

Inservice Units to Support the Implementation of the
Primary Reform Curriculum

Unit 1:
Philosophy of Curriculum Reform

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

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

Module Introduction

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

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

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

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

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

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

Module learning outcomes

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

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

Section 1 – The concept of outcomes-based education (OBE)



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

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

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

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

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

Part 1.1: Lower and Upper Primary Syllabuses

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

Units 2, 3 and 4 in this set of inservice units focus on the seven upper primary syllabuses and the seven lower primary syllabuses in greater detail.

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

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



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

Our way of life	Integral Human Development	Teaching and Learning

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

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

- What are the implications of this for your practice?



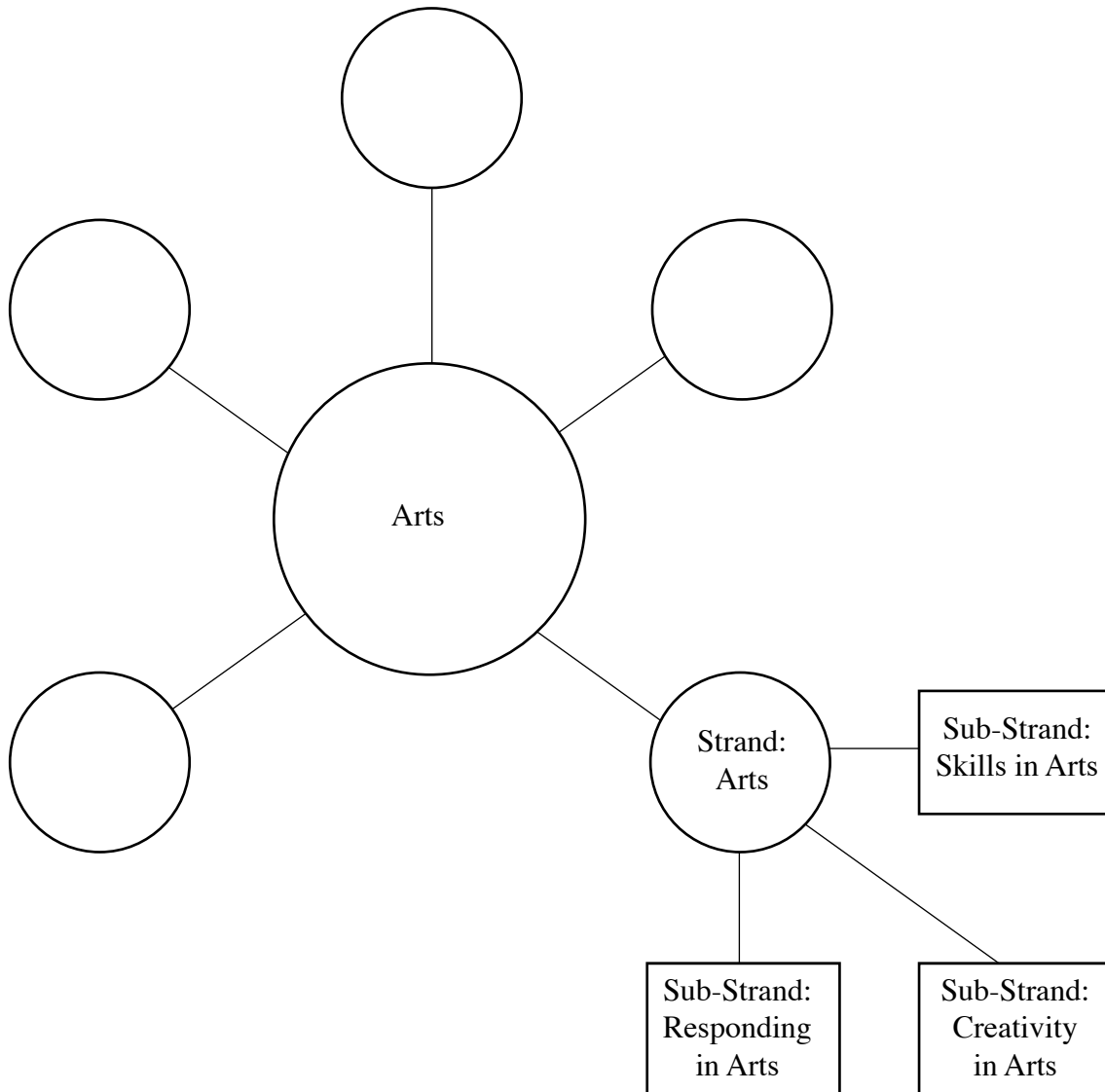
Seven Aims are listed on page 11 of the syllabus. This is followed by *Content Overview* (pages 12-15). Here the five strands of Arts are identified.

