# Facilitating Outcomes Based

Learning and Teaching

## A Guide for Trainers and FET College Lecturers

Developed by SAIDE

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1 How does the Limpopo Department of Education define commercial use? A commercial use would involve the assessment of a direct or indirect fee by a for-profit entity for use of the Limpopo Department of Education Creative Commons (CC) materials, or any derivation or modification of the Limpopo Department of Education CC material, or any other commercial exploitation of the Limpopo Department of Education CC materials.

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INTRODUCTION

Making the shift to outcomes-based teaching and learning

As the FET Colleges in Limpopo province, like those across the country will soon be introducing new learning programmes, it has become very important to expose college lecturers to training on how to facilitate outcomes-based learning and on how to use outcomes-based learning support materials.

To achieve the goal of developing additional teaching resources, the Limpopo Department of Education, with the help of the Khanyisa Support Programme, has embarked on a project to train lecturers to develop outcomes-based learning materials. Part of the project evaluation process involved field testing of the learning activities selected from the Activity Guide developed by the Khanyisa project team.

One of the key lessons learned from the field testing activity was that lecturers who have not been exposed to outcomes based training found it difficult to facilitate the learning activities. They reverted to the lecture method, thus undermining the purpose of using outcomes-based, learner-centred and activity-based resources.

This guide is intended for all FET College lecturers in the Limpopo province. Lecturers that have been exposed to some form of outcomes-based education (OBE) training previously will be able to use this guide to refresh their memory on the principles of outcomes-based methodologies and use some of the useful tools that the guide contains. While lecturers that have not previously been exposed to OBE training will have the opportunity to participate in training facilitated by trainers (FET lecturers) who have been specially selected and trained to use this guide.

This guide supports FET College lecturers to make the shift from content-based, lecturer-centred, transmission teaching and learning to an outcomes-based, learner-centred, activity-based approach. It is intended to assist the FET lecturer to understand why and how a particular strategy, method, or idea is useful, and not to just be a "how to" manual of tips. Yet it is at the same time intended to be relevant at all times to the context and practice of the FET lecturer, offering realistic exemplars and demonstrating approaches and methods for implementation.

Using this guide

This guide operates as learning support material for the trainer facilitating the understanding of outcomes-based concepts and approaches to teaching, learning, assessment and lesson design. In addition to the detailed training material provided in the eight sessions set out in the guide, two readings and trainer's notes are also provided at the end of the guide, see page 103. The guide can also be used for self study by lecturers who want to work through it on their own. It is designed to structure learning and explain concepts – providing a learning pathway for the reader. It is filled with activities that we strongly recommend that you complete before proceeding to the next section. If you scan through the contents page, it will give you an idea of what you will learn! We also strongly advise you to purchase a workbook or file in which you can do all the activities and also makes notes of any additional ideas you may have as you study. This workbook will act as a record of your thinking and development.

The importance of active learning

Because we believe that new understandings depend on, and arise out of action, we have designed this guide to include many activities that we hope, you will complete. Like all good learning materials, this guide will work best if you engage systematically with the activities. If you do not do the activities, you will miss out on the most important part of the learning pathway we have developed for you.

Thinking activities

At various points in the guide, we ask you to *stop* and *think* and to take some time to reflect on a particular issue. These thought pauses are designed to help you consolidate your understanding of a specific point before tackling the next section of the guide. They deliberately try and slow you down!

One of the habits many of us develop through our involvement in a rote recall kind of learning is that we rush through things. Once we have read something, we believe that we know it. This isn't true. While we may now recognise the idea, we probably don't really understand it in any detail. Work though this guide slowly and thoughtfully. Read and think. This is how we develop a depth of understanding and become able to use the ideas we learn.

Try to link the issues raised in each thought pause with what you have read, with what you have already learnt about learning, with your own previous experience, and so on. Think about the problems we have raised. You might want to jot down your ideas in your workbook so that you can be reminded of them at a later stage.

Outline of content

The guide deals with the following key issues:

Changing contexts
South Africa and the world at large have undergone rapid socio-political and economic change. This has direct implications for education.

To meet these new needs, we urgently have to improve curriculum and teaching and learning in FET colleges - education and training must become more responsive.

To drive the transformation process, South African educational policy has been underpinned by an OBE approach that emphasises a shift from content – driven, transmission teaching to an outcomes or competency-based approach that is learner-centred.

New roles for educators
To meet the challenges of the new educational approach, lecturer's roles have been reconceptulised. Lecturers need to be supported to make the paradigm shift that is required to understand OBE and its purpose and to understand the necessary competences that are essential for fulfiling the expanded roles of the educator.

Becoming a reflective practioner – understanding where we have come from, why we teach the way we do and cultivating the habit of continually reviewing our practice as educators to improve the quality and efficacy of our delivery are key to making the necessary transition.

The following sessions in the guide deal with the principles of outcomes-based planning, assessment and strategies for teaching in a learner-centred way.

Principles of outcomes-based planning
Curriculum design in OBE works on a design down principle.

The three essential components of classroom level planning are detailed descriptions of:
- What the student must be able to know and do by the end of the teaching processes.

- The kinds of performances/evidence that students must produce in order to demonstrate that they have achieved the outcome.

- How you will teach, and how students will learn (content, methodology and resources).

The point is made that the most important benefit of planning is not necessarily the written plan that we carry into the class, but the fact that planning forces us into thinking about our teaching.

Assessment

Criterion Referenced assessment used as part of the new educational approach, requires that the assessment criteria are made explicit so that every student is able to understand how her/his work is to be assessed. Another significant shift is from summative to a continuous, formative approach to assessment. In OBE assessment is viewed as integral to learning and teaching and is not just seen as something that one adds on at the end of a unit of learning. Its purpose is as much about improving the quality of teaching as it is about monitoring the student's progress.

The guide challenges lecturers to look beyond the well used modes of assessing to new modes such as observation, use of portfolios which help to track progress over time, peer and self assessment which help students to reflect on their own and other's work.

Teaching strategies

The final session in the guide deals with a number of well known whole-class teaching strategies such as, explanation, demonstration and questioning which still form the backbone of teaching practice, but are now approached in an interactive and learner-centred way. Well structured and well managed group work is also examined.

In conclusion

If one acknowledges that curriculum development, teaching, learning and assessment lie at the very heart of the FET college sector transformation process, then engagement in these areas is vitally important. We believe that this guide will make a contribution to improving the quality of teaching in FET colleges, thus filling a gap that currently exists in the system and contributing significantly to the transformation of the FET college sector in Limpopo province.

Good luck!

SESSION ONE

Changing Contexts of Education

OUTCOMES

You will be able to:
- Describe your present understanding of OBE
- Argue the need for change in the education system
- Reflect critically on the purpose of adopting an OBE system
- Analyse the various roles of the teacher

DURATION: 2 HOURS

Background: Understanding the changing contexts

Currently South Africa has an artisan shortage of about 20,000, this is according to research done by the Human Sciences Research Council (HSRC) in 2004. At the same time the spectre of mass unemployment is growing. The HSRC research also found that each year approximately one million youth leave school. Of these only about 19% go into further or higher education and training, the rest – 81% or 826, 000 – enter the labour market armed only with Grade 12 or lesser qualifications. The research also points to the dearth of skilled vocational educators in South Africa and the urgent need for a more credible and higher-quality technical and vocational education system.

Until very recently, the emphasis on change in the Further Education and Training (FET) colleges has largely been of a structural nature. Interventions thus far have focused on necessary institutional reconfiguration. Funds from Sector Education and Training Authorities (SETAs) have also begun to filter into some colleges, and there are various innovative projects on a small scale. However, there have been few systematic interventions focused on improving teaching and learning in FET colleges. For this reason the Limpopo Department of Education Khanyisa Support Programme focusing on curriculum and materials development and approaches to teaching and learning is of the utmost importance. These aspects of FET college education delivery are at the heart of the transformation of the FET college sector.

Changing contexts in South African FET colleges

I thought I was simply a lecturer and that I must just lecture. Now they say I must 'develop competences', 'integrate theory and practice', 'facilitate learning' 'design learning programmes' and 'make courses responsive'.

This expresses some of the frustrations many FET lecturers are currently experiencing. While FET colleges are exciting and challenging places to work in, the rapid change that has occurred over the last few years can also evoke fear and anger.

Lecturer's work has changed a lot in recent years. Today lecturer's are expected to do many things they did not have to do in the past. In addition they are being asked to do things they have always done in very different ways. This rapid change characterises society too. If you read the newspapers regularly you will notice that education (both technical–vocational and general schooling) and its main audience – young people – face massive challenges today.

ACTIVITY

Time needed 30 minutes

Activity 1.1
Understanding the current context

Resources needed: A selection of newspapers from the last few months.
Class organisation: Small group discussion and report back in plenary

In small groups scan through a selection of old newspapers from the last few months.

• Find a couple of articles that deal directly with challenges in FET colleges or schools (lack of resources, class sizes, student's poor levels of reading and writing skills).

• Find a couple of articles that don't necessarily deal directly with college/schooling but which may have an effect on what happens in the college classroom where you lecture (for instance, youth violence, or unemployment, or other issues in wider society that will have a spill-over effect on education an training, e.g. the number of people infected or affected by HIV and AIDS.

• Write down two ways in which the issues reported in these articles could affect the classrooms where you lecturer today. Explain what you'd do to confront these new challenges.

• Report back in plenary.

STOP THINK

Stop and think

All lecturers need to try and make sense of the different pressures that they face in the current college teaching environment. These social, moral, economic, technological and educational pressures are typical of change in South African education at the moment and they all impact on your work as a lecturer in some way or other way.

More and more, the curriculum and the teaching and learning approaches of the past are out of date and unsuitable for meeting the new social and economic challenges faced in our country. The need to fundamentally change the approach to curriculum development and teaching and learning was therefore one of the key imperatives of the new government post 1994.

Dealing with change in South African education system

As far back as 1998, schools across the whole of South Africa began the largest curriculum change the country had ever seen – the introduction of *Curriculum 2005* and *outcomes-based education (OBE)*. A massive paradigm shift effecting curriculum design and content, pedagogy and assessment was introduced.

In 2000, the implementation of the new curriculum was evaluated and a number of adaptations were made, but the paradigm that drives the revised national curriculum in South Africa, namely OBE, was not abandoned.

While all this was happening in the general schooling sector, lecturers in FET colleges have had to deal with the complex processes of college rationalisation and mergers, to grapple with the introduction of new types of programmes such as Learnerships and short skills programmes and new requirements around assessor training and mentoring and most recently, the introduction of a college integrated management system (IQMS). There has however been very little systematic development or training in the FET college sector around issues pertaining to curriculum and OBE until very recently.

Now, in line with the schooling sector, and indeed with world trends, new ideas and approaches to education are being explored in South African FET colleges. The focus is on making teaching more *learner – centred*, with a more *problem-solving* nature, and *outcomes-based* and *transforming curricula to be more responsive* to the needs of commerce and industry.

Our challenge in the FET college sector is to come to grips with an OBE approach to teaching and learning that helps our students succeed in their studies and equips them for the world of work.

While not all colleges have taken OBE on board to the same extent, many of you will have attended OBE workshops or participated in training around various aspects of the Curriculum Framework for General and Further Education and Training. You will have also no doubt read and heard all kinds of information pertaining to the new educational policies and processes in the education system – some of them positive and some negative - some correct understandings and some myths that continue to flourish.

Present understanding of OBE

Before proceeding much further it would be useful to try and develop a shared understanding of what we currently understand by an OBE approach to teaching and learning.

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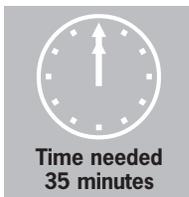
**Time needed
35 minutes**

Activity 1.2
Present understanding of OBE

Class organisation: Small group discussion and report back in plenary

• Discuss and summarise what you think the key features of an OBE approach to teaching and learning are.

• Discuss and summarise the fundamental differences between an OBE approach and the previously dominant approach to teaching and learning.

Once all the groups have presented, make a note of the key points. As we proceed to engage with this subject over time, we shall endeavour to refine and consolidate our understanding further, enabling us to develop our knowledge and skills to implement OBE in our classrooms successfully.

You have summarised a number of key points that describe an OBE approach – now let us consider the implications of these changes.

Hey! I've had it! Days of OBE this and learner-centred that – it's all just too much.

I've been teaching for twenty years and now they say I have to *develop* competence!

What are the main implications of these changes?

So what is the nature of the new ideas confronting South African FET lecturers?

Among others, we are asked to:
- Design classrooms and use methods which are learner-centred;

- Teach students how to solve problems and think critically;

- Teach students how to use the knowledge we teach them (this is sometimes referred to as learner 'competences'); and

- Plan lessons guided by learning outcomes.

This kind of teaching clearly needs a very different sort of FET lecturer from the one our history has given us – 'the chalk-and-talk' lecturer. The changed roles for educators are described in the *Norms and Standards for Educators* policy document[2] as follows:

NORMS AND STANDARDS FOR EDUCATORS

1. Learning mediator
2. Interpreter and designer of learning programmes and materials
3. Leader, administrator and manager
4. Scholar, researcher and lifelong learner
5. Community, citizenship and pastoral role
6. Assessor
7. Learning area/subject/discipline/phase specialist.

2 Department of Education (2000). *Norms and Standards for Educators*, Government Gazette no 20844: 4 February 2000 (p 13-14)

The understanding of the roles and functions of the FET lecturer have expanded. Competence is viewed holistically. Lecturers need to be competent to fulfil many roles at the same time. This requires flexibility and adaptability. At different times, a particular role may be more important while others are less so. But the core business of an FET lecturer is *planning and designing learning programmes and facilitating and managing the student's learning*.

ACTIVITY

**Time needed
30 minutes**
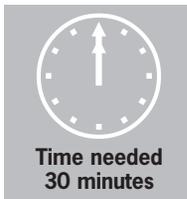
Activity 1.3
The seven roles of the educator

Resources needed: A list of the seven roles (above).

Class organization: Depending on the size of whole group, divide class into smaller groups so that each small group can discuss one of the seven roles and then provide feedback in plenary.

Working in small groups think about what each of these roles requires of you. Use the format provided or prepare a separate answer sheet to fill in your answers.

Role	Role description: I must be able to:
Learning mediator	• _____ • _____ • _____ • _____ • _____
Interpreter and designer of learning programmes and materials	• _____ • _____ • _____ • _____ • _____
Leader, administrator and manager	• _____ • _____ • _____ • _____ • _____
Scholar, researcher and life-long learner	• _____ • _____ • _____ • _____ • _____
Community, citizenship and pastoral role	• _____ • _____ • _____ • _____ • _____
Assessor	• _____ • _____ • _____ • _____ • _____
Learning area/subject/ discipline/ phase specialist.	• _____ • _____ • _____ • _____ • _____

KEY POINTS

Key points

▸ Politically, socially and economically South Africa is undergoing rapid change. This has direct implications for education.

▸ To meet these new needs, we urgently have to improve curriculum and teaching and learning in FET colleges - education and training must become more responsive.

▸ To drive the transformation process, South African educational policy has been underpinned by an OBE approach that emphasizes a shift from content – driven, transmission teaching to an out comes or competency-based approach that is learner-centred.

▸ Lecturers need to be supported to make the paradigm shift (to understand OBE and its purpose) and to understand the necessary competences required for fulfilling the expanded roles of the educator.

SESSION TWO
New Educator Roles

OUTCOMES
You will be able to: • Clarify the role of lecturer as mediator and facilitator • Understand the importance of being a reflective practitioner • Manage change constructively • Understand and implement reflective teaching practice
DURATION: 2 HOURS
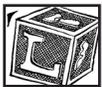
WHAT WE HAVE LEARNT?

What we have learnt?

In Session One we learnt that approaches to learning and teaching in South Africa (and the world as a whole) need to transform in response to the rapidly changing political and socio-economic contexts in which we find ourselves. Lecturers at colleges are being challenged to produce student graduates that are *competent* rather than just *knowledgeable*. We need to teach in a manner that enables students to *do* things with the knowledge they learnt at college rather than simply to memorize information. Students need to develop higher order skills like critical thinking, analysis, problem solving and so on. To achieve this outcome, lecturers need to be supported and enabled to shift their teaching practice to an outcomes-based approach, to strengthen their curriculum development skills and to slowly fill the seven roles set out in the Norms and Standards for Educators.
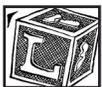
WHAT WILL WE LEARN?

What will we learn?

Key to the successful implementation of an OBE approach is to strengthen the lecturer's abilities in a range of new competences including, their role as mediator and facilitator and in planning and designing outcomes based lessons. In Session Two we shall examine what is meant by both mediation and facilitation. Lecturers will be supported to become reflective practitioners as important steps towards equipping themselves to meet the teaching and learning challenges described.

These two words are often used interchangeably. Learn to use them correctly.
To Facilitate To make easier, help, aid, smooth the process. (From the Latin *Facilis*: Done without effort)
To Mediate To bring about, to effect, intercede, intervene, act as go between. (From the Latin - To be in the middle)

ACTIVITY

**Time needed
15 minutes**

Activity 2.1
Clarifying the role of lecturer as mediator

Resources needed: Definitions provided (above)
Class organization: Individual task followed by group discussion

One of the roles of the educator is that of *mediator*. This term is often used interchangeably with *facilitator*.

• Read the definitions provided above.

• Write down in your own words what the difference between the two actions is and what are the implications of these for your teaching.

_____

_____

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ACTIVITY

**Time needed
20 minutes**

Activity 2.2
The importance of facilitation

Resources needed: Paulo Freire text provided (on the next page)
Class organization: Individual task followed by group discussion

• Read the extract from a talk held with the ground breaking Brazillian educationalist, Paulo Freire. Then answer the following question: Is the statement: "*In OBE the students do all the work, the lecturer's role is greatly reduced*" true or false? Provide reasons for your answer and discuss in plenary.

PAULO FREIRE talks about the 'TEACHER AS FACILITATOR'

…Let me begin responding by categorically saying that I consider myself a teacher and always a teacher. I have never pretended to be a facilitator. *What I want to make clear is in being a teacher, always teach to facilitate.* I cannot accept the notion of a facilitator who facilitates so as not to teach.

When teachers call themselves facilitators and not teachers, they become involved in distortion of reality. ...in de-emphasising the teacher's power by claiming to be a facilitator one is being less than truthful to the extent that the teacher turned facilitator maintains the power institutionally created in the position. That is, while facilitators may veil their power, at any moment they can exercise power as they wish. The facilitator still grades. Still has certain control over the curriculum, and to deny these facts is to be disingenuous. I think what creates this need to be a facilitator is the confusion between authoritarianism and authority. What one cannot do is try to divest of authoritarianism is relinquish one's authority as a teacher. In fact, this does not really happen. Teachers maintain a certain level of authority through the depth and breadth of knowledge of the subject matter they teach. The teacher who claims to be a facilitator and not a teacher is renouncing, for reasons unbeknownst to us, the task of teaching…

Another point worth making is the risk of perceiving facilitators as non-directive. I do not think there is real education without direction. To the extent that all educational practice brings with it its own transcendence, it presupposes an objective to be reached. Therefore practice cannot be non-directive. There is no educational practice that does not point to an objective; this proves that the nature of educational practice that does not point to an objective; this proves that the nature of educational practice has direction. The facilitator who claims that "since I respect students I cannot be directive, and since they are individuals deserving respect, they should determine their own direction," does not deny the directive nature of education…Rather this facilitator denies himself or herself the pedagogical, political and epistemological task of assuming the role of a subject of that directive practice. This facilitator refuses to convince his or her learners of what he or she thinks is just.

Paulo Freire and Donaldo Macedo, A Dialogue: Culture, Language and Race, in Breaking Free. Edited by Pepi Leistyna et al.[3]

STOP THINK

Stop and think

In summary, Paul Freire is saying that as teachers or educators we need to clearly understand that our job is to *facilitate* (understanding). Furthermore, as educators, we are placed in a position of power and we must own that power and use it responsibly. We have the authority as *educators* – with particular depth & breadth of knowledge, skills and experience to draw on. Our role is to provide direction – there is no education without *direction* – educational practice always points to an objective/outcome to be reached. Teaching can never be non-directive. We have a responsibility to plan and structure learning experiences, mediate learning by using facilitation techniques that

3 Paulo Freire and Donaldo Macedo, A Dialogue: Culture, Language and Race, in Breaking Free. Edited by Pepi Leistyna et al. in Daniel, L., et al (2003) An Outcomes Based Approach to Teaching and Learning. National Access Consortium Western Cape: Rondebosch.

"smooth the learning process". *We* are required to manage our classes and not abrogate responsibility to our students. We are tasked with creating opportunities for active learning for our students, this is not at all the same as thinking that it is alright to leave students to "get on" with learning on their own.

The changing role of South African FET lecturers

Introducing changes like these (characterised by the seven roles of the educator) makes huge demands on the FET lecturers. As changes take place in policy at the top, so we have to make changes in our own classroom and workshop practice. This threatens all our old, practiced, and familiar ways of doing things. It is understandable that people will complain about these changes. After all, a change to something new often implies that there was something wrong with the old – and that makes us feel uncomfortable. As good lecturers our challenge is to find ways to manage this change.

In the past, in many individual college classrooms and workshops, there was often nothing wrong with the training offered. Many lecturers worked hard, enthusiastically and successfully. Many students have achieved astonishing levels of competence in South Africa. But many others – inside the (technical) college system – have achieved very little. On average, South Africa is not high in the world rankings in technical and vocational education and training achievement. What went wrong?

This question has many answers, and we are only going to look at one aspect in this guide – the curriculum. The following is based on an extract from Paul Musker's book on OBE in which a conversation held with a Chief Executive Officer of a large South African company is reported on as follows:[4]

> …these days we talk about worker empowerment. Give more responsibility to your front-line staff, for example. We are finding it very difficult. Kids come from school into this company and they expect to be told what to do. And I'm not talking about kids from historically disadvantaged departments of education – I'm talking about the former white departments too. They are so used to rote learning in schools and colleges that they come here expecting to get instructions.

