tr>
<td>loves reading, word puzzles, writing stories</td>
<td></td>
</tr>
<tr>
<td>enjoys numbers, patterns and logical problems</td>
<td></td>
</tr>
<tr>
<td>enjoys designing things, drawing and painting</td>
<td></td>
</tr>
<tr>
<td>has many friends throughout the school</td>
<td></td>
</tr>
<tr>
<td>is well-coordinated and enjoys dancing and sport</td>
<td></td>
</tr>
<tr>
<td>constantly beats out rhythm with a pencil or pen and can play different musical instruments</td>
<td></td>
</tr>
<tr>
<td>is a quiet and self-reflective student</td>
<td></td>
</tr>
</tbody>
</table>

Compare your table with the colleague's. Then discuss these questions.

- Did you write the same name for all categories?
- Why not?

_HINT: Responses are determined by information from the table._

Read these notes

This model of multiple intelligences accounts for what we have always known as teachers: that different students have different strengths and that they learn best in different ways. While some students are good readers or are good at mathematics, others will be better at art, sport, music, making friends or leadership. The theory of multiple intelligences is increasing in popularity in educational circles. It confirms teachers’ observations of individual differences.

Most often, verbal and writing skills and skills of logic and mathematics are equated with ‘intelligence’ and other skills are simply seen as ‘talents’ or characteristics. In the past we have tended to equate intelligence with performance on tests and in examinations. The multiple intelligence model presents a useful framework to help teachers identify different kinds of intellectual accomplishment. In contrast to traditional views, Gardner’s view is that all seven areas are equally valued and should be called intelligences. (Papua New Guinea Education Institute, 2000)
Now discuss these questions with a colleague and write down your answers.

- What skills and abilities were valued in traditional society?

- Are the village elders ‘stupid’ if they cannot read or write?

- Think about your mother, grandmother or another female relative who did not get much schooling – what skills did she have to have to plant gardens and, harvest and feed and care for the family?

- Is/was she stupid?

HINT: Personal responses are required here.

Discuss your answers with a colleague. Write down any significant comments.

Read these notes.

Gardner talks about an ‘intelligence’ as the capacity to solve problems faced in everyday living and to produce things that are of value to a culture. Different cultures value different kinds of intelligences. In western culture, verbal intelligence and logical—mathematical intelligence appear to be the two most valued and there will probably always be a greater emphasis on these two because of the way that society operates.

Although we each possess all seven intelligences, each person differs in the specific profile of intelligences they exhibit. For most of us, two or three intelligences are usually stronger than others. These relative differences in intellectual strengths can have a significant impact on our lives, starting with the things that interest us in and out of school and even in our career choices.
The challenge for all teachers in all schools is to provide worthwhile learning activities that acknowledge individual differences in students and develop all students’ skills in all seven intelligences. Identifying students’ relative strengths is the starting point for better teaching.

Gardner’s Model of Seven Intelligences

1. **Word Intelligence**
   This intelligence is related to words and language. When we use words and language to talk to each other, to write letters, read newspapers, tell jokes and stories, we are using our word intelligence. This intelligence dominates Western educational systems and is often referred to as *verbal-linguistic* intelligence.

2. **Logical and Mathematical Intelligence**
   This is often called ‘scientific thinking’. This intelligence deals with numbers and recognising patterns, inductive and deductive thinking and reasoning. We use this intelligence when we count by twos, or know if we’ve received the right change at a store. It is also responsible for the various patterns of thinking we use in our daily lives, such as making lists, setting priorities, and planning for the future.

3. **Vision and Space Intelligence**
   This intelligence relies on the sense of sight and being able to visualise an object in your mind. It includes the ability to create internal mental images/pictures. We use this intelligence when we draw pictures to express our thoughts and feelings or when we decorate a room to create a certain mood. We use it when we use a map successfully to get to some place. This intelligence is often referred to as *visual-spatial* intelligence.

4. **Body Intelligence**
   This intelligence is related to physical movement and the knowing/wisdom of the body. The body knows many things that are not necessarily known by the conscious mind, for example, how to ride a bike, catch an object, or maintain balance while walking. This intelligence also involves the ability to use the body to express emotions and thoughts (such as in dance or body language), to play a sport, and to convey ideas (such as charades, mime and drama). This intelligence is referred to as *kinaesthetic* intelligence.

5. **Musical Intelligence**
   This intelligence is based on the recognition of tonal patterns, including various environmental sounds, and on a sensitivity to rhythm and beats. We use this intelligence when we play music to calm or to stimulate ourselves. This intelligence is involved when you hear a jingle on the radio and find yourself humming it over and over throughout the day. This intelligence is active when we use tone and rhythmic patterns (instrumental, environmental, human) to communicate how we feel and what we believe (for example the sounds of intense joy, fear, excitement and loss).

6. **People Intelligence**
   This intelligence operates primarily through person-to-person relationships.
and communication. We experience using this intelligence most directly whenever we are part of a team, whether it be a sports team, a school committee or a community task force. Through this intelligence we can ‘stand in another’s shoes’ and understand another person’s feelings, fears, hopes and beliefs. This is interpersonal intelligence.

7. **Self Intelligence**

This intelligence relates to inner states of being, self-reflection, meta-cognition (thinking about thinking) and awareness of spiritual realities. This allows us to step back from ourselves and watch ourselves, almost like an outside observer. This involves a knowledge about and an awareness of the internal aspects of self such as feelings and thinking processes. When we experience a sense of unity, have a feeling about our connection with the larger order of things, experience higher states of consciousness, dream of the future in our lives, it is the result of self knowing. This is intrapersonal intelligence.

Are there other sorts of intelligences which are valued in Papua New Guinea?

Choose three (3) of the activities below and work with your colleague to complete them.

<table>
<thead>
<tr>
<th>Type of intelligence</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word intelligence</td>
<td>Write down in your vernacular language a traditional story that you know</td>
</tr>
<tr>
<td>Logical and Mathematical intelligence</td>
<td>Use your traditional counting and number patterns to count a group of objects in your classroom. Explain to someone else what the number and counting patterns are.</td>
</tr>
<tr>
<td>Vision and Space intelligence</td>
<td>Draw a traditional pattern from your area. It could be the pattern used on bilums, mats, baskets, totems, tattoos, or grass skirts</td>
</tr>
<tr>
<td>Body intelligence</td>
<td>Show others in your school the steps of a traditional dance. Show them how women in your area carry things on their heads and/or shoulders (eg. baskets, clay pots, babies)</td>
</tr>
<tr>
<td>Musical intelligence</td>
<td>Show someone from another province how people in your area communicate using sounds but no words (eg. calling in the Highlands, blowing through conch shell). Beat the rhythm used on drums from your area.</td>
</tr>
<tr>
<td>People intelligence</td>
<td>Play “what’s it like to be..?” Discuss what it is like to be a person in a particular situation and then have to negotiate to arrive at three or four decisions about what it might be like to be that person. (Try to use a person who is in a controversial position at the time of the session, eg. Rural/urban teachers; the Prime Minister)</td>
</tr>
<tr>
<td>Self intelligence</td>
<td>Complete the checklist at the end of this section. Which three intelligences are your strengths? Which three intelligences did you choose for this activity? Is there a connection?</td>
</tr>
</tbody>
</table>

**HINT:** Having read the notes about Gardner’s multiple intelligences, apply the knowledge to this activity. The three activities you selected may relate to your intelligences.
Share your completed activities with a colleague, then discuss these questions.

- Why did you choose the three (3) activities you worked on?
- What difficulties did you have while working on your activities?
- How does your current practice cater for students with different intelligences?
- How can you improve/strengthen the use of multiple intelligences in your classroom?

2.2 Application of the Multiple Intelligences Theory in classrooms

Read these notes and discuss with a colleague.

There are many ways to apply the Multiple Intelligences Theory in the classroom. You probably focus on/use a range of intelligences now.

At all levels of education, teachers are transforming subject-specific lessons and curriculum units into meaningful MI experiences. For example:

- Science units incorporate visual, musical and kinaesthetic experiences.
- Language classes do re-enactments or illustrate their stories.

As teachers explore more effective methods of assessment, they often encourage their students to demonstrate understanding through MI activities. For instance:

- Elementary school students compose and perform songs about mathematical concepts that demonstrate successful performance at each grade level.
- Primary students show mastery of their own research questions through art, writing portfolios, and giving speeches to different audiences.

While you read this grid, think of other events, artefacts, content and activities you might include in the subject matter you teach.

Also think about ways students in your classroom might demonstrate understanding.
## Multiple Intelligence Type

<table>
<thead>
<tr>
<th>Type</th>
<th>Include in subject matter</th>
<th>Ways of demonstrating understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal-Linguistic</td>
<td>Books, stories, poetry, speeches, author visits</td>
<td>Writing stories, scripts, poems, storytelling</td>
</tr>
<tr>
<td>Logical - Mathematical</td>
<td>Exercise, drills, problem solving</td>
<td>Counting, calculating, theorizing, demonstrating, programming computers</td>
</tr>
<tr>
<td>Visual-Spatial</td>
<td>Posters, art work, slides, charts, graphs, tapes, haus tambaran visits</td>
<td>Drawing, painting, illustrating, graphic design, collage making, poster photography</td>
</tr>
<tr>
<td>Bodily-Kinesthetic</td>
<td>aerobic, exercises, rhythm exercises</td>
<td>Dance recital, athletic performance or competition</td>
</tr>
<tr>
<td>Musical</td>
<td>Tapes, bamboo flutes, concert going</td>
<td>Performing, singsing, playing, composing</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Teams, group work, specialist roles</td>
<td>Plays, debates, panels, group work</td>
</tr>
<tr>
<td>Intrapersonal</td>
<td>Reflection time, meditation exercises</td>
<td>Journals, diaries, changing behaviours, habits, personal growth</td>
</tr>
</tbody>
</table>

It is important to ask the right questions when you are considering lesson planning. Certain questions help you look for ways to involve as many intelligences as possible.

- **Verbal-Linguistic**: How can I bring in critical thinking, storytelling or writing?
- **Logical - Mathematical**: How can I bring in numbers, calculations, logic, classifications?
- **Visual-Spatial**: How can I use visual aids, visualization, colour, art, metaphor, or visual organisers?
- **Bodily-Kinesthetic**: How can I involve the whole body, or hands-on experiences?
- **Musical**: How can I bring in music or environmental sounds, or set key points in a rhythm or melody?
- **Interpersonal**: How can I engage students in peer or cross-age sharing, cooperative learning, or large-group simulation?
- **Intrapersonal**: How can I evoke personal feelings or memories, or give students choices?

You won’t always find ways of including every intelligence in your curriculum plans. But if this model helps you reach into one or two intelligences that you might not otherwise have used, then it has served its purpose very well indeed!
Work with a colleague to do the following:

Classroom activities often activate and use more than one of the multiple intelligences. Here are examples of such activities. Discuss with a colleague how you would include them in your lessons and indicate when it would be most appropriate to use them. If you have already used some with your class, talk about which multiple intelligences were involved.

- Group discussion  Verbal-Linguistic; Interpersonal
- Journal Writing  Intrapersonal; Verbal-Linguistic
- Choreography  Musical; Verbal-Linguistic; Interpersonal
- Constructing timelines  Logical-Mathematical; Visual-Spatial
- Putting on a play  Musical; Verbal-Linguistic; Interpersonal; Visual-Spatial
- Writing a report or essay  Verbal-Linguistic
- Making graphs  Logical-Mathematical; Visual-Spatial
- Designing posters  Verbal-Linguistic, Visual-Spatial
- Communicating with peers  Verbal-Linguistic; Interpersonal
- Hands-on experimentation  Kinesthetic; Logical-Mathematical
- Composing a song  Musical; Verbal-Linguistic

Provide specific examples of how you would include some of these activities into subject areas. Use this table to help you organise your ideas.

### Proposed Plan

<table>
<thead>
<tr>
<th>Grade:</th>
<th>Subject:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Outcome:</td>
<td></td>
</tr>
</tbody>
</table>

**Proposed activities:**

*(What will students do?)*

**Content/Knowledge:**

**Skills:**

**Attitudes:**

**How will you structure the activity?**

**When will you initiate it?**

**What resources will you need/use?**
Discuss your ideas with a group of colleagues teaching the same grade as you. Write down any significant comments.

What are some simple ways to get started?

Most importantly, start small. Minor changes to your curriculum planning can make a big difference in students’ motivation and understanding.

Here are five ways in which you could apply MI theory to your class:

1. **Add an interdisciplinary element to a favourite unit**
   For example, think of how you might liven up a mathematics lesson by inviting students to write song lyrics, invent dances, or write stories that help them recall important mathematical facts or procedures. Emphasize the curriculum requirements, but invite student expression in areas previously considered outside the scope of that content.

2. **Collaborate with other teachers in your school or district**
   Try a team-teaching approach with a colleague who can help you figure things out. By brainstorming possible links between your teaching, you may discover Multiple Intelligence ways to teach the same or related subject matter. For example, you can integrate most subject areas in integrated teaching.

3. **Offer students a variety of presentation options for projects**
   In addition to writing reports, let students “show what they know” by giving oral presentations accompanied by visual aids. Other presentation options include role-playing exercises, plays, debates, murals, etc.

4. **Apply Multiple Intelligence thinking to group projects**
   To help students develop interpersonal intelligence, use cooperative learning techniques. After looking at some of your students’ multiple intelligence strengths, you may wish to set up cooperative learning groups so that there is an interesting distribution in each group. Students with strong interpersonal skills often make wonderful theatrical directors, while those with a strong visual intelligence love painting imaginative designs.

5. **Involve the community, parents, family, and guest speakers**
   Bring guest speakers into the class to enhance lessons. For example, when talking about fishing, invite a local fisherman to talk about fishing. His speech could include things like: the appropriate times/seasons for specific types of
Think about what you have read and done in this section. What implications do multiple intelligences have for your current practice?

- Use these questions to help you think about the implications and record your thoughts.

  - Some of the challenges that I may face include:

  - The implications of multiple intelligences for my current practice include:

  - The implications multiple intelligences have for my current assessment practices include:

  - The implications multiple intelligences have for my programming/planning include:

  - The overall implications of multiple intelligences have for resources include:

HINT: Your responses will depend on your situation.