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

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



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



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

The content of each of the sub-strands is displayed in the table on page 14.



On page 16, you will find an overview of the *Learning Outcomes*. Looking down the columns for Grade 3, Grade 4 and Grade 5, you notice that there are 15 outcomes for each grade. You also notice that each outcome is numbered by a code with three digits.

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

It says that the first digit stands for the grade, the second for the strand and third for the outcome in the strand. For example,

3.1.1 stands for an outcome for Grade 3, Strand 1 (Art), Outcome 1.

3.2.3 stands for an outcome for Grade 3, Strand 2 (Craft), Outcome 3.



Now what do the following codes stand for?

4.2.2:

5.3.2:

5.4.1:

4.4.3:

4.5.2

5.1.3:



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

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

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

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



Read the information about indicators on page 15.

Indicators are listed as bullet points after each outcome. They are examples of the kinds of things a student is able to do when he or she has achieved an outcome. This means that there may be other ways a student is able to demonstrate achievement of the same outcome. In time, when you understand the standard of the outcome, you will be able to add to the indicators provided in the syllabuses.



Skim read pages 2-7. List the curriculum principles within the three sub-headings in the table below.

Our way of life	Integral Human Development	Teaching and Learning

- What is the importance of the *curriculum principles* for Arts education?
- Are the selected curriculum principles the same as for *Arts, Lower Primary Syllabus*?



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

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

List the strands of Arts here.

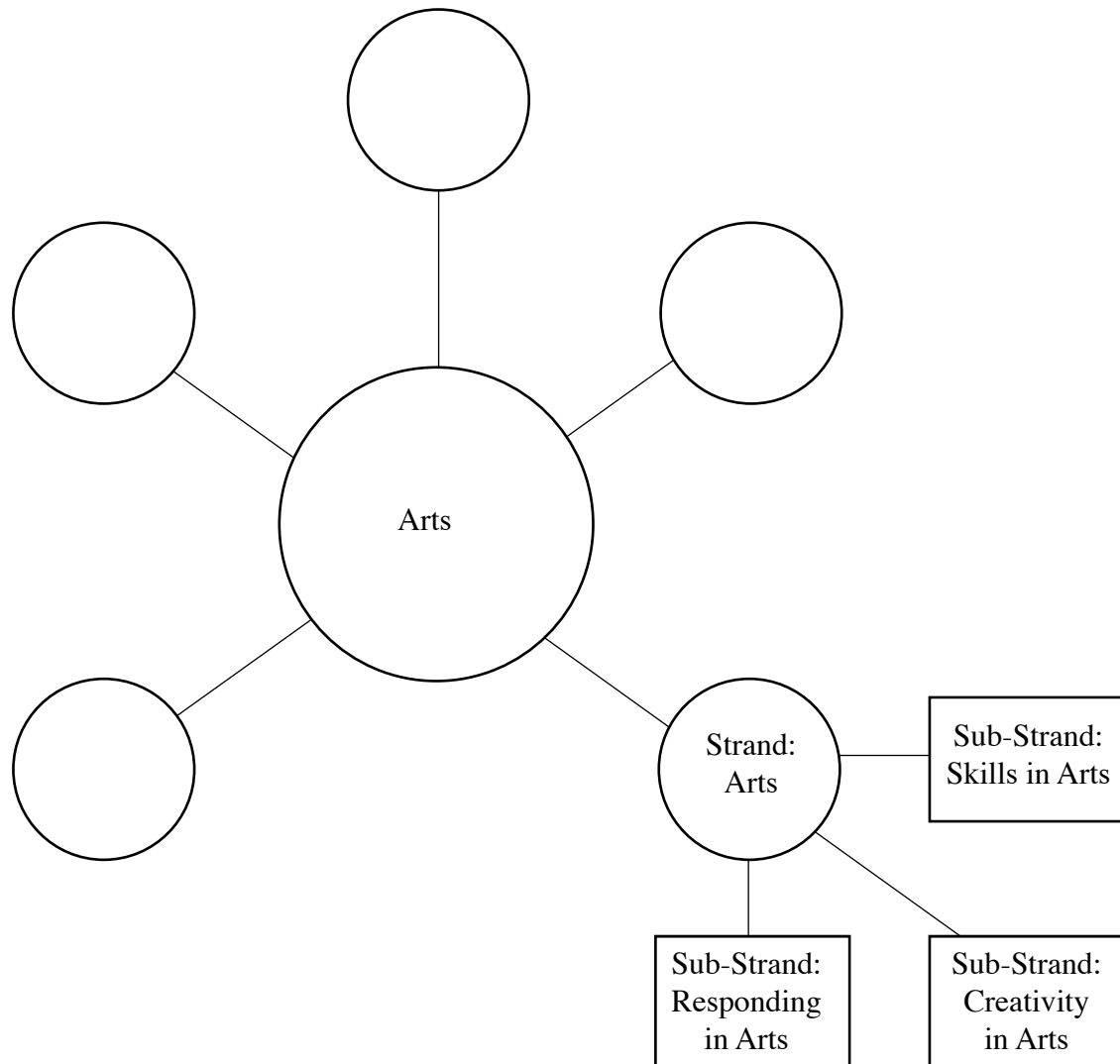
1. 3.
2. 4.

