



Module 1 Guide

Cambridge International Certificate in Teaching and Learning 6208

This guide is for centres using digital portfolios for collation of evidence and submission of portfolios.



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Cambridge International Certificate in Teaching and Learning

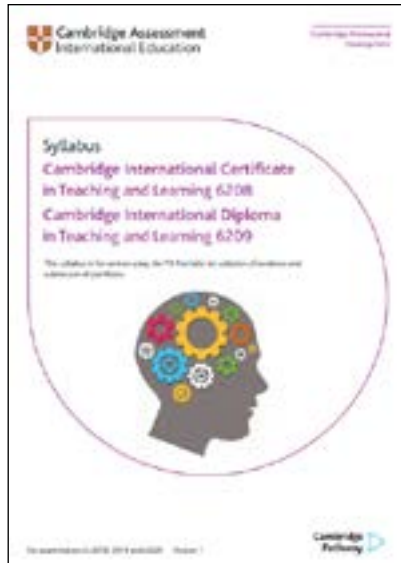
Module 1 Guide

The main aim of this guide is to exemplify standards for the Cambridge International Certificate in Teaching and Learning (6208)

This document contains guidance on:

- each learning outcome and related key questions
- summative assessment requirements
- how the assessment criteria are used by an examiner to grade a candidate's portfolio of evidence.

This guide must be read in conjunction with the syllabus.



Learning outcomes

For ease of reference the format below has been used for each learning outcome.

- Key words: These key words will help you identify the focus of the learning outcome.
- Principal Examiner comments: Here you will find clarification as to what candidates are expected to know and/or do to meet this learning outcome.
- Key questions: Provide the indicative knowledge and skills content for each learning outcome.
- Guidance for summative assessment: Brief guidance is provided on what candidates must submit for their evidence of practice, learning or reflection.
- Recommended resources: Recommended text and web-based resources are listed.

Assessment criteria

For each assessment criterion the following format has been used.

- Key skills: This will help you understand the key skills required for each assessment criterion.
- Principal Examiner comments: Here you will find clarification as to how candidates will be assessed and what examiners are looking for.

This guide is interactive

You can navigate through this document using the contents bar on each page. To return to this page, just click on 'Introduction'.



Learning outcomes – Unit 1

Understanding principles of teaching and learning

Learning outcome A: Explain their understanding of learning and how people learn.

Key words: learning • models of learning • active learning • constructivism • metacognition

There is an assumption that all teachers have a clear understanding of the concept of learning and how people learn. By finding out the candidates' existing understanding it should quickly become apparent that this is not correct and that we all have their own 'unique' understandings. These initial understandings should be used as the basis to review what are regarded as the established major theories of learning i.e. behaviourism, cognitivism, constructivism and humanism, which candidates can then relate to different aspects of their classroom practice.

To extend understanding candidates should then analyse the acquisition and participation models of learning. Particular focus should be placed on the 'participation model' of learning, which is based on Kolb's (1984) learning cycle of do/review/learn/apply, and how it relates to the concept of 'active learning'.

Active learning is often associated with 'learning by doing', but simply repeatedly doing something doesn't mean much learning will happen. Candidates must understand that to convert the 'doing' into active learning requires students being given time and opportunities to review or reflect on their experiences i.e. to think hard. When this happens neural connections are made in the brain, and in doing so each student 'constructs' their own unique personal meanings or understandings of their experiences. This process describes the relationship between active

learning and the concept of constructivism.

To conclude, candidates should be introduced to the concept of metacognition. If teachers want students to actively participate in learning then they need to make them think not just about the subject content being taught, but also about how they think (reflect) and learn. The process of 'thinking about thinking' or 'learning to learn' is known as metacognition (Flavell, 1976), and requires students to reflect on what helps them to learn and use the identified strategies to develop further learning. To make this happen teachers need to switch the emphasis away from just thinking about their own teaching performance and focus on the students and how they learn.