An optional activity (to do in your own time)

You could complete the MICA (Multiple Intelligences Checklist for Adults) to see where your own strengths and weaknesses lie. In the table is a list of statements about study habits. If the statement is very unlike you, put a circle around the number in the left hand column (A), and if the statement is very like you, put a circle around the number in the right hand column (C). If you think your study habits are somehow in between, put a circle around the number in the middle column (B).
### Module 2: Learning and Teaching for Outcomes

**Learning and Teaching for Outcomes**

#### A Very unlike me  |  B  |  C Very like me
---|---|---
Because I don’t like some subjects, I don’t study for them | 1 | 2 | 3
I try to use what I have learned in other courses in my study | 3 | 2 | 1
I prefer to talk to my friends, although I know I should be studying | 1 | 2 | 3
I find I am too tired to study properly | 1 | 2 | 3
I seek out the company of friends when I should be studying | 1 | 2 | 3
I prefer a quiet place where I can study | 3 | 2 | 1
It takes me a long time to get ready to study | 1 | 2 | 3
I find it hard to concentrate when I study | 1 | 2 | 3
I have to be in the right mood to study | 1 | 2 | 3
I find my study time is too short | 1 | 2 | 3
I spend too much time on unimportant things | 1 | 2 | 3
I make sure I know when all my assignments are due | 3 | 2 | 1
I work on the most important tasks first | 3 | 2 | 1
I have trouble finding time to read all of the material | 1 | 2 | 3
I try to read all material as quickly as I can | 1 | 2 | 3
I think and plan before writing an answer to a question in an examination | 3 | 2 | 1
I plan how much time to spend on each question before I begin | 3 | 2 | 1

(McGrath, H & Noble, T, 1995)

Now add up the numbers you have circled. The higher your score the better study habits you have.

Record your score here:
Section 3: Bloom’s Six Thinking Levels

3.1 Bloom’s thinking Levels

Read the following notes

The education reform emphasises the development of students' thinking skills as well as their independent learning skills, problem solving skills, and language skills. Bloom developed a model of six levels of thinking skills. The six levels fall into two broad groups:

• Those activities and questions that involve remembering, checking on understanding and applying what they know (Bloom calls these three levels knowledge, comprehension and application).

• Those involving higher order critical and creative thinking (Bloom refers to these levels as analysis, synthesis and evaluation).

Each of the levels of thinking is described below with examples of activities students could do to show their thinking at that level.

Read through these levels of thinking and the examples of activities and discuss with a colleague.

<table>
<thead>
<tr>
<th>Level of thinking</th>
<th>Examples of activities</th>
</tr>
</thead>
</table>
| KNOWLEDGE LEVEL   | • List all the different kinds of transport used in our district.  
                    • What kinds of foods do we have at our traditional feast?  
                    • What living things did we see at the beach?  
                    • What parts make up the dancing costume of our people?  
                    • What are all the foods you ate for the whole of yesterday? Make a list |
| COMPREHENSION LEVEL | • Make a flow chart of what happens to the coffee bean from the time it is on the bush to when it leaves our region  
                      • Group these animals from our list into those that live in the river, those that live in the sea, those that live in the bush, etc.  
                      • What food groups do all these foods belong to?  
                      • Which sentence tells the main idea for the paragraph?  
                      • What things are eaten or used at our modern feasts that are not from PNG? |
### APPLICATION LEVEL
This requires the student to make use of what they know by applying their knowledge in a practical way. They can experiment, sketch, make a model or construct and apply rules and principles to a new problem.

Students must first know and understand information before applying it at this level.

- Draw a map of our region
- Make a list of rules for a foreigner visiting your feast
- Make a role play about family relationships
- If your family moved to Europe, what kind of foods would you eat everyday?
- I must reconfirm my ticket 72 hours before my flight. What time should I reconfirm if my flight is at 3:30 pm, Friday?
- Write down the rules for boat safety

### ANALYSIS
This level involves students breaking what they know into component parts so that they can see the relationships between the parts. Here students may categorise or group information, compare and contrast, analyse, research or survey. They can distinguish between fact and opinion, advantages and disadvantages, cause and effect, good and poor reasons.

Students cannot complete a task at this level without having carried out the thinking at the previous levels. In other words, they can’t analyse until they have already remembered, understood and applied information.

- Compare this picture of a European feast with our feasts. What things are the same/different?
- Look at this building; what shapes have been used in making this building? Why do you think they were used?
- Write a sentence describing the personality of each character in our story.
- What would happen if frogs disappeared out of our area? How would it affect the food web?
- Here are some living things, here are some non-living things. What makes something living?

### SYNTHESIS
Synthesis and evaluation are equal levels of thinking. For tasks at the synthesis level, students are encouraged to think creatively, to see new ways of doing things, to take risks, to consider the unexpected, to link concepts in unusual and flexible ways, or to develop something that is original.

Before creating something new, students must have and understand information and have applied and analysed the component features of the idea, issue, topic or item.

- Imagine what life would be like if we didn’t have independence. Describe how life would be different.
- From all of these bits of information about housing problems, what are the two most important issues to do with housing in our community?
- Rewrite the story telling what would have happened if each character’s personality was opposite to the original story.
- We’ve already researched what changes have happened in our environment in the last 10-20 years. Now imagine what changes will happen in the next 10-20 years. Describe our village in the future.

Think about the information you read above and respond to the questions.

- Which levels of thinking do you most often use in your classroom or in your daily role?

- Which levels do you hardly use at all and why?
• What changes could you make to your teaching practice as a result of reading this information?

If your students (grade 8 class) were studying a unit from the social science learning outcome 8.1.3, what would be some of the appropriate learning activities that you would plan in order to develop their thinking skills in each of the six levels?

• If you are a non-teacher, what activities apply to your daily roles?

• Make a chart of your activities. Your chart could look like this:

<table>
<thead>
<tr>
<th>Strand: Environment &amp; Resources Sub-strand: People &amp; Environment</th>
<th>Learning outcome: 8.1.3 Evaluate the impact of resource use on the world’s physical environments and human settlement patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking Level</td>
<td>Activity (refer to the recommended knowledge, skills, attitudes section in the teacher guide).</td>
</tr>
<tr>
<td>Knowledge</td>
<td></td>
</tr>
<tr>
<td>Comprehension</td>
<td></td>
</tr>
<tr>
<td>Application</td>
<td></td>
</tr>
<tr>
<td>Analysis</td>
<td></td>
</tr>
<tr>
<td>Synthesis</td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td></td>
</tr>
</tbody>
</table>

*HINT: Your response will depend on your understanding of the information relating to the six thinking levels.*
Share your chart with a colleague and discuss the type of activities you have listed. Make and note any changes which will improve the list.

HINT: Personal responses are required here.

3.2 Some strategies to develop constructive thinking skills

Read the following notes

Accessing information
- Using group investigation and inquiry
- Learning to use existing data sources, for example, village elders
- Conducting surveys and interviews
- Using the jigsaw process

Inferring and interpreting
- Using graphic organisers, displaying data on graphs or charts
- Debating; discussing; drawing; dancing
- Writing; using role play and music

Synthesising and linking
- Summarising previous knowledge
- Comparing and integrating concepts and resources

Planning and applying
- Analysing relevance to a problem or situation
- Using problem solving strategies
- Designing and creating applications
- Implementing action

Evaluating and refining
- Reflecting
- Monitoring; measuring; interviewing
- Reporting; judging

Working with a colleague, collect and examine a good number of recent lesson plans (from different subject areas) taught by colleagues and/or yourself.

Examine these, considering the learning activities students were engaged in, to determine if strategies for developing thinking skills are used. Use this table to record your findings.
3.3 Learning and teaching tasks using Gardner’s seven intelligences and Bloom’s six levels of thinking.

Study the following table and discuss it with a colleague

We can actually combine these two approaches (Gardner’s seven intelligences and Bloom’s six levels of thinking) to plan activities that develop both thinking skills and intelligences.

This table shows how learning and teaching tasks can be classified in terms of both thinking levels and intelligences.
Learning and teaching tasks using Gardner’s seven intelligences and Bloom’s six levels of thinking.

<table>
<thead>
<tr>
<th>Module 2</th>
<th>Learning in an outcomes environment</th>
<th>Unit 6</th>
<th>Learning and Teaching for Outcomes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
<th>Synthesis</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Word - Linguistic</strong></td>
<td>• Make a list</td>
<td>• Summarise</td>
<td>• Write a letter</td>
<td>• Write a report on</td>
<td>• Review a book</td>
</tr>
<tr>
<td></td>
<td>• Record facts</td>
<td>• Describe</td>
<td>• Write story about</td>
<td>• Review a book (basic)</td>
<td>• Debate</td>
</tr>
<tr>
<td></td>
<td>• Read ….</td>
<td>• Research</td>
<td>• Make word</td>
<td></td>
<td>• Argue for or against</td>
</tr>
<tr>
<td></td>
<td>• True or False</td>
<td>• Retell</td>
<td>• Search</td>
<td></td>
<td>• State conclusions about</td>
</tr>
<tr>
<td></td>
<td>• List resources for</td>
<td>• Interpret</td>
<td>• Write a news paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Tell about</td>
<td>• Define</td>
<td>article</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Logical - Mathematical</strong></td>
<td>• Make a pattern</td>
<td>• Explain …</td>
<td>• Do a survey</td>
<td>• Make up a puzzle</td>
<td>• What might happen if …</td>
</tr>
<tr>
<td></td>
<td>• Write formulae</td>
<td>• Demonstrate …</td>
<td>• Draw plans</td>
<td>• Make up a problem</td>
<td>• Rank and rate</td>
</tr>
<tr>
<td></td>
<td>• Identify patterns</td>
<td>• Draw to scale</td>
<td>• Classify</td>
<td>• Make up a code</td>
<td>• Find evidence for</td>
</tr>
<tr>
<td></td>
<td>• List key features</td>
<td>• Estimate</td>
<td>• Categorise</td>
<td>• Write a program for</td>
<td>• Prove …</td>
</tr>
<tr>
<td></td>
<td>• Recall number facts</td>
<td>• Prepare a graph</td>
<td>• Make a grid</td>
<td>• Make up an experiment</td>
<td>• List criteria for</td>
</tr>
<tr>
<td></td>
<td>• Write tables</td>
<td></td>
<td>• Make a matrix</td>
<td></td>
<td>• Write an evaluative report</td>
</tr>
<tr>
<td><strong>Vision - Space</strong></td>
<td>• Make a chart</td>
<td>• Draw …to show</td>
<td>• Review art (basic)</td>
<td>• Make a board game</td>
<td>• Review art</td>
</tr>
<tr>
<td></td>
<td>• Make a mind map (basic)</td>
<td>• Make a mobile</td>
<td>• Make a mind map</td>
<td>• Create a …and draw a plan</td>
<td>• Review visual effects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Make a flow chart</td>
<td>• Make a display</td>
<td>• Design a …</td>
<td>• Evaluate products and creations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Make a book</td>
<td>• Make a decorative</td>
<td>• Create a badge</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Make a poster</td>
<td>design for …</td>
<td>• Create a logo</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Make a picture story</td>
<td>• Review film (basic)</td>
<td>• Make a computer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Make a collage (basic)</td>
<td></td>
<td>graphics for</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Make a mural (basic)</td>
<td></td>
<td>• Redesign</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Do a timeline for</td>
<td></td>
<td>• Make a treasure map</td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>
### Module 2
**Learning and Teaching for Outcomes**

#### Unit 6
**Learning in an outcomes environment**

<table>
<thead>
<tr>
<th><strong>Bodily - Kinesthetic</strong></th>
<th><strong>Music</strong></th>
<th><strong>People - (Interpersonal)</strong></th>
<th><strong>Self - (Intrapersonal)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Act like a…</td>
<td>• List sounds of…</td>
<td>• Read to the class or someone else</td>
<td>• List self facts…</td>
</tr>
<tr>
<td>• Move like a…</td>
<td>• Find music about…</td>
<td>• Describe behaviour…</td>
<td>• List own experiences…</td>
</tr>
<tr>
<td>• Follow this…</td>
<td>• Make noises like…</td>
<td>• Be a leader…</td>
<td>• Describe self…</td>
</tr>
<tr>
<td></td>
<td>• Recall the tune of…</td>
<td>• Tell a joke…</td>
<td>• Describe own experiences…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tell a story to a group…</td>
<td>• Describe feelings…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Work in a group…</td>
<td>• Personal scrapbook…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Perform for the class…</td>
<td>• Personal timeline…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Play a group game…</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Do a family tree…</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Make a group decision…</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• Juggle…</td>
<td>• Make sound effects for…</td>
<td>• Research a biography…</td>
<td>• Describe self…</td>
</tr>
<tr>
<td>• Exercise…</td>
<td>• Play an instrument…</td>
<td>• Interview…</td>
<td>• Describe own experiences…</td>
</tr>
<tr>
<td>• Dance…</td>
<td>• Why do these sounds</td>
<td>• Write instructions for</td>
<td>• Describe feelings…</td>
</tr>
<tr>
<td>• Play a sport…</td>
<td>have these effects?…</td>
<td>peer tutor about…</td>
<td>• Personal scrapbook…</td>
</tr>
<tr>
<td>• Make a model…</td>
<td>• Why does this music</td>
<td>• Teach…to…</td>
<td>• Personal timeline…</td>
</tr>
<tr>
<td>• Do needlework…</td>
<td>have this effect?…</td>
<td>• Organise others to…</td>
<td></td>
</tr>
<tr>
<td>• Play a floor game…</td>
<td>• Identify the…</td>
<td>• Give feedback to others</td>
<td></td>
</tr>
<tr>
<td>• Do orienteering…</td>
<td>• instruments in…</td>
<td>• Identify Characteristic</td>
<td></td>
</tr>
<tr>
<td>• Perform a play…</td>
<td></td>
<td>• Behaviour off/for</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Predict behaviour…</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Analyse behaviour…</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Solve social problem.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Demonstrate how to…</td>
<td>• Create a soundscape</td>
<td>• Write a perform a play</td>
<td>• Self-assessment using…</td>
</tr>
<tr>
<td></td>
<td>• Create a dance…</td>
<td>about…</td>
<td>proforma…</td>
</tr>
<tr>
<td></td>
<td>• Do a role play…</td>
<td>• Create an advertising</td>
<td>• Explain why you feel this way about…</td>
</tr>
<tr>
<td></td>
<td>• Play charades…</td>
<td>campaign…</td>
<td>way…</td>
</tr>
<tr>
<td></td>
<td>• Analyse body language</td>
<td>• Plan strategies for</td>
<td>• Self reflection…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>getting people to……</td>
<td>• Self analysis…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Devise an experiment</td>
<td>• Self report…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>about behaviour…</td>
<td>• How do you respond when…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Create a group game.</td>
<td>• How do you compare with…</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Make a …for yourself…</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(personal logo, etc)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Create a puppet show</td>
<td>• Evaluate music…</td>
<td>• Review performance…</td>
<td>• Set personal criteria…</td>
</tr>
<tr>
<td>about…</td>
<td>• Evaluate sporting</td>
<td>• Review presentation to</td>
<td>for and evaluate success…</td>
</tr>
<tr>
<td></td>
<td>performance…</td>
<td>class…</td>
<td>• Personal rankings and reasons</td>
</tr>
<tr>
<td></td>
<td>• Evaluate movements…</td>
<td>• Evaluate … as a group</td>
<td>• Reflections…</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Self-assessments…</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Opinions and values…</td>
</tr>
</tbody>
</table>
Working with a colleague, select two or three columns of the table on the next page to complete 2-3 thinking levels. Try to fill in each with one example of an activity you could do in your own classroom. Think of one unit you want to teach your class and find activities for the table that match that unit of work.