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



Skim read pages 8-10.

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



- What conclusion can you make about the sub-strands?
- Are the strands and sub-strands the same for upper and lower primary Arts? Explain.



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

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

By now you should be familiar with the way the outcomes are coded. Try your understanding here.

**What do the following codes stand for?**

7.2.2:

8.3.2:

6.4.3:

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

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

**Read the information about indicators on page 12.**

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

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

**Skim read pages 24 and 25.**

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

- List four assessment methods suggested specifically for Arts assessment.



Now let us compare Arts, Lower Primary Syllabus and Arts, Upper Primary Syllabus 2003

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

Key areas	Lower Primary Arts	Upper Primary Arts
<i>Curriculum principles</i> The same or different?		
<i>Aims</i> How many? The same or different?		
<i>Strands</i> How many? What are they?		
<i>Sub-stands</i> How many? What are they?		
<i>Assessment and Reporting</i> What assessment methods are being suggested? Any differences?		
<i>Recording</i> What recording methods are being suggested?		
<i>Reporting</i> What is being suggested here?		
<i>Evaluation</i> What is being suggested here?		

- Write a summary statement about how the two arts syllabuses compare.

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

Part 1.2: Comparing Objectives and Outcomes



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

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

Outcomes are often stated as, for example, ‘students describe’, ‘students are able to describe ...’, or that ‘students can describe’. You will notice that they are stated in the present tense and that they are demonstrable, that is, doable. So you will be asking yourself, at particular points throughout a unit of work, based on learning outcomes, questions such as:

‘Can my students do this yet?’

‘Are they progressing towards doing this?’

‘How close are they to doing this?’

‘What are ways of finding out whether they can do this?’

‘Am I giving ample opportunities for my students to learn and show me whether they can do this?’ etc.

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

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

An outcome is an actual demonstration in an appropriate context. It is the result of learning that is visible and observable of three things: knowledge, combined with skills, combined with attitudinal and motivational factors that constitute a demonstration or performance.

The word 'based' means to direct, define, derive, determine, focus and organise what we do according to the learning result that we want to have happen at the end. When we put the two words together, the word outcomes-based implies that we will design and organise everything we do directly around the outcomes that have been identified.

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

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

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



Read each of the statements below carefully.

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

Outcomes	
Objectives	

Hint: Think whether the statements express intentions or the learning destinations (end-points). There are five outcomes and three objectives in the above list.

Part 1.3: Features of outcomes-based education and outcome statements

Feature 1



Firstly, outcome statements may be simple or complex.

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

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

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

Step 1

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

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

Step 2

Look at the concept identified in the outcome.

Let us look at an example.

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

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

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

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

Step 3

Look at the context of the outcome. For Outcome 1, the context is ‘the local environment’; Outcome 2 has the same context ‘the local environment’.

We can conclude that outcomes 1 and 2 differ only in one respect – the verbs. So we can agree now that Outcome 2 is of a larger ‘grain size’ than Outcome 1. It is more complex than Outcome 1 and it will take longer for students to learn and demonstrate their learning.

In summary, the three steps are as shown below.

Outcomes	Step 1: Verb?	Step 2: Concept?	Step 3: Context?
1	name	parts of a plant	in the local environment
2	describe	parts of a plant	in the local environment

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

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

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

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

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



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

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

Outcomes	Step 1: Verb?	Step 2: Concept?	Step 3: Context?
3.1.5			
4.1.5			
5.1.5			

Now let us take an example from *Science, Upper Primary Syllabus*.

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

6.3.5

7.3.5

8.3.5

- Now complete the table.

Outcomes	Step 1: Verb?	Step 2: Concept?	Step 3: Context?
6.3.5			
7.3.5			
8.3.5			



Reflect on how an analysis of this nature helps you the teacher. Record your thoughts here.



Now look at the group of outcomes you have identified, in the table, on page 16.

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

Simplest
(smallest grain size)

Most complex
(largest grain size)

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



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

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



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

Hint: In thinking through the above question, put a context to the verbs. For Example, think ‘identify and organise’ what? or ‘identify and describe’ what?