? STOP THINK

Stop and think
Has the education system failed to generate independent, critical thinking? Thinking that can be applied across contexts to new problems? Have we spent too much time drilling home the solutions to problems instead of the desire to solve them? Giving answers instead of creating an environment of useful questions? Teaching memory skills instead of research skills?

4 Extract from Musker, P. 1997. Outcomes-Based Education. Nolwazi Educational Publishers Braamfontein. (p3).

This begs the question – what kind of students do we want to see graduating from our colleges? We need to start developing a clear picture in our own minds of exactly what our students will know and be able to do and value.

How can we manage change constructively?

The first step towards dealing intelligently with change is to think back, to understand how our history shapes our present thoughts and practices. In order to successfully shift from our old ways of doing things to new approaches to teaching, we need to have a clear understanding of what it is that we do now and why we do it.

ACTIVITY
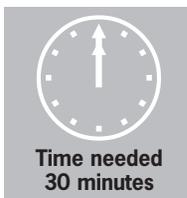
Time needed 30 minutes

Activity 2.3
Understanding why we teach the way we do

In this activity you are requested to reflect on your own beliefs about teaching and learning and your own classroom practices.

Resources needed: The three questions provided below
Class organisation: Individual activity and then small groups discussion

- We need to ask ourselves the following three questions:
  - o How did we get to be FET lecturers?
  - o Why do we teach the way we do?
  - o What might make us resistant to change or improving our practice?

- Sit quietly and try and answer these questions alone. Think about the following - did you become a teacher or a lecturer because you wanted to or because there was nothing better to do? How did you learn to teach – from your college studies, or by 'copying' how you were taught? Do you feel resistant to suggestions that you change? Why?

- Now discuss your ideas with a small group of other lecturers. How similar are your histories? How different are they?

Try and be as honest as you can. This is difficult for all of us, but try and help each other in the group.

STOP THINK

Stop and think
We teach the way we do because of how we were taught.

All those years at school, sitting in classrooms and observing teachers, have given us clear memories and pictures in our heads about how teaching 'should' or 'should not' be done. Sometimes we use this 'teaching' consciously: we remember that it worked and we 'copy' it in our teaching. But often we use this 'teaching' unconsciously: we do it without any real memory of where we saw it and even if it really worked or not.

Our teaching practices are influenced by our educational and life beliefs

Most of us have different beliefs about life, about education, about human beings. Some of us believe that the most important characteristic of society is that we should be free. Others believe that human beings should respect traditional values and our elders. Or that respect for a god – whether Christian or the Muslim Allah - is more important than individual freedom. In these cases it is likely that order and obedience would be more highly valued than freedom.

These beliefs often shape our educational practices. By understanding our beliefs – which are often deeply hidden – we become more able to accept new ideas and practices.

What are the main implications of these changes?

The range of roles mentioned in the *Norms and Standards* signals a shift away from the 'chalk and talk' idea of teaching where the primary role was the conveying of information. Now, even the direct teaching roles are aimed at *enabling* learning: empowering students, rather than filling them with information.

Making the shift: Becoming a reflective practitioner

Becoming a reflective practitioner refers to becoming skilful and becoming someone who can assess and adapt his or her teaching (i.e. reflect on his or her practice). So what makes a lecturer *really* qualified to teach? (We are talking about 'qualified' as quality, not simply as getting a certificate!)

The roles identified above, show that a competent lecturer must have more than just subject knowledge, more than just the ability to manage other people. Current policy says, '*Competence is not merely performance*', meaning that competence is more than simply doing an action such as planning a lesson, writing a lesson onto the board, making a worksheet for a lesson or setting and marking a project.

A *reflective* competence includes at least three abilities:

- **Understanding and being able to explain why a particular method was chosen or action taken.** You need to be able to consider different teaching possibilities (Should I introduce the lesson using a story or a practical demonstration?), you need to be able to make the choice and justify your choice (I'll use a story because my learners really become engaged by story-telling and I think it links well with the main concept I'd like to introduce later).

- **Acting effectively on decisions: Carrying out basic teaching functions.** It's no good making thoughtful decisions and then not being able to carry them out effectively! (*Oh dear, I've always been a dreadful story-teller and now my class are falling asleep!*) In order to do this lecturers need to know the knowledge pertinent to their subject area,

learning area, and be able to communicate these ideas to students in a manner appropriate to their level. In other words, they must be able to demonstrate an ability to use the knowledge they know and implement the teaching methods they have learnt.

• **Reflecting on actions and adjusting these in light of this reflection.** Part of being competent is the ability to monitor how things are working out, understand why they are working or not working, and then being able to adjust your action in the light of your observations. (*Hmm, people aren't participating in this role play. It's probably because I haven't used it before and they are a bit shy. They could think I am assessing them. Maybe if I join in they will feel more comfortable*).

Clearly then 'practice' isn't simply a physical thing: an action, such as talking to a class, writing on a chalkboard, dividing the class up for group activities. All practical actions are strongly influenced by *thinking*, whether we are conscious of this or not. Thinking precedes every action, and then *continues all the time* we perform the action.

You may have been told that teaching a lesson is simply a matter of following a formula:

• Step 1 - Plan the lesson.

• Step 2 -Teach the lesson (do an activity)

• Step 3 - Conclude and lesson.

• Step 4 - Determine who has passed or failed

If only this were true. Teaching would then be similar to boiling a kettle (*just follow steps 1-2-3*).

Of course, anyone who has taught in a classroom knows that this is not what happens. Students will be sure to disrupt the neat plan. That's the basic problem: lecturers deal with other human beings who are all different and unpredictable. As a consequence competent teaching is a demanding, complex activity where thought and action constantly bounce off each other.

Reflective teaching practice

A reflective teaching practice is one where teaching is regarded as an ongoing cycle of learning rather than a linear process. The shift towards this kind of reflective teaching is represented as follows.

Move from a linear approach to teaching to a reflective approach to teaching

STEP 1:

Plan lesson

STEP 2:

Teach lesson
(Do activity)

STEP 3:

**Conclude &
Assess**

STEP 4:

Students
Pass/Fail

Conceptualise

2. **Plan lesson**

1. **Think**

Implement

3. **Teach lesson**

Reflect/analyse

Reconceptualise

4. **Assess Students**

5. **Reflect on lesson**

6. **Plan new lesson**

New experience

7. **Re-teach & assess**

9. **Reconceptulise**

8. **Reflect on lesson**
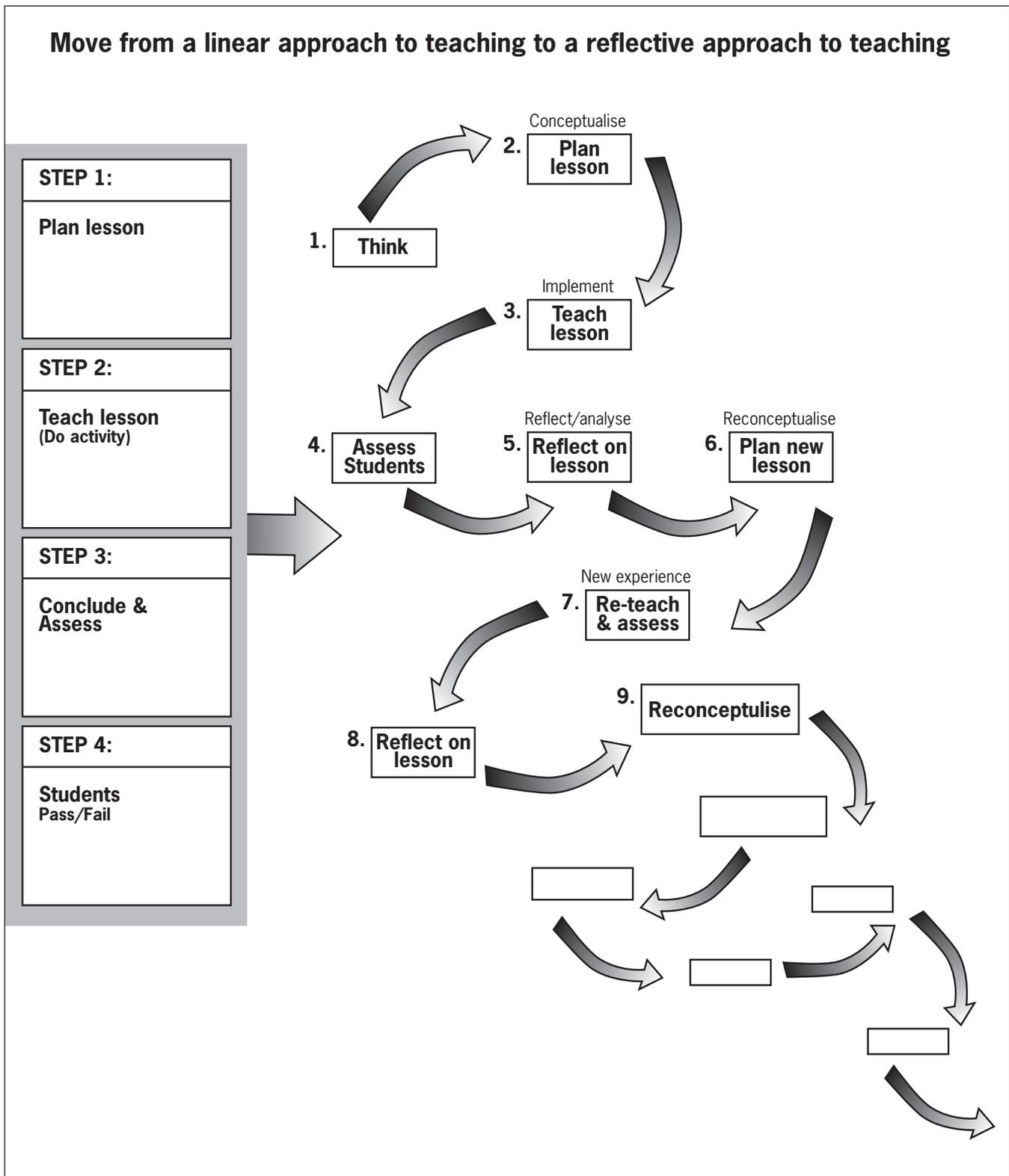
Each lesson is a learning moment for both lecturers and students. It is analysed and becomes the basis for the new lesson… In other words one teaching cycle (a lesson) feeds into the next cycle. Each lesson is educative: lecturers learn from their mistakes and good decisions, and use this knowledge in their planning and teaching in the next lesson.

Developing a reflective practice is like developing a new habit: it takes time and it takes practice. It's about trying out ideas (experiencing successes and mistakes), thinking about these (with the help from others) and then re-trying … again and again and again. The biggest impediment to reflective thinking is thinking that we've reached our destination; that we now know!

To conclude we'd like you to complete the following activity. This activity is intended to help you think a bit more about the seven roles of the educator by applying the notion of *reflect* practice.

ACTIVITY

**Time needed
30 minutes**

Activity 2.4
Developing reflective practice

Resources needed: Table provided (below)
Class organization: Individual activity

In activity 1.3 you were asked to flesh out what each of the seven roles require of you. In this activity you are asked to *reflect* on your own strengths and weaknesses in as far as they pertain to your ability to fulfill these roles. Once you have assessed yourself, then to come up with (*conceptualise*) a plan of action for addressing the situation and moving forward.

•   Look at the example on the following page.

•   Complete the table using any two of the remaining features.

Role	My current strengths/weaknesses	What can I do about this?'
Subject specialist	I completed a three-year college diploma in 1987. I sometimes feel unsure about the 'new' OBE Maths that I have to teach. But I also feel nervous doing a new course because I might fail.	I've realised how important subject knowledge is in teaching. It gives one confidence. Maybe I should get hold of a textbook that is now used in colleges and work on it with Khatu … then maybe work next year I'll register to do an in-service course … Also …?
Learning mediator Interpreter and designer of learning programmes and materials	? ?	? ?
Assessor	?	?
?	?	?

Stop and think

Teaching isn't an atomistic linear process where every lesson stands independently (*atomistic* = a small separate entity like an atom). Teaching isn't a matter of simply following a formula. Instead, it is about constantly *assessing whether the 'formula' works and adapting it*.

Key points

‣ The new approach to education delivery in South Africa requires a substantial shift in the way lecturers conceptualise their roles, in particular, their role as mediator. They also need to develop new competences such as facilitation skills.

‣ The first steps in the process of change require us to take a good, hard, honest look at ourselves – only when we can clearly see where we have come from and understand why we teach the way we do – can we begin to work on changing our teaching practice.

‣ To make the shift from transmission style teaching to OBE and learner-centred teaching requires us to hone the skills of reflective practice and to embed these in our lesson planning and teaching processes.

SESSION THREE
Principles of Good Planning

OUTCOMES
You will be able to: • Explain what good planning is and why it is important in an outcomes or competence based education system   • Understand the broad purpose of outcomes-based planning   • Understand the purpose of the Critical Outcomes
DURATION: 2 HOURS
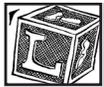
WHAT WE HAVE LEARNT?

What have we learnt?

In Session Two we analysed the various roles that lectures are required to play in the current education context and examined reflective practice as an approach to making the required shift to outcomes/competence based, learner-centred education methods.

These changes are both exciting and frightening. But they all point to the need for more *careful planning by reflective, creative* lecturers.

WHAT WILL WE LEARN?

What will we learn?

In Session Three we will explore what good planning is, why it is so important in an outcomes/competence-based, learner-centred education system. We explore the purpose of using outcomes as part of planning and lesson delivery and we engage with the way in which Critical and Development Outcomes have been implemented to support the attainment of a new vision for education in South Africa.

What is planning?

We are all familiar with the idea of planning. We plan so that we can fit everything we have to do into our day. We budget how we will spend our monthly salary. Once a year we plan our holiday (or, at least, plan to see whether we can afford to have a holiday!) But it is this familiarity which also makes us careless about planning. It also may stop us from *really* thinking about what a *good* plan is.

ACTIVITY

Activity 3.1
What is planning and why do we need to do it?

**Time needed
10 minutes**

Class organization: Whole class activity

In plenary, brain storm the question: What is planning and why do we need to do it? Record the key points.

The brain storm will probably have included the following: Planning is *thinking ahead*, about:

• What we want to do (our purpose)

• How we will do this (our means or method)

• How we will decide whether we were successful (our evaluation or assessment).

What ever the nature of the task in hand, these three basic steps remain the same.
It is this simplicity and our familiarity with the process which makes us careless about planning. Too often our 'plans' suffer because they stop at the point of a vague idea or a desire or a whim, without any methodical thought about *how* we will achieve this.

In Session Two we looked at moving from a linear approach to teaching to a reflective approach to teaching. Now we will incorporate these same reflexive skills into our *planning* approach.

Planning cyclically and reflectively

There isn't *one* model for planning. Simply implementing a set of procedures without thinking isn't good planning. Rather than regarding planning as a linear and mechanical process – where we have a clear beginning and end – we suggest a reflective and cyclical planning process. How do we begin planning in a reflective and cyclical manner?

ACTIVITY
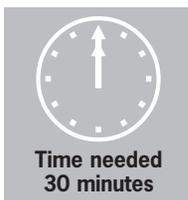
**Time needed
30 minutes**

Activity 3.2
Planning cyclically – what does it require?

Resources: Planning cycle template provided (on the next page)
Class organization: In pairs

• Using the seven questions provided in the planning cycle template below, think carefully about what it is that is actually required of you and describe in point form the key issues that arise in each aspect of the planning processes. Differently put, what do you need to think about and do, to fully answer the questions being posed in the planning process?

• For example, under the question, **What resources will I use to achieve my outcomes?** You will need to think about your particular context and your student profile (gender, age, general interests, their background knowledge of the filed of study etc.) so that resources chosen and examples cited are relevant to their experience. You will also need to think about and assess the availability and suitability of resources. Will you use a textbook or a video or posters? Or will you source some additional readings or develop your own worksheets and make copies for the whole class? The issue of resources may also be linked to the methods you

choose to use. If you are doing group work in which the students discuss certain issues and then present their findings to the rest of the class, you may need koki pens and flip charts and so on.

- First think about and discuss each of the seven questions jotting done the key issues on a piece of paper. Once you have consolidated your thinking – you may want to fill in the information in point form under each of the seven headings in the planning cycle in this guide. Use a pencil.

- Discuss issues of planning in plenary.

Cyclic planning
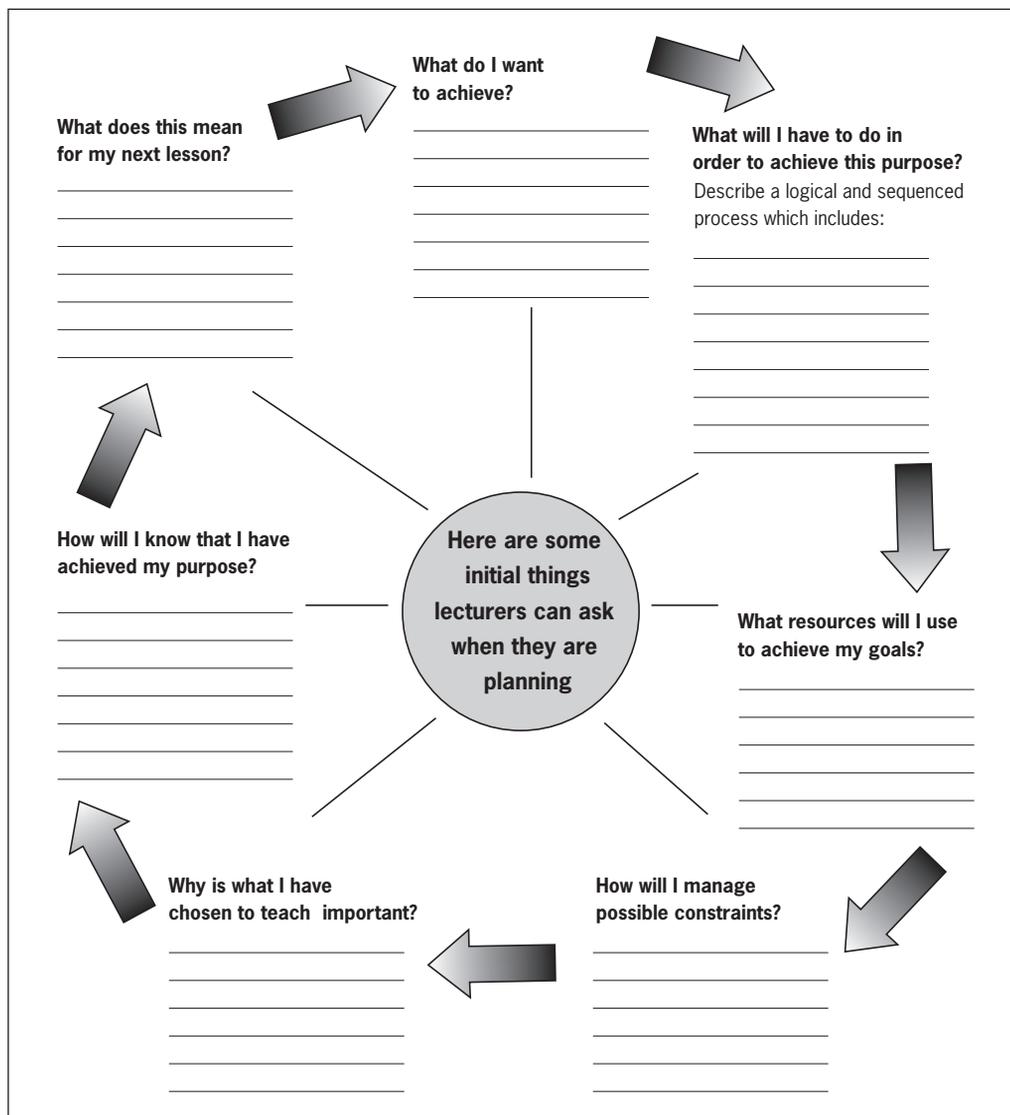
STOP THINK

Stop and think

First, *cyclical planning* regards assessment as an ongoing part of the teaching cycle rather than the *end* of a process. It is both the end of a cycle and the *beginning* of another. An analysis of *mistakes* – by teachers and learners – is used to inform a new cycle of planning and teaching. We use assessment *diagnostically*; it is used to *shape* teaching *and* learning.

Second, cyclical and reflective planning values *flexibility*. While it is important to think carefully of what we want to do, we must be prepared to deviate from this plan when unplanned learning opportunities arise. Good planning keeps teachers alert to comments from learners and enables them to use these to shape and re-shape teaching as it occurs.

This is not the same as *not* planning! Rigid planning destroys good teaching because the lecturer becomes a *slave* to the plan. She is too scared to depart from the plan even when a detour may improve learning. But casual (or no) planning destroys good teaching because the lecturer gets lost. She isn't clear about *what* he wants to do, *how* he will do it, *why* it needs to be done, and *who* he will do it with, etc.

Reflective planning suggests that we ensure we have a **clear** idea of:

- Our *destination*, our outcomes. In other words, both lecturers and students understand what they need to know by the end of a lesson (or series of lessons) and *why* learning this is important.

- Our *starting point*, the nature of our students and the context in which we are teaching. It builds on a careful analysis of the strengths, weaknesses and interests of our learners *and* ourselves.

It is this clarity that allows us to be **flexible** and thoughtful in the actual process of teaching. While we *will* plan teaching strategies and activities, we won't become slaves to these. Instead, we will change them if alternative strategies seem more likely to assist us in reaching our destination.

Proper planning prevents poor performance

Planning as a time for thinking about teaching

Experienced lecturers sometimes say they don't have to plan. "It's something you do while you're in training", they say. But even these lecturers plan … but do so casually and poorly (possibly just jotting a few key ideas down). Research suggests that the majority of lecturers - and certainly for those lecturers regarded by their peers and by students as *good lecturers – do* plan.

