

Inservice Units to Support the Implementation of the  
Primary Reform Curriculum

**Unit 6:  
Learning and Teaching  
for Outcomes**

**Module 1: Learning and  
Teaching Fundamentals**

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

Name: ..... File N°:.....

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 21<sup>st</sup> 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 (ie, 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*

- *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.



- 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.

Plus	Minus	Interesting
1.	1.	1.
2.	2.	2.
3.	3.	3.



**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.

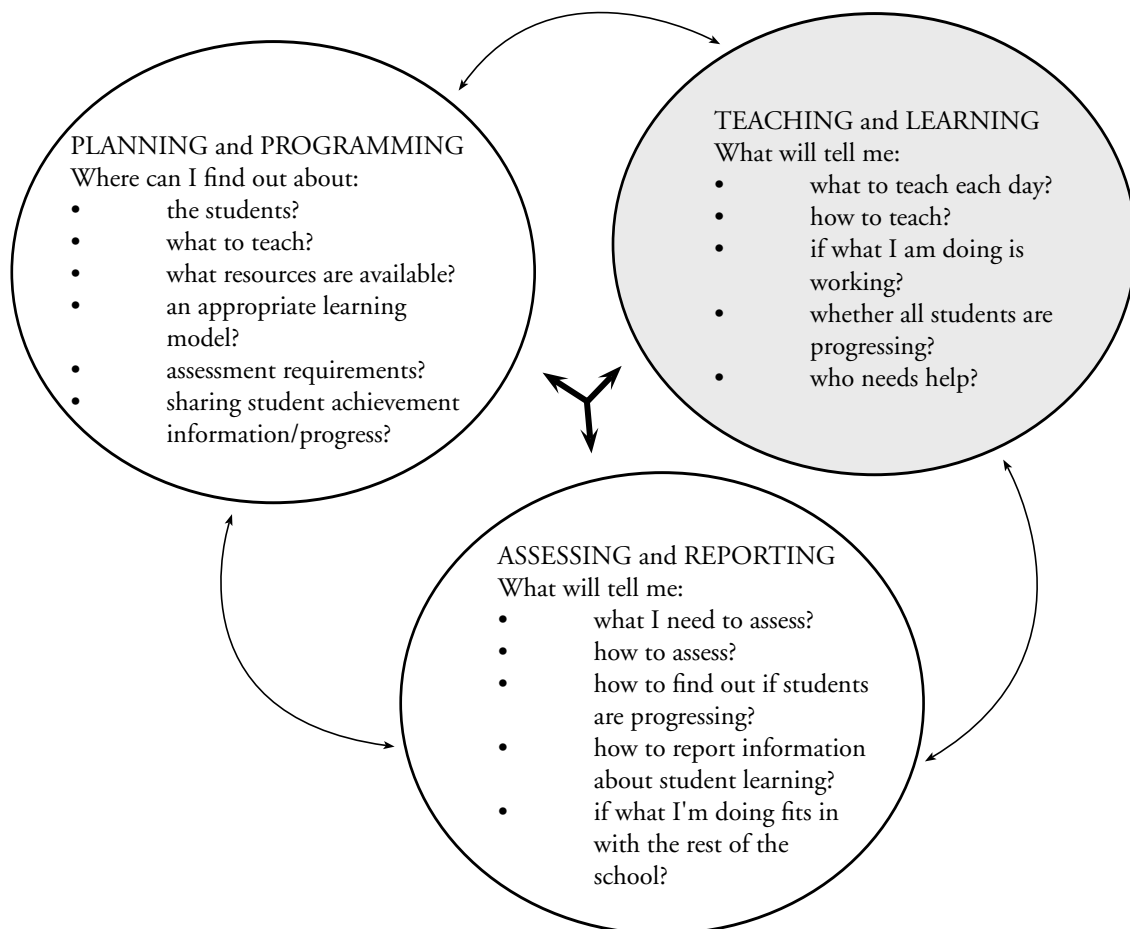
### 1.3 The Revised Teaching and Learning cycle



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



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?