Some outcomes are ‘multiple-headers’, that is, they have three or more verbs. An example is Outcome 6.1.1 in *Mathematics, Upper Primary Syllabus*, page 12. It states: (Students) add, subtract, multiply and divide fractions. Outcome 6.1.2 on the same page states: (Students) add, subtract, multiply and divide decimals. This means that students must show they can do all four operations before they are deemed to have achieved that outcome.

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



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

Or

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

Record some of your thoughts here.



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

Here are some activities based on upper primary syllabuses.

- **Look at outcomes 6.3.1, 6.3.2, 6.3.3, 6.3.4 and 6.3.5 on page 12 of the Upper Primary Science Syllabus.**
 - Are they of similar ‘grain size’? Explain your answer.
- **Now look at outcomes 6.1.1, 6.1.2, 6.1.3, 6.1.4, 6.1.5, 6.1.6, 6.1.7 and 6.1.8 on page 12 of the Upper Primary Mathematics Syllabus.**

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

- **Now look at outcomes 6.3.1, 6.3.2, 6.3.3 and 6.3.4 on page 17 of *Language, Upper Primary Syllabus*.**
 - Are they of similar 'grain size'? Explain your answer.

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

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

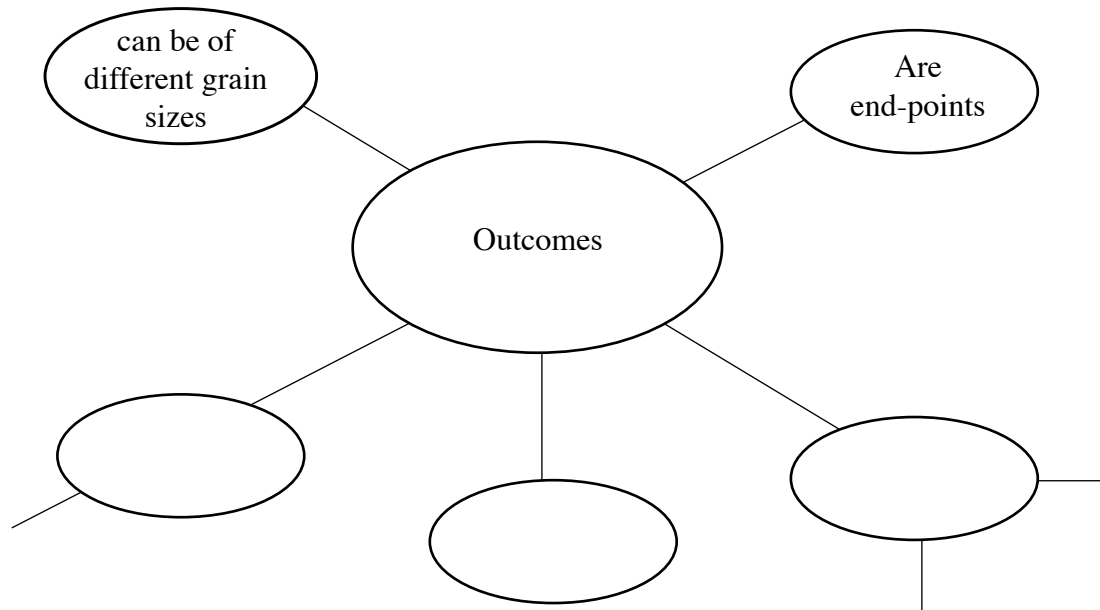
Here are some activities based on lower primary syllabuses:

- **Locate outcomes 3.2.1, 3.2.2, 3.2.3, 3.2.4 and 3.2.5 of *Mathematics, Lower Primary Syllabus*.**
 - Are they of similar 'grain size'? Explain your answer.

- **Locate outcomes 5.2.1, 5.2.2, 5.2.3, 5.2.4 and 5.2.5 of *Lower Primary Mathematics Syllabus*.**
 - Are they of similar 'grain size'? Explain your answer.

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

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



Feature 2



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

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

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

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

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

Grade 3	Grade 4	Grade 5
3.2.1E Read a range of predictable text types	4.2.1 E Read simple text types and interact with the ideas and information from the texts	5.2.1 E Read, reflect on and respond to ideas and information from a wide range of text types in all genre categories

Straight away you will notice that 3.2.1E is a single header (one verb), 4.2.1 E is a double header (two verbs) and 5.2.1 E is a triple-header (three verbs).

Lets us do an analysis of these outcomes.