Guidance for summative assessment

Evidence of learning

1 Describe your personal understanding of the concept of learning and how people learn.

Candidates must briefly describe what their personal understanding of learning and how people learn was prior to starting the Certificate programme. Reference should be made to an acquisition or participation model of learning where applicable. They must then describe their understanding as a result of engaging with some established learning theories, and in particular the concept of active learning, which is closely associated with the theory of constructivism..

Recommended resources

Burkill, B. and Eaton, R. (2011). *Developing Teaching and Learning*. Cambridge University Press

Web-based resources

Cambridge Assessment International Education (2017). *Getting started with Metacognition*

<https://cambridge-community.org.uk/professional-development/gswmeta/index.html>

Cambridge Assessment International Education (2017). *Education Brief: Active learning*

<http://www.cambridgeinternational.org/images/271174-active-learning.pdf>

Cambridge Assessment International Education (2017). *Getting started with Active Learning*

<http://www.cambridgeinternational.org/images/271179-assessment-for-learning.pdf>

Cambridge Assessment International Education (2017). *Education Brief: Metacognition*

<http://www.cambridgeinternational.org/images/272307-metacognition.pdf>

Petty, G. (2011). *Constructivism*.

<http://www.teachertoolbox.co.uk/constructivism.html>

Watkins, C. (2008). *Active learning is better learning. Managing Schools Today*.

<http://www.chriswatkins.net/wp-content/uploads/2015/07/Watkins-09-2-active-SLT.pdf>

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Learning outcomes – Unit 1

Understanding principles of teaching and learning

Learning outcome A: Key questions

KQ1 What is your personal understanding of the term 'learning' and how people learn?

In sharing their understanding it is anticipated that, despite any similarities expressed, each candidate will have their own 'unique' understanding of the concept, which should be noted. For example, they might think learning is:

- an increase in knowledge and skills
- being able to memorise and recall facts and information
- seeing something in a different way
- making sense or abstracting meaning
- having to think hard

KQ2 What is your understanding of the major theories of learning: behaviourism, cognitivism, constructivism and humanism?

The candidates' current understanding of learning should be connected or linked to their existing knowledge of the four major theories of learning i.e. behaviourism, cognitivism, constructivism and humanism. Any misunderstandings candidates have should be corrected, preferably by their peers. Candidates should then reflect on their recent teaching experiences and make 'connections' with each of the four major learning theories. In doing so they should confirm that all four theories, to some extent, underpin different aspects of their classroom practice.

It should be noted that at this stage of the programme only a brief overview of each theory and the main associated theorists is required.

KQ3 How does an understanding of the acquisition and participation models of learning help you to teach and your students to learn?

'Modelling' is a technique used to simplify complex processes and this approach can be used to help candidates consider the concept of learning in more detail. The two 'models' commonly used to explain how people learn are known as the 'acquisition' and 'participation' models of learning. To extend the candidates' understanding they should analyse both models in detail, for example:

- acquisition model of learning:
 - learning is seen as an increase in knowledge and skills as a direct result of teaching
 - learning is mainly teacher-led where the teaching is very didactic and the students are mostly passive
 - has dominated many teachers' classroom practice over the years
- participation model of learning:
 - learning is seen as creating personal meaning by reflecting on shared experiences and then applying it in different situations
 - learning is seen as more of an 'active' rather than a passive process where the teacher acts as a

facilitator as well as a transmitter of knowledge and skills

- now at the forefront of many teachers' classroom practice

Candidates should then consider why the participation model of learning, which is based on Kolb's (1984) learning cycle of do/review/learn/apply, is associated with the concept of active learning. Each part of the learning cycle should be analysed to highlight features associated with the concept, for example:

- do** students participate in activities or tasks; there is active engagement with materials, resources, ideas, other people, etc.
- review** students are given time and opportunities to reflect and think hard about their experiences, mostly with their peers but also as individuals
- learn** students start to make 'connections or links' with existing knowledge and understanding, they begin to 'make sense' of the experience in their own unique way
- apply** students are provided with opportunities to apply their new learning, including using it in different contexts

Candidates should note that all learning is 'active' in some sense if it really is learning, but some kinds are more active than others. Tasks such as reading a book and summarising the main points, discussing different

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Learning outcomes – Unit 1

Understanding principles of teaching and learning

strategies to solve a maths problem, observing a science experiment and noting the physical changes taking place, etc., are all examples of active learning because students are engaged in activities that require them to make sense of what is being studied. What active learning is not is students simply being 'physically' active, for example by running around a classroom, playing in a sandpit, etc., it must involve an element of active sense-making to be considered as active learning.