If you are a non-classroom teacher, given examples of activities you could do in your everyday role as a supervisor. For example, write a report, explain your education your educational philosophy.

Compare your chart with other colleagues', for example, at a staff meeting; then discuss these questions:

- Has this exercise helped you in thinking about what the students do in your classroom or people whom you supervise do?

- Has this exercise helped you in thinking about what you do in the classroom or in your daily tasks/roles?

- Is the exercise worth repeating?

- Why?

- Would you alter the activities in any way?

- What else do you need in your classroom teaching now?

- What sort of incentives/motivation can you provide for those working under or with you?

HINT: Your responses will depend on the situation of your school.
Think about the activities you have planned for different subject areas.

- Use the proforma below to complete your activity:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Knowledge</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
<th>Synthesis</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logical - Mathematical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision - Space</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HINT:** Apply your understanding of the examples provided on pages 33-34 to complete this activity.

- What does your choice of teaching strategies indicate to you about what you really believe is important in how children learn or in what other people do?
Module Summary

Congratulations! You have come to the end of this module! In doing so you have done many tasks and activities designed to make it easy for you to learn and apply your learning. You have covered these main points:

• different concepts of learning aligned with the goals of education
• both formal and informal styles of learning
• Gardner’s multiple intelligences
• Bloom’s levels of thinking
• ways of applying Gardner’s multiple intelligences and Bloom’s levels of thinking in classroom teaching

You should by now have developed certain knowledge, understandings, insights and skills to help you to perform well in your work.

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. compare and contrast a range of learning styles?</td>
<td></td>
</tr>
<tr>
<td>2. demonstrate understanding of student-centred learning approaches?</td>
<td></td>
</tr>
<tr>
<td>3. discuss the implications of the current required learning styles for classroom practice?</td>
<td></td>
</tr>
<tr>
<td>4. apply the principles of student-centred learning to classroom practice or monitor their application in the schools you supervise?</td>
<td></td>
</tr>
<tr>
<td>5. explain Gardner’s multiple intelligences and relate its relevance to learning and teaching in your classroom or in the school(s) you supervise?</td>
<td></td>
</tr>
<tr>
<td>6. explain Bloom’s levels of thinking and relate its relevance to learning and teaching in your classroom or in the school(s) you supervise?</td>
<td></td>
</tr>
<tr>
<td>7. apply your knowledge of Gardner’s multiple intelligences and Bloom’s six levels of thinking to plan or monitor activities in your classroom?</td>
<td></td>
</tr>
</tbody>
</table>
If you answered ‘Yes’ to all of them, then you have done well. Think about the kinds of evidence that will support the achievement of each of the outcomes. If you have said ‘No’ or ‘Not sure’ to any, then it maybe 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.

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

If you are 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
Additional space for your notes
## Unit 6:
Learning and Teaching for Outcomes

### Module 3: Learning and Teaching Strategies

#### Contents

<table>
<thead>
<tr>
<th>Contents</th>
<th>Page/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Introduction</td>
<td>2</td>
</tr>
<tr>
<td>Module Learning Outcomes</td>
<td>3</td>
</tr>
<tr>
<td>Section 1: Learning Activities and Teaching Strategies –</td>
<td>4</td>
</tr>
<tr>
<td>What is the current trend?</td>
<td></td>
</tr>
<tr>
<td>Section 2: Graphic Organisers – Strategies for Organising Information</td>
<td>7</td>
</tr>
<tr>
<td>Section 3: Other teaching strategies that promote student-centred</td>
<td>13</td>
</tr>
<tr>
<td>learning</td>
<td></td>
</tr>
<tr>
<td>Section 4: Strategies for Collaboration and Cooperation</td>
<td>17</td>
</tr>
<tr>
<td>Section 5: Learning centres</td>
<td>28</td>
</tr>
<tr>
<td>Module Summary (and additional space for your notes)</td>
<td>31</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
Learning and Teaching Strategies

Module Introduction

Welcome to Module 3: Learning and Teaching Strategies

Many teachers value the out-of-school learning by their students as an important part of their education. They encourage students to make full use in school of what they learn outside it.

Efficient teaching demands of the teacher a sound knowledge of all that the student must know, and an ability to relate the content, methods, sequence and pace of her/his work to the individual needs of students.

Effective teaching is not a set of generic practices. It is a set of context-driven decisions about teaching. Effective teachers do not use the same set of practices for every lesson. They constantly reflect about their work, observe if students are learning, and then adjust their practice as needed.

You learned earlier on about the new approach to learning and teaching encouraged in the primary curriculum. You learned also about how children learn and ways to encourage their thinking skills and abilities in different intelligences. This module introduces you to a range of learning and teaching strategies, including demonstration and modelling, the six thinking hats, do-talk-record, questions and questioning and reciprocal teaching. These strategies can be used in any subject area and in any grade level. The module gives ideas for using these strategies in your classroom.

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.
Module Learning Outcomes

When you have worked through this module you, the learner, can;

1. explain student-centred teaching strategies and processes
2. explain current trends in learning activities and teaching strategies
3. distinguish between traditional and current learning and teaching approaches
4. demonstrate a critical understanding of a range of teaching strategies which promote active student learning
5. use student-centred learning and teaching strategies in your classroom.
Section 1: Learning activities and teaching strategies – What is the current trend?

Read these notes.

When children first come to primary school, they are used to learning in a very active way in elementary school. This same way of learning continues in primary school. The children do not just sit and listen to the teacher telling them things. They work things out for themselves. They talk about things with other children. They work together. They try to make use of what they learn in a practical way. They read books and they write things of their own...

Different children learn in different ways. Primary teachers should use many different kinds of activities. Sometimes the teacher can work with the whole class at the same time. Sometimes, children can teach each other. Sometimes, the children work in groups. Sometimes, they work by themselves. This approach is important for all students in all schools. It is particularly necessary in schools where classes have students of different ages or grade levels.

People from the community sometimes come into the classroom and help the children learn things. Sometimes the class goes out into the community to see something that they can learn from. The teacher always tries to help the children see that what they learn in school is useful in some way in their own lives.


During the past years there has been a swing away from formal methods to more informal teaching.

Some curriculum development has led to significant changes in teaching by doing away with a number of traditional features of primary school teaching such as fixed timetables and thirty minute lessons.

The reform curriculum for primary schools advocates student-centred approaches. Student-centred approaches have become more popular in recent times. Research has shown that the student-centred approach is a very effective way for students to learn. Therefore, teachers need to choose learning activities, and a variety of appropriate teaching strategies, which will most benefit all the students in their classrooms.

There is a greater readiness among teachers to innovate and try out new teaching methods. The role of the teacher is therefore very important in any teaching strategy, especially since his/her direct participation can range very widely from complete control over what is learned to minimal intervention. For example, in schools which use formal teaching methods the teacher is the source of almost all the knowledge that the students acquire in class, whereas in those that use informal teaching methods, the teacher simply helps his/her pupils to make efficient use of the learning resources that are available.
Discuss the table below with a colleague. It compares learning then (20th Century) and now (21st century).

<table>
<thead>
<tr>
<th>Topic</th>
<th>Learning for 20th Century</th>
<th>Learning for 21st Century</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mistakes</td>
<td>Should not be made</td>
<td>To be learned from</td>
</tr>
<tr>
<td>Assessment</td>
<td>Exams/Tests</td>
<td>Profiles</td>
</tr>
<tr>
<td>Determined by</td>
<td>Central Authority</td>
<td>Local needs in context of general/global framework</td>
</tr>
<tr>
<td>Staffed by</td>
<td>Subject expert</td>
<td>Cross-curricula team</td>
</tr>
<tr>
<td>Aim</td>
<td>Theory to practice</td>
<td>Practice to theory</td>
</tr>
<tr>
<td>Approach</td>
<td>Content driven</td>
<td>Process driven</td>
</tr>
<tr>
<td>Focus</td>
<td>Teacher-centred</td>
<td>Student-centred</td>
</tr>
<tr>
<td>Teacher role</td>
<td>Expert</td>
<td>Fellow learner/facilitator</td>
</tr>
<tr>
<td>Emphasis</td>
<td>Knowing that .............</td>
<td>Knowing how &amp; why and how to find out</td>
</tr>
<tr>
<td>Student activity</td>
<td>Working alone</td>
<td>Working collaboratively</td>
</tr>
<tr>
<td>Student role</td>
<td>Passive/receptive</td>
<td>Active/generative</td>
</tr>
<tr>
<td>Planning for</td>
<td>Lessons</td>
<td>Learning</td>
</tr>
</tbody>
</table>

What can you say about the differences between learning as compared then and now? Write a paragraph, commenting on the current trends in learning and teaching approaches.

HINT: The content of your paragraph will depend on your understanding of the learning and teaching approaches the reform syllabuses advocate.

Think about your current practices – which column, in the above table, do your practices resemble more, column 2 or column 3?

- Is there a need to change some of your practices? Record your thoughts here.
An effective teacher structures his/her teaching around teaching strategies that:

- build on knowledge already held by his/her students
- encourage students to learn by doing
- ensure that learning grows out of useful experience and experimentation
- use teaching aids effectively
- create a safe learning environment
- stimulate appreciation as well as cognitive development
- vary groupings of students to suit each learning situation.

Discuss these questions with a colleague and record your responses.

1. Why must teachers know not only what to teach but also know who they teach and how and when to teach?

2. Discuss with two or three other colleagues what people think when they hear the words teacher and student. In your experience, do these widely held views accurately reflect what teachers and students are really like?

3. To what extent do you think teachers and students consciously or unconsciously fulfil these stereotype roles?

4. What relationship does teaching have to learning?

5. What significance do these relationships have for the teacher?

HINT: Responses will depend on your school/class situation.
Section 2: Graphic organisers – Strategies for Organising Information

Graphic organisers are mind tools that may be used to plan activities and investigations. They include mind maps and concept maps.

Read these notes

What is a Mind map? What is a Concept map?

A mind map is a thinking tool that helps connect ideas and see relationships. It starts with the key idea/word in the middle of the page or space. Around the central idea/word are drawn the sub-ideas or topics that relate to that word. You then take each of those sub-ideas and expend them further.

The relationships between key concepts or ideas are linked by means of arrows or lines. Avoid crossing lines as it makes interpretation easier.

Concept maps are more elaborate than mind maps. A single concept is written or drawn in the middle of a sheet of paper. A learner or a group of learners is then asked to link the concept to other concepts by branching off the main concept. The link between any two concepts is then written along the line linking them to explain the linkage.

An alternative form provides a number of concepts which the learners are then asked to link, again explaining the linkage.

Why use mind maps?

Mind maps have a two dimensional shape, rather than the linear (one dimensional) structure of note-taking. A good mind map shows the ‘shape’ of the subject, the relative importance of information and ideas, and the ways they relate. Typically mind maps are more compact than notes, often taking up one side of a sheet of paper. This helps associations to be made easily. Information that is acquired after the main mind map has been drawn can be easily added in.

Mind maps can also be used well to summarise information, to consolidate information from different research sources, to think through complex problems and as a way of presenting information that shows the overall structure of your subject. Mind maps are a quick reference for review purposes – it is easy to refresh information in your mind just before it is needed by glancing at one.

Mind maps can be used as a way of recording information from a brainstorming session. Ideas and concepts from brainstorming are linked together by lines or arrows.

Mind maps can take different forms. You can make simple connections to a main idea, or you can map a range of ideas and ‘sub-ideas’ which are linked in various ways. Maps can also include pictures and diagrams as well as words.
A good way to obtain ideas for mind and concept maps is to ask: Why? Where? Who? How? When? What?

For example:

• what knowledge is required?
  - If this were a book, what would the chapter headings be?
• what are my specific outcomes?
• what are the most important seven (7) categories in the area under consideration?
• what are the basic questions?

To plan for concept/mind mapping:

• decide on the format of the map.
• decide whether to do this as a whole class or in small groups
• help the students decide on the most useful concepts or ideas to organise the map around.

To manage a mind/concept mapping activity:

• make sure all students understand the purpose of the mind map
• give students time to develop their own maps in groups and make their own connections
• display different maps for students to refer to and use
• model how to create and interpret mind and concept maps.

Here is an example of a mind map completed when students were asked: “what would happen if oil ran out?”
Do a sample mind map and ask a colleague to do a map on the same topic. To do this activity, use the blank sheet of paper (see next page) and a pen or pencil (preferably two to four coloured pens or pencils).

In upper primary Science, there is a strand called: Science in the home, and sub-strand called: Using energy at home. Outcome 6.3.3 reads: Identify and describe the sources and types of energy. Recommended knowledge for this outcome requires you to cover types of energy. (Upper Primary Science Teachers Guide: page 43)

- Use types of energy as the central idea for your mind map
Space for your mind map
Discuss your completed mind map with a colleague. Use the PMI tool to comment on each other’s mind map.

**PMI Tool**

Plus - one thing you like about ..........  
Minus - one thing you do not like about .......... or could be improved.....  
Interesting - one thing that you find interesting

Skim read several teacher guides again. List four subjects which recommend the use of concept or mind maps in the *Teaching and learning* activities section.

1.  
2.  
3.  
4.  

*HINT: The answers are found in the teaching guides.*

Here are examples from the upper primary syllabuses in which students could use mind maps to present information upon completion of assigned task.

<table>
<thead>
<tr>
<th>Syllabus</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>Group work, research, open investigations</td>
</tr>
<tr>
<td>Social Science</td>
<td>Project – investigations/research</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Cooperative learning</td>
</tr>
<tr>
<td>Personal Development</td>
<td>Research – collecting and organising information</td>
</tr>
<tr>
<td></td>
<td>Discovery learning – projects/field trips</td>
</tr>
<tr>
<td></td>
<td>Group work - projects</td>
</tr>
<tr>
<td>Making a Living</td>
<td>Projects, Group work</td>
</tr>
<tr>
<td>Arts</td>
<td>Describing skills</td>
</tr>
<tr>
<td>Language</td>
<td>Structured overview, reading strategies – constructing diagrams, graphic outlines, notetaking framework</td>
</tr>
</tbody>
</table>
Choose two subjects from this table and briefly describe two activities that your students could do that would require them to present information in the form of a mind map.