For many lecturers the most important benefit of planning is *not* the written plan we carry into class. Instead it is the fact that planning forces us into *thinking* about our teaching. This enriches our teaching. It suggests new and innovative ways to teach; it gives us the confidence to experiment; and it provides time to search out really interesting resources.

Planning does take time, especially when you are a new lecturer. But it gets quicker as you become more experienced. Experienced lecturers can also re-use lesson plans. Good lecturers, though, would adapt old plans on the basis of the previous use of that plan and to take account of the different students that will be taught. Experienced lecturers *do* plan, they are just much quicker and more efficient at planning their work.

ACTIVITY

**Time needed
30 minutes**

Activity 3.3
Why lesson plans and work schemes are important

Resources: Completed version of Activity 3.2 (above) and above reading (from *Stop and Think*)
Class organization: Small groups

In a small group, discuss three reasons for proper planning. Think through the components of the planning cycle carefully to help you in structuring your answers. Share these with the rest of the class in plenary. You are likely to have come up with a set of responses something like this:

• **They provide 'support', a 'scaffold' for our teaching** - Provides us with a 'safety net' which gives us the confidence to experiment with good teaching strategies.

• **The processes of planning sharpens our thinking about exactly what we are doing** – It enables us to think carefully about what we teach, why we are teaching this, and the sequence in which we should teach it.

• **It alerts us to possible problems and so allows us to act pro-actively** – We can plan so as to minimize possible problems – such as the weakness of students or constraints of the college environment – rather than have to deal with these as they occur.

• **It improves our time management skills** – This is one of the most difficult skills to develop, but it is vital if we want to ensure that we do the important things in a year (rather than run out of time before we get to the major outcomes!), and in order that our lessons don't descend into chaos as time runs out!

• **It enables us to teach in a learner-centred and resource-based manner** – While 'teacher-talk' can be done without much planning, lessons that *involve* students require that we ensure that resources are available when needed.

- **It enables us to plan team and theme teaching in advance** – Co-operative work with other lecturers and the organization of teaching into themes that cut across subjects are only possible if lecturers plan the use of time, space and resources (including lecturers) early! E.g. this kind of co-operative planning might be necessary when thinking about how to integrate the theoretical component of a subject with the practical component, or when dealing with a subject like entrepreneurial studies which cuts across (applies to) other specialist subject areas, be they in the engineering or commerce fields etc.

Planning with outcomes in mind

Planning in terms of national educational purpose

Many lecturers seem to be afraid of *outcomes*. This fear if often the consequence of an unnecessarily complicated debate about *what* outcomes are and how we, as lecturers, should make use of them. Yet we use the broad concept of an outcome (or goal, or aim) often in everyday life.

Goals, aims, objectives. These are *planning* terms that will be familiar to many of us. In everyday life we say things like "my *goal* in life is be happy" or "I *aim* to be the best cook in this contest" or "the *object* of this exercise is to improve the quality of life of the residents". They tell people what we intend to do; they refer to our *intentions*.

These terms are commonly used in educational planning. Educational texts often get into intense arguments about how an 'aim' is different from an 'objective', or an 'objective' is different from an 'outcome'. We won't do this. Instead we suggest that as lecturers we should understand that all of these, in slightly different ways, indicate our educational *intentions*. What is important for lecturers is that:

- We understand clearly what our educational intentions or purposes are; and that

- We spell these intentions out clearly so that our students know what is expected of them.

As will be discussed later in more detail, in South Africa outcomes operate at two levels. At the national level, embodying national goals that give expression to values embedded in our Constitution, we have the Critical Cross Field Outcomes – called Critical Outcomes for short. They are generic and cross-curricular. They underpin the learning process in all its facets. While they are not restricted to any specific Learning Field or subject, they inform the formulation of the Learning Outcomes in the individual Learning Fields at all levels of the National Qualifications Framework.

Also at the national level, we have the Learning Outcomes (previously called Specific Outcomes). They are more context specific – they describe the competences which students should be able to demonstrate in particular Fields of Learning e.g. Business Studies or Engineering and at particular levels e.g. General Education and Training Band of Further Education and Training Band and so on. They frame the national schooling curriculum.

The second level operates in the design and delivery of lessons in the individual lecture room or workshop. The challenge of designing outcomes based lessons and work schedules will be more fully explored in Session Four.

Essentially, the new curriculum will effect a shift from one that has been content-based to one which is based on outcomes. This aims at equipping all learners with the knowledge, competencies and orientations needed for success after they leave school or have completed their training. Its guiding vision is that of a thinking, competent future citizen.

It will also foster learning, which encompasses a culture of human rights, multilingualism and multiculturalism and sensitivity to the values of reconciliation and nation building.

Minister of Education, Professor Sibusiso Bengu
Government publication, February 1997[5]

ACTIVITY

**Time needed
35 minutes**

Activity 3.4
Understanding the Critical Outcomes

Resources: – Quote from Professor S. Bengu (above)
                        – List of Critical and Developmental Outcomes (on the next page)
                        – Flip chart and koki pens
Class organization: Small groups

Read the quote provided above. In the light of the vision of "*a thinking, competent future citizen*" and the nature of the society that has been briefly sketched, discuss what kind of broad outcomes would need to frame our educational system to support the attainment of this vision.

Some guiding questions to help you think:

• What are the things that one needs to be able to do in order to live "successfully" in a society like the one Prof. Bengu is referring to?
• How much of this should have been learnt by the time one leaves the schooling or college system?
• Write up your points on a piece of newsprint and present in plenary.
• Summerise the key point from each group.
• Now read and compare the Critical and Developmental Outcomes (on the next page) with the key points that the class has written down. Are there any that correspond? Has this exercise helped you to understand some of the thinking that underpins the way in which the South African Qualifications Authority (SAQA) thought about the Critical and Development Outcomes?

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5 Quoted in Daniel, L. et al (2003) *An Outcomes Based Approach to Teaching and Learning.* National Access Consortium Western Cape: Rondebosch.

CRITICAL OUTCOMES

1. Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made.

2. Work effectively with others as a member of a team, group, organization, community.

3. Organize and manage oneself and one's activities responsibly and effectively.

4. Collect, analyse, organize and critically evaluate information.

5. Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation.

6. Use science and technology effectively and critically, showing responsibility towards the environment and health of others.

7. Demonstrate an understanding of the world as a set of related systems by recognizing that problem-solving contexts do not exist in isolation.

Additional guidelines were added as follows, these are known as the Developmental Outcomes.

In order to contribute to the full personal development of each learner and the social economic development of the society at large, it must be the intention underlying any programme of learning to make an individual aware of the importance of:

1. Reflecting on and exploring a variety of strategies to learn effectively.

2. Participating as a responsible citizen in the life of local, national and global communities.

3. Being culturally and aesthetically sensitive across a range of social contexts.

4. Exploring education and career opportunities.

5. Developing entrepreneurial abilities.

What do the critical cross-field outcomes mean for our teaching?

• They shift the focus from *content recall* to the *demonstration of competence*, and from *teacher inputs* to *learner outputs*. In outcomes-based education what learners can *do* when they leave school is the measure of our success or failure rather than the mark learners achieve in an exam.

• They prioritise outcomes that spell out a vision of a future society populated by democratic, tolerant, co-operative and critically thoughtful citizens (rather than citizens that are obedient or ruthlessly competitive, for instance).

Our national goals thus informs both *what* we teach (curriculum content) and *how* we teach and assess (educational methods). For instance, a method like groupwork only becomes appropriate because of the kinds of outcomes chosen; it assists in the development of co-operative, tolerant, citizens who can think critically. If obedience and competition were the chosen outcomes, group work would not be an appropriate method but rote learning might be.

A final point: we don't directly teach critical cross-field outcomes. Instead we could regard them as a list of good 'habits' we will assist all our students to develop. As we know, 'habits' develop unconsciously: they develop through the kinds of experiences we have in our lives. As lecturers we need to use critical cross-field outcomes to inform us about the kinds of learning experiences we will construct for our students.

KEY POINTS

Key points

▸ Planning is *thinking ahead*, about:
  • What we want to do (our purpose)
  • How we will do this (our means or method)
  • How we will decide whether we were successful (our evaluation or assessment).

▸ Planning cyclically and reflexively supports a learner-centred approach rooted in the learner's own experience, facilitates integrated assessment and allows for flexible implementation.

▸ Classroom level planning of lessons and work schedules is important because it:
  • Provides 'support', or 'scaffolding' for our teaching
  • Sharpens our thinking about exactly what we are doing
  • Improves our time management skills
  • Enables us to teach in a learner-centred and resource-based manner
  • Enables us to plan team and theme teaching in advance

▸ The Critical and Development Outcomes underpin and support the attainment of a vision of a transformed South Africa and are the basis for educational transformation.

SESSION FOUR

Outcomes-Based Planning

OUTCOMES

You will be able to:
- Broadly apply the Critical Outcomes to your Learning Field/Subject
- Differentiate different level outcomes and their functions within an OBE system (National, Critical Outcomes, Learning Field/Subject Learning Outcome and classroom level outcomes)
- Understand the design down principle of OBE
- Understand the principles and procedures of outcomes-based lesson planning.

DURATION: 2 HOURS

WHAT WE HAVE LEARNT?

What have we learnt?

In the previous session we learnt about the importance of thinking ahead and planning. We examined the important impact planning has on all levels and aspects of our programme delivery from formulating purpose through choice of method, resources and the like and, to assessment. We explored ways of planning cyclically and reflexively to support a learner-centred approach to teaching and learning and we engaged with the role and function of the Critical and Development Outcomes play in underpinning the vision of transformation in South Africa.

WHAT WILL WE LEARN?

What will we learn?

In Session Four we will engage with the design down principle of OBE by applying the Critical Outcomes to your Learning Field and then analyse how Critical Outcomes underpin the national level subject specific Learning Outcomes. We examine the principles and procedures of outcomes-based lesson planning.

ACTIVITY

Activity 4.1
Applying Critical Outcomes

Time needed 45 minutes

Resources: Critical Outcomes (above)
Class organization: Small groups then report back in plenary

- In small groups, choose three of the Critical and Development Outcomes and give examples of how they are/could be incorporated into your learning field/subject.

- All groups present and discuss their findings in plenary.
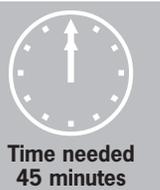
Specifying our broad, national, educational purpose

South African curriculum policy – in line with other countries committed to an outcomes-based curriculum - describes its educational intentions in terms of desired learning *outcomes* rather than *objectives*. Terms like *critical cross-field* outcomes, *specific* outcomes, assessment criteria, performance indicators, lesson outcomes, (and so on) spell out our educational aims at different levels.

We have spent some time examining how Critical and Developmental Outcomes are derived and how they serve to support the attainment of the vision of a transformed South Africa as a whole and a transformed education system in particular. Now we will look carefully at the design down principle and see how it is that the Critical Outcomes give focus to the Learning field as a whole and underpin the subject specific Learning Outcomes. In the schooling sector this all occurs at the national level as part of the National curriculum framework. While in the FET College sector such a framework may not as yet have been finalized, it is safe to say that the same design down principles hold as a key OBE principle in the South African education system.

From the national level to the individual classroom, lecture room or workshop is a huge step. It's however, at this level, that we as lecturers all focus most of our energies, and therefore we will dedicate a big chunk of time to getting to grips with classroom level outcomes-based, learner- centred, activity-based lesson design and teaching.

- *Critical outcomes* also called the *critical cross-field outcomes* describe South African education's broad national goals (derived from our constitution). These define the 'big' educational purpose that *all* providers in a country should be committed to achieving, regardless of what subject they teach, or the level at which they teach. Consequently these outcomes will be spelt out in very general terms.

- *Learning field statement*, previously called, learning area in Curriculum 2005, this includes the features, scope and subject-specific outcomes of the learning field (e.g. engineering). They are still relatively general in that they describe the educational purpose of the learning over the entire course or programme.

- *Learning outcomes*, previously called, specific outcomes when Curriculum 2005 was first introduced, suggest how particular learning areas or subject specific goals, aims and objectives can contribute to the realisation of national goals. Although specific to a particular learning field or subject they are still relatively general. As a statement of intended result of learning and teaching, it describes knowledge, skills and values that students should acquire by the end of a particular band of study e.g. Business Studies in the FET band.

- *Assessment standards*, previously called, *assessment criteria* in the Curriculum 2005 initiative. They are criteria that collectively describe what a student should know and be able to do demonstrate at a specific level. They embody the knowledge, skills and

values required to achieve the Learning Outcomes. Assessment Standards within each Learning Outcome collectively show how conceptual progression occurs from one level to the next. They serve as descriptors of *how* the learning outcomes should be demonstrated at particular levels of study.

There are differences between outcomes and objectives. But as lecturers only two of these are important.

• Firstly, in an outcomes-based system we are interested in *what students must be able to do* after a teaching intervention. Objectives often state what a lecturer must do.

• Secondly, our particular understanding of outcomes says that we must focus on student *competence* – what they can *do* - rather than on their ability to memorise information.

Designing down

The following schematic representation, captures the key aspects of the design down principle which is one of the corner stones of OBE.

National level

NATIONAL GOALS

Critical Cross-Field Outcomes

Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made.

↓

Learning Field

Business Studies: Definition purpose and scope.

↓

College classroom level

Learning Outcomes

Learning Outcome/Exit Level Outcome: Business Operations

The learner is able to demonstrate and apply a range of management skills and specialized knowledge to perform business operations successfully.

↓

Assessment Standards

o Identify and briefly discuss the eight business functions.
o Analyse how the business functions are interrelated and how they operate in small, medium and big business contexts.
etc.

↓

Content and context

Specifying detailed teaching outcomes

How do we want students to know things and to demonstrate their competence?

The outcomes we have spoken of so far are all still broad statements of intent. While they provide us with the big picture of what we hope students will achieve – and this is important, they don't provide the lecturer-as-planner with the detail required to concretely develop schemes of work or lesson plans.

The broad statements of intent do not tell us, for instance:

- *What must the lecturer do in order to enable students to achieve the purpose?* What specific content should be covered? How should it be taught? What kind of skills should I teach my students in order that I achieve this purpose? And over what length of time?

- *What should the students be able to know and do in order to develop the competence, or level of competence described in the outcome?*

- *What must the student do in order to demonstrate that they have achieved the competence or outcome we were aiming to teach?* We need to specify in our planning what the students must be able to do in order to 'prove' that they can, for example, *analyse business functions*… What evidence must they provide? When? How? Where?

- *How long will it take students to achieve particular levels of competence?* Broad statements of intent like the Critical Outcomes, the Learning Field Statements and even the nationally generated Learning Outcomes and Assessment Standards, do not distinguish between levels of competence. They don't tell us when students should be able to demonstrate that '*they can analyse basic business functions' or 'complex international business functions*'. More detailed curriculum planning insists we become more detailed in terms of the breadth and depth at which we teach, and how long students will take to become competent (and so how long we should take to teach concepts).

In essence then this more focused level of planning is the one where lecturers develop concrete, observable and measurable indicators of student learning. Having these allows them to monitor whether learners are moving forward with the kinds of competences or outcomes described in the broader statements of intent referred to earlier. This then brings us to the level of the *Lesson Outcomes* which are the most precise descriptions of the kinds of knowledge, skills and attitudes students will achieve *within a lesson or short series of lessons*.

They should also be able to design appropriate activities for their learners that will help them to achieve the desired outcomes.

Three essential components for detailed planning

You need to generate:

Detailed descriptions of what the student must be able to know and do by the end of a teaching and learning process. (What will be done?)

Detailed description of the kinds of performance/evidence students must produce in order to demonstrate that they have achieved the outcome. Performance in this case refers to anything from demonstrating understanding to performing a physical activity. (How will I know that it has been done successfully?)

Detailed description of how you will teach, and how the students will learn. Thus this planning would include references to the content you need to convey, how you will do so (through explanation, student research, a group discussion), the resources required, and how long you will need for lesson. It is at this level that issues of resource shortages (and how you over come these), of linking work to the students prior knowledge and interests, of how to make your lesson activity-based and interactive, of linking your work to the work of other lecturers (integration), and the appropriate use of time, become part of your planning.

Stop and think

This kind of detail is vital in precise lesson planning. In single lessons or in a single unit or module of work (a sequence of lessons/lectures/practical tasks). Outcomes must be detailed and measurable, but they must also be the means to a greater end.

A danger inherent in this detailed planning is that we loose sight of the 'big picture'. Using an example from Office Practice, we teach people to answer the phone politely and professionally, but forget that this is ultimately just one small component of *communication* and that the bigger picture or outcome is to develop in our students the ability to convey information, to give expression to their ideas, opinions and feelings, to listen to others, capture information accurately and so on. So, we must check that our detailed description of outcomes and performances ultimately promote a whole understanding. The students must be able to see how the discrete or separate activities all come together to enable them to achieve the greater purpose – the outcome of the course. Thus, it serves no purpose to establish that a student is good at answering the phone, but cannot write down a message correctly or discuss a problem with his/her boss. Planning of learning outcomes for individual lessons, therefore, should always have the broader outcome in mind.

Good planning does one more thing: it provides the lecturer with evidence about what is working, what isn't working, and some idea of what could be done to remedy weakness. In other words it does not simply assess the students, it also assess our teaching. Good planning always builds in a feedback loop: a cycle that assists reflection.

KEY POINTS

Key points

‣ Outcomes are differentiated and function at different levels in the South African curriculum framework. Critical Outcomes and Learning Outcomes related to Learning Fields/Subjects are generated and operate at the National level. Then there are lesson outcomes that operate at the college classroom level and may vary from instant to instant and are not determined by policy.

‣ Curriculum design in OBE works on a design down principle.

‣ The three essential components of lesson planning at classroom level are detailed descriptions of:
  o What the learner must be able to know and do by the end of the teaching processes.
  o The kinds of performances/evidence that students must produce in order to demonstrate that they have achieved the outcome.
  o How you will teach, and how students will learn (content, methodology and resources).

HOMEWORK PREPARATION FOR SESSION 5

In preparation for Session Five, carefully go through the reading at the end of this Guide entitled *Activity Based Learning*. In the next session you will be implementing all that you have learnt about planning by designing and developing a lesson plan using an activity-based approach.

SESSION FIVE

Lesson Planning

OUTCOMES
You will be able to:
• Plan and develop outcomes-based lessons
• Review and critique lesson planning against guidelines provided
DURATION: 2 HOURS

WHAT WE HAVE LEARNT?

What have we learnt?

In the previous session we carefully examined the structure of the curriculum framework and identified that outcomes operate at two levels within this framework. The Critical Outcomes and Learning Outcomes related to Learning Fields/Subjects are generated at a National level and apply nationally. While lesson outcomes are generated by individual lecturers and operate at the classroom level. The curriculum design-down principle means that even at the classroom level, outcomes are framed and informed by the national level Critical and Learning Outcomes.

Lesson planning at classroom level requires lecturers to incorporate detailed descriptions of what the students must know and be able to do by the end of the teaching processes; the kinds of performances/evidence that students must produce in order to demonstrate that they have achieved the outcome, what teaching strategies will be used, and how students will learn (content, methodology and resources).

WHAT WILL WE LEARN?

What will we learn?

In Session Five we will apply what we have learnt about outcomes-based planning to design an outcomes-based, learner-centred, activity-based lesson. These lessons will then be reviewed and critiqued by peers who will provide feedback against the planning guidelines provided.

Key principles of outcomes-based lesson planning

• OBE requires a *design down* approach, but we *deliver up* (building up from the lesson outcome to the subject outcomes and purposes and finally towards the achievement of the Critical Outcomes). Example B below, illustrates how delivery of the lesson outcomes is structured to build towards the achievement of the overarching Module outcomes or competencies.

• Congruence between the stated outcomes, the activities designed to achieve the learning required and the assessment or evidence to be demonstrated are the essential components of an outcomes-based approach.

ACTIVITY

**Time needed
2 hours**

Activity 5.1
Planning lessons

Resources:	Pen and paper
	Three essential components for detailed planning
	(Key Points: page 37.)
	Activity-based learning (Homework reading)
Class organization:	Work in pairs
Duration:	2 Hours (10 minutes introduction, 50 minutes lesson planning, 50 minutes peer review and presentation of lesson plans in plenary, 10 minutes consolidation and closure).

Re-read the *Three essential components for detailed planning* and think about the importance of activity-based learning (Homework reading). Use the Lesson Planning Templates as a guide to plan a detailed learner-centred activity-based lesson. The templates vary in format, but are both essentially structured in the same way.

Exemplar of Lesson Planning Template A

Date: *28 March 2006*

The Field or Subject: *Office Practice*

Theme or Strand: *Behaving Professionally at Work*

Sub theme or topic: *Communicating with others*

Duration: *1 Hour*

1.   What are the outcomes for this lesson/unit of work?
Students will be able to:
1. Demonstrate good listening skills
2. Provide examples of the results of poor listening skills

2.   What will be done to achieve these outcomes?
Provide a summary of the whole lesson process which includes the following elements:

Classroom/lecture/workshop organization:

Small groups for role play and then students sit and work in pairs.

Methods:
- o *Introduction of topic linking it to the students current knowledge and life experience.*
- o *Role play using listening scenarios provided in Activity Guide.*
- o *Students take turns in relaying information to test listening skills and work through activities 1-3 in the Activity Guide.*
- o *Whole class report back and consolidation of learning undertaken.*
- o *Wrap up and consolidation.*

Resources needed: *Text Book, Activity Guide and workbooks and pens*

What will provide evidence of this learning?(Activities)
- o *Checklist activity from pair work reflecting listening score obtained by each learner*
- o *Provide written explanations of the results of poor listening skills observed in role play activity*

### 3.	How will the student's learning be assessed?
o	*At this stage, assessment would be informal and formative*
o	*Observation of role play and discussion in pairs*
o	*Individuals and groups to report randomly on the findings in the whole class session*
o	*Work books collected at the end of the session to check responses to activities 1-3.*

### 4.	Feedback
o	*Summarise findings after going through the students workbooks noting strong points and addressing weaknesses in feed back session at the beginning of the next session.*
o	*Provide individual written feed back in students workbooks.*

A tabular approach to lesson planning is offered as an alternative to using the format in Example A above. The same key elements of planning are used in both, it is only the format that is different in Example B. Both formats are intended only as guidelines and should be adapted as required.