KQ4 What is the relationship between 'active learning' and the theory of constructivism?

Candidates now understand that active learning requires students to participate in activities and then think hard about their experiences, the do and review (reflect) stages of Kolb's learning cycle. It is at the next stage of the cycle where, as a result of their reflective thinking, students begin to 'construct' their own unique meanings of their experiences and the relationship between active learning and the theory of constructivism can be clearly established. This is because when students encounter any 'new' learning they try to make sense of it by linking it to their existing learning. This means that as 'active' creators of their own learning students must be involved in activities that require them to do, experiment, ask questions, reflect, practice, etc., so that eventually

they can apply their new learning in different contexts.

KQ5 Why do teachers need an understanding of the concept of metacognition?

To extend their understanding of learning and how people learn candidates should now consider the concept of metacognition, which is often referred to as 'thinking about thinking' or 'learning to learn'. The reason for this is that research shows that learning is not one single entity or skill but a range of learning practices or competencies that enhance the students' capacity to learn. These competencies suggest that learning is not something that can simply be done to students by teachers, but requires students to actively participate in their learning. To do this they need to think about 'how they think' in order to learn more effectively.

The process of metacognition requires students to reflect on how they learn and then intentionally apply the results of reflection to further learning. The process involves the teacher helping the students to:

- understand the demands that a learning task makes
- know about individual intellectual processes and how they work
- generate and consider strategies to cope with the task

- get better at choosing the strategies that are the most appropriate for the task

To make this happen requires teachers to not only think about how to teach subject content but to also have an understanding of learning and how students learn.

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Learning outcomes – Unit 1

Understanding the principles of teaching and learning

Learning outcome B: Review teaching methods and learning activities that engage and motivate learners to learn.

Key words: motivation • extrinsic motivation • intrinsic motivation • collaborative learning

Candidates should begin by explaining their existing understanding of the term 'motivation' and why the concept is considered to play an important part in the learning process. Candidates may refer to Maslow's (1987) hierarchy of needs to support their understanding, but in doing so should clarify how the concept can actually help a teacher motivate students to learn. Asking candidates to describe the difference between intrinsic and extrinsic motivation, and providing examples from their practice, can further help develop the concept and the important part it plays in the learning process.

Having clarified their understanding of motivation, candidates should now reflect on their practice as a teacher and identify teaching methods and learning activities they think engage and motivate their students to learn. They should then reflect on their experiences as a learner and identify teaching methods and learning activities they know engaged and motivated them to learn. Teacher and learner experiences can then be compared to reach collective agreement on what teaching methods and learning activities candidates think engage and motivate students to learn and discuss the reasons why.

Guidance for summative assessment

Evidence of learning

- 2 Identify the teaching methods and learning activities you use in your current practice that engage and motivate your students to learn.

Candidates should identify at least two, but no more than four, teaching methods or learning activities they use in their current classroom practice that they think engage and motivate their students to learn.

3. Briefly explain why you chose these teaching methods and learning activities.

For each teaching method or learning activity identified candidates must explain why they think it engages and motivates students to learn. They must support their explanation with relevant theory where applicable.

Recommended resources

Burkill, B. and Eaton, R. (2011). *Developing Teaching and Learning*. Cambridge University Press.

Petty, G. (2004). *Teaching Today: A Practical Guide*. 3rd Ed. Nelson Thornes Ltd.

Web-based resources

Petty, G. (2011). *Maslow's hierarchy of needs*. Available from: <http://www.teacherstoolbox.co.uk/constructivism.html>

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Learning outcomes – Unit 1

Understanding the principles of teaching and learning

Learning outcome B: Key questions

KQ1 What is your personal understanding of the term 'motivation'?