Example 1:

Example 2:

Discuss your planned activities with a colleague. What would you change/do differently? Write your responses and comments here.
Section 3: Other strategies that promote student-centred learning

We have seen that each subject syllabus begins with suggested learning and teaching approaches specific to the subject. The strategies in this module which complement those in the syllabuses extend the learning of your students in different ways.

Brainstorming

Brainstorming is when a group/class record all the information they already know on a topic, to develop new ideas or to stimulate creative thinking. Students ‘let the ideas come into their heads’, write them down, sort them, and decide which need further research.

It is useful for getting out as many ideas as possible; all ideas are accepted without judgement or discussion; initially quantity of ideas is more important than quality; ‘piggyback’ extending other people’s ideas is encouraged; two recorders may be helpful.

To plan for brainstorming:

- Decide what subject, topic or part of topic participants need to investigate.
- Consider the group’s size – a whole class brainstorm will produce more information but small group brainstorming will encourage all students to participate.
- Decide how you are going to record the participants’ responses. If you are going to use a table or a chart, then decide on the headings used to organise the responses.

To manage a brainstorm activity:

- Ensure all students know the purpose of the activity
- Encourage all students to participate, letting ideas ‘come into their heads’
- Appoint a recorder for small groups or the presenter can be the recorder for the whole group. Make sure all contributions are recorded.
- Decide how you can organise the information. Do this with the whole group or small groups.

How often do you use brainstorming as a teaching strategy? Why?

HINT: A personal response is required.

Work with a colleague to complete this activity.

Choose a learning outcome from each upper or lower primary syllabus. Look at the elaboration of the learning outcome in the relevant teacher guide and consider specific
Learning activities that could occur during which *brainstorming* would be appropriately used. Consider the specific skills that would have to be developed. The first one has been done as an example.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Learning Outcome</th>
<th>Suggested content – knowledge/skills found in teacher guide</th>
<th>Eg. activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>6.3.1</td>
<td>Knowledge – structures &amp; Groups, features of report texts, Skills – use writing processes – writing, editing, publishing</td>
<td>use knowledge of current local happenings to write a report about it. Students in their small groups could <em>brainstorm</em> current events to use in their written piece of work.</td>
</tr>
</tbody>
</table>

**MAL**

**PD**

**Arts**

**Science**

**Mathematics**

**Social Science**

_HINT: Use your professional judgement and the responses from your colleagues to respond to these questions._

_**Share your table with other colleagues. Comment on the strategy (brainstorming) itself and the skills this builds in your students’ learning. Record your comments here.**_
Questions and Questioning

**Read these notes carefully**

Questioning is an important part of teaching. Teachers are encouraged to plan to use questions for their lessons. This gives the lesson a structure and helps the teacher to know:

- when to ask questions
- what type of questions to ask
- the purpose of asking certain questions at a certain time
- what answers to expect
- possible unexpected answers.

Teachers ask questions, not because they do not know the answers, but to:

- impart knowledge
- discover particular areas of learning which students find difficult
- encourage student participation
- increase students’ confidence
- create and maintain students’ interest
- focus attention on a particular issue or concept
- control the method and speed of presentation.

There are two main types of questions:

**Closed Questions** elicit limited responses and are often limited to “yes” or “no” and typically have “right” and “wrong” answers. They do not stimulate discussion or involvement of learners but are useful for revision and perhaps an introduction to discussions.

Examples of closed questions are:

- what programs are you enrolled in?
- what is the chemical symbol for mercury?
- what tools do we use to draw a pie graph/chart?
- what have we covered the first half of the term?

**Open questions** require comprehension as well as the organization of knowledge and facts into appropriate responses.

Examples of open questions are:

- What procedures would you use to find out why a car frequently stalls?
- What differences exist between male and female teachers?
- What information would you need from students when they first begin to write essays?

Read the indicated pages of these teacher guides and consider how/when questioning could be applied in these processes. List some examples for each subject.
Making A Living processes and skills (pages 10-11, teachers guide):

Social Science process and sample activities (pages 4-5, teachers guide):

Environmental Studies process teacher guide, page 7):

Read the Personal Development Teachers Guide – pages 5-9 and consider the steps for approach 1 (page 5).

- Provide examples of the steps that would require questioning. Record your responses in this table.

<table>
<thead>
<tr>
<th>Approach 1 (pages 5-6) steps:</th>
<th>Sample activity using questioning within each step:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• gathering information</td>
<td></td>
</tr>
<tr>
<td>• analysing information</td>
<td></td>
</tr>
<tr>
<td>• taking action</td>
<td></td>
</tr>
<tr>
<td>• evaluation and reflection</td>
<td></td>
</tr>
</tbody>
</table>
Section 4: Strategies for collaboration and cooperation

Cooperative Learning

Cooperation

Cooperation means working together to reach shared goals. In cooperative activities individuals seek outcomes that benefit themselves and benefit all other group members. Cooperative learning is the use of small groups that allows students to work together to maximise their own and each other’s learning. The idea is simple. Class members are split into small groups after receiving instruction from the teacher. They then work through the task until all group members successfully understand and complete it.

Cooperative efforts result in students striving for mutual benefit so that all group members benefit from each other’s efforts. In cooperative learning situations, there is a positive interdependence among students’ goal attainments; students perceive that they can reach their learning goals if and only if the other students in the learning group also reach their goals.

What makes cooperation work?

To structure lessons so students do work cooperatively with each other requires an understanding of the components that make cooperation work. Mastering the essential components of cooperation allows teachers to:

- take existing lessons, curriculum, and courses and structure them cooperatively;
- tailor cooperative learning lessons to unique instructional needs, circumstances, subject areas and students; and
- assess the problems some students might have working together and help to increase the effectiveness of student learning groups.

Any learning task in any subject area with any curriculum can be structured cooperatively. Teachers:

- specify the outcomes for the lesson
- make a number of pre-instructional decisions
- explain the task and form groups
- monitor students’ learning and assist groups to increase their interpersonal and group skills
- evaluate students’ learning and help students evaluate how well their groups functioned.
Reflect on the learning activities in your lessons, especially in group situations. Record your thoughts here:

- the reasons for using group work

- the processes involved in organising and managing these group activities

- the benefits of using group work

- evidence of interdependence among the students.

HINT: Use your teaching experience to respond to these statements.

Teacher and student roles and relationships in cooperative learning

Read these notes and discuss them with a colleague.

The new pattern of interaction changes the role of the teacher in a dramatic way. Teachers now see themselves as learners, facilitators, researchers, and designers of curricula. When teachers work in collegial groups their inherent isolation from each other disappears. No matter what the group approach may be called – cooperative learning, authentic instruction, student team learning, group investigation, co-op co-op, active learning, jigsaw, complex instruction, group work, tribes or learning community, the benefits of cooperative instruction are documented by hundreds of research studies. The traditional competitive system reward the few, but loses many. Students, even those considered to be slow learners, become motivated when able to work with peers. Now-a-days cooperative learning is heralded as one of the most promising instructional strategies to dramatically improve academic achievement.
<table>
<thead>
<tr>
<th>The teacher’s role in the cooperative, thinking classroom</th>
<th>Benefits of cooperative learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Planning experiences that foster transfer of learning</td>
<td>• More complex thinking is woven into every session</td>
</tr>
<tr>
<td>• Helping students learn how to learn</td>
<td>• Focus is on the process and interaction as well as the task and product</td>
</tr>
<tr>
<td>• Developing student responsibility</td>
<td>• Social skills are explicitly taught</td>
</tr>
<tr>
<td>• Promoting active learning</td>
<td>• Roles are shared and rotated</td>
</tr>
<tr>
<td>• Facilitating student self-evaluation</td>
<td>• Individual contribution to the group goal is evaluated</td>
</tr>
<tr>
<td>• Encouraging mastery of skills and understanding of concepts</td>
<td>• Students learn to self-evaluate</td>
</tr>
<tr>
<td>• Extending participation</td>
<td>• Students with different characteristics are mixed/matched</td>
</tr>
<tr>
<td>• Fostering advanced thinking</td>
<td>• Members share responsibility for the group</td>
</tr>
<tr>
<td>• Building group skills</td>
<td>• Students rely on each other</td>
</tr>
<tr>
<td>• Balancing teacher-to-student, student-to-student interactions</td>
<td></td>
</tr>
</tbody>
</table>

**Working in groups:**

Collaborative and cooperative learning will be effective if it is matched to students’ experience and abilities. Students can be introduced to this method of investigation through a firm framework which includes:

- the number and roles of members
- the task and the instructions to be followed
- suggested resources
- the format of the product
- the kind of evaluation required
- the duration of the investigation.

With experience, students take increasing control over the nature and planning of the task. They negotiate, for example, membership and operation of the group and the method of reporting. Students take increasing responsibility for self-and peer evaluation.
Arrange with colleagues to observe their lessons.

- As you observe, note evidence of cooperative learning occurring, that is, record how is cooperative learning occurring in the classroom?

- Also, note what the teacher’s role is in the process of cooperative learning and what is the students’ role in the process?

Record your observations in this table:

<table>
<thead>
<tr>
<th>What is the activity?</th>
<th>What seems to be the teacher’s role?</th>
<th>What seems to be the students’ role?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleague 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colleague 2</td>
<td></td>
<td></td>
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<tr>
<td>Colleague 3</td>
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<td></td>
</tr>
<tr>
<td>Colleague 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Share your findings with your colleagues and discuss the benefits of cooperative learning for your students?

Record the conclusions here.

HINT: Summarise the points made during the discussion.
We now look at several cooperative learning strategies:

1. **Pairing** (pair-check, think-pair-share, paired interview)
2. **Jigsaw** (simple jigsaw, expert jigsaw)
3. **Fishbowl**
4. **Listening triangles**
5. **Role play**
6. **Card shuffle**

### 1. Pairing

Pairing is an excellent introductory structure to develop skills in cooperative learning processes. Students interact with a partner to complete their work requirements. To introduce the basic pairing arrangement:

a. Ask students to form into pairs.

b. Outline a particular task to be completed by each pair of students. If there is an ‘extra’ student left over after the pairs have been organized, the teacher can become the partner or form one 3-way group, and ask them to share the activities.

- **Pair-Check**
  a. Students divide into pairs.
  b. Each student is given a problem to complete.
  c. When they finish, they take turns to check their partner’s answer, and then praise their partner for their efforts. Roles are then reversed.

- **Think-Pair-Share**
  a. Divide the students into pairs.
  b. The class is asked a question by the teacher.
  c. Each person silently thinks about possible answers for at least five seconds (this amount of time can vary widely).
  d. Partners turn to each other, and discuss possible answers (the time in this section can vary from 30 seconds to 30 minutes or more)
  e. The teacher then asks for pairs to share their answer with the class.

- **Paired Interview**

Students form into pairs after they have partly-completed their work, such as with a written story, and then interview each other on their progress at that point. Student A asks the three questions of Student B, who responds to each in turn. B then directs the three questions towards A, who likewise answers them in turn.

Q.1. What have you done so far?
Q.2. What is your favourite part?
Q.3. What will you do next?
Organise to use the three paired activities described above in three of your lessons and arrange with colleagues to observe the lessons.

- Ask your colleagues to assess how effectively you organised the pairing and reporting and how much cooperation there was between pairs. Discuss the findings with them and record your responses to the following questions.

  What worked well?

  What didn’t work very well?

  How could you use pairs more effectively next time?

2. Jigsaw

The jigsaw strategy is very effective for students to share responsibility for a task that lends itself to being broken down into smaller components. Each component is the responsibility of a particular person or sub-group. This strategy is extremely useful for introducing new topics in all subjects.

- **Simple Jigsaw** is one of the most effective cooperative strategies for promoting responsibility within each of the students in the team. It comprises teams of four, with each member assuming responsibility for a specific task.

**To implement the strategy:**

a. Break into teams of four, and number the members from 1 to 4.
b. Present a mini-project to each team, such as ‘a study of the local community’.
c. Assign specific tasks to each member
d. Each of the members then is required to complete their specific task.
e. The team reforms, and the students share their information with each other. This information then can be collated, and the project can be completed.

The most difficult aspect of this strategy is the formulation of the specific tasks. It sometimes can also be worthwhile to assign tasks to the students according to the level of difficulty, and the interests of the different students. Extra students (eg. a fifth member) could be asked to share a role with someone else in a team. This means that there could be two No.1s in the team, who could work together on that particular task.
In **Expert Jigsaw**, each learner belongs to a ‘home’ or ‘family’ group and is allocated a number. All learners of the same number group together to learn and practise a topic or task. They thus become experts of that topic or task. They then return to their home or family groups to teach others in the group what they know and to learn from other members of the group.

<table>
<thead>
<tr>
<th>Home Teams</th>
<th>Expert Teams</th>
<th>Home Teams</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
<td><img src="image3.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>

**To implement the strategy:**

a. Form students into Home Teams of four members, and number them from 1 to 4
b. Introduce the project or activity to the Home Teams
c. Outline the specific tasks of the Expert Teams
d. The Home Teams are then reformed into Expert Teams, which means that all of the Home Team No.1’s move to Expert Team No.1, Home Team No.2’s into Expert Team No.2, and so on.
e. The Expert Teams then research their specialized area, and develop a range of ideas.
f. Expert Teams then split up, with all members returning to their original Home Team. At this stage, there then will be an ‘expert’ on each of the areas within each of the Home Teams.

**Do either of the following (you may do both, if you wish):**

1. Plan an expert jigsaw activity for your class during some subject lessons. Explain:
   - what the activity is
   - how you will organise/divide the groups
   - the task for each expert group
   - how the activity will end.

2. Do a presentation to a small group of colleagues, to model/demonstrate the jigsaw strategy. In your presentation:
   - explain the usefulness of the strategy
   - demonstrate how (the process) jigsaw groups can be organised.
   - Explain when it is most appropriate to use this strategy
   - End the session with their opinions about the strategy.

**HINT**: Choose the task you feel comfortable with. Use your notes on this strategy to complete either task.
3. Fishbowl

Fishbowl is a useful strategy for discussion. A small number of students engage in the discussion, debate or activity with ‘observers’ (the rest of the class) sitting behind and around in a fishbowl arrangement. They observe and think about the progress of the participants.