Exemplar of Lesson Planning Template B

Date: *28 March 2006*

Subject: *Electrical Studies*

Topic: *Lighting*

Class organization: *Practical Workshop*

Duration: *2 Hours*

Resources:	**Tools:** *Screwdriver set, pliers, diagonal cutter.*

Equipment: *Line tester probe type, Digital multimeter, Mercury and Sodium vapour lights, Simulator panels, Ignitor tester, Ladder.*

Statutory requirements: *Safety shoes, Hard hats, Overalls, Safety belts.*

Key Competencies of Module:
o   Knowledge of electrical light apparatus
o   Knowledge of electrical test equipment and testing procedures
o   Understanding of safety regulations
o   Understanding operating procedures of light ignition
o   Observation skills
o   Identification of circuits and components

What are the outcomes for this workshop?	What will be done to achieve these outcomes?	How will the student's learning be assessed?	Feedback
Students will be able to: Identify, connect and do fault finding on the following: o *Filament lamps* o *Simulators* o *Electric discharge*	**Methods:** o *Overview of content to be covered in this module* o *Introduction of topic linking it to the student's prior knowledge and context.* o *Whole class discussion on relevant aspects of safety pertaining to working with electricity.* o *Explanation and demonstration by lecturer used to deliver theoretical input on: Theory of a filament, Fluorescent, Mercury vapour, Sodium vapour and Tungsten halogen lamps. etc.* o *How to find faults & safely repair lights.* o *Students work in pairs at workstations identifying faults and repairing lights*	**Students will provide evidence of:** o *The correct identification & connecting of circuits, lights & daylight switches.* o *Find all faults.* **Assessment strategy:** o *Ongoing observation by lecturer.* o *Students do individual self-test on this section of the work when they feel ready to do so. A minimum of 70% must be achieved to proceed to next section of work.* o *Self-test to be placed in portfolio and counts for year mark.*	**Individual feedback to students based on:** o *Observation* o *Checking self-tests.*

Some additional notes on lesson planning

Outcomes and Competences: Decide what it is that your students must know, be able to do and value by the end of the lesson. Formulate your lesson outcomes and decide what competences students must demonstrate. This means thinking not only about what you want them to know, but what skills they must be able to demonstrate and what attitudes you would like them to value or engage with.

Content: Select the content that you will use to teach this section of work and that will support the students attainment of the lesson outcomes – specific information.

Choosing resources, designing activities:

Once you have identified the resources - you can start designing the activities that you would like learners to engage with.

- Existing text books
- Reference books
- Newspaper articles
- Information on the internet
- Personal experience & evidence e.g. photos, filed work
- Videos

Assessment strategy: Observation, tasks, tests, presentations, demonstration, individual or group work?

Evidence of Learning or Assessment tasks: What kind of tasks will you set your learners so that that can demonstrate the achievement of the stated outcomes?

Learner-Centred: Use the introduction to link the topic to the life experience and context of the student. Select resources carefully, trying to link them to context and relevance to the student's life experience. Case studies and other examples should also be carefully chosen for the same purpose.

? STOP THINK

Stop and think
The models for lesson planning are provided simply as a guide. While they cover all the key elements of outcomes based lesson planning they are not meant for you to try and memorise or to implement rigidly. Rather, they are intended for you to work with and to see, what works and what doesn't, and then to adapt them to your needs.

KEY POINTS

Key points

‣ Lecturers must teach towards clearly described outcomes.

‣ Congruence between the stated outcomes, the activities designed to achieve the learning required and the assessment or evidence to be demonstrated are the essential components of an outcomes-based approach.

‣ These outcomes should be stated in terms of what we want students to *know* and be able to *do* at the end of a process of teaching and learning. As far as possible these outcomes should be stated in terms of measurable and observable behaviour (the *doing* does however also including content *knowledge* – the theoretical understanding that informs doing. Although *attitudes* and *values* are a tricky area as they intersect with the personal aspects of peoples lives, it remains none-the-less vitally important to engage with this component of outcomes as this is the very component that builds towards our national democratic vision as embodied in the Critical Outcomes)

‣ While OBE requires a *design down* approach, we *deliver up* (building up from the lesson outcome to the subject outcomes and purposes and finally towards the achievement of the Critical Outcomes).

SESSION SIX

Assessment

OUTCOMES
You will be able to:
• Understand the purpose of assessment
• Distinguish between various forms of assessment
• Use the principles of outcomes based assessment when planning assessment activities.
DURATION: 2 HOURS

WHAT WE HAVE LEARNT?

What have we learnt?

In the pervious Sessions (Three - Five) we emphasised the importance of thinking about teaching and learning holistically. A critical part of this was understanding assessment as part of a cycle of planning, teaching, assessing, reflecting and re-planning … and so on. This way of thinking understands that assessment isn't punitive or summative; instead it is an ongoing tool through which we can monitor our progress as lecturers and make changes where these are necessary. In other words, assessment is regarded as something positive and pro-active.

We have suggested that lecturers must clearly define the kinds of *competences* we want students to demonstrate at the end of a process of teaching and learning. These should be stated in terms of knowledge, skills and values; at appropriate breadth and depth, and should include core subject area concepts. Careful thinking about these influences the kinds of teaching methods and learning activities we chose to move our students to achieve our desired outcomes. We suggested that teaching was an intentional and *planned* activity. We explored ways in which we could clearly define our learning outcomes, accurately assess our students' preparedness, and then structure a resource-rich teaching experience that could bridge this gap – from what is known to the unknown (new knowledge, skills and values).

WHAT WILL WE LEARN?

What will we learn?

These outcomes will also influence the kind of assessment you, as a lecturer, choose to use. In this session we will explore assessment in terms of:

• Why is assessment important?

• How do we decide on a mode of assessment that is appropriate to our desired outcome?

• How can we integrate assessment into our teaching and learning processes?

What is assessment?

ACTIVITY

**Time needed
30 minutes**

Activity 6.1
What is assessment?

Resources: Pen and paper

Class organization: Individual activity then discussion in plenary

• Think back to your own schooling. Use this experience to write down four different ways you can remember your learning progress being assessed.

• Now think about your own subject area that you lecture in. What are the most commonly used assessment methods?

• First do this activity on your own. Write down your answers. Then discuss your answers with the rest of the class.

• Now in plenary, develop a working definition of what assessment is – you can revisit this definition again after you have worked though this section on assessment and refine it further. Write your definition down in the box provided below.

What is assessment?

**STOP
THINK**

Stop and think
Did you find it quite difficult to remember four *different* ways in which you were assessed as a student? As students in classrooms of yesterday, we probably haven't experienced a great range of assessment tools. Perhaps you have remembered exams, or perhaps multiple choice tests. Can you remember rote learning things for tests?

Some people were lucky enough to experience different ways of being assessed. Perhaps project-based assessment was used. If you did subjects that had practical components you may have been marked on your performance (*such as drawing biology pictures, or cooking a white sauce*) or the products you made (*a chair in woodwork, a neat agricultural garden*) or a maybe you had a Language lecturer who got students to do 'orals' where verbal ability was tested.

Why do we assess students?

ACTIVITY

**Time needed
20 minutes**

Activity 6.2
Why do we assess students?

Resources: Pen and paper
Two questions provided below:

Class organization: Small groups of about four or five

Individual accountability is the feeling on the part of each group member that s/he is responsible for completing his/her part of the task, and cannot expect or allow other group members to do the work for him/her. Individual accountability can be established by assigning individuals at random to ensure that each student has attained the outcomes. Student self direction and independent learning must be valued in co-operative learning.

Some groups should answer Question I. while others answer Question 2. Each group should spend about ten minutes writing down their responses to the question. Then spend another ten or so minutes discussing the answers in plenary.

Question 1:   **Why do we assess students?**
              (Write down as many reasons as you can think of)

Question 2:   **Who will have access to the assessment results and for what will they be used? (What are the implications of this for the way we assess and how we report)**

The Purposes of assessment

All assessment is used to provide lecturers with information on students' progress. But lecturers use this information in different ways:

• *As in-lesson 'check ups'*. This gives the lecturer information about whether the student is understanding the lesson or activity and reaching the desired outcomes in that activity. Information from 'check-ups' is used by the lecturer to *adapt* the methods being used in order that students can learn better. So, for instance, the lecturer may (through questioning) find that students have misunderstood and explanation she has just given. The lecturer may then decide to ask students to *read* something, or *do* an activity, in order to clarify the explanation.

- *As after-lesson information-gathering*. The function here is similar to the 'check-ups' but is often more formal. It also tends to assess larger 'chunks' of work - the understanding of whole concepts rather than bits of information - and is also diagnostic. In other words, the lecturer wants to find out *why* and *how* students are going wrong. The lecturer may design tasks that assess (and help students develop) new concepts, that extend existing concepts, force students to generalise and, ultimately, to develop theoretical understanding.

- *To sum up a student's performance*. While the first two functions are primarily *developmental* - assessment is used to improve teaching and learning - this function's purpose is primarily *summative*. It is about making *judgments* about how well students are performing. This information is provided to students (and parents) and to other interested parties, like higher education institutions or employers. It is often used for selection purposes (acceptance into the next Grade, or universities, or into a company ahead of other applicants). The methods used can be similar to those used in formative assessment, but must be accepted by the wider community as fair, reliable and valid.

A number of important distinctions emerge here. First, assessment is used for two broad purposes: to improve teaching and learning (it is formative) and to make judgments about learning (it is summative). But, you will notice we say the purpose is *primarily* summative or formative. This simply means that summative assessments should provide good information about students. Lecturers should be able to draw on the information in, for instance, assessment reports to plan teaching for the new students in their class. An accumulation of formative assessments - for instance, an assessment of a student's oral abilities - should be able to be used summatively too.

Second, while the purposes that assessment serve may be different, this does *not* mean that the methods of assessment used must be different. For example, a written essay is a common form of *summative* assessment but can (and is) used *formatively* too. Good lecturers will give students opportunities to submit drafts of essays, make comments on these essays about how they can be improved, and then allow the student to re-submit. Assessment is now used developmentally: it becomes a form of teaching.

Third, whether using assessment to 'check up' or 'sum up', a good lecturer will design assessment (whether a casual question in class, an assessment project, or an exam) so that she can find out *why* students don't understand, or misunderstand. For instance, she will make comments on the essay which go further than simply pointing out an error. Good, *diagnostic*, assessment will say: "This is *what the error is, this is why I think you are making this error*, and this is what I think you *could do to correct the error*".

Changing the way we think about assessment

In the past

In the past we tended to use assessment mainly to decide which of our students would pass and who would fail; we used it for judgment and selection purposes. We also often planned our assessment *after* we'd finished our teaching and relied largely on written modes, in particular tests. We forced students through control tests and exams with the instructions that they should learn hard and possibly limited what they had to study by giving them the 'scope' of the exam.

Now

An assessor is a judge, or someone who estimates the *value* of something. While a tax assessor calculates how much tax someone has to pay, and an engineering assessor looks at the damage done to building and works out what needs to be done to repair it and what the cost will be, lecturers (as assessors) must make decisions on the value of the learning demonstrated by students and, on the basis of this, make judgments about what more needs to be done.

This suggests a number of key changes in the way we need to think about assessment:

• First, assessment is an ongoing *learning* tool through which we diagnose learning difficulties and on the basis of what we find, adapt and improve our teaching (and the way in which students learn) so that these difficulties are overcome. This suggests that we need to assess *continuously* and assess *diagnostically*. It also means we should use the results to reflect on our own teaching.

• Second, we can only decide on the value of learning if we have set criteria which clearly describe what we regard as valuable. For instance, if our outcome – our description of valuable learning – is 'be *able to do* research', then our mode of assessment must be able to assess the *doing* of research, not be a test or essay which asks the student to *write about* research!

Assessment can be used in many ways. When we plan a learning programme we need to insert modes of assessment that can do two things:

• *Sum up the performance of students over a period of time.* This can occur at the end of the learning process – a year, or a phase – and functions mainly to make decisions about whether or not a student progresses to the next level. It often includes ranking students. The matric exam is a good example of this kind of summative assessment.

• *Monitor learning in an ongoing way and form and re-form learning continuously.* This kind of assessment occurs during the learning process and functions mainly to assist teaching and learning. This kind of *formative* assessment can take many forms; from regular control tests through to informal observation of students doing activities. The most important point is that it should provide lecturers with information that helps them understand how and why learning is or isn't occurring. Of course, summative assessment should also be designed to serve a formative purpose.

Using assessment summatively

Summative assessment is the most familiar form of assessment in South Africa. In the examples given above, the tax assessor makes a final decision about our tax, based on our earnings at the end of a tax year. We then have to pay our tax. The tax assessor was not interested in helping us manage our money better during the year…only in the end result.

Much of teaching in the past treated assessment in the same way: we only made decisions about our students' progress at the end of a college year or term. But this is not the only difficulty. Much summative assessment was also very unhelpful. It simply gave us a mark for a student's work without any assistance to tell us how and why that mark is appropriate.

Although the following example is from the schooling sector is exemplifies the kind of practice and the attendant problems of only using summative approaches to assessment. Have a look at this example of a typical report of a summative assessment:

NAME: Thabo Moeng
GRADE: 9 D
POSITION IN CLASS: 29/44
PASS/FAIL: Pass

Subjects	Class average	Student mark
SiPedi	45	60
English	62	48
Afrikaans	45	48
Geography	61	66
Maths	53	55
Physical Science	49	43
Biology	44	49

ACTIVITY

**Time needed
30 minutes**

Activity 6.3
The constraints of summative assessment

Resources: Thabo's 'Report' (above and questions 1-5 below)
Class organization: Individual activity then discussion in plenary

Look closely at Thabo's report and do an analysis of what the report tells you. For instance, you could ask questions like:

1. What are Thabo's learning strengths and weaknesses?
2. Which subject is the most difficult?
3. Is Thabo among the stronger or weaker learners in his class?
4. Does Thabo have any good teachers?
5. Do you think that the class, as a whole, are doing well? Give reasons for your answers.

Do this activity individually. If the report doesn't provide you with the information you need to give an answer, say so. But then take a guess. After you have completed questions 1-5, discuss the findings in plenary.

What did we find?

A report like Thabo's provides some information about the student. We could conclude (from looking at Thabo's marks) that his strengths lie in Geography and SiPedi while he is weak in Physical Science. Overall, his placing (29 out of 44 learners) seems to suggest that he is an 'average' or just below average performer. Does Thabo have a good teacher? How can we tell? We could compare these class averages against those of other classes (and teachers). But does this tell us about the quality of the teaching, or the learners, or the nature of the assessment? Is the class doing successfully? Again, how do we tell?

It seems the information provided in this fairly typical report is incomplete. Is it accurate? Is it helpful? Does it:

•   Assist outsiders making judgments about the quality of Thabo's learning?

•   Does it help either Thabo or the teacher improve teaching and learning?

Let's look at some of the secrets which are not revealed in that report.

> **I tell you the truth: that mark in Geography is such a joke - we only wrote one test and it was so easy we all did well. And Biology? We share Mr Gule with another class, so we mostly work on our own, no wonder we're doing badly. SiPedi – mmmm….maybe I could do much better than that: I was doing well in all my class-work but then we had a group project and my group didn't want to work together so we all got a bad mark. In Science the other teacher sets all the tests and so we are never as well prepared as his class is.**

- Go back to your written answers for the last activity. Does this information from Thabo change your view of that report?

It would seem that we need to be careful about the judgments we draw from Thabo's report. The 'easy, one-off' Geography test explains the high class average in this subject. We also now know a little more about how the SiPedi, Biology and Science marks were calculated and what may have affected the mark. For a long time reports similar to Thabo's were accepted as reliable indicators of learning performance. These reports served a variety of purposes:

- *Learners* are interested in seeing how well they've performed relative to other learners, to see where they need to work harder, and to see whether they have passed or failed that year.

- *Parents* are interested in seeing whether their children are working hard, to see how they are coping with work, and to see whether they are getting value for money from the school.

- *Other teachers* might want to see what to expect of learners coming into her class. The HOD might need to advise Thabo about subject levels and choices for next year.

- *Other people* - other schools, universities or employers - would be interested in Thabo's academic strengths and whether he has the skills and knowledge to do the job for which he has applied.

A new approach to summative assessment

Summative assessments are vital in any system of education. If they are valid and reliable, they provide people outside the college with a quick description of the kind of person that is applying for work or for entry into a technikon or university. It also provides national departments with a quick description of which colleges are performing well and which aren't. So summative assessment cannot be abandoned.

What does need to happen, though, is that the *form* of summative assessment be changed so that:

• The report is more *analytical and descriptive*. This would give all interested parties the information they require to make good judgments about a student's ability (to do a job, to enter another educational institution, or how to improve their own learning). This could be done through a written description of weaknesses or strengths, or by providing a grade against a set of criteria.

• The assessment of a student's ability isn't based on *one, written,* exam. A summative assessment should *sum up* learning and so should be based on a *number* of assessments over a *period* of time. Second, the modes of assessment should be *varied* so as to assess different kinds of capabilities; written tests do not give a good, rounded, assessment of the range of learning capabilities we should assess. It could be argued this isn't *reliable*.

• It assesses what we want to assess. For instance, we have no idea whether Thabo's English mark means that he can read a newspaper or a business report and then write a good summary for his employer. Or does it mean that Thabo can simply write a grammar test? Is the mark an assessment of a *valid* skill?

Even though we need to keep summative assessments that are valid, reliable and transparent we do need to begin using *assessment as a teaching tool*. In other words, we need to plan for a continuous, diagnostic form of formative assessment.

Using assessment formatively

If there is a change in the way teaching and learning that is happening in a college classroom or in the workshop then there must be a change in assessment practices too. If the curriculum has moved away from content heavy syllabuses into a syllabus which has knowledge, skills and values as outcomes, then surely we must assess how our students have progressed in their development of knowledge, skills and values. We have to move away from assessing facts and content only.

Do you remember reading earlier that progress towards most outcomes is going to take time? Therefore instead of focusing only on terminal (end point) assessment that result

in reports like Thabo's, assessment now should also be *continuous*.

Does continuous assessment really mean giving students tests every day, week or every month? Not at all, what it really means is that assessment has to be integrated into day-to-day   teaching so that the lecturer is constantly aware of the students' progress towards the outcomes. After all, if education is a journey, we should constantly check that everyone is on the right road.

Usually the information we get from assessment made at the end of the semester or trimester, summative assessment, comes too late for us to be able to put the problems right. When most of the class fails the end of the year Maths exam, it is too late to try to adjust your teaching strategy at that stage! Students and lecturer need feedback on learning progress along the road, not only when students arrive (or fail to arrive!). If we assess often, then we can make the adjustments needed to help our students reach the educational outcome more successfully. This type of assessment is often called *formative or developmental (it forms or shapes student progress, and helps to develop teaching competence*). Ideally the students should be given as many formative assessment activities as is reasonably possible before any kind of summative testing. Formative tasks show the lecturer how the students are progressing and, because they are not a scary 'end of the year make or break' test, they also allow the students to show their understanding in a less threatening situation.

Formative assessment is diagnostic

In order to use assessment formatively or developmentally, we must assess in a manner that gives us information about *why* and *how* students are going wrong. If we simply know that they are wrong, but not the nature of the error or why they are making it, we cannot use this error to teach. So we make assessments that are more like the engineer's assessment where he measures what is wrong with a building and then says what needs to be fixed: he is interested in helping the building improve. When we assess our students' progress so that we can see where they need help with problems in learning, this is called diagnostic assessment (doctors diagnose your illness based on the symptoms or signs you show, then they can help you to get better). If a lecturer's job is to help students learn more and learn better, then we should be spending most of our energies on developmental and diagnostic assessment, not exclusively focusing on the simple pass/fail summative assessment.

In order to use assessment diagnostically we need information rather than ranking, and need to be able to assess whether people can do things (rather than simply memorise). These are the major reasons for moving away from what is called norm-referenced assessment to criterion-referenced assessment which we will discuss in the next session.

KEY POINTS

Key points

▸ Assessment is important as a means not only of tracking our student's progress, but also as a means for reflecting the efficacy of the lecturer.

▸ Assessment needs to be seen not as something that is tacked onto the end of a learning unit, but as integrated into the teaching and learning processes.

▸ Assessment needs to help us know whether people can *do* things rather than simply memorise information.

▸ If a lecturer's job is to help students learn more and better, we need to begin to use assessment as a teaching tool. In other words, we need to plan for a continuous, diagnostic form of formative assessment.

SESSION SEVEN – ASSESSMENT

Continued

OUTCOMES

You will be able to:
- Understand the difference between Norm and Criterion Referenced assessment
- Use new modes and methods of assessment
- Use the principles of outcomes based assessment when planning assessment activities.
- Understand the principles of an integrated approach to assessment and the importance of developing an assessment plan.

DURATION: 2 HOURS

Types of assessment

Norm-referenced and criterion-referenced assessment

The type of assessment in which the 'best' student must get a high grade and all the others are ranked beneath that standard until the least proficient gets the bottom grade, is often called *norm referencing*; the grades given to student clusters around a "norm" in a class.

ACTIVITY

**Time needed
15 minutes**

Activity 7.1
Norm referencing

Resources: Thabo's 'Report' (above - Session 6: page 50)
Class organization: Individual activity then brief report back in plenary

Look back at Thabo's report. This report is 'norm-referenced'.
1. Where in the report does Thabo get compared to other learners (to the 'norm')?
2. How does the 'access to Thabo's thoughts on his report' help us realise that norm-referencing may not give us accurate information about a learner's performance?