Candidates should share their personal understanding of motivation, which often focuses on how they want their students to behave. Typical responses might include:

- a student's desire to participate in a learning process
- how enthusiastically a student does or does not engage in learning activities
- a state of mind that energises, directs and sustains a student's behaviour
- the driving influences from internal or external forces that enable a student to learn effectively.

KQ2 Why is motivation considered to be an important part of the learning process?

Motivation is seen by most teachers to be an important part of the learning process because if students are not motivated, then little or no learning is likely to take place. Biehler and Snowman (2000) emphasise that a major role of the teacher is to create the circumstances that help motivate students to do what they want them to do as a prerequisite for effective learning. Petty (2004: 43) reinforces this point when he says:

"...the greatest challenge that many teachers face is to make their students want to learn. If students do not want to learn, their learning efficiency will be so low that they may learn virtually nothing. If you know how to motivate students, you can hugely increase their learning rate."

Many teachers have a number of misconceptions about learning and motivation that prevents them from using the concept with maximum effectiveness. For example, some teachers think many learners are simply unmotivated to learn. This is not an accurate statement. What teachers actually mean is that learners are not motivated to behave in the way they want them to behave. Most students are motivated to learn if they think the learning is meaningful and is going to be useful to them.

KQ3 What is the difference between intrinsic and extrinsic motivation?

Candidates should provide examples from their classroom practice where one or more of their students have not been motivated to learn. They should then explain how they attempted to motivate these students, either successfully or unsuccessfully, and in doing so establish the difference between the concepts of intrinsic and extrinsic motivation, for example:

- intrinsic motivation - refers to an inherent interest in learning a topic or 'learning for learning's sake', intrinsically motivated students find studying a subject enjoyable and they want to learn mastery of it
- extrinsic motivation - refers to a desire to pursue a subject for reasons outside of the individual, extrinsically motivated students study in order to receive rewards, good grades, teacher or parental approval, etc.

Ideally teachers would like all their students to be intrinsically motivated. However, in practice they often have to use extrinsic motivation strategies to initially engage some students in the learning process. The intention then is to use teaching methods and learning activities that will eventually intrinsically motivate all students to learn.

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Learning outcomes – Unit 1

Understanding principles of teaching and learning

KQ4 What teaching methods and learning activities in your current classroom practice do you think engage and motivate your students to learn?

Candidates should reflect on their classroom experiences as a teacher to identify the teaching methods and learning activities they think engage and motivate their students to learn. Commonalties should then be identified, for example:

- using tasks based on active learning approaches
- using collaborative pair and/or group work
- making sure all students experience learning success early in a lesson
- providing students with constructive feedback to guide future learning
- encouraging students to assess their own learning
- using questioning techniques that develop students' higher order thinking skills
- involving students in the assessment process

KQ5 What teaching methods and learning activities in your experiences as a learner engaged and motivated you to learn?

Candidates should reflect on their experiences as a learner, when at school and beyond, to identify the teaching methods and learning activities that have engaged and motivated them to learn. Commonalties can again be identified and compared with those derived from their experiences as a teacher.

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Learning outcomes – Unit 1

Understanding principles of teaching and learning

Learning outcome C: Explain their understanding of the purposes of assessment.

Key words: assessment • formative assessment • summative assessment

Candidates should begin by explaining their understanding of the term 'assessment' and share their experiences of assessment as a learner to gain an insight into how students often feel about the process.

Although some teachers still regard assessment as something separate from learning and only happens after teaching has taken place, most now regard it as an integral part of the learning process. To explain their understanding of the purposes of assessment candidates should initially make a clear distinction between two types of assessment, formative and summative, and then explain the purposes of each type. Some candidates may refer to formative assessment as 'Assessment for Learning' and summative assessment as 'Assessment of Learning'. This is commendable but what's important at this stage of the programme is that they clearly understand the difference between formative and summative assessment and have a sound understanding of their purposes. Candidates could conclude by identifying the formative and summative (where applicable) assessment methods they mostly use in their classroom practice and discuss what they use them for.