To implement the strategy:

a. The teacher formulates two topics or questions relevant to the topic and writes them up for the whole class to consider.

b. The class is divided into two groups of equal size - A and B.

c. One group sits in an inner discussion circle and the other group is seated in an outer circle to listen, observe and record features of the discussion. The outer group’s task, explained orally, or written up, is to listen carefully to the flow of the discussion, commenting on its relevance, coverage and interest, on the degree of participation of the group’s members, and formulate ideas or questions that could help to maximise the effectiveness of group discussion in general.

d. Times are set for the discussion and comment stages.

e. Groups swap roles for the second topic or questions and repeat steps (c) and (d).

Alternatively, Step (d) could consist of a re-grouping of participants into 4-6 smaller groups comprised of both A and B members of previous groups to have a de-briefing discussion, or a discussion of a second topic.

Discuss these questions with a colleague and record your answers.

• When is it most appropriate to use fishbowl? List some examples from some subjects.
• What do you see as the advantages of using fishbowl?

• Do you see any problems in using fishbowl?

**HINT: Use notes to help you respond.**

### 4. Listening Triangles

A listening triangle involves students working in groups of three to discuss an idea or issue being studied in class. This strategy encourages those who are usually quiet to participate in a group discussion.

**To implement the strategy:**

- divide the class into groups of three
- provide specific questions for students to discuss in the activity
- each participant chooses a role (listener or talker or observer)
- for one minute the talker talks about their feelings, opinions and preferences about the questions
- then the listener gives a summary of the main points made by the talker. The listener can make brief notes if that is helpful
- the observer makes a brief comment about whether or not they think the listener’s summary is accurate
- everyone moves to the next chair on the left and the activity is repeated using the same question
- do this again so that everyone has had a turn being the Talker, Listener and Observer.

**Consider these questions and record your thoughts.**

• Do you see any difficulties in using listening triangles?

• What could you use listening triangles for classroom learning? Provide two examples here.
5. Role Play

Role play involves acting out roles of real or imaginary individuals in varied situations. The students need to feel safe in these situations. Role play can help students identify their own values and develop empathy for other people.

To implement the strategy:

a. explain the role play to the whole group
b. arrange any necessary props
c. select a suitable location for the role play (this can be in the classroom, or under a tree outside, or anywhere with enough space)
d. cast participants in various roles. Begin with those who are comfortable about participating
e. discuss the roles and how they might be played with the whole group
f. explain the audience is to observe the behaviour acted out
g. remind the actors they are trying to behave, think and feel like someone else
h. you can stop and restart the role play at any time: to get advice and answer questions from the audience, to question the actors about their behaviour, to add more players, etc.
i. immediately after the role play, ask questions of the actors which they answer in character. For example, how were you feeling? Why did you respond that way?

Reflect in a paragraph how role plays promote learning in your classroom. Identify two subjects in which this strategy can be useful and give examples of the skills, knowledge and attitudes the use of role plays can strengthen.

Subject 1:

Subject 2:

HINT: Use notes from this page as well as your own professional knowledge to write your response.
6. Card Shuffle  This is an ideal strategy for sequencing, classifying, matching or positioning concepts, definitions or information.

To implement the strategy:

a. Decide on the material to be covered and make a set of cards (between 5 and 30) containing words, numbers, pictures or symbols. There are some examples in the above illustration. You will need to make one Master Copy, and then at least ten copies. Cut up each copy and place the cards in an envelope.

b. Clearly explain the task to the students. Remember that this activity is for sequencing, classifying, matching or positioning.

c. Give one envelope to each group of three or four students.

d. Each group opens the envelope and spreads out the cards; they then rearrange the cards to complete the task, talking to each other and asking for explanation or justification for the positioning of certain cards.

e. Organise the movement of the groups so that they are able to visit the other tables and discuss what they notice. They may not touch the cards.

f. Each group returns to their home table, and based on what they observed and discussed in the visits to other tables they decide whether or not to make any changes to their card organisation.

g. Teacher explores the reasons for the sequence, with groups of students.
Section 5: Learning Centres

Learning Centres

Read these notes

A learning centre is a carefully constructed learning component of the classroom in which the materials and resources are arranged to allow students to learn knowledge, skills and understandings in an independent mode of learning.

Learning centres can take any form that teachers want them to take and they can last one day, a week, or have a life of the entire year. Many teachers set up learning centres to match with the theme being studied in the classroom.

Learning centres can serve one or a number of purposes. Most teachers who begin with learning centres begin with one initially – until they feel comfortable and relaxed enough to set up another. Whatever the number and form of the learning centres, the most important point is to recognise that learning centres are places in the classroom where students go to learn and practise.

Learning centres provide opportunities for students to work at their own pace and at their own level through a series of activities on the same topic. Activities can range from easy recall and comprehension activities which teach and revise basic skills and concepts, to intellectually challenging, creating and judging activities. A well planned learning centre allows very able students to go further with a topic and challenge themselves. It also allows students who need more work on a topic to go over it again and practice specific parts independently or with the teacher and another student.

Learning centres are very useful for those students who have finished early or who already know a topic and don’t need to work through it again with the whole class. Instead, they can work at the learning centre on another related task.

At the learning centre a student can work:
• individually
• with a partner
• with a small group
• with the teacher
• with a peer tutor
• with a parent/volunteer.

Learning centres help students:
• make decisions
• work independently
• follow directions
• revise and practise work done in class
• learn new concepts and be challenged to extend their thinking
• develop responsibility in using, caring for and packing up materials
• work with others
• share ideas and materials with colleagues
• create a variety of products
• seek direction and help when necessary
• keep records on what they are doing
• evaluate how well they have worked and what they have produced.

**Teachers who use learning centres can:**
• create opportunities to meet each student’s needs based on their abilities and interests
• allow students to work at their own pace. Some students can spend more time practising and reinforcing concepts and skills taught to the whole class. Other students can be extended on enrichment activities
• allow students to work independently on self-selected activities
• reinforce students’ knowledge and understanding of topics and promote students’ skills in higher order thinking
• free themselves from a lot of routine work like record keeping, which allows more time to plan, organise and supervise students’ learning.

**A step by step guide to planning and setting up a learning centre:**
1. decide on your topic
2. check the syllabus outcomes for the topic
3. decide what your completed centre will look like
4. write a range of task cards for the topic at different levels
5. write instructions for the use of the centre
6. collect resources to put in the centre. Make sure there are resources related to each of the task cards.
7. use students to help you run the learning centres.

**What is in a learning centre?**
• Directions for the use of the centre - Make sure your directions are simple so that students can work on their own, for example:  
  *To complete the work for this unit, each student must do two blue cards. Then choose three more cards (of any colour). Remember to fill in your record card when you have finished each task, and the “How did you go?” sheet when you have finished all five cards for the unit.*
• Task cards - the main part of your centre
• Progress and evaluation materials.

Most learning centres should have a place where students can list what they have completed. This may be on:
• a chart/ blackboard in the learning centre
• a record card – which helps the user keep a record of which task cards he or she has completed, what books he or she has read and so on·
• a ‘How Did you Go?’ Sheet – which gives the user an opportunity to comment on the centre.
Students’ work displayed in the learning centre will provide motivation for other students and a sense of achievement.

**Discuss with a colleague:**

- how a learning centre can be used in your classroom. List 4 good ideas.

- if you are not familiar with this strategy, how can you learn to use this strategy effectively?

- how would you obtain the resources you need?

*HINT: Your response will depend on the outcomes of your discussions.*
Module Summary

Congratulations! You have come to the end of this module! In doing so you have covered these main points:

- some teaching strategies for promoting student learning
- strategies for collaboration and cooperation
- a range of strategies which can be used to promote student learning as suggested by teacher guides
- how these strategies can be applied in your classrooms
- how these strategies can be organised.

You have worked your way through parts of the teacher guides and done many tasks and activities specially designed to make it easy for you to learn and apply your learning.

You should by now have developed certain knowledge, understandings, insights and skills to help you to perform well in your work.

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. explain student-centred teaching strategies and processes?</td>
<td></td>
</tr>
<tr>
<td>2. explain current trends in learning activities and teaching strategies?</td>
<td></td>
</tr>
<tr>
<td>3. distinguish between traditional and current learning and teaching approaches?</td>
<td></td>
</tr>
<tr>
<td>4. demonstrate a critical understanding of a range of teaching strategies which promote active student learning?</td>
<td></td>
</tr>
<tr>
<td>5. use student-centred learning and teaching strategies in your classroom?</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 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.

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

If you are 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 own notes
## Unit 6: Learning and Teaching for Outcomes

### Module 4: The Classroom

<table>
<thead>
<tr>
<th>Contents</th>
<th>Page/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Introduction</td>
<td>2</td>
</tr>
<tr>
<td>Module Learning Outcomes</td>
<td>3</td>
</tr>
<tr>
<td>Section 1: How can learning be encouraged in the classroom?</td>
<td>4</td>
</tr>
<tr>
<td>Section 2: Access, Equity and Participation</td>
<td>19</td>
</tr>
<tr>
<td>Section 3: Classroom management</td>
<td>28</td>
</tr>
<tr>
<td>Section 4: Relationship with the community</td>
<td>36</td>
</tr>
<tr>
<td>Module Summary (and additional space for your notes)</td>
<td>43</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: The Classroom

Module Introduction

Welcome to Module 4: The Classroom

Effective classroom management skills are essential to a safe, open, fun, and productive learning environment for all students. What a teacher does in his/her classroom not only influences the learning that occurs, but also develops students’ attitudes towards school and education. Therefore, we need to think deeply about our own beliefs about learning and teaching in order to provide a positive environment for our students to work in.

In this module, you learn about the elements of classroom organisation/management and why it is important to make your classroom a positive learning environment. The module also introduces ideas to foster collaborative learning opportunities and interactions among your students, while reducing the frequency of behaviour problems.

Finally, we consider how you can address any issues of access, equity and participation that may surface in the course of your teaching.

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.
Module Learning Outcomes

When you have worked through this module, you, the learner, can:

1. describe ways of promoting school and community relationships
2. apply classroom management ideas in your classroom
3. explain the features of a positive learning environment
4. describe ways of improving classroom environment
5. explain ways of addressing issues of equity, access, and participation in classroom teaching
6. describe ways of fostering interaction among students in your classroom.
Section 1: How can learning be encouraged in the classroom?

1.1 Create a positive classroom environment

Read these notes and discuss with a colleague.

The environment in a school and its classrooms needs to be supportive and promote learning.

Students learn best in situations where they are understood, praised and encouraged. Encouragement from parents and teachers helps them to feel good about themselves. It makes their confidence grow and makes them want to try harder and learn more. In a positive learning environment, students feel happy, confident, and safe to try new things. They know their efforts will be accepted, not criticised.

In addition to the many things that you might already do to foster a positive classroom environment, you might find some of these ideas helpful.

To create a positive classroom environment:
• build a strong, supportive social environment in your classroom
• provide all students with opportunities for making choices throughout the day (eg. games, group tasks, etc.)
• provide for regular class meetings so students can talk about feelings, concerns, ideas, successes
• involve all students in problem solving
• pair students for some tasks so that assistance is available, if needed.

Find out from about five (5) students their impressions of their teachers, their classroom environment, their school as a whole and the degree of support they receive at all levels.
• As you are selecting your five students take into consideration gender and grade level. Record the impressions in the table provided.
### Unit 6: Learning and Teaching for Outcomes

#### Module 4: The Classroom

<table>
<thead>
<tr>
<th>Student</th>
<th>Impressions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teachers</td>
</tr>
<tr>
<td></td>
<td>Classroom environment</td>
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<tr>
<td></td>
<td>School</td>
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<td></td>
<td>Support</td>
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<td>5</td>
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</tbody>
</table>

**Now from the information you have collected, write a one paragraph summary of students’ impressions about these aspects.**

*HINT: Content of your summary should be determined by students’ impressions.*

**Share your paragraph with a colleague. State whether your students’ overall impressions are negative or positive, and discuss the implications for classroom practice.**

- Record your discussion points here.
Here are some examples of what you can do in order to create effective learning environment.

- Read each and indicate by ticking the appropriate column, whether you are already doing this.

<table>
<thead>
<tr>
<th>Examples</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>The contributions of all students are valued</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All students can feel secure and are able to contribute appropriately</td>
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<td></td>
</tr>
<tr>
<td>Students learn to appreciate and view positively differences in others, whether arising from race, gender, ability or disability.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students take responsibility for their actions and behaviours both in school and in wider community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All forms of bullying and harassment are challenged</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students are enabled to participate safely</td>
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</tbody>
</table>

_HINT: Personal responses are required depending on your particular school situation._

**Think about these questions and write your responses to each question.**

- As a result of the self-assessment (above), what do you need to do to improve the learning environment?

- Do your students know
  - what it means to be responsible?
  - what are good and bad habits/behaviours?
  - what good citizenship means?
  - what mutual respect is?
  - the kind of person each of them is?

- How are values learned?
• Do students in your classroom know what is expected of them?

1.2 Build a positive relationship with your students

Read these notes and discuss with a colleague.

Working to establish a relationship with students is an important strategy in effective behaviour management. Investing time to get to know the students is a good first step in establishing a positive relationship with them. Students are most likely to respond to rules, requests and reinforcement if they know their interactions with the teacher will be positive.

The first column of this table shows some suggestions about how you can build/reinforce a positive relationship with your students.

• Give examples of how (what you would do/say) you would demonstrate each.
• Record your examples in the second column. The first one has been done for you as an example.

<table>
<thead>
<tr>
<th>Suggestions for building a positive relationship</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrating to students their importance</td>
<td>By learning their names, actively listening to them, remembering things said by them.</td>
</tr>
<tr>
<td>Praising continuation of appropriate behaviours</td>
<td></td>
</tr>
<tr>
<td>Showing interest in helping students</td>
<td></td>
</tr>
<tr>
<td>Explaining the reasons for having rules</td>
<td></td>
</tr>
<tr>
<td>Encouraging students to participate in activities</td>
<td></td>
</tr>
</tbody>
</table>

Students respond better to adults who take a personal interest in them. Personal knowledge of each student is one way to strengthen and improve these relationships. It also provides the opportunity to model interpersonal behaviours.

Discuss with a colleague the implications of negative and positive relationships for students’ learning and your practice.

• Record your discussion points here.
Think about what your relationship is like with your students.

- Are there any particular students with whom you do not have a good relationship? Why?

- How does this poor relationship affect
  - the students’ learning?

  - your teaching?

- What could you do to improve the relationship?

1.3 Motivate Students

Read these notes.

Some students seem naturally enthusiastic about learning, but many need or expect their teachers to inspire, challenge, and stimulate them. Effective learning in the classroom depends on the teacher’s ability to hold and maintain the interest of the students.

Whatever the level of motivation your students bring to the classroom, it will be transformed, for better or worse, by what happens in that classroom.