Sometimes it is helpful to know how other students are progressing and to compare individual progress with the whole. But in many instances it simply doesn't matter how well specific individuals in the rest of the class are doing, rather we need to know how each student is doing *individually*.

When individual students are assessed against a set of requirements, it is called *criterion referencing*.   Criterion referencing involves deciding on some 'requirements' that students have to fulfill in order to succeed. These 'requirements' are called 'criteria'. The success of a student is measured against such 'criteria' (*often called assessment criteria in official documents*).

Summary of key features of criterion referenced assessment adopted in South Africa

Criterion Referenced Assessment

- It measures student's performance against clearly defined criteria*
- It tries to provide measurable criteria so that:
  - o   A students' progress can be monitored
  - o   A student's achievements are acknowledged
- It makes the assessment criteria quite explicit so that every student is able to understand how her/his work is to be assessed.
- Every lecturer is able to explain results with reference to stated criteria.
- Even if grades are given they refer to the student's performance relative to the predetermined standard, not to the student's performance relative to other students.

* Assessment criteria/standards in OBE are statements that describe the standard to which the students must perform the actions, roles, knowledge, understanding and skills stated in the outcomes.

Different modes of assessment

What can we get students to do or provide us with in order to compile the "evidence" we need to make judgements about assessment?

The following list is taken from Rob Sieborger's book, *Transforming Assessment*.[6]

> **Activities:**
> Acting, answering, asking, assessing, calculating, collecting, composing, computing, co-ordinating, copying, designing, discussing, drafting, drawing, evaluating, experimenting, illustrating, interviewing, listening, making, mapping.
>
> **Physical activity:**
> Planning, problem solving, questioning, reviewing, recalling, researching, role-play, selecting, singing, surveying, talking, translating, watching, word processing, writing.

Isn't that an amazing list? And to think that mostly we only ask students to do the last one – writing. As we progress through this session you may think of further activities you could include in your assessment tasks. Sieborger also provides a list of the forms in which *evidence* can be presented.

Written:
Story, letter, report, diary/ logbook, essay, questionnaire, notes, display material (like charts), newspapers…

Spoken:
Performance, role-play, recorded conversation, recorded discussion, interview, debate…

Visual:
Picture, poster, chart, graph, decoration, photograph, video…

Real object:
Artefacts, models, produce, sculpture…

ACTIVITY

**Time needed
30 minutes**

Activity 7.2
Using new modes of assessment

Resources: Sieborger's List (above)
Class organization: Work in pairs then report back in plenary

• Write down three ways of assessing that you can imagine using in your subject which you have NOT used before.

• Identify a learning outcome which could be assessed by each of the methods you have chosen.

The Assessment Methods Matrix used by the Limpopo province Department of Education, provides an extensive range of assessment instruments, methods and examples of evidence which is very useful for lecturers embarking on outcomes-based assessment processes. It helps to stretch us beyond the usual fall back position, which is often some kind of written form of assessment. Used in conjunction with the examples suggested by Sieborger, it provides an extensive range of options for implementation.

Assessment Methods Matrix

Assessment Tools/Instruments/Tasks	Assessment Methods	Evidence Type		Assessment Records
Written task instruction & parameters with criteria for learners Mark memo or assessment grid with 'model answers' & criteria for assessors.	1. Written assessment	Exams	Answered exam papers, moderated exam results	Product evaluation checklist Recording Forms
		Tests	Answered test papers, moderated test results etc.	
		Assignments	Completed assignments e.g. an inventory catalogue, time tables, rosters	
		Projects	Research papers, surveys, graphs, diagrams, posters, visual aids etc.	
		Written Questionnaires	Completed questionnaires, comments, statements, set of questions	
		Portfolio of evidence	Any kind of file, including some of the following evidence: Summaries, minutes, reports manufactured articles, mind maps, checklist etc	
		Reports	Project-management, training reports etc.	
		Documents linked to an activity	Authorisation forms, Sign off forms	
		Written tasks	Stories, essays, CVs, etc.	
		Witness testimony	Affidavit, declaration, confirmation letter	
		Journals	Completed journal	
		Logbooks	Completed log sheets of student attendance, Kms traveled etc.	
		Emails	Copies of emails	
Instructions for candidates Assessment checklist with criteria for observer/assessor	2. Observation	Set tasks	List of activities	Observation check lists
		Problem solving	An action resolving conflict through structured intervention	
		Practical demonstrations	Physical reproduction of an activity	
		Artefacts/Products of learners activities e.g. constructions	Photographs, videos, models, drawings, paintings	
		Simulation	Physical reproduction of a work area, equipment, action etc.	
		Role plays	Drama, play performance	
		Games	Any specialized form of exercise which attempts to simulate an actual situation	
		Modelling	Acting out of ideal behaviour to serve as a 'model'	
Instruction for candidate task Assessment checklist with criteria for observer/assessor	3. Oral assessment	Presentations/ performances	Spoken presentation, dialogue, singing	Observation check lists
		Oral Questioning	Audio or visual recorded tape	
		Interviews	Spoken dialogue, questioning & answering between members	
		Case Studies	Description of an event concerning real-life situation follwed by a series of instructions to elicit responses from students	
		Group discussions	Discussion – structured or/unstructured, controlled or uncontrolled	

Key to Assesment Methods Matrix on previous page

> **Assessment tools/Instruments/Tasks:** Instructions to learners and criteria against which they are being assessed; OR instructions to assessors.
>
> **Assessment Methods:** What do you ask the candidate to do and how do you assess this.
>
> **Evidence Type:** What learners produce as evidence – must be tested against clearly established criteria that are deemed valid, authentic, current, consistent and sufficient.
>
> **Assessment records:** Ways of recording the level of performance for a candidate or group of students.

The rest of this sub-section will focus on developing your skills in four particular assessment strategies:

• observation;

• assessing group work;

• using portfolios;

• self and peer assessment.

Observation

Imagine that for some reason, exams or end-of-year tests were cancelled. Would you still be able to say which students could cope in the next year of the programme? Could you identify those students who are struggling?

Of course you would.

But how come you can? Well, because you have been involved in *continuous, ongoing observation* of that class all year. You notice things about them. You notice who is always willing to help others and who finishes work first. You are aware of students' problem areas because you've heard the questions they ask and you have looked at their class-work. You've watched them talking to their friends in group work, class discussions and projects. The only problem is that your observation is:

• *Incomplete and patchy.* We notice some students more than others, either because we like them or because they are problem students.

• *Unfocused.* We are able to make some general comments but have difficulty identifying specific details.

• *Based on limited observation.* We notice a student being cheeky once and we assume the student is always cheeky.

In other words, we don't make *proper use* of the impressions we have built up over the months. So, for instance, we may be surprised by a student's results in a test because we have noticed (based on our informal observation) that she was coping well in class. But because the test is regarded as a neutral and objective assessment mode - all students wrote the same test - the mark carries far more weight. Consequently the student is assessed as "weak" or "could do better". Observation is a powerful assessment tool but needs to be implemented in a more rigorous manner in order to be regarded as a legitimate 'measure' of student competence.

How can we collect observation information rigorously?

There are a number of ways in which information can be collected:

• collect 'data' or information by observing students individually;

• collect information in groups;

• observe students in a variety of different circumstances; and

• observe students doing different things and using different skills.

This sounds like an impossible task if you think about a class of about 30 or more. However, you don't have to make the same observation on ALL students at the same time. Over time, you can focus on different individuals or groups.

Recording assessment made by observation

Dividing up the task of observation like this does, however, calls for a very organised system of observation and recording, since you will be working with many students or skills over a period of time. An effective way of recording the performance of students will help you be sure that no student or aspect is being left out. The traditional way of recording marks has been to use mark sheets. With the new methods of assessing students, we need to use other methods of recording student performance as well. There are many ways of recording evidence of learning by students, but two useful ways of recording observations are:

• check lists

• rating scales.

Checklists

Here is an example of a checklist that could be used to assess performance in the laboratory.

SCIENCE EVALUATION CHECKLIST

Class _____   Unit _____   Date _____

Learning Outcome:

Values	Tebogo	Cynthia	Neo	Ephraim
Cooperation				
Respect for material				
Active participation				
Neatness & organization				
Efficiency in using time				
Enthusiasm				
Skills				
Setting up apparatus				
Dismantling & storing apparatus				
Uses measuring instruments properly				
Drawing neat illustrations				
Hand-eye co-ordination				
Knowledge				
Use of correct terminology				
Understanding symbols & diagrams				
Predicting results				
Interpreting graphs				
Drawing conclusions				
Neat laboratory reports				

The use of checklists helps to make your observations more **focused** (*helps you overlook any distracting and irrelevant behaviours*) and more **comprehensive** (*you know you have covered the important aspects*). This means your assessment will be more accurate and reliable.

Rating scales

Another device that can be used to help make judgements through observation is a **rating scale**. A rating scale helps the assessor record the degree of an impression gained while observing the students. A scale with a certain range is used, e.g. 1 to 10 or 1 to 3, etc.

Have a look at the following scale used to assess the progress students in the skills of open discussion.

The scale used is called a Likert scale – named after the man who developed it. It has 5 options ranging from extremely positive (5 = all the time) to very negative (1= never)

5 = all the time 4 = often 3 = sometimes 2 = seldom 1 = never	Lydia	Nelson	Shadrack
Does the student listen during classroom discussion?	3	3	4
Does the student volunteer information during the discussion?	1	3	4
Does the student defend his points of view?	1	2	5
Does the student accept points of view of other participants?	2	2	4
Does student assume a leadership role in a class discussion when asked to do so?	1	1	4

You need to spend a lot of time preparing your checklist or rating scale sheet. The statements on your checklist or rating scale must relate to the desired outcomes and include what performance indicators (*signs of competence/achieving the outcomes*) you would be expecting from your students.

Portfolio assessment

One of the difficulties with continuous assessment is that some lecturers simply do MORE tests! So continuous assessment becomes just as series of summative marks joined together with an 'end of term' average! This isn't really 'continuous', as it doesn't give an overall view of how the student is continually developing. Sometimes it would be very useful to be able to see, all at once and in one place, the work that the student had produced over time, and in relation to other pieces of work. A portfolio can do this.

What is a portfolio?

A portfolio is a collection of each student's work that demonstrates what they have learned.   They hand in a collection of evidence that they have met the learning outcomes for a particular unit or section of work (a semester, a year).

A portfolio might include a sample of that student's best work in each subject. Or it could hold a sample of that student's work for each term (to track development).

ACTIVITY

**Time needed
15 minutes**

Activity 7.3
What are the key purposes for having a portfolio?

Resources: Pen and paper
Class organization: Work in pairs then report back in plenary

Discuss with a partner what you think the key purposes of having a portfolio are?

The idea of using portfolios is still a new one, and not many lecturers are sure of how to go about doing it. It is an idea that can greatly contribute to the personal growth of both students and lecturers as they interact in their classrooms. It's also a way of recognising and rewarding the ordinary class-work that students do which is seldom included in assessment. In this way it could encourage students to work consistently through the term. Students can develop selection and judgement skills by choosing pieces for their portfolios.

What should a portfolio consist of?

First you need to decide on what kinds of skills/knowledge/values your students need to demonstrate by the end of the year and secondly, decide, on the basis of this, what kinds of work needs to be presented in the portfolio and thirdly, give the students a set of simple criteria against which you will mark their work (correctness of factual information, variety of sources consulted and neatness of presentation etc …)…use rating scale above…

Storing the portfolios

But all that paper: where would we keep these portfolios? Must we carry these home on the taxi everyday or leave them as food for the rats? This is a question lots of lecturers are concerned about. The important thing about storing a portfolio is that the documents are safe and are kept together. A ring binder is a good idea but so is a cardboard box or a plastic sleeve.

Marking portfolios

Lecturers sometimes worry about marking portfolios. Well, they do not always have to be marked. Often the work in the portfolio has already been marked. Alternatively you can decide on criteria for the portfolio and use those criteria to mark it (*e.g. The portfolio shows 3 examples of 'best work', student has written one paragraph explaining what s/he considers good about the work s/he has selected for the portfolio, work must include any of these – a hand drawn 3 dimensional technical drawing, a technical drawing produced using the CAD programme, a graph, a journal tracking the student's progress on the Formula One car design, and a research report comparing diesel and petrol engines*).

One of the most important aspects of using portfolios is that the lecturer spends time with the student while the portfolio is being put together. This is referred to as a student-lecturer conference. These two should come together at some stage to discuss the student portfolio. In order for the lecturer to understand the full contents of the portfolio, the lecturer may have to ask some questions about certain pieces of work (*e.g. you may want to ask something about some entry into a journal that a student has made*). It is recommended that the lecturer make some written comments in each student's portfolio – providing feed back as one would in any other form of assessment task.

Self and peer assessment

As education becomes more democratic and more open, the idea that students could contribute to their own and their classmates assessment begins to be less strange. After all, the students have understanding about their own performance which you as lecturer cannot access because you can't be everywhere at once, nor can you get inside their heads!

Students learn a lot by marking their classmates' work. They know that they will have to justify why a certain grade, rating or mark was given, they take it very seriously. They spend time thinking about the criteria that were set for the task and whether and to what degree their classmates' work has achieved that. Assessment stops being something that happens 'out there' at the lecturer's home. Students can see for themselves how assessment is the objective evaluation of the worth of something against a set of standards. This will obviously benefit the quality of their own work.

ACTIVITY

**Time needed
10 minutes**

Activity 7.4
Peer assessment: What needs to be in place?

Resources: Pen and paper
Class organization: Small group discussion

Many lecturers have concerns and questions about self and peer assessment, read the following conversation between Mac and Joe, two FET college lecturers and note what you as a lecturer need to do to enable your students to engage meaningfully in peer assessment. Jot your key points down in the space provided below.
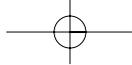
Mac: You know, I think my problem is that deep down I just don't believe students can objectively assess themselves and their friends.

Joe: Well, is YOUR assessment always objective ?

Mac: Hey no, I guess not. But, do you really think the students will be able to say what they feel and think about their friends? I think a lot of them will just stay away from criticising others for fear of losing friendships.

Joe: Yeah, we'd need to make sure we have a way of handling this because it could turn into a very ugly situation in your class. But I tried it the other week. First I spent a lot time talking to my students, preparing them for it. You know, about the need for everybody to reflect on how they do things, and that assessing yourself or some else is not just about criticism. It's also about identifying strengths and improving on them.

Mac: I also worry that these students won't know **how** to assess the work and will guess what mark it should get. I mean, you know, marking is quite difficult.

Joe: Maybe we need to give very clear instructions and criteria, almost like a marking memo or checklist. I think I'm gonna work on one this week.

Mac: Hey, I'll do anything to get less marking. I'd love it if the students can do their own!

Joe: Sorry, Mac … it doesn't mean less marking. Another way in which we ensure that assessment is reliable is to 'triangulate' … in other words, we must use a variety of views of a student to assess how good they really are…

Mac: You mean that in addition to peer assessment we should also use observation and written work and test etc?

Joe: Yes … but not all the time! We must use these in focused ways …

**As a lecturer I need to do the following to ensure that students are properly supported to do peer assessment:**
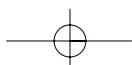
Example of a checklist for peer assessment

Check list: Business Letter		
.........*name*...... **marking** ....*name*........'s **work**		
	Possible marks	**Mark I have given**
The letter is in the correct format	2	
Address	1	
Date	1	
Beginning	1	
Ending	1	
The letter communicates the information clearly & logically	6	
Each topic is in a new paragraph	2	
Each paragraph starts with a topic sentence	2	
Each paragraph gives further details	2	
Spellings have been checked	2	
Total	**20**	
One thing (…name…) did well was		
One thing (….name…) can do better next time is		

Stop and think

STOP THINK

Do you see that the students are not just left to make decisions about the quality of their peer's work without guidelines? They will assess more fairly and honestly if you provide the same kinds of marking checklists or rubrics as a lecturer would use.

Self assessment

Self assessment can be used to help the students evaluate for themselves the value of the work they have been doing. While this may not enable you to allocate a mark, it both motivates the students and gives you insight into the personal development taking place. Again as in peer assessment, self assessment needs to be carefully supported and structured by the lecturer.

Example of a self assessment sheet

Self Assessment Sheet

Name: _____   Date _____   Activity _____

What I did. *I was responsible for collecting the equipment from the lab and measuring out the right amounts of water and chemicals* _____
_____

What I used. *The task sheet – and the stock list in the lab. Jars and a tritette_____*
_____
_____

What I learnt. *Measure carefully! Also don't spill expensive chemicals, Also when you mix water with …* _____
_____
_____

How I felt. *Proud to be handling poisonous chemicals safely* _____
_____
_____

What I did not do well. Measure – I was too quick and so some of our experiments didn't work
_____
_____

How I could improve it next time. *Take my job more seriously. Refer to the task sheet at all times* _____
_____
_____

STOP THINK

Stop and think

These examples are not meant to prescribe to you what you should do: they are meant just to spark off your own thinking about how you might use these forms of assessment in your own classes. You need to design your own observation sheets, checklists and criteria depending on what you'll be assessing and what activity your students will be doing.

Integrated assessment

In the preceding pages we have looked at the nature of Criterion Referenced Assessment and examined a number of modes and methods used for assessing in OBE. All these have been focused at the level of the class room and implemented by the individual lecturer.

In this sub-section we will take a look at the "big picture" of assessment, so as to see, how what we do in our classrooms builds towards the achievement of the larger intended educational outcome – the qualification.

The Education and Training Quality Assurance body (ETQA) – DOE, Umalusi, the SETAs – have the responsibility for providing clear guidelines regarding delivery of education and training and assessment. Based on such guidelines, individual institutions, like colleges, need to develop an over arching assessment strategy. This strategy would need to address a number of issues such as:

• the college's reporting and quality assurance requirements;

• the way in which responsibility for different aspects of assessment are shared between different assessors;

• within the context of the qualification, the composition and weighting of summative judgements (e.g. examinations) and work-based assessment, self, peer assessments etc.;

• the role of the external examiners or external moderators;

• policy requirements for individual students e.g. the use of learning contracts, transcripts or records, process for learner appeals etc.

The assessment strategy is therefore an expression of the institution's generic approach to assessment. This in turn informs how assessment will be implemented in the various college departments. Department and/or subject heads interpret and filter down assessment policy to lecturers responsible for the delivery of specific programmes and courses.

The next level of planning involves what happens in the classrooms. The FETC policy states:

Integrated assessment needs to be incorporated appropriately to ensure that the purpose of the qualification is achieved, and such assessment shall use a range of formative and summative assessment such as portfolios, simulations, workplace assessments and also written and oral examinations.
(Principle No. 7, FETC Policy)

The broad principles that should inform the development and design of integrated assessment include:

- Focus activities on assessing the achievement of the purpose of the unit standard or learning programme;
- Encourage the integration of theory and practice;
- Grasp the ongoing role of assessment (not a once-off event) in an outcomes-based model;
- Accept that any assessment can only aim to assess an appropriate sample of evidence which should be sufficient to infer that a learner is competent; and
- Provide access to assessment plans that clearly assess the achievement of purpose to all role players.

In order to implement these principles the following guidelines are useful:

- Study the level descriptors for the relevant NQF level;
- Understand the purpose of the qualification;
- Analyse the exit level outcomes, critical cross-field outcomes and main learning areas that deal with each dimension of the purpose of the qualification;
- Identify discrete areas that need to be assessed separately;
- Identify how to facilitate integrated teaching and learning in areas where applied competence will be assessed;
- Sequence the assessment according to your assessment plan;
- Design assessment instruments; and
- Review the process, instruments and application.

In summary, what emerges is that an integrated approach to assessment within the framework of OBE serves to provide cohesion as it demands a holistic approach to planning and delivery of learning programmes. Assessment can no longer be conceived of as an end in itself, but rather as an integrated component of teaching and learning. This approach to assessment is one that emphasises learning rather than testing and that uses a variety of formative and summative methods to achieve the purpose and the key outcomes as specified in unit standards and qualifications. A variety of formative and summative assessment methods are used to enable the students to develop the required competences.

Implementation of integrated assessment at the classroom level is underpinned by the same principles that form the basis of all quality assessment. These are:

- **Validity:** The assessment should measure whether the key outcomes have been achieved against set criteria.

- **Reliability** (sufficiency): The assessment should measure the agreed outcomes and criteria consistently.

- **Fairness:** The assessment method should be free of barriers irrelevant to the achievement being measured.

- **Directness:** Assessment activities should be as close as possible to actual performance.

- **Integration into work or learning:** As far as possible the collection of evidence should be integrated into the work or learning process.

- **Appropriateness:** The assessment method should be suited to the performance being assessed and also to the instructional strategy being used.

- **Manageability:** The methods of assessment should be cost effective and unobtrusive so as not to disrupt the learning.

- **Authenticity:** The assessor should be satisfied that the work being assessed is that of the person being assessed.

- **Systematic:** Rigorous planning and recording should ensure that the assessment is fair.

- **Openness:** Encourage learners to contribute to the planning and accumulation of evidence and ensure they understand the process and assessment criteria.

- **Consistency:** Design the assessment to ensure that the same assessor would make the same judgement again in similar circumstances.

An assessment plan

In line with the holistic approach promoted by the integrated assessment strategy, we are now going to focus on how to draw up an assessment plan for a year.

What are the advantages of having such a plan? A plan that indicates:

- What will be assessed?
- How it will be assessed?
- When it will be assessed?

ACTIVITY

**Time needed
15 minutes**

Activity 7.5
Advantages of having an assessment plan for the year

Resources: Pen and paper
Class organization: Individual activity, then report back in plenary

---

Write down three advantages of having an assessment plan for the year:

1. _____
   _____

2. _____
   _____

3. _____
   _____

Some colleges have tests every two weeks, regardless of where one has got to in one's teaching. This is unnatural and doesn't work in OBE. This does not mean that there is not regular assessment in OBE. There is. It occurs during a learning activity (formative assessment) and at the end of a learning activity (summative assessment).

If the year's assessment activities are planned before the academic year starts then lecturers will know how much teaching/learning time they have and can ensure that the assessment timetable is realistic.