Guidance for summative assessment

Evidence of learning

4 Explain the differences between formative and summative assessment and their main purposes.

Candidates must explain the differences between formative and summative assessment and how they are used for different purposes. They should support their explanation with relevant examples from their existing teaching practice and their experiences as a learner.

Recommended resources

Burkill, B. and Eaton, R. (2011). *Developing Teaching and Learning*. Cambridge University Press.

Kyriacou, C. (2007). *Essential Teaching Skills*, 3rd Edition. Nelson Thornes.

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Learning outcomes – Unit 1

Understanding principles of teaching and learning

Learning outcome C: Key questions

KQ1 What is your understanding of the term 'assessment'?

Assessment is a term that covers any activity in which evidence of learning is collected in a planned and systematic way and then used to make a judgement about what students know, understand and are able to do.

Assessment plays an important and integral part in the teaching and learning process, it is not just concerned with examinations and grades. Like learning, assessment is a complex process and teachers need a good understanding of the principles which underpin it to help develop and improve their practice.

All assessments have some common characteristics as they all involve:

- making observations – of learner activity, products, tests, tasks, etc. which then need to be interpreted to work out what the evidence means
- interpreting the evidence – made with reference to different kinds of knowledge, attitudes and specific skills being assessed, often referred to as criteria and relate to the learning aims and objectives
- making judgements – that can be used for decisions about actions based on the interpretation of the evidence.

KQ2 What is your experience of assessment as a learner?

Candidates should reflect and share their experiences of assessment as a learner so they can gain more of an insight into why students often think of it as:

- something to fear
- only carried out by a teacher
- a test of memory
- something that only happens at the end of a course or learning programme
- more important than their classroom learning
- something separate from learning

The outcomes from these shared experiences should reflect some of the thoughts and attitudes many students have towards assessment, which candidates may not have previously thought about but should be aware of and sensitive to.

KQ3 Why is it important to know the differences between formative and summative assessment and to know their purposes?

Most teachers now regard assessment as an integral part of the learning process by making a clear distinction between two types of assessment and their purposes:

- formative assessment – used to:
 - provide feedback to teachers and students on the learning taking place
 - monitor and review students' learning to take

appropriate corrective action

- diagnose students' learning needs
 - support learning
 - reinforce learning
 - motivate students to learn
- summative assessment – used to:
 - recognise achievement and/or attainment
 - certificate 'competent or safe practice'
 - select students for progression
 - predict future performance
 - maintain standards
 - provide quality assurance data

In identifying the main purposes for each type of assessment, candidates should confirm that formative assessment is an integral part of the learning process whilst summative assessment is used to evaluate student learning, academic achievement or attainment at the end of a learning sequence.

KQ4 What formative assessment and summative assessment methods do teachers mostly use in their classroom practice?

Candidates should reflect on their experiences as a teacher and as a learner to identify the formative and summative (where applicable) assessment methods teachers mostly use in classroom practice. They should then discuss when they are used and why.

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Learning outcomes – Unit 1

Understanding principles of teaching and learning

Learning outcome D: Identify and explain key features of what they think makes an effective lesson, and evaluate the impact any new learning will have on their future practice.

Key words: evaluation • reflection

Before identifying and explaining the key features of what they think makes an effective lesson, candidates should begin by explaining their understanding of the difference between assessment and evaluation, because the two terms are often confused. Having clarified any misunderstandings they should then consider why it is important for teachers to be continually reflecting on their classroom practice, both as a learner as well as a teacher.

By accepting that reflection is a key part of effective learning, then as learners themselves, candidates should be continually reflecting on their existing practice to learn and improve future practice. But what is reflection and how can a teacher's reflective practice skills be developed? A very simplistic view of reflection is that it just involves 'thinking about things' and most people do, at some time each day, think about what they did or said. But that's usually as far as it goes and seldom does any real learning take place as a result of their 'thinking'. This scenario very much applies to teachers, who are very busy people and tend to be thinking about the next lesson rather than the one they have just taught.