To encourage students to become self-motivated independent learners, teachers can:

- give frequent, early, positive feedback that supports students’ beliefs that they can do well
- ensure opportunities for students’ success by assigning tasks that are neither too easy nor too difficult
- help students find personal meaning and value in the material
- create an atmosphere that is open and positive
- help students feel that they are valued members of a learning community.

Good everyday teaching practices can do more to counter student apathy than special efforts to attack motivation directly. Most students respond positively to a well-organised lesson taught by an enthusiastic teacher who has a genuine interest in students
and what they learn. Thus activities you undertake to promote learning will also enhance students’ motivation.

Ask five of your students to analyse what makes their lessons more or less interesting. Ask them to recall two recent lessons, one in which they were highly motivated and one in which their motivation was low and to make a list of specific aspects of the two lessons that influenced his or her level of motivation.

**Student 1**

<table>
<thead>
<tr>
<th>Aspects that made the lesson more motivating</th>
<th>Aspects that made the lesson less motivating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td></td>
</tr>
<tr>
<td>Lesson 2</td>
<td></td>
</tr>
</tbody>
</table>

**Student 2**

<table>
<thead>
<tr>
<th>Aspects that made the lesson more motivating</th>
<th>Aspects that made the lesson less motivating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td></td>
</tr>
<tr>
<td>Lesson 2</td>
<td></td>
</tr>
</tbody>
</table>

**Student 3**

<table>
<thead>
<tr>
<th>Aspects that made the lesson more motivating</th>
<th>Aspects that made the lesson less motivating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td></td>
</tr>
<tr>
<td>Lesson 2</td>
<td></td>
</tr>
</tbody>
</table>
### Student 4

<table>
<thead>
<tr>
<th>Aspects that made the lesson more motivating</th>
<th>Aspects that made the lesson less motivating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td></td>
</tr>
<tr>
<td>Lesson 2</td>
<td></td>
</tr>
</tbody>
</table>

### Student 5

<table>
<thead>
<tr>
<th>Aspects that made the lesson more motivating</th>
<th>Aspects that made the lesson less motivating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td></td>
</tr>
<tr>
<td>Lesson 2</td>
<td></td>
</tr>
</tbody>
</table>

- Did you find any interesting factors? Record findings here.

**HINT:** Your response will be very much determined by your particular school situation.

Meet with a group of colleagues to reach agreement on characteristics that contribute to high and low motivation.

- Discuss any issues and list significant points from your discussion here.
How might your students’ feelings about motivation influence your teaching practice? Write your response here.

Do the following self-assessment survey.

Directions: Circle the response that you feel describes what you do or see in your school. The response scale is (1) most of the time, (2) frequently, (3) sometimes and (4) rarely.

- Specific feedback is offered rather than general comments 1 2 3 4
- Students are helped to develop an appreciation of their behaviours and achievement 1 2 3 4
- Students are encouraged to work towards self-satisfaction from a task or product 1 2 3 4
- Students are encouraged to avoid competition or comparison with others 1 2 3 4
- Students are encouraged to make mistakes and learn from them 1 2 3 4

Reflect on your assessment.

Ask four of your students to write down five things that interest them very much.

<table>
<thead>
<tr>
<th></th>
<th>Interest 1</th>
<th>Interest 2</th>
<th>Interest 3</th>
<th>Interest 4</th>
<th>Interest 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ask them to write down five things they would like to do very much.

<table>
<thead>
<tr>
<th>Interest 1</th>
<th>Interest 2</th>
<th>Interest 3</th>
<th>Interest 4</th>
<th>Interest 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Analyse the two lists. What are the common interests and desires that you could use in your teaching to build motivation?

HINT: Your response here will depend on the outcomes of your discussion and analysis.

1.3.1
Securing motivation and concentration

Read these notes.

Motivation is a key to academic success for most students. There are a number of ways to increase the motivational level of students.

Teachers secure students’ motivation and concentration by:

- using teaching approaches appropriate to different learning styles
- using, where appropriate, a range of organisational approaches, such as grouping or individual work, to ensure that learning needs are properly addressed
- varying subject content and presentation so that this matches their learning needs
- planning work which builds on their interests and cultural experiences
- planning appropriately challenging work for those whose ability and understanding are in advance of their language skills
- using materials which reflect social and cultural diversity and provide positive images of race, gender and disability
- planning and monitoring the pace of work so that they all have a chance to learn effectively and achieve success
- taking action to maintain interest and continuity of learning for pupils who may be absent for extended periods of time.
Think about the following factors and indicate (by ticking the appropriate column) whether each is evident or not evident in your current practice.

<table>
<thead>
<tr>
<th>Motivation factor</th>
<th>Evident</th>
<th>Not Evident</th>
</tr>
</thead>
<tbody>
<tr>
<td>I relate learning materials to students’ life experiences, ie, make it relevant to them personally, thereby stimulating their interest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I demonstrate an active interest in each student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I demonstrate an active interest in the student’s work or the activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use lots of praise both verbally and non-verbally</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I give frequent positive/constructive feedback that supports students’ beliefs that they can do well</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I ensure opportunities for students’ success by assigning tasks that are neither too easy nor too difficult</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I help students find personal meaning and value in the materials I provide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I create an atmosphere that is open and positive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I help students feel that they are valued members of a learning community</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*HINT: Personal responses are required here.*

Share your table with a colleague and explain your responses, that is, explain why these are evident or not evident in your practice.

What might you do about those factors that are not evident in your practice? Record your ideas here.
1.3.2 Foster positive student behaviour through praise

Read the following notes

One of the most powerful strategies for encouraging appropriate behaviour in the classroom is providing praise. The planning of how and when to use praise rests with the teacher.

1. **Define the appropriate behaviour while giving praise.**
   Praise should be specific for the positive behaviour that the students display. This means any comments about behaviour should focus on what the student did right. The praise should include exactly what part of the student’s behaviour is acceptable. This serves to clearly communicate to the student what was good.

2. **Praise should be given immediately.**
   The sooner an approving comment is made about appropriate behaviour, the more likely the student will repeat the desired behaviour.

3. **The statements used as praise should vary.**
   Individual statements that one uses should be varied. When students hear the same praise statement used over and over, it loses its value for the student.

4. **Praise should not be given continuously or without reason.**
   If praise is given too frequently or without stating what the student is doing that is “good”, then praise loses its value to the student.

5. **Be sincere with your praise.**
   Students will notice if you do not mean what you say. Non-verbal cues like facial expressions and posture will alert the students that your praise is not sincere. The praise will not be effective if the student perceives that it is not sincere. Smiles communicate that the praise given is genuine.

6. **Be consistent when praising the particular behaviours.**
   It is important to be consistent with the behaviours that you praise. Students learn more quickly when they are always praised for desirable behaviours.

7. **Praise should be developmentally appropriate.**
   Statements to younger or developmentally delayed students should be in language that is at their level so they clearly understand what behaviour is seen as appropriate. However, if older students perceive they are being “talked down to”, it is likely that the praise will be discounted.

Think about and respond to these questions.

- How and when do you use praise in your classroom?
• How can you make some of the above ideas more evident in your classroom practice?

Now do a class observation

Observe some learning activities, either in the classroom or outside. Take notice of the use of praise; when, why, how it is used.

• Use this table to record your observations.

<table>
<thead>
<tr>
<th>Situation</th>
<th>Why praise was used</th>
<th>What the teacher actually said to the student</th>
<th>What the teacher could have said to praise the student</th>
</tr>
</thead>
</table>

_HINT: Use your observation notes to complete the table._

What interesting things did you discover?

• Make notes here and then discuss with a colleague how praise influences student behaviour and performance.
1.4 Classroom Interactions

Read these notes

Classroom interaction occurs when the teacher and students are involved in the teaching-learning process.

Classroom interaction is a learning process whereby students learn new ideas and knowledge from each other when they work in groups and when the teacher explains a new concept.

How a student thinks and feels about self-performance, other students, the teacher, and general classroom life, will determine greatly how well the student will learn. If the student feels good about classroom life then the student will succeed. A student who does not feel good about classroom life will be less likely to succeed and may even fail.

Communication in the classroom

There are different types of talk that happens in classrooms. One way of categorising this talk is below:

| 1. Teacher-initiated talk | Presents information or opinion |
|                          | Gives directions                |
|                          | Asks closed questions           |
|                          | Asks open questions             |
| 2. Teacher-response talk | Accepts ideas, behaviour, feeling |
|                          | Rejects ideas, behaviour, feeling |
| 3. Pupil-response talk  | Responds to teacher            |
|                          | Predictably/unpredictably      |
|                          | Responds to another pupil      |
| 4. Pupil-initiated talk | Initiates talk to teacher      |
|                          | Initiates talk to another pupil |
| 5. Silence               |                                 |

When analysed, classroom talk can reveal a great deal about:
- social processes and power structures in the classroom
- how questions and answers are used to build knowledge
- who gets to speak and who doesn’t
- what kinds of tasks are allocated to which people
- the way praise is used
- the way control strategies are used
• what counts as valuable knowledge and what doesn’t (is it the story that child X tells or is it child Y’s, etc…?)
• the use of pronouns (we, you, etc).

Observe 2-3 classes (or you may arrange with a colleague to observe your classes).
Use this table to analyse the communication that occurs in the classes. Follow the examples given to record your observations in the table.

<table>
<thead>
<tr>
<th>PURPOSE</th>
<th>SITUATION</th>
<th>SPEAKER</th>
<th>AUDIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide information</td>
<td>Lunch arrangements changed because of wet weather</td>
<td>Teacher</td>
<td>Whole group</td>
</tr>
<tr>
<td>To share learning</td>
<td>A student presents a talk on life-cycle of a frog</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

HINT: Information you get from your mini research will help you to complete the table.

Share your analysis with a colleague or other teachers and discuss these questions.
• Which forms of communication are common in your/or the other classrooms?
• What do they show about your preferred means of interaction?

• What changes could you make?

HINT: Personal responses are required.
Section 2: Access, Equity and Participation

2.1 Inclusive Curriculum

What is an inclusive curriculum?

Read these notes and discuss with colleagues.

An inclusive curriculum is one which:

• supports students’ use of their vernacular language and encourages teachers to draw on local materials and real-life experiences when planning lessons

• recognises cultural diversity and presents a balance of urban and rural images

• uses acceptable terms to describe people who are disabled (eg. rather than refer to someone as handicapped or mentally affected, refer to them as individuals with a speech problem or physical disability)

• provides a balance of male and female images and values equally the experiences of women and men in the curriculum

• avoids the type of language that devalues women and girls, boys and men, certain cultures, religions, interests, occupations or ethnic groups.

We should be aware of two aspects of an inclusive curriculum that are of particular importance to education in Papua New Guinea – cultural relevance and gender equity.

What is a culturally relevant curriculum?

A Philosophy of Education for Papua New Guinea (1986) states that ‘cultural bonding’ must take place during learning and teaching in Papua New Guinea schools. A culturally inclusive or relevant curriculum will allow this to happen. A culturally inclusive curriculum is one based on multicultural education and bilingual education.

What you can do to support multicultural education in the curriculum:

• provide opportunities for students to appreciate their own cultures and the cultures of others

• encourage the local community to be involved in the school curriculum

• encourage teachers to invite parents into the classroom to teach traditional skills, knowledge and values

• use a range of teaching strategies such as integrated teaching, cooperative learning, whole language methods, drama, art, songs, games and discovery learning

• allow for different cultural learning styles in your teaching strategies.
What is a gender inclusive curriculum?
A gender inclusive curriculum is one which by its content, language and methods gives value and validity to girls and to women. It values their knowledge and experiences equally with boys’ and men’s knowledge and experience.

A gender inclusive curriculum is a basic concept which lays the foundations for all aspects of schooling—curriculum planning, learning, teaching and assessing.

The National Curriculum Statement provides this advice, on page 25:

*The National Curriculum is inclusive and designed to meet the needs of all students irrespective of their abilities, gender, geographic locations, cultural and language backgrounds, or their socioeconomic backgrounds. The National Curriculum must be implemented by teachers in ways that are inclusive of all students at all levels of schooling...*

In order to be inclusive of all students, teachers need to cater for a range of physical, social, cultural, emotional and intellectual needs of their students. This can be achieved through using appropriately and carefully planned learning activities, a range of teaching methods and strategies and thoughtful use of a teacher’s language of communication.

To be inclusive teachers will need to ensure that all girls and boys have the opportunity to participate. Teaching practices, including classroom organisation and management, should ensure that girls and boys are able to participate fully in all learning activities.

*Gender Equity in Schools – a resource book for teachers,* states, on page 6:

*When in class students receive important messages about themselves and others. These messages come from the activities they do that are described or defined in the curriculum materials. Even the type of language and pictures used in textbooks give students messages about themselves. All these messages – whatever the students’ gender, abilities, language, culture and where they live – should promote:

- equal access for all children
- equal participation of all children
- equal learning outcomes for all children.

*When a curriculum does this, we say it is an inclusive curriculum. If we are thinking about it being fair to girls and boys in particular, we say it is a gender-inclusive curriculum.*
Think about the following and record your thoughts here.

- How can you foster access and equity in terms of:
  - your time?
  - space in classrooms and playgrounds?
  - equipment?
  - opportunities?

- Do you often make sure that no one is left out or ignored in your classroom?

- Do you rotate tasks and responsibilities so that all students have opportunities to do a range of different tasks?

- Are opportunities provided for both girls and boys to take leadership roles? Give two examples from your practice.

- Do you select texts which are less sexist and more gender-inclusive?

- How do you ensure discipline methods are fair to both boys and girls? Provide some examples.

_HINT: Personal responses are required._

Work with a colleague to complete this activity.

- Read the section on pages 25-26 of the National Curriculum Statement. Three key messages are mentioned in this statement. List each here and discuss the significance of each for classroom practice.
Message 1:

Message 2:

Message 3:

Now do the following activity.

- With a colleague, look through several syllabuses (lower and upper primary). Find the sub-section called *Inclusive curriculum*. Read what has been said about inclusive curriculum, and indicate the page number on which you found the information, then answer the question: How is inclusive curriculum intended to be addressed?

- Record your responses in this table.

<table>
<thead>
<tr>
<th>Syllabus</th>
<th>Page number</th>
<th>How is inclusive curriculum intended to be addressed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making a Living</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Science or Community Living</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science or Environmental Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Development, Health or PE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*HINT: Information from each syllabus will assist you to complete the table.*
Share your notes from activities 1 and 2 with a group of colleagues. Discuss any important issues relating to inclusion. Record the results of your discussion here.

Think about and respond to the following questions.

Record your responses to the questions in the table below. Make sure you explain your current practice.