Guidelines on how to draw up an assessment plan

1. **Start with the outcome/s.** Where possible choose a variety of assessment activities to obtain the evidence needed (think back to the Assessment Methods Matrix and Rob Sieborger's list of possible activities in the section dealing with Different Modes of Assessment on page 57 - 59).

2. **Ask yourself what evidence will show that the student has achieved the outcome.** Students can only be judged competent or not on the basis of the evidence which has been collected. Lecturers set assessment tasks in order to collect that evidence. Evidence in the context of assessment requires students to *do* something, to *demonstrate*:

   • What they can do
   • What they know
   • What they understand
   • What their attitudes are

3. **Include assessment of applied competence.**

4. **Make sure that the plan is realistic** i.e. it can be implemented.

Judging the evidence and making an assessment decision

The lecturer has to decide when the student has given enough evidence of appropriate quality to confirm that they are capable of performing the outcomes consistently and to the required standard.

The student is then judged:
• Not yet competent
• Competent
• There is insufficient evidence to make a judgement.

Grading in OBE

In order to make the leap from a grading system of percentages and symbols to more OBE friendly judgements, instruments such as rubrics or rating scales (discussed above) can be used. These allow lecturers to evaluate the students work by making meaningful comments as well as quantifying the result.

The following is an example that could be adapted to suit a particular reporting need:

5	Performs above expectations
4	Has achieved well at this level
3	Satisfactory/Meets minimum requirement
2	Greater effort required
1	Needs serious attention

STOP THINK

Stop and think

Using an OBE approach to assessment, lecturers are required to ask the following questions:

• Does the evidence relate to the outcomes and the assessment criteria that are being assessed?

• Are you sure that the evidence reflects the student's own work?

• Is there enough evidence to meet all the criteria needed to certify the student as competent?

• Is the lecturer confident that the performance can be repeated?

KEY POINTS

Key points

‣ Criterion Referenced assessment used as part of the new educational approach, makes the assessment criteria explicit so that e*very student is able to understand how her/his work is to be assessed*.

‣ We need to think beyond the well used modes of assessing to new modes such as observation (using appropriate and rigorous methods for collecting and recording data) use of portfolios which help to track progress over time, peer and self assessment which help students to reflect on their own and other's work.

‣ The design down principle applied in the outcomes-based approach to curriculum is mirrored in the design of integrated assessment with principles and policy set by the ETQAs, filtered down to the institutional level, the departmental level and to the classroom level.

‣ In line with this holistic approach, the importance of preparing an assessment plan before the academic year starts is stressed. In this way lecturers will know how much teaching/learning time they have and can ensure that the assessment timetable is integrated realistically.

HOMEWORK PREPARATION FOR SESSION 8

In preparation for Session Eight, carefully go through the reading at the end of this Guide entitled:

Co-Operative Learning: A Teaching Strategy. In the next session we will be discussing a range of teaching strategies – *Co-Operative Learning* will provide greater depth to your understanding of group work in Session Eight.

SESSION EIGHT

Some Teaching Strategies

OUTCOMES
You will be able to: • Understand and implement whole class teaching strategies in an interactive and learner-centred way – using explanation, demonstration and questioning techniques • Understand and implement small group teaching techniques
DURATION: 2 HOURS

WHAT WE HAVE LEARNT?

What have we learnt?

Planning is a very important part of good teaching. But the best plans in the world have to be turned into reality; we need the skills to teach. This session provides examples of a range of whole class, lecturer-led and small group, student-led lessons that lecturers can use in their teaching.

In recent years teaching has undergone important changes. The most important of these is a shift away from lecturer-centred style of teaching to methodologies that *maximise student involvement*. Another important shift has been towards developing student abilities to use the knowledge they learn rather than simply memorise it. These shifts signal changes in the ways in which we teach and assess.

However, they *don't* suggest that we must jettison whole class, or lecturer-led, methods, like the ability to explain clearly, or ask good questions, or manage large class discussions. Student-centred methods, like group work, are no better than lecturer-centred methods if they are used thoughtlessly. In fact, group activities often become busy, physical work rather than activities that develop student *understandings* or *thinking abilities*.

We suggest that good teaching normally consists of a mix of methods that focus on *learning*, not merely on student activity. This can sometimes be better achieved in a lecturer-led classroom where the lecturer uses questioning well than in an unstructured group work lesson. Student-centred methods are not *necessarily* superior. Choose methods on the basis of the degree to which they:

• engage students *cognitively* rather than leaving them listening passively;

• enable them to achieved clearly stated learning outcomes; *and*

• enable student to learn *how* to learn.
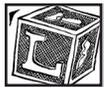
WHAT WILL WE LEARN?

What will we learn?

In Session Eight we explain and demonstrate how this can be done in relation to whole class methods, like:

• Using *explanation and demonstration* as teaching strategies;

• Using *questioning* as a teaching and learning strategy;

We then turn our attention to using the small group, problem-centred, methods more commonly associated with outcomes-based education. Many of these methods are called "active learning" methods. But they only become active if lecturers construct activities which engage students in *thinking* rather than simple activity. Likewise, we will demonstrate how so-called lecturer-centred and whole class methods can easily be turned into active, *learning*-centred experiences through good teaching.

Explaining and demonstrating

ACTIVITY

Time needed 30 minutes
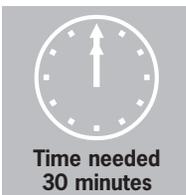
Activity 8.1
The importance of clear explanations

Resources: Pen and paper
Class organization: Work in pairs

Read these two sets of directions to get to a friend's house provided in the text box below:

• Which directions would you prefer to get? (Try and draw a map to the two different destinations. Which is easier? Why?

• Summarise *why* one explanation is clear and helpful while the other is confusing in a table like the one we have begun on the next page. Make the list as long as you can.

Mac: Okay, take the second - or is it third. No, I think its second turning left off Main St - to get to Main St you can either go down Commercial and turn left - or down Jacobs St and go down a little back road - no, don't do that, its complicated, stick with Commercial. Drive along there for about 5 minutes - depending how fast your car is, hey? Turn right and right again and then there's a road to the left that says "Golf Club" - you can see it, its got big smart gates - don't take that road. Go straight for quite a while until you come to our road and there's a brick house and then one with a dreadfully untidy garden - really terrible neighbours! And then us. Okay?

Joe: My house is 5 minutes drive from here near Eastgate Mall - do you know that area at all? Good. Look, follow on this map I've drawn. From where we are now, you'll turn left at the robots and you'll be in Main Rd. Drive for about 3kms and then turn right at a sign saying "Eastgate Mall." (Don't turn into the parking lot by mistake - lots of people do!) Turn left at the next robots into Tambuti Ave. Let me repeat that. Into Main, turn right at the Mall sign, left at the next robots. Okay? Good. We're the last house on the left, no 16 with big white gates - and there you are!

These things were helpful in Joe's explanation	These things were confusing in Mac's explanation
Joe started with a general overview	Mac didn't check to see if he was making sense.

Why is explanation an important teaching tool?

Students have consistently voted good explanation as the most valuable teaching tool that lecturers can use. In research done in the 1930's, students rated 'skilful explanation' as the top teaching skill out of seven others. In 1980, the study was repeated, with a list of 32 teaching methods as options. Students still rated 'ability to explain clearly' as the number one skill!

Whether one is committed to learner-centred teaching or not, lecturers must be able to explain. In many ways explanation remains the *foundation* of all good teaching. Even in an entirely learner-centred lesson lecturers need explanation skills in order to inform students about what they need to do.

But explanation as a teaching tool is not merely talking at students, or random chatter. Instead it is *structured* talk aimed at helping students learn; it must engage students and change the way in which they think. So, explaining is a skill worth developing but it is not as simple as it looks and takes effort to get right. A 10-minute explanation uses over 2000 words. If these words are not prepared, many are wasted, confusing, repetitive, illogical, unsure, incoherent and plain boring to the student!

On the other hand, an effective explanation presents *selected* information in a *logical order*. In addition, though, it must build on the knowledge the student already has, it was engage students, and must move them towards your desired learning outcomes. Most of all explanation is persuasive and patient.

Good explanations are usually used in tandem with other methods, like demonstration or questioning. Questioning enables lecturers to gauge the level of student understanding and also to involve students and get them thinking. Demonstrations provide visual support for an explanation. Imagine how much easier the direction instruction earlier would have been had you had a map in your hand.

The problem with lecturer explanations

The single biggest problem is that explanation is over-used. It is often used for inappropriate purposes, at inappropriate times, and simply used badly. Lecturers mistake boring, didactic, *information transfer* as explanation. But there are other problems with the ways in which lecturers explain. Let's look at the directions in the last activity to work out why one explanation was successful and the other not. The first explanation was confusing because:
• it gave no sense of the destination;

• it jumped all over the place; there was no logical order and the explainer often changed his mind; and

• it contained a large amount of irrelevant information; the explainer didn't distinguish between what information was important to understanding how to get to a place and what wasn't important.

The second explanation was more helpful because:
• the direction-giver drew a useful picture (she demonstrated how to get there);

• his information was ordered in a logical and sequential way;

• he focused on key landmarks and repeated this information;

• was brief and to the point; and

• gave pointers for common mistakes.

Just as a person can get 'physically' lost with confusing directions, a student can easily get 'intellectually' lost with an explanation that is roundabout, lengthy, not logically sequenced, and which doesn't build on correct assumptions about student understanding.

It is important to remember that in an explanation a lecturer' words don't enter a student's head in the same way as they are said. Words - an explanation - is only a clue to a student about what you are talking about. Students still have to translate those words into an image, a picture. If the student can't do this, then she will be confused. So, the common practice of so many lecturers - to repeat something 20 times because students don't understand - is pointless. No amount of hammering will get the info into the student's head! Rather, look for useful clues … for words and analogies *that link the unknown work with something students know*. Examples of snow and fridge …

When you prepare an explanation, there are three questions you need to answer.

• What is it that I want to explain? (*what knowledge must I convey?*)

• How am I going to organise that for the students? (*what structure will do this best?*)

• How am I going to present it? (*presentation*)

Have a clear purpose

As with good planning, a clarifying our purpose - the learning we want our students to achieve - must be the first step in preparing an explanation. If we know the purpose of our lesson is for students to understand how democracy works, we will then be able to decide on its key concepts and also be able to distinguish between useful classroom talk and talk that is diversionary.

Decide on key concepts

The key point is to get lecturers to understand that good explanations rest on lecturers knowing the difference between the core concept … and the supporting details (that may be interesting but are not fundamental to understanding …the problem is students often remember these and forget the key concept) … they loose the core details and instead are working off the supplementary details)

Know your subject matter

In order to be able to pull out the key concepts in any explanation we need to know our subjects. If we don't we can often drown students in large amounts of information that might be interesting but doesn't assist students in achieving the understanding we are aiming at. For instance, they could learn all sorts of interesting stories about the liberation struggle but never really get any closer to understanding the concept 'democracy'.

Knowing your subject matter well is necessary for a good explanation but its not enough. In our 'giving directions' example, both people knew very well where they lived. But, although both knew their 'subject matter' well, the quality of their directions - their explanations - varied.

However, it is dangerous to attempt to explain something we are not absolutely clear about ourselves. It would be like giving directions to a place we don't know! There are two dangers:

• At best, we will leave our students confused.

• At worst, we will fill students heads with nonsense. The problem is that it is often very difficult to get students to 'unlearn' this nonsense!

In both cases we will waste lots of scarce learning time.

Demonstrations as a form of explanation

What are demonstrations?
We have already noticed that it is highly unlikely that a good lecturer will simply talk for an entire lesson. *Explanations* are almost always supported by the use of good questioning – which we will deal with in the next sub-section – and demonstrations. In fact, both demonstrations and questioning are ways in which one can overcome the weakness of explanation which we mentioned, namely that it is so ephemeral and impermanent.

We often limit our understanding of demonstration to the kind of thing that happens in science lessons. But we will argue that *modelling* ways of arguing, or speaking, are also demonstrations. Equally, playing a tape, watching a video, or acting out a sequence are all demonstrations.

The problem with demonstration lessons

The major problem with our use of demonstrations is that they are so didactic: we expect students to keep quiet, watch us, and then copy what we do. While this kind of imitation - chorusing in primary schools is a good example - has benefits, the benefits are very limited because students tend to do these things thoughtlessly. Our challenge is to make demonstrations:

• more interactive

• more thoughtful and engaging.

This trend away from simply watching, or looking at demonstrations, isn't confined to colleges. In the past museums were places where one looked at exhibitions. Now most museums design exhibitions so that students can try things out; so that they can interact with the exhibition. Computer games 'demonstrate' in the same way; they don't just demonstrate something, they ask the user to do things as they watch.

Using demonstrations more effectively

Demonstrations, then, can be used for two kinds of teaching:

• First, demonstrations are powerful ways of teaching *processes*. In other words there is a major emphasis on the *'how to'*. We are *showing how* to acquire the skills or understandings we want our students to master. Demonstrating how to use a lathe in woodwork, is an examples of this.

• Second, it can be used to *reinforce or illustrate a principle or concept*. In can be used as an analogy, for example – making popcorn in the classroom to illustrate the "big bang" theory of how the universe came into existence. Asking a class to drop a rock and feather from the second floor of a building to illustrate the principle of gravity - that regardless of the weight of an object they both fall to earth at the same speed - is another example of this kind of use of a demonstration.

• Third, it can be used to do both. Chemistry experiments are a good example of this. It is important to learn how to do an experiment (science processes), but it is also important to learn what happens when phosphorous meets water and why (science content).

In the first example the lecturer wants the students to understand a physical skill which is not difficult conceptually, but which is very difficult to follow if you're not watching it and don't do it yourself.

The importance of planning a demonstration

The steps required to plan a demonstration are very similar to all teaching:

- *What must students learn from this demonstration?* (Why am I doing this demonstration rather than using some other method?)

- *What do they know?* (What should I begin with?)

- *What do I need to be careful of here?* (In some subjects this may refer to physical dangers. But we also think of cognitive dangers - presenting confusing information that leads to misunderstanding)

- *Consider and evaluate alternatives.* (What would happen if…?)

Performing the demonstration

Doing a demonstration does not necessarily mean that your students should sit passively watching you; you need to involve the students throughout the demonstration. Demonstrations should always be used in combination with other teaching and learning strategies. For example, asking questions and explaining new concepts and the steps you are going through in the activity, as well as allowing students to question and ask for clarification where necessary, and to evaluate the information they observe, helps to ensure effective learning.

Begin with a question that focuses observation

Remember, one of the most important ways of teaching people to read is to design reading around key questions. This focuses reading and develops good reading habits. The same can be said for demonstrations. We all look at things but often don't see what we need to see. Instead we get distracted by other things that might be happening. A good question focuses the way students look and develops better observation skills. It also links the demonstration to the lesson purpose.

Keep demonstrations short

Student's concentration spans are short. Demonstrations are like non-word explanations: in other words, they carry a lot of information. So keep them short, write up key points at regular moments, and make links between the 'bits'. These 'breaks' could also be used for student practice and note-taking.

Repeat demonstrations

Although this is sometimes difficult, repetition is important for a number of reasons. First, a lot happens in a demonstration and students miss some information. In the same way as a second viewing of a movie lets us see much more, so a second viewing of any demonstration reveals more information. Second, demonstrations are mostly used to teach students how to do processes. This requires repetition, and repeated viewing, before the skill is learnt.

Consolidate and assess

Consolidation is, largely, ensuring that you design learning so that the process skills you demonstrated are practised after the first demonstration. But you must also ensure that you assess what you taught: in other words the process and not the content unless you are using a demonstration as an analogy for some content (like the Big Bang) but then you must explain this clearly to students and teach in such a manner that this becomes clear. Don't just set up the popcorn making and *hope* that students will make the link with the 'big bang'. Experiments and demonstrations rely on each other and on other methods such as questioning, explaining and discussion, to be effective.

Questioning

Why is questioning an important teaching tool?

Questioning is a powerful form of explanation. It conveys information, it activates students mentally, and it models ways in which students should think and reason. After explanation it is the most widely used teaching method. Research suggests that American lecturers ask questions for about 30% of classroom time. This translates into almost 1000 questions a week!

Why, and when, is it useful to use questioning? Research shows that often lecturers don't think about why they use questioning. It is a method they use automatically. When lecturers were directly asked to think about it, most said they use questioning to:

• check student understanding of work covered;

• diagnose leaner difficulties;

• check student recall of specific facts taught; and to

• motivate and involve students.

Some lecturers said they use questioning to:

• arouse interest and curiosity in a topic;

• help students better understand a topic through active involvement with it;

• show lecturer interest in student opinion and thinking;

• encourage problem solving and other thinking skills;

• help students learn from each other;

• help students identify the own misunderstandings; and

• improve verbal expression and explanation skills.

What's the problem with lecturer questioning?

The kind of questioning used should be linked strongly to our educational purpose. For example, if we want to check whether students have remembered specific facts, we should use simple recall questions. But if you want to develop or check problem solving ability, more probing, complex questioning is needed. The problem is that, worldwide, research has shown that:

• Only 10% of lecturers list 'encouraging students to think' as a reason for asking questions while 15% of all questions asked are concerned with class routine and management e.g. "Do you all have your books?"

• More than 60% of the 'educational' questions require simple, factual, recall while less than 15% require students to engage in complex thought.

• Only 7% of lecturers felt that asking questions could involve students in the lesson more and increase the motivation.

• Not one lecturer listed 'helps students learn from each other' as a reason to ask questions! In many cases lecturers asked questions without any expectation of a reply; questions were rhetorical. Even where replies were expected, lecturers left no time for students to think and provide the reply!

• Inexperienced lecturers, particularly, ask many more questions than they receive answers. They find difficulty in knowing how to phrase questions in order to get a satisfactory response from students.

Good questioning needs

- **Careful preparation** and thought about the purpose of using questioning;

- Focus on questions that demand both **lower order and higher order thinking;**

- **A lecturer to ask clear, unambiguous questions** and allow sufficient 'wait-time' for students to speak; and

- **A lecturer to respond to student answers in some way;** with praise, by redirecting the questions, using body language or some other method.

Stop and think

We suggested that lecturers should think more carefully about how they used whole class teaching and try and make these teaching experiences more interactive, talkative and intellectually engaging. In this section we discuss ways in which lecturers can use *small* groups – groups comprising between two and six people – as:

- A way of overcoming some of the limitations of large group teaching; and

- A way of providing a richer mix of teaching methods for use in classrooms.

Small group work

Why is group work educationally useful?

The ability to use small group methods *is* an important part of good teaching. But small group work, like whole class teaching, has both strengths and weaknesses; it cannot solve every educational problem! The reason for choosing to use small groups in any learning situation must be based on its appropriateness to the particular learning outcomes you want to achieve.

But what are the reasons given for doing group work? Research tells us that:

- Students have more time to *talk* – and share opinions and experiences - if they are divided into small groups.

- Good group work includes 'hands-on' activities; these provide opportunities for active learning by students.

- This combination of activity, talk, and the sharing of ideas, leads to higher levels of recall and better understanding.

South Africa's critical cross-field outcomes also suggest that the *process* of group work will develop many skills that future citizens need. For example, students who learn in groups frequently and over a long period:

• Develop *strong inter-personal skills*. They learn to communicate better with their peers as well as negotiate mutually agreeable goals. These skills are useful in daily life and at work in South Africa.

• Develop *strong co-operative and collaborative working skills*. This can balance the competitive, individualistic, ethos which is strong in South Africa.

• Develop strong *problem-solving and critical thinking skills* if group work activities are problem-based. These are vital skills in a rapidly changing world.

What are some of the problems with the way small group work has been used?

As much as group work has its strengths, there are also many examples in South Africa of poorly implemented group work. Some of the typical problems encountered include:

• Students often aren't taught about how to do group work. This can lead to tension in groups and situations where no useful learning occurs.

• Groups are often too large for good discussion. This leads to students on the edges not being able to follow discussions, or read documents. This leads to them withdrawing from group discussions and thus from learning. It can also lead to disciplinary problems as these students get bored.

• Lecturers prepare poorly. This leads to confusion about the educational purpose of activities, and to time being wasted in re-arranging furniture or trying to get clarity on the task.

• Sometimes tasks are inappropriate. Groups are given tasks that don't encourage discussion or co-operative work. Instead they are simply finding the one right answer kind of activities. Even when tasks are good, some students can become bored because they work out answers quickly.

• Lecturers don't conclude lessons well. One of the most important characteristics of group work is that there is a lot of divergent thinking and many different ideas floating about. Lecturers must pull these ideas together for students, either through explanation or good whole class questioning and explanation.

Organising successful small group work

Plan carefully

As with all teaching, planning is vital. Four planning issues become particularly important in planning small group teaching:

1. Plan group activities carefully so that they do, in fact, elicit the kinds of learning you want them to. It is very useful to do a 'dry-run', a practice run, to ensure that they do have the outcomes you think they ought to have.

2. Group activities are often dependent on good resources. This will include, at least, well-designed worksheets. These need to be prepared well in advance. In addition you need to access other resources - textbooks, maps, or other objects - that might be needed for successful group work.

3. Think carefully about how you will conclude the lesson. Group work is good at opening up new ideas. At the end of lessons feedback from groups might differ widely, and might not be entirely correct. How will you manage the final session so as to organise the information into a conceptually coherent learning moment.

4. Think of how you will intervene in group processes. On the one hand you don't want to disrupt discussion in groups too often. On the other, you will need to intervene in groups that are weak or losing direction.

One of the most common complaints about group work is that preparation takes time and effort. The arguments against this is that once you have done this properly the first time – you have good resources (worksheets, etc.) and students have been trained to work in groups - you can re-use these resources many times with less preparation. Also, students will increasingly work independently.