Outcome	Verbs	Concept/Context
3.2.1E	Read	a range of predictable text types
4.2.1E	Read ... and interact (with) ...	simple text types ideas and information from the texts
5.2.1E	Read, reflect on and respond (to)	ideas and information from a wide range of text types in all genre categories

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

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

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

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

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

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

Straight away you will notice that 6.2.1 and 7.2.1 are double headers (two verbs each) whereas 8.2.1 is a triple-header (three verbs).

Outcome	Verbs	Concept/Context
6.2.1	Read and respond (to)	a range of texts about real and imaginary worlds
7.2.1	Read and respond (to)	a wide range of more complex literary and factual texts
8.2.1	Read, reflect and respond critically (to)	a broad range of complex literary and factual texts

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

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

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

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

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

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

Now look at the lower primary and upper primary Language (English) outcomes together.

Outcome	Verbs (verbs)	Concept/Context
3.2.1E	Read	a range of predictable text types
4.2.1E	Read ... and interact (with) ...	simple text types ideas and information from the texts
5.2.1E	Read, reflect on and respond (to)	ideas and information from a wide range of text types in all genre categories
6.2.1	Read and respond (to)	a range of texts about real and imaginary worlds
7.2.1	Read and respond (to)	a wide range of more complex literary and factual texts
8.2.1	Read, reflect and respond critically (to)	a broad range of complex literary and factual texts

- Identify some sequences of verbs, concepts and contexts that indicate to you progress expected of students as they move from grade 3 to grade 8.

- Here is a task for you to do.

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

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

Outcomes B:
Investigate volumes of simple solids to determine rules

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

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

The most complex outcome is Outcome

The simplest outcome is Outcome

- Explain why you think this.
- Then sequence them from the simplest to the most complex.

Simplest
(smallest grain size)

Most complex
(largest grain size)

- Now go to page 13 or page 30 of the *Mathematics, Upper Primary Syllabus* and check your response with that provided in the syllabus.
- How did you go? If your sequence matched the sequence in the syllabus, you have done well.
- If not, have another go with the following outcomes from the *Social Science, Upper Primary Syllabus*.

Outcomes A:
Identify the main physical environment of the province and nation and describe the factors and process that have formed them

Outcomes B:
Compare and contrast the main physical environment of the world and describe the factor and process that have formed them

Outcomes C:
Identify and describe local human-made and natural environments

The most complex outcome is

The simplest outcome is

Then sequence them from the simplest to the most complex.

Simplest
(smallest grain size)

Most complex
(largest grain size)

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



Plan an activity with some Personal Development outcomes.

- Photocopy and then cut and paste a sequence of three outcomes on to a piece of cardboard. Then cut the card into three pieces, each with one outcome on it
or
on three pieces of cardboard or paper neatly copy the three outcomes from a sequence.
 - Shuffle the cards
 - Then ask a colleague to sequence the outcomes
 - When the task is done, ask the colleague to explain how she or he did it
 - Record any significant points raised during this conversation.
- Then check this sequence with the one in the syllabus.
- Comment about the ease or difficulty of sequencing the outcomes.
- Now go back to page 23 and add your learning to the mind map you are constructing.

Feature 3



A third feature of outcome statements is that we need ‘indicators’ to fully understand the scope, that is, the breadth and depth or the ‘standard’ of an outcome.

Often an outcome is a broad statement of the end-point of learning.

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

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

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



Read the indicators for Outcome 6.1.1

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

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

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

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

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

show numbers to 1000 by bundling concrete materials such as sticks



Reflect on the following and record your thoughts.

- Aspect(s) of Outcome 4.1.1. this indicator is illustrative of.

- The other aspect(s) of the outcome that you should have evidence of, before you can confidently say that a student has achieved this outcome
- The need to collect evidence over a period of time in a variety of ways before making definitive judgements about achievement of outcomes.
- Can this outcome be achieved in the vernacular?



Consider one outcome from each of the lower or upper primary syllabuses.

Construct and add another indicator, keeping in mind the breadth and depth of the outcome as explained by the indicators already provided for the selected outcomes.

Outcome	Additional indicator

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

Feature 4



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

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

An example is provided here.

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

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

Personal development outcomes

6.2.4: Identify rules and demonstrate safety procedures in play and games

6.2.6: Identify responsibilities attached to different roles in games and sport

Language outcomes

6.1.2: Apply a range of speaking and listening skills, on both familiar and introduced topics in spontaneous and structured activities

6.3.3: Identify how texts have been structured to suit the context

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

The task you have selected requires the students to

- design a game with special attention to safety and role and responsibilities of players
- present the game to the rest of the class
- play the game.