<table>
<thead>
<tr>
<th>Providing equality of opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do the teaching approaches you use reflect equality of opportunity?</td>
</tr>
<tr>
<td>Do you take into account the interests and concerns of boys and girls by using a range of activities? Provide 2 examples from your own experience.</td>
</tr>
<tr>
<td>Do you take into consideration gender stereotyping when organising students into groups, assigning them to activities or arranging access to equipment?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Developing understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you encourage students to take part in everyday activities such as play, drama, class visits and exploring the environment?</td>
</tr>
<tr>
<td>Do you use a range of visual and other materials to increase students’ knowledge of the wider world?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planning for full participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you enable students’ full participation in learning and in physical and practical activities by providing support from adults or peers when needed?</td>
</tr>
<tr>
<td>Do you plan students’ full participation in learning and in physical and practical activities by adapting tasks or environments?</td>
</tr>
<tr>
<td>Do you plan for students’ full participation in learning and in physical and practical activities by providing alternative activities, where necessary?</td>
</tr>
</tbody>
</table>
2.2 Teaching in an inclusive classroom

Read these notes.

In an inclusive classroom the teacher makes sure classroom practices allow equal participation and success for particular individuals and groups of students.

- For example, arrangements are made for the students with special needs to participate in most activities. If a student can’t play sport, he or she can do the scoring or mark on the field rather than sit on the sidelines every week. Shy students are given the opportunity to select classroom activities. Girls and boys share positions of responsibility, leadership of groups, etc.

In an inclusive classroom the teacher makes sure the resources are for everyone to use.

- For example, if there are not enough setsquares or paint brushes or reading books to go around, draw up a roster. Don’t let the quiet, shy or weaker students always miss out.

In an inclusive classroom the teacher makes sure all students feel safe and valued and that the learning and general school environment are supportive.

- For example, girls are given a fair use of time, money, personnel and other resources. The classroom management of harassment is especially important. In senior classes in particular, students should feel free to discuss topics and express opinions without being picked on or laughed at by others. All students, regardless of sex, age, intellectual ability, size or social status have the right to respect and fair treatment.

In an inclusive classroom the teacher makes sure non-violent, non-discriminatory and inclusive language is defined, modelled and reinforced.

- If the teacher makes insulting or critical comments about individuals or groups, if the teacher uses coarse language or makes rude jokes, then his or her students will think it is OK for them to behave the same way. Teachers have enormous influence on their students and it is usually what the teacher says or does casually rather than as part of the teaching program that has the most influence.

In an inclusive classroom the teacher makes sure teaching strategies suit students with disabilities and learning difficulties.

- This may mean careful long-term planning to ensure these students have access to learning experiences. The teacher makes sure arrangements are made to ensure safety and access for students with disabilities during field work or excursions. Most students, not just those with disabilities can be disadvantaged if the print on a page or the blackboard is too small or if there is too much noise, or if there is not enough space to work, or if the content is too hard, or if not enough background information is provided.
List the key ideas you gained from the notes above in point form.

HINT: Try to extract important information from these notes. Have your notes in bullet points; the main ideas only.

Use the information you’ve extracted from the syllabuses and the readings to prepare a short presentation on the principles of inclusive curriculum.

Your presentation should focus on:
- what inclusive curriculum is
- the significance of inclusive curriculum for current classroom practice
- how it can be fostered

• Use the space at the end of this module to write your presentation notes.

HINT: Your role and the audience will shape the content of your presentation notes.

Deliver your presentation to your colleagues during a staff meeting. Then lead a discussion on:

• the degree to which some of the aspects of inclusive curriculum are evident in classroom practice

• appropriate strategies for implementing inclusive curriculum.
Study typical student behaviour in the classroom and identify examples of non-inclusive behaviour.

• Record your observations and findings in this table.

<table>
<thead>
<tr>
<th>Examples of non-inclusive student behaviour</th>
<th>Why behaviour is unacceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Talk to your students about their non-inclusive behaviour and help identify ways they can include their peers.

• Identify practices in your school which prevent access, equity and participation for all students. Bring them to the attention of the school administration and seek changes. List your intended actions here.

Ask a colleague to monitor your lessons to see how much attention boys and girls are given in your classroom.

• You may do the same for your other colleagues while they are teaching. Use this simple checklist for assessing teacher practices. Indicate by ticking the appropriate column each time each practice occurs over an agreed period of time.

<table>
<thead>
<tr>
<th>Practice</th>
<th>Girl</th>
<th>Boy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teacher asks a question of a girl/boy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Teacher accepts an answer from a boy/girl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Teacher gives individual help or encouragement to a boy/girl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Teacher tells off a girl/boy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. A girl/boy asks the teacher a question</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. A girl/boy speaks individually with the teacher</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Comment on your findings.

HINT: The context and situation of your school will determine your responses to this.

We all need to think critically about our own practices and ask ourselves:

1. are the students in my class/the classroom experiencing learning as fun?
2. what do I do which prevents students enjoying their learning?
3. do I show through words and actions that I understand what the situation is like for the student?
4. do I use praise and encouragement in my classroom(s)? Are my comments to students mostly positive or mostly negative?
5. is my classroom an inclusive classroom?
6. do all the students in my class feel safe and valued?

It is important, though, to look at ways in which we can improve our attitudes to students in our classrooms.
Section 3: Classroom Management

Read these notes and discuss with a colleague.

The curriculum cannot be implemented well without proper classroom organisation. Classroom management seems to be directly related to the personality of the teacher. The learners should be in a place where they can succeed rather than where they will be bored. A classroom that is well organised and managed should provide this sort of opportunity for every student.

Successful classroom management involves not only responding effectively when problems occur, but preventing the frequent occurrence of problems. The most effective decisions in classroom management are based on a clear concept of the goals and intended outcomes that a teacher wishes to accomplish.

Some strategies for classroom management include:

1. **Classroom rules**
   Rules and procedures should be developed in conjunction with teaching strategies that help students meet their personal and academic needs. Establishing procedures is crucial – particularly in the lab (science), the workshop (MAL) and the gym. But each student should know what these rules are, for example, seating arrangements, daily schedules.

2. **Adequate preparation and professional development**
   Being prepared sounds very obvious and simple but good planning will help to avoid many problems in classroom management. This means being prepared and making prompt start to lessons, consideration on variety, interests and motivation, provisions of lessons suited for student needs and abilities, and also availing yourself to opportunities around you to enhance your own professional development and that of others.

3. **Build positive relationships**
   Give students ‘the time of day’ (smile say hello) both inside and outside the classroom. Always be courteous and expect courtesy in return. Be genuine and caring and reinforce positive/acceptable behaviour where possible. Be firm but fair and consistent.

4. **Knowing students**
   Be aware of what a specific student is capable of – this includes verbal and written ability as well as other specific skills like reading to the class. Be aware of student weaknesses and dislikes, for example, directing questions at a student who becomes anxious when receiving the focus of the whole class.

5. **Creating a cohesive classroom group**
   Encourage a cooperative ‘team’ effort, a sense of belonging and involving your students by, for example, allowing them to take on responsibilities.
6. Communication/effective listening
Effective communication is the foundation for good classroom management. Be a good listener, friendly and consistent. Listen carefully as well as talking, give students individual attention and show an interest in what they say. Tune into student experiences and share your experience where appropriate. Be empathetic.

7. Praise and encouragement
Point out to students that they are working for their own success, continually explaining why they will benefit from what they are learning. Make it deliberate practice to encourage students and praise work behaviour both as individuals and as a group (work displays). Identify mistakes non-critically. Avoid embarrassing the student. Encourage students to learn from errors by ensuring that your criticism is constructive. Praise students’ efforts in areas outside of your teaching subject.

8. Mutual respect
Treat students with respect and expect respect in return. This can be conveyed through one’s tone of voice and speaking in context. A positive classroom climate is crucial for effective learning and teaching – and this depends on the interactions between teacher and students.

9. Monitoring
Some techniques you might find useful for responding to minor classroom disruptions include:
• scanning the class frequently in order to notice and respond to potential problems
• reacting calmly and quickly to students’ disruptive behaviour in order to create a positive ripple effect
• making positive initial contact with students by praising the positive behaviour that competes with the negative behaviour
• reminding students of the classroom rules or procedures that they are not demonstrating
• making students clearly aware of the rules and procedures and the consequences for violations
• employing consistent consequences for misbehaviours.

Being alert is absolutely vital – keep scanning the classroom, check for attentiveness, safety procedures in the workroom, lab or gym – you need to know what’s going on in your classroom. Response to student misbehaviour is most effective when it maintains or enhances the student’s dignity and self-esteem and encourages the student to be responsible for his/her own behaviour.

10. Delivery of instruction
Leading educators over the past several years have emphasized that quality of instruction is a key factor influencing students’ behaviour and achievement.
• Involve students in evaluating their own work as well as your instruction
• Vary style as well as the content of instruction in order to address diverse student learning styles
• Provide work of appropriate difficulty to complement varying ability levels
• Relate materials to students’ lives whenever possible
• Be animated, create anticipation, and use activities to catch student interest or increase student motivation to participate
• Engage student learning through cooperative group work, competitive teams, group discussions, debates, and role playing.

Your teaching skills
The establishment of a strong presence and appropriate routines and procedures are very important in classroom management; however, they are of little value where you neglect teaching skills.

Enthusiasm and focus on task are essential, but unless you are able to teach your subject, they are not enough. If you concentrate on planning and ignore teaching skills, you’ll have problems. You cannot teach effectively without a range of instructional skills.

Summarise the information from the previous pages in the form of a mind map. Add more branches where necessary.

HINT: Extract main ideas from the reading to complete your mind map.

Use your mind map to share the information with the rest of your colleagues on the importance of classroom management. Write down important issues from your discussions.
Think about these questions and write your responses for each.

- Can you remember an incident from your school days where a teacher did not treat you with respect? How did this affect your feelings about the teacher or the subject?

- Think about some of the procedures/routines you have established in your classroom. How consistent are you with these procedures/routines and how have they contributed to effective classroom management?

- Think about what an effectively managed classroom would be like if the strategies provided above were being effectively implemented. Record your thoughts in this diagram.

  Looks like ……

  Feels like ……..

  Sounds like ……..

Use this checklist to analyse your current classroom management practices. For each strategy rate yourself a number (between 1 - 5) out of 5.

Key:
5 – most effective
4 – moderately effective
3 – effective
2 – least effective
1 – none
### Strategy

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Rating out of 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom rules</td>
<td></td>
</tr>
<tr>
<td>Adequate preparation &amp; professional development</td>
<td></td>
</tr>
<tr>
<td>Building positive relationships with students</td>
<td></td>
</tr>
<tr>
<td>Knowing students</td>
<td></td>
</tr>
<tr>
<td>Creating and enhancing a cohesive classroom group</td>
<td></td>
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<tr>
<td>Communication/Effective listening</td>
<td></td>
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<tr>
<td>Praise and encouragement</td>
<td></td>
</tr>
<tr>
<td>Mutual respect</td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td></td>
</tr>
<tr>
<td>Delivery of instruction</td>
<td></td>
</tr>
</tbody>
</table>

- Comment on the results of your analyses, indicating the areas you need support in.

---

**Read these notes on group work and discuss them with a colleague.**

Group work is an important element of classroom management. Many teachers structure their classrooms to cater for small groups because this helps them:

- vary learning experiences to suit the students’ needs
- involve students more in their own learning
- divide the class into smaller units to tailor instruction to individual needs
- facilitate students’ interaction skills.

Group work also helps develop the social skills of students. Such skills include completion of a task independently, cooperation and collaboration, problem solving and sharing of resources.

Activities can be a mixture of instructional and independent; that is, you can work with one group while the other groups work independently. There may be times when all students are working independently. This lets you to move around the room to observe students’ application.
Here are some suggestions for effectively managing group activities in your classroom:

- **Group processes – hold a session with students to cover**
  - explanation of tasks, what the expected outcome is and what each group is to do
  - allocation of groups and individual member roles (eg. reporter, recorder, manager, etc)
  - establishment of time limits for completion of tasks
  - reminding students of group skills they have learned and how to use them while working
  - answer any questions relating to the tasks.

- **Monitoring group progress**
  If you have four groups working in your classroom and you are working with one of those groups, the other three groups need to know exactly what they are doing so they do not interrupt your teaching.

- **Evaluating student progress**
  You need to build in time in your classroom activities for sharing of outcomes. Some of the ways this could be done include: displays of completed work, reporting back to whole class, progress reports (if groups are working on long term projects, progress reports to whole class at the end of each working session).

- **Reflection**
  There must also be time given for consideration about what went well, and the problems that arose or areas where a group needed to improve. Here are some ways to encourage reflection.
  - Use discussion with open-ended questions about group behaviour and attitude: What happened in your group that helped you complete your task? What got in the way of completing your task?
  - Use brainstorming about specific problems with specific group working skills – brainstorm all the ways you can think of to solve this problem.
  - Use specific questions about specific learning aspects of the task, eg. how did your group come up with the answer to that sum?
  - Use of self-evaluation strategy that students can use to rate how well they worked together.
  - Give positive constructive feedback based on what you observed as the students were working. Draw attention to those students doing the right thing, eg. it was good to see Kila helping others in her group to agree on one answer.
  - Ask students to keep a reflective journal on how they work in groups. They write about the group skills they are improving in, and those skills they still need to work on.
Work with a colleague to complete this activity, recording your responses.
Examine a current unit of work you have taught for one of the primary subjects. Consider the group learning activities you planned for your lessons.

- Were there briefing sessions prior to start of the lessons? Do you see room for improvement?

- How did you monitor group progress?

- How did you evaluate your students’ progress?

- What opportunity did students have for reflecting on what they had done?

HINT: Personal responses are required here.

What is your classroom management profile?
Answer these 12 questions and learn more about your classroom management profile. The steps are simple:

- Read each statement carefully.
- Write your response, from the scale below, on a sheet of paper.
- Respond to each statement based upon either actual or imagined classroom experience.

1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree
<table>
<thead>
<tr>
<th><strong>If a student is disruptive during class, I assign him/her to detention, without further discussion.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I don’t want to impose any rules on my class.</strong></td>
</tr>
<tr>
<td><strong>The classroom must be quiet in order for students to learn.</strong></td>
</tr>
<tr>
<td><strong>I am concerned about both what my students learn and how they learn.</strong></td>
</tr>
<tr>
<td><strong>If a student hands in assignments late, I don’t care.</strong></td>
</tr>
<tr>
<td><strong>I don’t want to reprimand a student because it might hurt his/her feelings.</strong></td>
</tr>
<tr>
<td><strong>Class preparation isn’t worth the effort.</strong></td>
</tr>
<tr>
<td><strong>I always try to explain the reasons behind my rules and decisions.</strong></td>
</tr>
<tr>
<td><strong>I will not accept excuses from a student who is late.</strong></td>
</tr>
<tr>
<td><strong>The emotional well-being of my students is more important than classroom control.</strong></td>
</tr>
<tr>
<td><strong>My students understand that they can interrupt whenever they have relevant questions.</strong></td>
</tr>
<tr>
<td><strong>If a student requests to leave the room, I always honour the request.</strong></td>
</tr>
</tbody>
</table>

**Think about these questions and write your responses here.**
How does your current classroom management style affect your teaching practice?