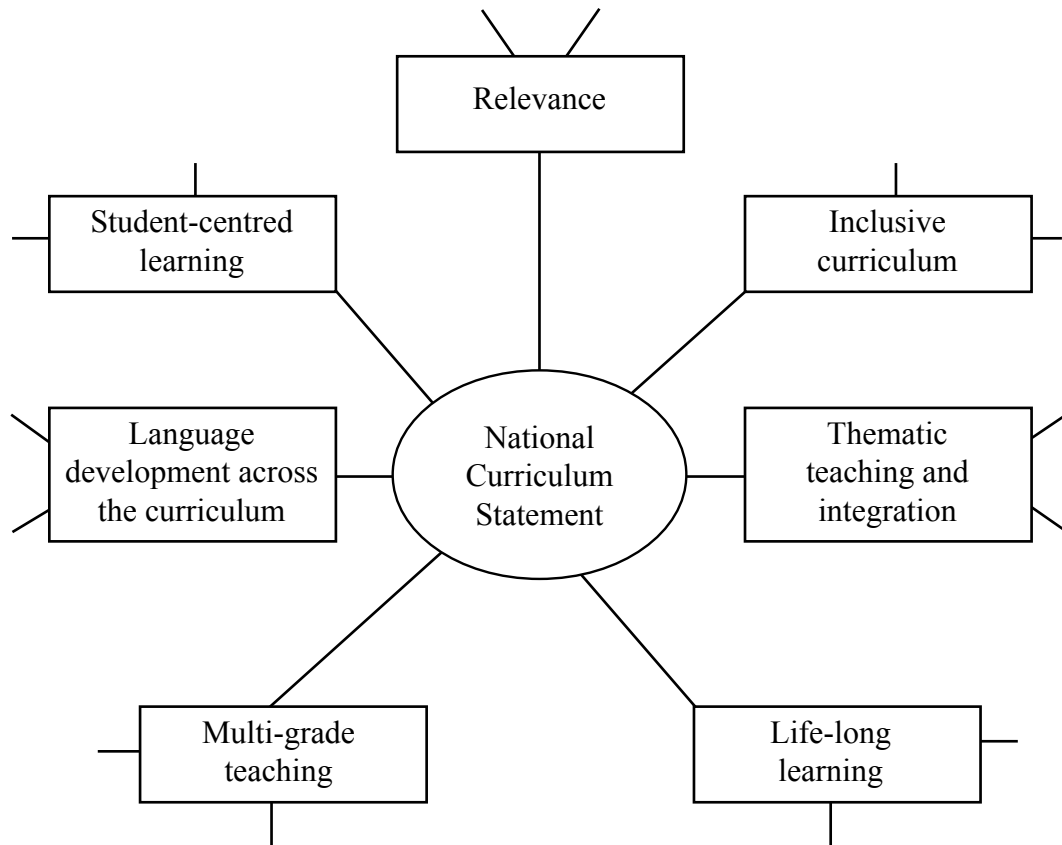
Read Section 5.4 of the *National Curriculum Statement*, pages 25 – 29.

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.*

---



**Read the Science Syllabus, pages 5-6, and Science Teachers Guide, pages 8-18.**

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.

Phase of the approach	What can the teacher do?	What can the student do?
Preparation		
Exploration		
Students' questions		
Investigations		
Reflections		

*HINT: information from Science Teacher Guide (pages 8-12) will assist you in completing this 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.



- Which of these strategies are also described in the Community Living Teacher Guide?



**Read Making a Living Syllabus, pages 5-6, Making a Living Teachers Guide, pages 59-66 .**

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.

Ways of learning	Implication for my practice
1.	
2.	
3.	

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;

Strategy	Applicable to you (tick one only)			
	Often	Sometimes	Need to strengthen	Never
a) build on your students' prior knowledge				
b) involve the community and its resources in students' learning				
c) provide opportunities for students to go out into the community to learn				
d) provide opportunities for problem solving, decision-making, and taking action				
e) provide students with opportunities to reflect on their own learning: knowledge, skills, values and attitudes				

*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.**

	Steps involved	Examples	Yes/No
1			
2			
3			
4			

**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.

	Brief description of the phase	Some examples	Yes/No
1			
2			
3			
4			

**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.

	Brief description of the phase	Some examples	Yes/No
1			
2			
3			
4			

*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.

<i>Issue</i>	<i>Possible Solution</i>



**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.**

Lower Primary Teacher Guide	Upper Primary Teacher Guide
Bilingual and bridging strategies; pages 10-11 Language functions and genres; pages 11-29 Learning strategies; pages 30-33 Reading strategies; page 33 Writing strategies; pages 34-35	General strategies; pages 14-18 Language strategies; pages 18-19 Reading strategies; pages 19-27 Writing strategies; pages 28-31

- 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.