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

Part 1 – a speaking component

Part 2 – a written component

Part 3 – playing the game

BOX 1

TASK DESCRIPTION

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

Part 1 – A speaking Component (presentation)

The presentation should include:

- an explanation of the game
- position of players, roles and responsibilities
- requirements – equipment, number of players, officials
- rules and tactics
- skills expected
- safety aspects
- scoring system

Part 2 – Written component (150 words)

Each student is required to submit the task in a written format. This should include :

- an explanation of the game
- a procedural account of the rules
- team's involvement (roles and responsibilities, leadership, planning and task break up)
- own and group evaluation of presentation to the class

Part 3 – Play the game

Another group plays the game using the rules and scoring system

Preparation

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

Negotiated Assessment Areas

Communication

Interactivity

Planning

Enjoyment

Moving and performing

Critical thinking

Team spirit

Considerations of safety

BOX 2**Assessment of Speaking component**

Names:

.....

.....

.....

.....

Date assessed:

Topic:

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

Criteria	1	2	3	4
- The explanation of the game was clear and concise				
- Roles and responsibilities were clearly defined				
- Plans for changing roles were identified				
- Each group member shared equally in the presentation				
- The presentation was well planned				
- Group demonstrated the skills of the game competently				
- The game was novel and interesting				
- The rules were well developed				
- The rules had purpose				
- Tactics were included in the presentation				
- The other students reacted positively to the game				

Comments:

BOX 3

Assessment of Written component

Name: **Date assessed:**

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

Criteria	1	2	3	4
- Explanation text type (genre) was used for game description				
- Procedural genre was used for outline of rules				
- Communication skills were clearly defined				
- Interaction skills were clearly defined				
- Group reflection comments were presented				
- Own personal reflection comments were presented				

Comments:

BOX 4

Assessment of Playing the game

Names: **Date assessed:**

.....

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

Criteria	1	2	3	4
- Rules, including safety aspects, made sense				
- Group tactics worked well				
- Change in roles worked well				
- Game was very interactive				
- Game was very challenging				
- Equipment was easily found				
- Enjoyed the game				
- The game developers are to be commended				

Comments:



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

- Is the purpose of the task clear?

- Are the descriptions of the components clear?

- **Now look at boxes 2, 3 and 4.**
 - Do the assessment criteria for each of the components reflect the assessment areas set in the Box 1? Comment.

 - **Now look at the outcomes on which the unit of work is based** (page 31 of this module)
 - Is the task appropriate for the outcomes on which the unit of work is based? Comment.

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

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

 - Who should assess this task
 - teacher only?
 - teacher and selected students?
 - selected students only?
 - others?

- Thus this one assessment task provide you with enough information to make a decision about the students' achievement of the four outcomes? Explain.



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

- Read this information.

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

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

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

- Read pages 24-25.

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

- Read page 25.



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

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

Feature 5



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

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

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

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

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



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

- Do they know why they are doing a particular unit of work?
- Do they know what they are expected to learn (that is, the outcomes) from the unit of work?
- Do they know how you plan to assess their learning?
- Do they know what kind of things you will be looking for in an assessment task, such as an investigation?
- What role(s) do they have in planning and carrying out assessment?

In OBE, teachers look for ‘evidence’ of achievement of outcomes. This is done over a period of time using a variety of methods such as observation, written responses, practical demonstration, project work, portfolios and so on. In each of these instances, assessment criteria are developed.

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

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

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

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

Feature 6



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

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

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

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

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

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

The teacher then negotiates the criteria for assessment with the students.

There are two aspects to assessment that are clear in this teacher's approach.

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

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

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

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

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



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

- Think about the differences, if any, between your approach to teaching and assessing and the approach described in the scenario. The following questions may assist with your thinking:
 - the role of students in developing assessment criteria
 - the role of students in assessment
 - consistency of assessment with criteria set

- follow up activities for students not able to do a task or understand a concept
- opportunities for students to learn and practise their learning before being assessed.

Part 1.4: Inputs, Outputs and Outcomes



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

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

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

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

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

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

Outcome	Outputs	Inputs
	(given the inputs and the outcome, what should happen in order to achieve the outcome)	(given the outputs and the outcome, what needs to be provided or be made available in order to facilitate achievement of outcome)
Teachers can discuss the structure and the contents of the upper primary syllabuses	Various interactive activities to (list them here) <ul style="list-style-type: none"> - help unpack the syllabuses - help see structure of and patterns across syllabuses - explore the rationale for OBE and how OBE is reflected in the syllabuses etc. 	Teachers’ attendance and time, knowledge and skills, copies of primary syllabuses, facilitators’ time, knowledge and skills, resource materials, funding, meeting rooms, etc.

The above table uses an example from your work context to illustrate inputs, outputs and outcomes.



Now have a go at doing one by yourself.

- Consider this scenario.