- Is there a need for your preferred style to change so that it is more consistent with outcomes-based approaches?

**HINT: Personal responses are required.**
Section 4: Relationship with the Community

4.1 Culture & Society

Read these notes and discuss with your colleagues.

The foundation of the reform is the promotion of culture, values, attitudes, knowledge and a range of skills appropriate for Papua New Guinean societies along with the need for international competitiveness. *(National Curriculum Statement, 2002, page 3)*. This means that the national curriculum must enable students to demonstrate an understanding and appreciation of the values, customs and traditions of Papua New Guinea.

One of the ways through which this can be done is through the facilitation of the *integral human development*. Here the success of the national curriculum requires the integrated involvement of all the agents of education such as the home, church, school and community. Within the national curriculum, the teachers must integrate knowledge, skills and attitudes to allow students to achieve the desired outcomes of integral human development. *(National Curriculum Statement, 2002: page 22)*

The school can help educate students but cannot, and should not, be regarded as the only agent of education. Other agents of education must ensure that all human needs are recognised and work in partnership with the school.

Barriers between school and community must be removed, but this is more likely to happen as the result of initiatives taken by the school. *(Ministerial Committee Report, 1986 pages 14-15)*

Discuss these questions with a colleague and write your responses:

- How do you and your staff relate to the community?

- If there is little cooperation, why?

List two ways how cooperation can be improved?

1.

2.
• Suggest four ways in which classroom activities can be implemented with the help of the parents and community. Provide examples from subject content.

1. 
2. 
3. 
4. 

HINT: Responses are based on your school situation.

4.2 Working with Parents and Community

Read these notes.

A teacher should work as a partner with parents, families, and the community. Encouraging all these parties to see the schools as an integral part of the neighbourhood and helping schools identify ways to connect to local community resources are critical steps if we are to meet today’s educational challenges.

These strengthened relationships enable schools and their communities to identify shared educational values and priorities that they can work on together. Teachers need to know and work with parents and the community to insure that they have the same goals in mind for the students.

Work with a colleague to examine each of the characteristics that indicate a school is community-oriented.

• Give examples of what you would expect to see in relation to each characteristic.
### Characteristics of a community-oriented school:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Examples of what I currently do or could do to strengthen the partnership with parents and community:</th>
</tr>
</thead>
<tbody>
<tr>
<td>teachers use the surrounding environment in their teaching</td>
<td></td>
</tr>
<tr>
<td>the head teacher and staff seek to stimulate the interest of the community in educational goals</td>
<td></td>
</tr>
<tr>
<td>the community participates in a range of school activities</td>
<td></td>
</tr>
<tr>
<td>the school collaborates with the community in community activities</td>
<td></td>
</tr>
<tr>
<td>regular and meaningful communication exists between the classroom and students’ families</td>
<td></td>
</tr>
<tr>
<td>teachers participate in school-wide efforts to communicate with the broader community</td>
<td></td>
</tr>
<tr>
<td>teachers involve parents and families in setting and monitoring student learning goals.</td>
<td></td>
</tr>
</tbody>
</table>

- Share your chart with other colleagues. Add any significant points suggested by them.

- What changes do you have to make to your current practice to be more community-oriented?

_HINT: Personal responses are required, based on your situation in your school and your personal ideas._
What opportunities are there in the community for students to put to good use the knowledge and skills they learn in school?

• What are some consequences of poor communication between the school and the community? List 2 examples.

1. 
2. 

HINT: Personal responses are required.

Read these notes about working with parents and families to support and promote student learning.

Families can support student learning by attending school activities and meetings with the teachers, and by supporting the school’s goals for the students. At home, students’ learning will be a priority and the students will be given space and quiet time to work on schoolwork at home. Students will come to school fed and ready for the school day.

Below are some ideas about how or what you can do to involve families:

1. **Parenting**
   Schools can provide training and information to help parents/families understand their children’s development so they can support them appropriately.

2. **Communicating**
   Schools must reach out to families with information about school programs and student progress. This includes report sheets and teacher-parent interviews, as well as new information on topics such as school choice and making the transition from elementary school to higher grades. Communication must be in forms that families find understandable and useful, for example, schools need to talk to parents in a language they understand well and it must be two-way, with educators paying attention to the concerns and needs of families.

3. **Volunteering**
   Parents can make significant contributions to the environment and functions of a school. Schools can get the most out of this process by creating flexible schedules, so more parents can participate, and by working to match the talents and interests of parents to the needs of students, teachers, and administrators. You could organise a volunteer program for parents and inviting parents to participate in their children’s learning activities.
4. **Learning at Home**

With the guidance and support of teachers, family members can supervise and assist their children at home with homework assignments and other school-related activities.

Send notes to parents and guardians. Inform them about the nature of the project, the due dates, expectations of students, and any special requests that you may want them to attend to. Notifying family members is especially important if you are planning a larger event, a cultural day, or a debate. In addition, a very useful communication tool between parents and teachers is through means of newsletters. This tool increases communication between the teacher and parent and thereby increases awareness.

5. **Decision-making**

Schools can give parents meaningful roles in the school decision-making process, and provide parents with training and information so they can make the most of those opportunities. This opportunity should be open to all members of the community, not just people who have the most time and energy to spend on school affairs.

6. **Collaboration with the Community**

Schools can help families gain access to support services offered by other agencies, such as healthcare, cultural events, literacy programs, and community development schemes. They also can help families and community groups provide services to the community, such as neighbourhood watch groups in facilitating training about safety. It is important to make the school “community friendly” as schools and communities can support each other and contribute to the success of coordinated school programs.

Discuss with a colleague the degree of involvement of parents/the community in your school activities. Then indicate on the scale below by circling one of:

0 = None
1 = Sometimes
2 = Adequately
3 = Very Effectively

1) The school holds parent/teacher meetings at convenient times for parents.

I------------------------I-------------------------I--------------------------I
0                               1                                 2                                  3

2) School policies are ‘community friendly.’

I------------------------I-------------------------I--------------------------I
0                               1                                 2                                  3
3) There is cooperation between parents and teachers.

   0 1 2 3

4) Parents/community members are involved in learning activities.

   0 1 2 3

5) There are collaborative activities between the school and community.

   0 1 2 3

6) School facilities are shared by all relevant individuals and groups.

   0 1 2 3

- What does your ranking say about the strengths and weaknesses of your school?

*Strengths:*

*Weaknesses:*

*HINT: The situation in your school will shape your analyses and your intended actions. Use the mind map as your plan for your intended actions.*

In a staff meeting, share the results of your assessment of school/community relations and raise the importance of community/parent involvement in learning activities of students.

- Initiate a discussion about what the school could do to strengthen its relationships with the community.
• Identify some issues and problems around using community members in the classroom? List them here.

• What could you do about these issues/problems?

• Make a list of the agreed decisions made during your meeting.

_HINT: Feedback from your colleagues will determine the responses you write here._
Module Summary

Congratulations! You have come to the end of this module! In doing so you have done many tasks and activities designed to help you learn and apply your learning. You have covered these main points:

- relationship with the community
- the elements of classroom organisation and management
- how to motivate students in learning
- issues about access, equity and participation
- classroom interactions.

You should by now have developed certain knowledge, understandings, insights and skills to help you to perform well in your work.

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. describe ways of promoting school and community relationships?</td>
<td></td>
</tr>
<tr>
<td>2. apply classroom management ideas in your classroom?</td>
<td></td>
</tr>
<tr>
<td>3. explain the features of a positive learning environment?</td>
<td></td>
</tr>
<tr>
<td>4. describe ways of improving classroom environment?</td>
<td></td>
</tr>
<tr>
<td>5. explain ways of addressing issues of equity, access, and participation in classroom teaching?</td>
<td></td>
</tr>
<tr>
<td>6. describe ways of fostering interaction among your students in the classroom?</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 the achievement of each of the outcomes. If you have said ‘No’ or ‘No 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.
Remember these module outcomes help you to achieve the outcomes of the unit. Refer back to the outcomes of the unit (listed in the Unit Introduction) and reflect on where you are in relation to those outcomes.

If you are 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
Additional space for your notes
Inservice Units to Support the Implementation of the Primary Reform Curriculum

Unit 6:
Learning and Teaching for outcomes

Unit Summary
Unit Summary

Congratulations! You have completed this unit.

At this point, let us review your learning journey.

You may have studied the unit
• during school-based, cluster or district learning and development (in-service)
• as a study guide for self-improvement
• as a study guide to improve your qualifications.

If you were seeking academic accreditation, you 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: Learning and teaching fundamentals
Module 2: Learning in an outcomes environment
Module 3: Learning and teaching strategies
Module 4: The classroom

In these modules you compared the learning and teaching approaches promoted by the National Curriculum Statement (2002), the primary syllabuses and the teacher guides and made connections to your current practices. You focused on the two areas that are responsive to a wide range of learning styles: Gardner’s multiple intelligences and Bloom’s six thinking levels and their implications for current classroom practice. You consolidated your understanding by making connections between the wide range of learning styles and your current practice in the classroom.

You further explored ideas about how to successfully manage student-centred classrooms, and the importance of working with parents and community in order to promote student-centred learning approaches. Finally, you examined a range of teaching methods/approaches compatible with those promoted by the reform curriculum and considered ways of applying the use of these in your classroom.

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 unit 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?
Can you: | Yes/No/ Not sure |
---|---|
1. explain the relationship between the parts of the teaching and learning cycle? |
2. analyse the advice the National Curriculum Statement (2002), the primary syllabuses and the teacher guides provide about learning and teaching? |
3. demonstrate examples of student-centred learning approaches and teaching strategies? |
4. discuss ways of implementing a range of classroom management tools? |
5. discuss the characteristics of a classroom that fosters student-centred learning? |
6. explain to others, issues relating to access, equity and participation (inclusive curriculum) and the implications for classroom practice? |
7. explain the implications of Gardner’s Multiple Intelligences and Bloom’s levels of thinking for classroom practice? |

If you answered ‘yes’ to all of them, then you have done very well.

If you are seeking academic credit, 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 seeking academic credit and you are satisfied that you are ready or assessment, go to your assessor and start the processes of assessment. 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 for 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?
Unit 6: Learning and Teaching for Outcomes

Accreditation and Certification

Contents

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 are described below.

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 8. 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 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 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 and other places. Contact PNGEI for more information.

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 (that is, 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, Waigani, 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, Waigani, 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, it will not contribute to the final grade.

Thirteen (13) statements, numbered 1 to 13 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: My knowledge about the relationship between the three parts of the teaching and learning cycle is…If you know a great deal about the relationship between the three parts of the teaching and learning cycle, then you should make a tick close to ‘very good’, the 3rd marker. If you know only a little bit about it, then your tick should be placed close to ‘little’, i.e. the 1st marker. If you feel you have given a lot of thought to the relationship between the four parts of the teaching and learning cycle and are very familiar with it and have been implementing it, and are in a position to help others, then you should place the tick close to the 4th marker.

Now do this task as best as you can in order to maximize your learning.

1. My knowledge about the relationship between the three parts of the teaching and learning cycle is

limited    moderate    very good    can help others

2. My understanding of the learning and teaching approaches promoted by the primary reform curriculum is

limited    moderate    very good    can help others

3. My knowledge of the learning and teaching approaches appropriate for an outcomes environment is

limited    moderate    very good    can help others

4. My knowledge of the processes of learning is

limited    moderate    very good    can help others

5. My knowledge of Gardner’s Multiple Intelligences is

limited    moderate    very good    can help others

6. My knowledge of the application of Gardner’s Multiple Intelligences to lessons is

limited    moderate    very good    can help others
7. My knowledge about Bloom’s six levels of thinking is
limited moderate very good can help others

8. My understanding of how Bloom’s levels of thinking may be applied to classroom teaching is
limited moderate very good can help others

9. My familiarity with the principles behind inclusive curriculum and how it may be fostered in a classroom is
limited moderate very good can help others

10. My confidence in effectively organising and managing a range of student-centred activities is
limited moderate high can help others

11. My understanding of a range of teaching strategies which foster social, spiritual, mental and academic development is
limited moderate very good can help others

12. My confidence in using a variety of appropriate teaching strategies compatible with the reform curriculum is
limited moderate high can help others

13. My overall understanding of the current trends in teaching strategies and learning approaches is
limited moderate very good can help others

On completing the unit, you need to do the self-assessment again to see for yourself the progress you have made by doing all the learning activities.
Inservice Units to Support the Implementation of the Primary Reform Curriculum

Unit 6: Learning and Teaching for Outcomes

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

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

1. explain the relationship between the parts of the teaching and learning cycle
2. analyse the advice the National Curriculum Statement (2002), the primary syllabuses and the teacher guides provide about learning and teaching
3. demonstrate examples of student-centred learning approaches and teaching strategies
4. discuss ways of implementing a range of classroom management tools
5. discuss the characteristics of a classroom that fosters student-centred learning
6. explain to others, issues relating to access, equity and participation (inclusive curriculum) and the implications for classroom practice
7. explain the implications of Gardner’s Multiple Intelligences and Bloom’s levels of thinking for classroom practice.
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 3: demonstrate examples of student-centred learning approaches and teaching strategies, you may wish to present a folio of the plans and programs you have developed over the past year to the assessor. The folio should contain examples of where you have incorporated student-centred strategies learning and teaching principles. The folio may also contain evidence of lessons learnt by you as well as evidence of improvement in your learning and teaching approaches over time as a result of incorporating these learning and teaching principles.

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<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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<th>On my own</th>
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We agree the tasks to be undertaken are as detailed above.

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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.

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<tr>
<th>Learning Outcome</th>
<th>Evidence</th>
<th>Satisfactory</th>
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We agree that the evidence to be produced for assessment of learning outcomes is as detailed above.

--------------------------------------------------------------------------------------------------------
Learner                                                      Date
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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 6:
Learning and Teaching for Outcomes

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.

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<th>Yes/No/</th>
<th>Not Applicable</th>
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<tr>
<td>I have done the initial self-assessment</td>
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<td>I have negotiated my learning contract</td>
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<td>I have access to the resource documents</td>
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<td>I understand what I should do to meet the assessment requirements</td>
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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.

Gut lak long stadi bilong yu