Colleagues	The approach(es) used	Evidence
C 1		
C 2		
C 3		
C 4		
C 5		

*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.

I need to change	
From ....	To ....
1.	
2.	
3.	



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.

Changes I plan to make	My plan of action ...
1	1
	2
	3
	4
2	1
	2
	3
	4
3	1
	2
	3
	4

## Section 3: Learning and teaching in an outcomes environment

---

### 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?

- 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.

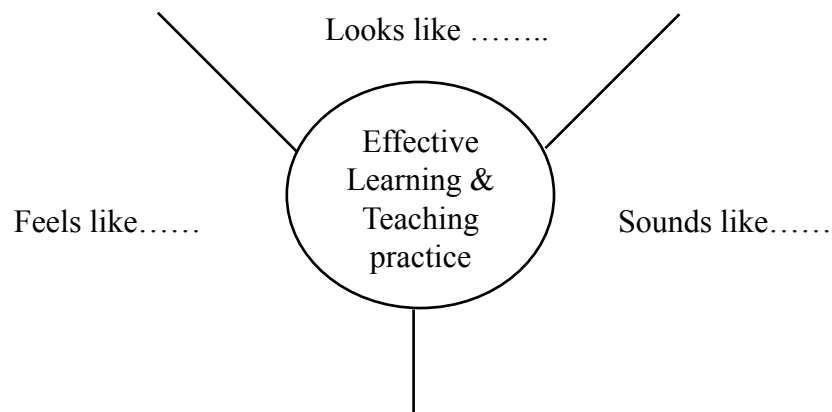


**How do you promote diversity and inclusivity in and beyond your classroom?**

- 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.**



*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.



**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.*

## Section 4: Learning and teaching practices in your school

---

### 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?

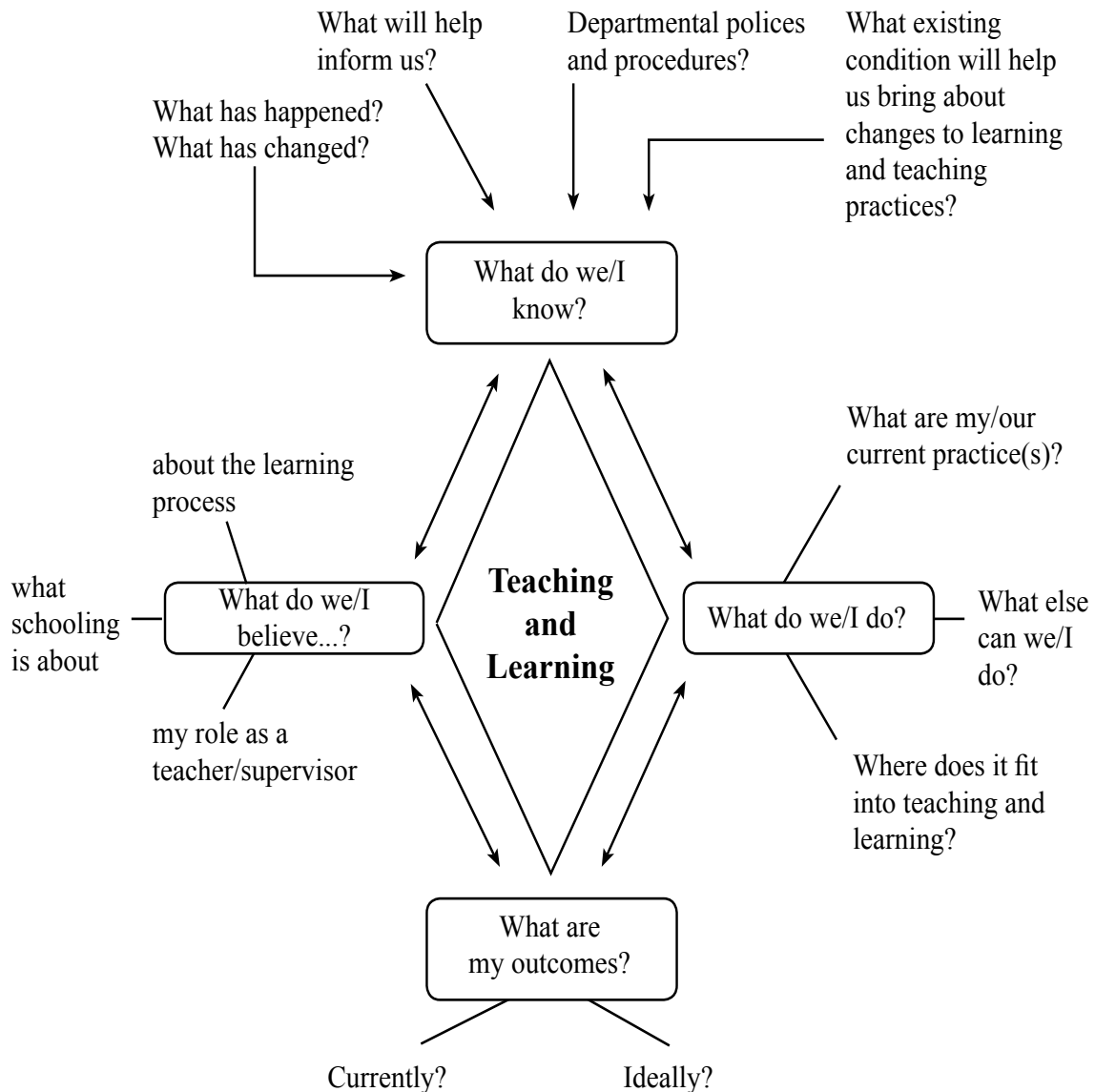
- What do you now think about the learning and teaching relationships you have with others?
- What do you now think about the learning environment?