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

Outcome	Outputs	Inputs

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



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

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

Remember inputs help provide direction for classroom activities and help achieve the outcomes. Inputs can be the resources including skilled people and other kinds of community support you can use.

**Share your ideas with the colleague.**

In doing this you will need to give your colleague some background information about inputs, outputs and outcomes and how they relate to each other. Prepare some notes for this here. Your notes may be done in the form of a mind map or another organiser.

**Reflect on your understanding of OBE now.**

- Is it:
Beginning Developing Consolidating Achieved ?
- What can you do to improve your understanding of OBE, if needed?
- What can you do to inform your colleagues about OBE?

Section 2: Three approaches to OBE



There are many forms of outcomes-based education and there are many ways of developing an outcomes-based curriculum. Bill Spady, an American educationist has described three broad approaches to outcomes-based education - traditional, transitional and transformational.

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

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

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

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

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

The *transformational approach* to OBE requires learners to own, integrate and use prior learning so that they can apply them to real-life situations that are by nature complex. It expects education systems to throw out traditional curricula, courses and programs and to start from the exit outcomes (end of schooling outcomes) to define what schools will teach and how they will teach it. The transformational approach orients education to future needs of society and individuals. Subjects and approaches are seen only as means of achieving the exit outcomes.

In *traditional OBE*, the fundamental organisation of the system is tied firmly to the calendar. From the time students enter the system to the stage when they complete their studies, everything is ruled by time. *Transformational OBE* aims to change this time-based system of education.

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

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

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

Outcomes-based education has two purposes. They are:

- to equip all students with knowledge, understandings, skills, attitudes and values needed for future success
- to implement programs and opportunities that maximise learning.

The three premises (assumptions) of OBE are:

- all students can learn and succeed (but not on the same day or in the same way)
- success breeds further success
- schools can make a difference.

The four principles of OBE are:

- i Clarity of focus through learning outcomes
- ii High expectations of all students
- iii Expanded opportunities to learn
- iv Planning and programming by designing down.

Each of these is explained below.

- i Clarity of focus through learning outcomes
This means that everything teachers do must be clearly focussed on what they want students to ultimately be able to do successfully. For this to happen, the outcomes should be clearly expressed. If students are expected to learn something teachers must tell them what it is and create appropriate opportunities for them to learn it and demonstrate their learning.
- ii High expectations of all students
A fundamental aim of OBE is for all students to succeed. This can be a problem for those who think that some people are born 'smart' and therefore should learn a lot; that some people are born 'average' and therefore should learn a modest amount; and that some people are born 'dumb' and therefore should not bother to learn very much at all. Some people make similar assumptions based on the gender of a person or socio-economic status or ethnicity or a combination of these and other factors.

The structure of traditional education, the way it is structured and defined, creates failure. Success is defined in a particular way and creates, simultaneously, the conditions that produce failure.

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

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

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

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

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

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

The five practices of OBE are:

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

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

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

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

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

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

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

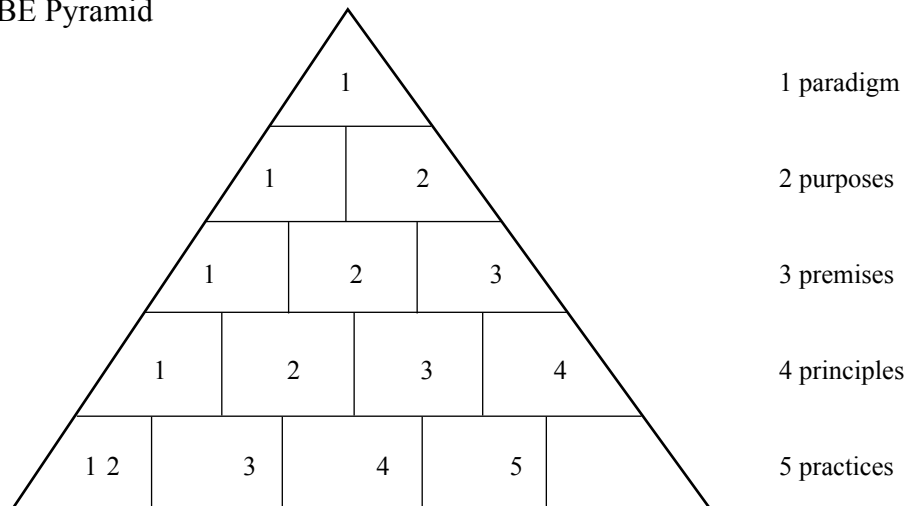
Hints: Have a go at thinking the above through. It is important for you to understand the big picture when implementing curriculum change.

If you wish to know more about OBE, go to Section 3. This section is optional.

Section 3: Optional reading

Bill Spady summarises the concept of OBE in the following way.