Teach students how to work in groups

It is important to know how to prepare a group task so that all students get the opportunity to take part. They also have to know how to work with a group. You have to teach them this. Research tells us that if we want a group to work together effectively, we must:

• *Build trust.* Group members must be able to relax and work well with each other. Students need to know that they can *rely* on their classmates to do their part. They also want to know that no one will laugh at their attempts or questions, and that they will get help when they need it.

- *Create a climate of common purpose.* Group work is much easier if everyone is working towards the same goal. This points to the importance of spelling out clear assessment criteria before the lesson begins. Students need to take *responsibility* for their own learning and to help each other gain the goal. This leads to everyone being committed and involved.

- *Give clear instructions.* If students know what is expected of them, they are likely to be more confident about starting the task and they won't get anxious and waste time trying to work out what to do.

- *Allocate definite roles to all members of the group.* If everyone knows their particular role, then the group is likely to operate effectively. Remember to rotate roles amongst students. Also make sure you give every student a meaningful role in the activity.

- *Give opportunities for students to practice co-operative group skills.* Playing "group games" can help where there is no pressure of content. Here is an example:

  Work with groups of 4 to 6. Give each group a jigsaw puzzle and ask them to share the pieces out amongst the group members. Don't show the group the completed picture on the lid of the puzzle. The students can talk, and try things out but nobody is allowed to take over pieces that belong to someone else. In order to finish the puzzle everyone has to contribute. Group members can help verbally – but cannot demand an action - everyone has to play their own part.

Keep group formation rules simple

- Begin with pair work rather than group work if you and the class are unsure about group work. Use pair work when you want students to complete a large amount of work. While pairs won't generate the number of ideas that larger groups do, they are more efficient.

- A simple group formation technique, especially in a crowded classroom, is for students to turn around in their desks to face those behind them to make groups of 4 or 6. Groups larger than six members become difficult to manage and some students will be excluded from the discussion.

- Don't change the composition of groups frequently. Keep them together for at least a term before changing. In order to work well, students need to become familiar with their fellow group members.

- If your class allows for this it is a good idea to form desks into permanent clusters for group work. This doesn't mean that all work needs to be in groups; students can still work as individuals when they need to do so.

- Set a routine and rules for group work.

Ways to get participation, co-operation and discipline

• *Numbered heads together:* Each student in the group gets a number (e.g. 1 - 4). Because the lecturer may call any number for a report-back, each person gets involved and takes responsibility.

• *Think, pair, share:* First, individuals think about the question by themselves; then share ideas with a partner. Finally each person describes their partner's ideas to another pair or to the whole class.

• *Fill the-gap:* Each member of the group must provide one piece of a whole. For instance, one person writes part of a story or topic, or problem, and then shares this with another student so that they get the whole picture.

• *Clear instructions.* Groups need very clear instructions for tasks and need to agree together on their goals.

• *Balancing lecturer support and student activity:* Groups need the lecturer to support them and check their understanding occasionally. But, throughout, lecturers should maximise student assessment of their own group work. However the lecturers should assist them in finding out what went well, what went wrong, and why.

• *Roles in the group:* Try these roles to get groups working efficiently and co-operatively:

    – note taker/secretary (takes notes, keeps records)
    – facilitator/encourager (makes sure that everyone speaks and participates)
    – timekeeper & noise controller
    – artist & editor (organises drawings and wall displays of the group's work)
    – link with lecturer (gets materials, checks instructions, reports group's needs to lecturer)
    – reporter (reports back to class to explain group's ideas and show their work
    – next time rotate the roles.

Scale the difficulty of group tasks so students develop depth and breadth

• Ensure that all group work has stimulus material - something to look at, read, touch, listen to, experience - in order to evoke discussion. Don't use groups to answer simple one-word answers that aren't debateable - like filling in historical dates. Also, don't ask groups to 'discuss' a vaguely worded question.

• Need for interpretation task - interpret, analyse, form and image of, describe what is happening - for each individual before group discussion - write down, swap notes.

• Structure deliberate task that all students need to address together … otherwise you end up with what is effectively individual work in the structure of a group!

• Always structure in an opportunity for feedback.

• Poorly designed tasks - inhibits discussion.

The need to choose group members carefully

The size of the group you use will depend on the type of task you choose to set. The 'ideal' size group is made up of between 3 and 6 students. The minimum group size is 2 (a pair group) and the maximum about 10. This will give each student an opportunity to be involved.

If the group size is too big, some students could get lost and may not participate. Pair work is a very useful as a way of getting every student involved – but the group is too small if you want students to 'brain-storm' and generate new ideas or opinions. When the group is large, you must allocate separate, but meaningful, roles to every student, or risk some of them being left out or becoming bored and disruptive.

There are many different ways of organising groups. Remember: what you choose to do should depend on your purpose. Types of group organisation include pair, friendship, ability and mixed ability grouping.

Pair groups: You can use these when you want every student to discuss or work on an idea before you open the discussion to a larger group. This will help students formulate their ideas and gain confidence.

Friendship groups: These groups constitute themselves. They can be useful if you want to maximise co-operation and have minimal disagreement over operational issues. They are also easy to manage (as long as the friends co-operate and don't waste their time chatting over irrelevant things). There are some dangers, for example, some students may not be popular and so be 'left out', or, some students may never interact with each other at all and will not learn important social skills.

Ability groups: These are useful when you ask each group to do a different task (*solve a problem*) at a level of complexity in line with their own abilities and development. This type of grouping recognises that not all students are talented in the same way and that in the same class, you could have students that are working and thinking in different ways and at different levels. Dividing students into groups according to their level of development has advantages in that fast students can go ahead with minimal supervision, while slower students can get the attention they need.

Mixed ability groups: These are more socially desirable. They make students interact with different people and get to know about other cultures. When these groups are formed great care must be taken to give every student a very clear role. Students should also know that while they are working in such a group they could be assessed on their ability to co-operate and help one another.

The need to organise the physical learning environment

Space can be a problem in a crowded noisy classroom, and getting students to move furniture around can waste time and be very disruptive. Here are some ideas to help you avoid problems:

- **Give clear instructions** about how you want the groups to be formed – do this before you first tell the students about the task you want them to do.

- Always think of ways to **form groups quickly** and with as little fuss as possible, e.g. - Make a group of four students sitting close to each other ('*Work in groups of four, okay - the two in the front desk turn around and face the two who are behind you*').

- **You can organise groups quickly if you plan before the lesson** ('*I usually make a list of students I want to work together before the lesson starts. As the students walk into the classroom, I give them each a slip of paper to inform them of the group they will work in and where they should sit*'). This technique can be used to inform students of what will happen, even if you only plan to use the group work later on in the lesson.

- **Choose a group organisation that suits you purpose** - e.g. pair groups, random groups, ability groups or mixed groups.

- **Manage classroom time effectively** - short focused activities are often more useful than a long dragged out discussion. Set a tight time limit for every task and assist students with managing the time allocated. Give time guidelines when setting out the task - ('*Each task should only take 5 minutes so don't take too long on the first one*'), or, when you want to summarise the ideas generated, - ('*You've got three minutes left: start finalising the points you want to make.*') Some co-operative tasks, for example a project or survey, may stretch over a few days or even weeks. In these cases students will need a lot of support and help with time management. You can help by giving 'targets' along the way ('*By week two, you must have drawn up your questionnaire and shown it to me.*') You can get students to use 'self assessment' and also underline the idea that the process is important by allocating marks for completing various steps along the way.

- **Manage the activity effectively.** Successful group work needs an active lecturer – someone who is aware of what is happening in all the groups, is assessing learning and is generally helping the groups to function effectively.

The need to conclude lessons carefully

Most lecturers know that there should be time for summarising ideas and giving feedback at the end of every lesson. However, in a group work lesson, many lecturers are not sure how, or why, this should be done.

Here are some ideas about group feedback:

- **Keep it short** – no one can sustain interest in other people's ideas for too long. Most of us are quite anxious before we present our ideas. It is a good idea to allow each group to present their best idea or keep a strict time or word limit.

- **Keep it focused** – you don't have to hear everything that every group came up with.

- **Keep it interesting** – avoid repetition by insisting that once a group has made a point, no one else can make that point (*it'll keep them listening too!*)

- **Keep it fair** – we would all feel cheated if we had spent 20 minutes discussing an issue and then the first group to report back gave all the points we had thought of. Get the groups to take it in turns to make points until everyone has had a chance to contribute.

- **Keep it varied** – there's no rule that says feedback has to be verbal or whole-class. Think of other ways of sharing the knowledge and insights that the group task has generated. For example, ask groups to make a poster display of their ideas using a pie-chart and other graphs, or to write their main points on newsprint and stick them on the classroom wall, or even to Make up a role-play. All of these can be used to capture and communicate the group's ideas.

- **Use all students as a resource** - ask one group to share their findings with the next group, rather than with the whole class. You can also split the original group in two and mix them with another group to share their ideas.

KEY POINTS

Key points

▸ Whole class teaching strategies can be implemented in an interactive and learner-centred way.

▸ Explanation, demonstration and questioning, still form the backbone of teaching practice and therefore developing the skills to use these techniques appropriately are a key professional development challenge for FET college lecturers.

▸ The reason for choosing to use small groups in any learning situation must be based on its appropriateness to the particular learning outcomes you want to achieve. Tasks must be properly thought through and structured and groups carefully managed.

For a detailed discussion of Co-operative learning see additional reading on pages 97-102.

READING
Activity – Based Learning[7]

Learning comes about when we engage in **acts** of understanding. The theory of learning that we are working with here rejects the idea that good teaching is like "banking" (depositing knowledge in the student in the same way as money is deposited in the bank). Instead, it works with the idea that teaching and learning is an active *process* of making meaning.

What has changed? If you speak to education department officials and lecturer of the old school, you would probably be told that students learn by having knowledge *given* to them. They might argue about how this knowledge is given; some would say that it is given to the student "from inside" by different kinds of intelligence and aptitudes that children inherit at birth. Others would say that knowledge is given to the student by "inputs from outside", by the influence that the environment has on students' life experience. But they would not argue very much about the "fact" that knowledge is given to students. These lecturers and education officials tend to share a *passive* or *static* view of the student. Whether knowledge comes from inside or outside the child, the really important underlying idea is that the child passively receives knowledge.

However, there is another, much more progressive way of thinking about teaching and learning. All people can learn if they are given the opportunity to learn. No matter what the barriers are that students experience, we no longer think of them as passive recipients of knowledge (or even as unable to receive knowledge), but rather as *active constructors* of their own knowledge in interaction with the world and society around them. The new paradigm assumes that knowledge is not simply given to students when they learn. Rather it assumes that students create knowledge when they learn. Importantly, the concept of activity is central to this whole shift in the way we understand learning.

The basic idea here is simple – we can only know about things if we *act* on them. Very small babies get to know the world around them by touching and tasting things – all mothers get exasperated by their children constantly putting things in their mouths! As the child gets older, she literally gets to know her world by moving about in it, learning to crawl and then walk, moving about bumping into things, learning what's hard and what's soft, grabbing things and learning what's heavy and what's not. Older children and adults, too, use action to know the world. Sometimes these actions may be physical like those of the small child, but more often than not, the action increasingly happens in the *mental* realm:

- connecting new information to what we already know;

- filling in missing gaps in our knowledge by identifying other facts that will help us interpret new information; and

- recognising novel and contradictory aspects of new knowledge that our previous understandings cannot account for.

7 This section is partially adapted with permission from Moll, I. et al. (2001). Learners and Learning. Johannesburg: Oxford University Press/SAIDE, pp. 18-20.

People do not learn by being told something that is not familiar to them. The point about activity-based learning is that it gives students an opportunity to engage in a task that is unfamiliar to them, in such a way that they can learn by reflecting on that engagement. Ideally, each of the learning tasks – or *Activities* – that are set out in a study guide are designed in this way.

The idea is to ask students to do something that is possibly still unfamiliar to them. This *doing* can be an actual physical action, but usually it is *thinking* – thinking about some issue or problem in a new way. This thinking is done on the basis of some reading, writing and discussion. The questions that are posed to students in the various tasks give them an opportunity to think about new forms of understanding. The periods of reflection that follow each task provide them with opportunities to think about and discuss what they have learnt, and to consolidate new understandings.

The diagram below helps to illustrate how the activity-based learning cycle is designed in a learning text:

content to set up activity
learning activity
reflection on learning
new question
content to set up activity
learning activity
reflection on learning
new question

etc.
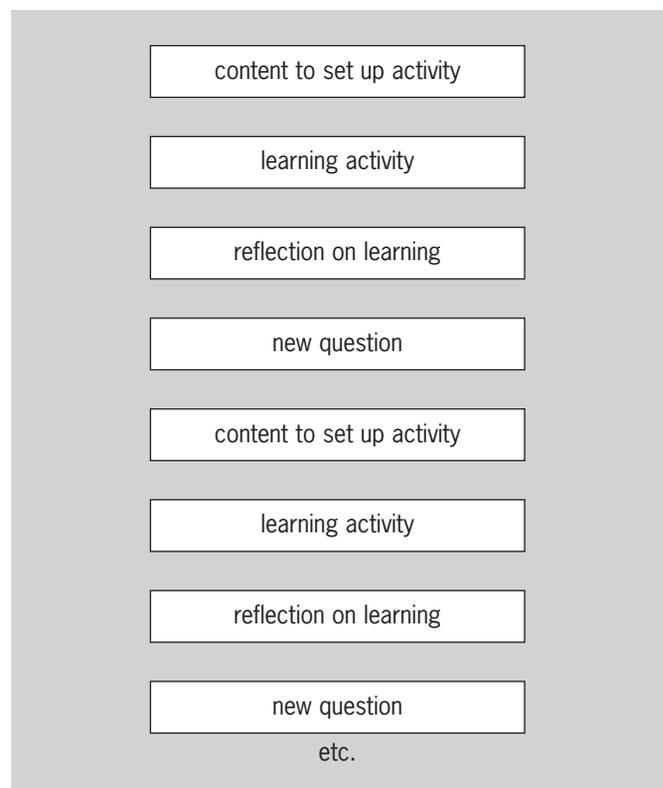
When designing your lessons, try and build on the knowledge that your students have (hence the importance of doing a situational analysis and developing a profile of the students before the programme is designed).

This learning approach is premised on the notion of a learning cycle in which activities are central - new understandings depend on, and arise out of, activity. Students therefore most benefit if they *engage systematically in the activities* that are set out for them in the lesson plan. If they don't do the activities, they will miss out on the most important part of the learning pathway that has been designed for them.

This diagram captures the notion of a learning cycle (or spiral). Starting with some content input from the lecturer, building on what the student knows and then shifting the student to engage in an activity in which new/different information is offered. Next, provide some discussion of issues arising from the activity, structure an opportunity for the student to reflect on what he/she learnt to consolidate learning and then design another activity, provide some feed back on it and so on.
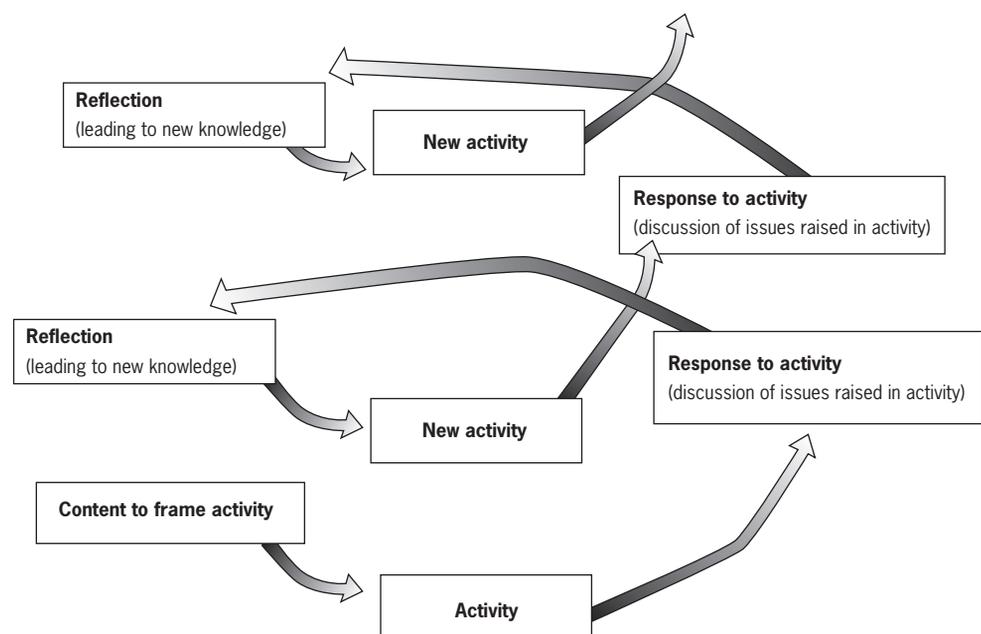
Finally, at the end of a number of cycles, the end of a learning unit is reached – by which time your student will have had a chance to achieve the outcomes set at the beginning. Each section should also include assessment tasks whether for formal or non formal assessment purposes. These help the students to consolidate units of learning as well as to track progress along the learning pathway.

READING

Co-operative Learning – A Teaching Strategy

Ideas in this reading come from: van der Horst, H. and McDonald, R. (1997) *OBE: Outcomes Based Education: A Lecturer's Manual*. Kagiso Publishers, Pretoria.

What is Co-operative Learning?

> Co-operative learning is when students work together in small participative groups where everyone is involved in a collective task that has been clearly defined by the lecturer, but which function without direct and immediate supervision.

> Co-operative learning is not merely another name for group work.
> It includes more than students simply working in groups.

The co-operative learning model does not belong to any one school of educational thinking. It has its roots in early Greek educational approaches, but current developments are indebted to early twentieth century educational psychologists and pedagogical theorists. In 1916 John Dewey's book, *Democracy and Education* suggested a concept of education where the classroom mirrored society at large as "a laboratory for real-life learning."

Dewey's pedagogy required lecturers to create, within their learning environments, a social system characterised by democratic procedures and scientific processes. Their primary responsibility was to engage students in inquiry into important social and interpersonal problems. The classroom organisation suggested by Dewey emphasised small problem-solving groups of students searching for their own answers and learning democratic principles through interaction with one another.

No doubt many lecturers already use some co-operative learning activities in their classrooms, and this is a positive sign as it means they are already in the process of gaining insights into the functioning of co-operative learning. If a genuine co-operative approach to teaching is adopted (not merely a name for students arranged in groups), democracy can really come into play, with the students contributing their experiences from their daily lives as well as having their needs met.

Co-operative learning will not only lead to more meaningful learning taking place in classes, but will also help lecturers to cope with the question of how to teach large classes in the South African context.

Co-operative learning stimulates peer interaction and student-to-student co-operation in the process of fostering successful learning by all. This model has two main aims: The first is to improve student understanding and skills in the subject being taught. The second is for the student to develop co-operative group skills, and to interact with individuals from different groups and cultures found in our South African college classrooms.

Co-operative learning activities share common characteristics. According to researchers there seem to be at least three specific elements that are critical to the success of co-operative learning. These elements are:

- **Face-to-face interaction**
- **Positive interdependence**
- **Individual accountability.**

- Face-to-face interaction requires placing students in close physical proximity to each other in order to complete the assigned tasks.

- Positive interdependence means establishing an atmosphere where students believe that each individual can achieve the particular learning objective only if everyone in the group achieve the intended learning outcome.

Positive interdependence can involve:
- having a common goal
- realising that each member of the group has a portion of the information or materials needed to complete the task
- breaking a task into a series of sub-steps that are then completed in assembly-line fashion, with each group members completing only one section of the total task
- assigning role to individuals group members, for example, writer, reader, timekeeper etc.
- allowing the group to form its own identity by developing a group name, developing a group motto, or creating a symbol that describes the group.
- The ability to use small group methods is an important part of good teaching. But small group work, like whole class teaching, has both strengths and weaknesses; it cannot solve every educational problem! The reason for choosing to use small groups in any learning situation must be based on its appropriateness to the particular learning outcomes you want to achieve.

- **Individual accountability** is the feeling on the part of each group member that s/he is responsible for completing his/her part of the task, and cannot expect or allow other group members to do the work for him/her. Individual accountability can be established by assigning individuals at random to ensure that each student has attained the learning outcomes. Student self direction and independent learning must be valued in co-operative learning.

In addition to the above elements, two additional elements are important for successful co-operative learning. They are social and group functioning skills that have to be taught. Co-operative learning activities can be enhanced when lecturers make a concentrated effort to help students develop the social skills necessary to function effectively as group members. For the group to function properly students need to be encouraged to engage with the learning activities, strive to learn and interact with others in a way that develops positive self esteem.

IMPORTANT
Students must be taught to become skilled in co-operative learning. It does not happen automatically if you do not teach the skills involved in co-operative learning, disciplinary problems may emerge.

What co-operative learning skills do students have to be taught?

There are four sets of skills that have to be taught:

- **Forming skills**
- **Functioning skills**
- **Formulating skills**
- **Fermenting skills.**

- **Forming skills** are an initial set of management skills that help to get groups up and running smoothly and effectively. These skills include:
  o   moving into groups quietly without fuss
  o   staying with the group rather than moving around the room
  o   using quiet voices that can be heard by members of the group, but not by others
  o   encouraging all group members to participate.

- **Functioning skills** are group management skills aimed at controlling the interaction that occur among group members. These include:
  o   staying focused on the task
  o   expressing support and acceptance of others
  o   asking for help or clarification
  o   offering to help or clarify
  o   paraphrasing or summarizing what others have said.

- **Formulating skills** refer to a set of behaviours that help students to do a better job of processing material mentally. These skills include:
  o   summarising and recording key points
  o   connecting ideas to each other (mind mapping)
  o   seeking elaboration or expansion of ideas
  o   finding ways to remember information
  o   checking explanations and ideas.

- Fermenting skills are a set of skills needed to resolve cognitive conflicts that arise within the group. These skills include:
  o   critiquing ideas without criticising people
  o   synthesising diverse ideas
  o   asking for justification
  o   extending other people's ideas
  o   probing for more information

Lecturers should teach these skills to students just as they teach learning content. Therefore, when lecturers plan a co-operative learning activity, they not only plan the teaching and learning outcomes, they also plan for the learning of social and group functioning skills.