*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.





Use this checklist to observe the following within your school (if you are a non-teacher do your observation at a nearby school).

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

*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.

<b>Action Plan</b>
Proposed actions – WHAT do you need to do?
Timeline – WHEN do you intend to do it?
WHO will initiate the action?
WHAT resources do you need or will you use?

*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.

Can you:	Yes/No/ Not sure
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 ( <i>National Curriculum Statement</i> , syllabuses, teacher guides) promotes?	
4. discuss and apply a range of 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 teaching strategies each syllabus and teacher guide promotes?	

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 life-long 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.

*Quality teaching quality learning*, A discussion paper for teachers, principals and parents, NSW Department of School Education (1994).

## 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)

## WHY TEACHERS MUST BECOME CHANGE AGENTS

Michael G Fullan

From *Educational Leadership*, March 1993, pages 12-17

*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 called upon 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 agency.

Moral purpose and change agency, 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 agency 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 agency, 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 right 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

Berends, M (1992) “A Description of Restructuring in Nationally Nominated Schools” Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.

Block, P (1987) *The Empowered Manager*. San Francisco: Jossey-Bass.

Farber, B (1991) *Crisis in Education*. San Francisco: Jossey-Bass.

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.

- Fullan, M (1993) *Change Forces: Probing the Depths of Educational Reform*. London: Falmer Press.
- Fullan, M and Hargreaves, A (1991) *Whats Worth Fighting for in Your School?* Toronto: Ontario Public School Teachers' Federation; Andover, Mass: The Network; Buckingham, UK: Open University Press; Melbourne: Australian Council of Educational Administration.
- Garnder, H (1991) *The Unschooled Mind*. New York: Basic Books.
- Goodlad, J (1991) "Why We Need a Complete Redesign of Teacher Education" *Educational Leadership* 49, 3: 4-10.
- Holmes Group. (In press) *Tomorrow's Colleges of Education*. East Lansing, Mich.: Holmes Group.
- Howey, K R (1992) *The Network of Fifteen*. Columbus: Ohio State University.
- Kramer, R (1992) *Ed. School Follies*. New York: Foss Press.
- Pascale, P (1990) *Managing on the Edge*. New York: Touchstone.
- Sarason, S (In press) *The Case for a Change: The Preparation of Educators*. San Francisco: Jossey-Bass.
- Schlechty, P (1990) *Reform in Teacher Education*. Washington DC: American Association of Colleges of Education.
- Senge, P (1990) *The Fifth Discipline*. New York: Doubleday.
- Sizer, T (1992) *Horace's School: Redesigning the American High School*. Boston: Houghton Mifflin.
- Stiegelbauer, S (1992) "Why We Want to Be Teachers" Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.
- University of Toronto, Faculty of Education. (1992a) *Making a Difference Video*. Toronto, Ontario.
- University of Toronto, Faculty of Education (1992b) "B.Ed. Restructuring Committee Report" Toronto, Ontario.
- Michael G Fullan is Dean of Education, University of Toronto, 371 Bloor Street, West, Toronto, Ontario, Canada M5S 2R7.