The OBE Pyramid



One paradigm

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

Two purposes

The two purposes are:

- to equip all students for future success
- to implement programs that maximise learning

Three premises

The three premises are:

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

Four principles (see below for explanation)

The four principles are:

- Clarity of focus through learning outcomes
- High expectations of all students
- Expanded opportunities to learn
- Planning and programming by designing down.

- Clarity of focus through learning outcomes

This means that everything teachers do must be clearly focussed on what they want students to ultimately be able to do successfully.

This involves:

- focusing on demonstrations of learning outcomes, rather than on the content being used in the activity
- students, teachers, parents, and members of the community knowing the outcomes that students are working towards
- clearly informing students the short term and long term intentions at every stage of the teaching/learning process
- clearly identifying and informing students about what is to be assessed and how it will be done
- students understanding the reasons for learning what they are learning always keeping the 'longer term' outcomes in mind.

- High expectations of all students

There is ample evidence to suggest that if teachers establish high challenging standards students usually rise to the challenge. Successful learning promotes more successful learning.

This involves:

- recognising that all students can succeed
- challenging students to achieve high standards by providing experiences that promote learning
- giving students time to produce work of a high standard
- establishing clear expectations of student performance, including criteria, and referring to these when monitoring the progress of student learning.

- Expanded opportunities to learn

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

This involves:

- giving students opportunities to progress and to demonstrate learning outcomes in more than one context
- developing activities, units and programs that are sufficiently flexible to cater for the different characteristics and learning needs of students
- involving students in planning, assessment and evaluation processes.

- Planning and programming by designing down

Designing down means that the starting point for planning, programming and assessing must be the outcomes – the desired end results. All decisions are then traced back from the outcomes.

This involves:

- teachers and students being mindful of the longer term outcomes such as end of year grade outcomes or end of schooling exit outcomes

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

Five practices (see below for explanation)

The five practices are:

- i Design outcomes (ie, write or develop outcomes)
- ii Design programs (ie, plan units of work including assessment, reporting and evaluation strategies, with outcomes in focus)
- iii Deliver instruction (ie, teach/learn with outcomes in focus)
- iv Document results (ie, assess in an on-going way, interpret and record achievement of outcomes)
- v Determine advancement (ie, identify progress in relation to grade outcomes for grades 3, 4, 5, 6, 7 and 8).

i Design outcomes (ie, write or develop outcomes)

This involves:

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

ii Design programs (ie, plan units of work including assessment, reporting and evaluation strategies, with outcomes in focus)

This involves:

- deciding on which syllabus outcomes the students are to achieve
- deciding how to assist students to achieve the outcomes
- planning becoming a process of anticipating possible activities rather than predetermining specific activities
- valuing students' backgrounds, interests, prior understandings, experiences and learning styles, and considering these when planning activities
- recognising the different ways and settings in which learning and assessment take place
- identifying and overcoming barriers that might limit students or groups of students from demonstrating achievement and progressing
- maintaining a learner-centred approach to learning and teaching
- planning assessment at the same time as planning experiences that promote learning
- collecting evidence of achieving outcomes formally and informally
- using assessment information to inform future planning and to provide opportunities to learn.

iii Deliver instruction (ie, teach/learn with outcomes in focus)

This involves:

- making sure students have the necessary prerequisite knowledge and skills at the start of instruction
- creating a positive learning environment in which students know they will be helped
- helping students to understand what they have to learn, why they should learn it and how they will know they have learned it
- using a variety of methods to help each student to learn
- providing students with sufficient opportunities to practise using the newly gained knowledge and skills
- helping students to bring each unit of work to a personal closure so that they are aware of what they have learned and where it is leading them
- looking at learning from the students' perspective.

iv Document results (ie, assess in an on-going way, interpret and record achievement of outcomes)

This involves:

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

v Determine advancement (ie, identify progress in relation to grade outcomes) Here the focus is on development, growth and progress.

This involves:

- a knowledge of students' progression along the outcomes continua or progress map (ie, from one grade to the next, in the PNG context)
- providing opportunities for self-assessment so that students can monitor their own progress
- the use of a wide range of strategies to cater for the developmental differences and prior knowledge and skills of students
- building comprehensive and cumulative developmental assessment using the techniques of observation, consultation, formal assessment and peer- or self-assessment to facilitate further learning.

Module Summary

Congratulations! You have reached the end of this module.

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

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

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

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

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

If you answered 'yes' to all of them, then you have done very well. Think about the kinds of evidence that will support your answer. If you have said 'no' or are 'not sure' of any, then it may be worth your while to go over the appropriate sections of the module again and have another go at repeating the tasks.

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

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

Additional space for your notes

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