Before starting a co-operative learning activity, the lecturer should explain some of the skills, so that students will be able to recognise a skill when it is expressed in behaviour. Once the lecturer is convinced that the students understand and can recognise the skills, students practise them during the co-operative learning activity. While the students are practising a particular skill, the lecturer should move from group to group monitoring the use of the skills. When the activity has been completed, the lecturer engages each group in reflecting on how successfully the skills were used and setting goals for improving their use in future.

Although teaching skills in addition to learning content takes time, it is very important for two main reasons. Firstly, many of these skills are exactly the kinds of skills students will need to help them succeed in the workplace and in other aspects of adult life. Secondly, when students are skilled at interacting with each other in positive ways, group norms develop in the classroom that encourage and support learning.

Different approaches to Co-operative Learning

Although the basic principles of co-operative learning do not change, there are several variations. The following are three different approaches.

> ### NOTE FOR YOUR INFORMATION
> You will have to work out what suits your situation best. You may even create your own individual approach to co-operative learning

Student Teams Achievements Divisions (STAD)

This approach was developed by Robert Slavin and his colleague and is perhaps the simplest and most straightforward of the co-operative learning approaches. Lecturers who use this approach present new content to students each week. Students within the class are divided into mixed ability teams of boys and girls from different cultural groups. Team members use various study devices to master the content and then help each other to learn the content through tutoring, quizzing one another, or carrying on team discussions. These quizzes are assessed and each individual is given an "improvement mark". This improvement mark is based not on a student's absolute mark, but rather on the degree to which the mark exceeds a student's past averages. Student progress is therefore encouraged.

Jigsaw

Jigsaw was developed and tested by Elliot Aronson and his colleagues. In the Jigsaw approach students are assigned to heterogeneous study teams of five or six members. Learning content is presented to students in text form, and each student has the responsibility to learn a portion of the material.

FOR EXAMPLE

For example, if the textual material was on co-operative learning, one student on the team would be responsible for STAD, another for Jigsaw, another for Group Investigation, and perhaps the a fourth would become an expert on the characteristics of co-operative learning.

Members from different teams with the same topic (sometimes called the "expert group") meet to study and help each other learn their topic. Then students return to their home team and teach other members what they have learned. Following home team meetings and discussions, students take quizzes individually over the content.

> **Why is the co-operative learning approach explained above called the "Jigsaw" approach?**

Group Investigation (GI)

Many of the key features of group investigation (GI) were originally designed by Herbert Thelen. More recently, this approach has been extended and refined by Shlomo Sharan and his colleagues.

Group investigation is perhaps the most complex of the co-operative learning approaches and the most difficult to implement. In contrast to STAD and Jigsaw, students are involved in planning both the topics for study and the ways to proceed with their investigations. This requires more sophisticated classroom norms and structures than those approaches that are more teacher-centred. It also requires that students have already been taught communication and group process skills. This approach can be whole class.

Sharan, et al. have described the following six steps of the GI approach:

• **Topic selection** – Students are first exposed to a general field of enquiry. They can choose specific sub-topic within a general problem area, usually indicated by the lecturer. Thereafter students organise themselves into heterogeneous groups.

• **Co-operative planning** – Students and the lecturers plan specific learning procedures, tasks and objectives consistent with their sub-topics.

• **Implementation** – Students carry out the plan described above. Learning should involve a wide variety of sources, skills and activities of different kinds both inside and outside the school. The lecturer closely follows the progress of each group and offers assistance when needed.
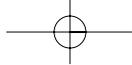
- **Analysis and synthesis** – Students analyse and evaluate information obtained during the previous step and plan how to summarise and present this in an interesting way

- **Presentation of final product** – Some or all of the groups in the class give a presentation, in different form on the topics studied. Group presentations are co-ordinated by the lecturer.

- **Assessment** – In cases where groups pursued different aspects of the same topic, students and lecturer assess each group's contribution to the work of the class as a whole. Assessment can include either individual or group assessment.
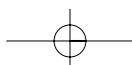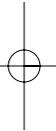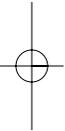
TRAINER'S NOTES

GENERAL PREPARATION

- In preparation for each of the eight sessions make sure that you read through the specific session to be presented. Carefully familiarize yourself with the purpose, outcomes, content and activities that make up the session. Prepare your own notes for facilitating the session.

- Ensure that you have prepared all the resources required for the various activities to be undertaken as part of the session.

- Give careful thought to the duration of each session and how you will manage the time allocated. You might find that things take longer than anticipated – plan how to deal with this. Allocate enough time for activities and feedback.

- Decide how best to structure the delivery of these workshops to meet the specific needs of your group - you might want to do one workshop a week over eight weeks, or one a month or have a three/four day block session.

- See to it that the participants keep a file or notebook in which they write their own notes and do all the activities, keeping a record of the whole workshop process for reference purposes.

- Agree on "house keeping rules" at the outset of Session One and apply them consistently throughout the whole workshop process.

INTRODUCTION TO THE TRAINING WORKSHOPS

- This first session is a really important one. It sets the tone for future interaction with the group, so you need to make sure that their first impressions are favourable!

- Start by introducing yourself and get the group to introduce themselves.

- Find out what the participant's expectation are in a plenary session – write these up on a flip chart. Also take any general questions on OBE that might arise at this point. "Park" the questions on a "Questions" sheet. All questions should be dealt with as the training sessions progress.

- Do a reality check – if some of the expectations or issues raised are way out of the scope and purpose of this training – raise this point and explain why this issue may not be dealt with during these sessions.

- Briefly state what the purpose of the training is - refer to the content in the introduction of the guide.

- Briefly introduce the *approach* to learning used in this guide. Draw the participant's attention to the fact that each training session is structured in the following way:
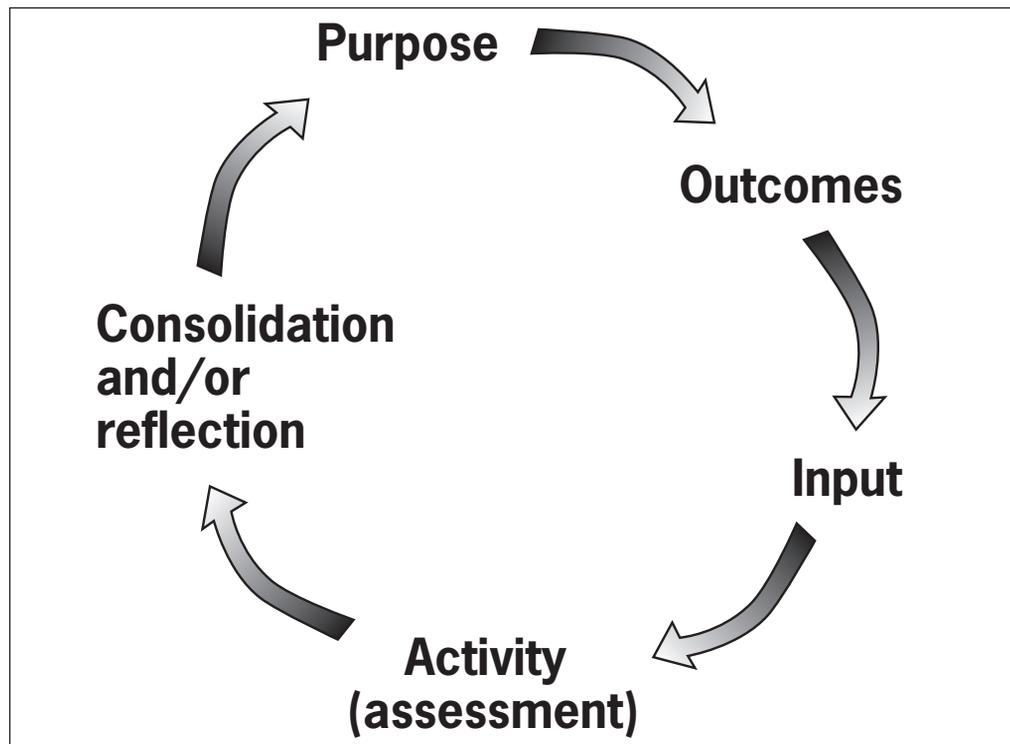
- Highlight that this approach models an outcomes-based and an activity-based approach to teaching and learning that lecturers need to shift to in their *own* classroom practice. Although the lecturers will not be formally assessed, the activities are intended to serve both as a means to consolidating new information as well as, providing *evidence* of understanding of the new concepts learnt. In other words put they serve as assessment tasks.

- Explain the diagram of the process. In OBE one starts off asking what the *purpose* of the course or session is. Once the purpose has been established one needs to identify what *outcomes* would enable the student to achieve this purpose. Once the relevant outcomes have been identified the next step is to ask what type of *learning activities* would enable the student to achieve the required learning outcomes. This also entails deciding on what evidence would be needed to confirm that the outcomes have been achieved i.e. what type of assessment activity would produce this evidence.

- Stress the importance of participation as part of the active learning approach and the need to systematically work through all the activities in the guide to build the knowledge and skills required to implement OBE.

- Wrapping up each session: You may want to devise a system whereby one or two people are designated at the beginning of each session to do the consolidation at the end – thereby increasing participation even more. You may also want the participants to prepare some reading or whatever for the following session, use the opportunity to alert them to this at the end of a session.

SESSION 1: CHANGING CONTEXTS OF EDUCATION

Introduction
• Draw the participants' attention to the outcomes for *this* first session and briefly provide an overview of what you plan to do.

Session process
• **Discuss the changing socio-political and economic context in South Africa** (focus especially on the need for educational transformation after 1994). Highlight the rapid changes that are occurring globally and the impact of globalization (SA as part of the world). Highlight what these changes mean for education and the **implications** of these educational changes for the l**ecturer's practice**.

• Provide an opportunity for the lecturers to work though all the activities as set out in the session. Ensure that the appropriate resources are provided, see to the required organization of groups etc. and monitor the time spent on each activity. Take feed back after each activity as suggested in the activity. Consolidate findings.

Wrap up
Wrap up the session with some kind of consolidation/reflection on the whole session.

SESSION 2: NEW EDUCATOR ROLES

Introduction

• Recap on what was learnt in Session 1 (What we have learnt?)

• Go through the outcomes for Session 2 and provide a brief overview of what will be learnt in this session (What will we learn?)

Session process

• Remind participants that one of the key roles of the lecturer is that of mediator. It is therefore very important that lecturers understand what this entails.

• Let participants work through Activities 2.1 and 2.2

• **Lecturer as mediator: A key OBE concept:** This represents a shift from lecturer as responsible for transmission of knowledge, to *mediator* of learning. It is also important to debunk a common misunderstanding about OBE, namely that "*the students do all the work (by taking responsibility for their own learning) and that as a consequence the lecturer's role is greatly reduced*" This misperception by educators often leads to a feeling of disempowerment and apathy towards their work. It is most important that this misperception is not allowed to take root and that lecturer's are clear about their role and responsibility in planning, and delivering education.

• **Acknowledging the difficulties and uncertainty that accompanies any process of change.** It is important to acknowledge people's anxieties about change (sometimes their fears may be disguised by anger or denial). Try and create a "safe" space for people to air their views about what they might be feeling. Try and reassure them that it is normal to be apprehensive of new requirements. However, with time, as they begin to understand the new requirements and as these begin to make sense to them, they will see the purpose of the proposed changes and how they work and it will become easier to embrace the changes.

- Take the participants through the process of thinking about how they became lecturers and why we teach the way we do by working through Activity 2.3. The activity is intended to provide an opportunity for each one to reflect on how and why they are where they are to day. Some discussion in small groups is planned so that individuals can see that others may have had similar experiences. In the general discussion which follows this activity it is important to stress that we are not judging anyone, but that it is important to recognize where we are, how we got here and how we operate currently in order to see what it is that needs changing.

- **Becoming a reflective practitioner: Making the paradigm shift.** Reflective practice, not just acting, but *understanding* and being able to *explain* why a particular method was chosen and *adjusting practice* in the light of reflection are some of the important skills required of a lecturer in an outcomes-based education system. As the trainer, helps the participants to see that it is this type of practice that will help them to make the shift from a lecture-centred, transmission approach to teaching, to a more student-centred approach which focuses on the student's contexts and needs.

Wrap up
Use the key points to consolidate learning in this session.

SESSION 3: PRINCIPLES OF GOOD PLANNING

Introduction

• Recap on what was learnt in Session 2 (What we have learnt?)

• Go through the outcomes for Session 3 and provide a brief overview of what will be learnt in this session (What will we learn?)

Session process

• **Good planning with explicit outcomes and assessment criteria spelt out so that students know what is expected of them: A key OBE principle.**

• **Activity 3.2: Planning cyclically - what does it require?** The kind of information that the lecturers are expected to fill in under each of the seven headings is as follows:
  o **What do I want to achieve?** *The purpose and outcomes*
  o **What will I have to do in order to achieve this purpose?**
    – *What will be taught?(What knowledge?)*
    – *Who will do what to whom?*
    – *What kinds of learning and teaching activities will I use?*
    – *Will they be led by the lecturer or by the student?(or someone from outside?)*
    – *What kind of assessment will I use?*
    – *When? And in what order?*
    – *Allocate time appropriately to different activities and sequence correctly.*
  o **What resources will I use to achieve my outcomes?** *How can I use the students' interests and background knowledge, textbooks, vides, other lecturers' expertise, and so on to implement the plan?*
  o **How will I manage possible constraints?** *These may be caused by poor student preparation, or lack of resources, lack of time etc.*
  o **Why is what I have chosen to teach important?** *How will I convince students that they should learn this? How will I link it to other work, the world of work, their lives?*
  o **How will I know that I have achieved my purpose?** *Spell this out as detailed criteria which you can use to judge whether the plan has succeeded.*
  o **What does this mean for my next lesson?**

• Work through the activities 3.1 – 3.3 to consolidate an understanding of the purpose and importance of proper planning in OBE. **Key OBE principle: Proper planning prevents poor performance**

• Introduce the notion of Critical Outcomes to the participants and discuss their role in framing teaching and learning.

Wrap up

Use the key points to consolidate learning in this session.

SESSION 4: OUTCOMES BASED PLANNING

Introduction

• Recap on what was learnt in Session 3 (What we have learnt?)

• Go through the outcomes for Session 4 and provide a brief overview of this session (What will we learn?)

Session process

• Discuss the role of the Critical Outcomes in stetting the national purpose and framing all teaching and learning.

• Note that in South Africa outcomes operate at two levels, the national and the classroom levels.

• **Discuss the design down, deliver up principle of OBE. Key OBE principle**.

Wrap up

Use the key points to consolidate learning in this session.

SESSION 5: LESSON PLANNING

Introduction

- Recap on what was learnt in Session 4 (What we have learnt?)

- Go through the outcomes for Session 5 and provide a brief overview of this session (What will we learn?)

Session process

- This whole session is dedicated to detailed lesson planning using an outcomes-based approach.

- Two lesson planning templates are provided. While they vary in format, the same key elements of planning are used in both, it is only the format that varies. Both *formats* are intended only as guidelines and should be adapted by lecturers as necessary.

- In this session stress the importance of achieving congruence between the stated outcome/s, the activities that are designed to enable the students to work towards achieving the outcomes and the assessment tasks, criteria and evidence required to demonstrate that the outcome/s are achieved. **These three components of outcomes-based lesson planning have to work together.** This is a key OBE principle. If the activities do not enable students to achieve the outcomes or the assessment evidence does not demonstrate achievement of the outcome, then a serious disjuncture in the planning has occurred.

- Draw the participants' attention to the importance of *detailed* planning. What the lecturer is expected to do in the lesson must be clear. Equally what the students have to do and what they are expected to demonstrate in the assessment activities (and against which criteria) must also be explicitly stated.

- Use the peer review process built into the lesson planning activity to reflect the strengths and weaknesses of the lesson plans. Lessons should be assessed against the following criteria: Ask the peer group that is doing the review whether they would be able to teach the lesson based on the plan in hand? It is likely that the review will demonstrate a number of assumptions that are not made explicit in the written plan (stuff that is *in* the lecturer's head). This will show up the importance of detailed planning. In principle, any lecturer should be able to pick up the lesson and know what to teach, what methods to use and how to structure the assessment.

Wrap up

Use the key points to consolidate learning in this session.

SESSIONS 6: ASSESSMENT

Introduction

• Recap on what was learnt – looking back not just at the previous Session, but at Sessions 3, 4 and 5 as well. In these last three sessions the importance of thinking about teaching and learning holistically (and cyclically) has been emphasized. This forms the basis for the new approach to assessment that we will be exploring in this and the next session.

• Go through the outcomes for Session 6 and provide a brief overview of this session (What will we learn?)

• While the amount of work to be covered has required us to divide the session on assessment into two (Session 6 and 7) it is important that the trainers and lecturers view these two sessions as an integrated whole.

Session process

• This session is all about the nature of assessment and assessing in an OBE context. It deals with what assessment is and why we assess. This input is consolidated in Activities 6.1 and 6.2.

• In this session we then go on to examine the paradigm shift that has occurred in how assessment is used in the OBE context. The limitations of summative assessment – something you do at the end of a unit of learning - are explored.

• We then focus on understanding assessment holistically, as an essential part of the cycle of planning (as seen already in Session 5).

• **Key OBE principles of assessment covered in this session include:**
   o **Assessment should not be punitive**
   o **It is a *tool* for lecturers to monitor teaching and learning - it enables lecturers to make changes to their teaching as they go along**
   o **Its purpose is positive and proactive**
   o **In the OBE system, the selected approach to assessment is formative (diagnostic and developmental) and needs to be implemented on a continuous basis.**

Wrap up

Use the key points to consolidate learning in this session.

SESSIONS 7: ASSESSMENT (Continued)

Introduction

• Recap on what was learnt in Session 6 – including the key principles of OBE assessment distilled from the previous Session (What we have learnt?)

• Go through the outcomes for Session 7 and provide a brief overview of this session as a continuation of Session 6 (What will we learn?)

Session process

• Start by examining the important paradigm shift that is required in the new assessment system adopted - from Norm Referenced Assessment to Criterion Referenced Assessment. Examine the characteristics of Criterion Referenced Assessment.

• Discuss the different modes of assessment and get participants to do Activity 7.2, creating an opportunity for them to think about applying some of these modes in their work context.

• Spend some time going through the Limpopo Department of Education Assessment Matrix which offers an extensive range of methods and associated types of evidence. These provide a rich opportunity for lecturers to expand their assessment practice creatively.

• Discuss Observation, Self and Peer Assessment. Work through the purpose and use of check lists and rating scales which have been provided as tools for this kind of assessment practice. Rigorous application of criteria and record keeping are the key to successful implementation of these forms of assessment.

• Work though the Activity 7.3 and discuss the purpose of portfolios.

• In bringing this Session to closure, paint the "big picture" by contextualizing the shifts and new assessment practices in terms of the integrated assessment approach which is essentially an holistic, systems view of assessment.

• This leads into a short discussion on the importance of developing an assessment year plan.

• **Key OBE principles of assessment covered in this session include:**
  o **Criterion Referenced assessment uses criteria against which the student's achievements are assessed.**
  o **The approach to assessment adopted needs to be understood holistically and integrated systemically – policy and criteria set by the ETQA informs institutional policy and programme outcomes and filters down into the planning of individual lessons**

Wrap up

Use the key points to consolidate learning in this session.

SESSION 8: SOME TEACHING STRATEGIES

Introduction

• Recap on what was learnt in Session 7 (What we have learnt?)

• Go through the outcomes for Session 8 and provide a brief overview of this session (What will we learn?)

Session process

• *Different ways of learning demand different ways of teaching.* Ask the group to give examples of what is meant by this. Use this as a way of "kick starting" this Session.

• While there are many more teaching strategies than the ones discussed in this Session, typical whole class strategies like explanation and demonstration were specially chosen as they are amongst the most commonly used and indeed, remain the backbone of teaching practice. What is of importance is for lecturers to understand that these "traditional" methods can be used in new ways. Use this session to discuss how *explanation, demonstration* and *questioning* can be turned into interactive and learner-centred teaching strategies.

• One of the myths surrounding OBE is that, *Group work is OBE*! Given the information about OBE that we have worked through in these eight sessions, ask the lecturers to briefly discuss why this statement is false.

• Like whole class teaching, group work can also be practiced in ways that are not necessarily progressive. The fact that students happen to sit and work in groups does also not necessarily mean that the learning and teaching that is happening is either learner-centred, activity based or in any way interactive or collaborative. In fact quite the converse is often true. Students are put in groups while lecturers continue to engage in transmission style teaching and rote learning continues. Worse still are situations in which students, through lack of proper guidance and structure from their lecturers, are effectively left sitting in groups chatting aimlessly with little or no directed learning taking place. It is therefore important that lecturers come to understand how to structure and facilitate group work in such as way that it promotes quality learning and teaching. Use this rest of this session to discuss the conditions for appropriate use of group work and how best to structure it.

• Where possible try and link the discussion on group work to the reading on *Co-operative Learning* as this will provide greater depth of understanding and help lecturers in the implementation of group work in their classes.

Wrap up

• Use the key points to consolidate learning in this session.

• Finally and most importantly – "the proof of the pudding is in the eating there of!" In other words, the lecturers need to be encouraged to implement the teaching strategies – it is only with time and practice that the necessary skill and confidence will be evidenced.

Conclusion

A lot of new information has been packed into to these eight sessions. It is unlikely that lecturers will be able to implement all the new approaches to teaching, learning, lesson planning and assessment at once. It is however hoped that incrementally as the lecturers' confidence grows and these new approaches become more familiar and the understandings of new concepts are internalized, that the shifts in practice that are necessary to implement OBE, will be realized.

As part of this process, it is also hoped that this Guide will provide ongoing support as a reference that lecturers can come back to time and time again and which will help them to refine their understanding and practice of OBE.

Good luck!