This means that to learn from reflection any initial thinking needs to be taken further, which means participating in a process that is:

- deliberate

- purposeful
- structured
- about linking theory to practice
- to do with learning
- about development and change

Even so, critical self-reflection of classroom practice is difficult. To make the process easier and more effective teachers should utilise the support of a mentor, who can provide appropriate advice, support and guidance to help them develop their learning and classroom practice. Another important part of the reflective process is for teachers to keep and maintain a Reflective Journal, which can be used to record experiences from what Schön (1983) considers to be two perspectives:

Reflection-in-action

Reflecting during the experience, which can be thought of as 'thinking on our feet and making changes as the situation demands.'

Reflection-on-action

Reflecting after the experience, which can be thought of as 'making changes as a result of retrospective thinking.'

Having reviewed the concepts of evaluation and reflective practice candidates should now apply their

'new learning' by reflecting on their recent classroom experiences, and on the learning session taught by an experienced teacher they recently observed with their mentor, to identify the key features of what they think makes an effective lesson. The key features identified should focus on learning as well as teaching and be accompanied with a brief explanation of why the candidates think it was effective. Candidates should be encouraged to support their explanations with references to relevant principles and concepts of teaching and learning.

Finally, candidates must evaluate the impact they think their new learning and experiences from Unit 1 will have on their future practice as they prepare for Unit 2. This means they must clearly identify what new learning has been developed and then explain how they intend to use it in their future practice, for example:

- use more active learning approaches to make lessons more student-centred
- provide students with opportunities to reflect and think hard
- use a greater variety of formative assessment methods to support as well as check the students' learning
- reflect on classroom practice in a more systematic manner

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Learning outcomes – Unit 1

Understanding principles of teaching and learning

Candidates may also include some of the key features they observed with their mentor in the lesson taught by an experienced teacher that clearly made it an effective lesson, for example: use of directed questioning; using collaborative group work where students support each other; relating subject matter to students' interests; encouraging students to contribute to the lesson using their existing learning and experiences, etc.

Guidance for summative assessment

Evidence of practice

- A completed **Module 1: Unit 1 Observation Visit Form**.

In the first part of the form candidates must identify the teaching and learning approaches used by the experienced teacher that they think engaged and motivated the students to learn, it is their personal reflections.

In the second part of the form, as a result of a professional discussion with their mentor, candidates must identify the key features of an effective lesson, so the context is wider in its scope. It is recommended that at least four but no more than six key features are identified, and each should be accompanied with a very brief explanation of why it was effective.

Evidence of reflection

- 1 Analyse the key features that you think make a lesson effective.

Using the outcomes from the observation of the experienced teacher's lesson and their experiences as a teacher, candidates must now analyse the key

features of what they think make an effective lesson. Because this is an analysis, views and opinions expressed must be supported with relevant theory, concepts or principles. It is recommended that at least three but no more than five key features are identified and analysed.

- 2 Evaluate the impact your new learning and experiences from Unit 1 have had on your practice and how this will help you to prepare for Unit 2.

After reflecting on their new learning and experiences from Unit 1 candidates must identify what they regard as the significant new learning recently developed. In doing so they must explain the impact their new learning has had on their classroom practice as they prepare for Unit 2. It is expected that the concept of active learning will strongly feature as part of the evaluation.

Recommended resources

Burkill, B. and Eaton, R. (2011). *Developing Teaching and Learning*. Cambridge University Press.

Pollard, A. (2008). *Readings for Reflective Teaching*. London: Continuum.

Web-based resources

Cambridge Assessment International Education (2017). *Getting started with Mentoring*

Available from: <https://www.cambridge-community.org.uk/professional-development/gswment/index.html>

Cambridge Assessment International Education (2017). *Getting started with Reflective Practice*.

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Learning outcomes – Unit 1

Understanding principles of teaching and learning

Learning outcome D: Key questions

KQ1 What is the difference between assessment and evaluation?

Candidates should begin by initially explaining their understanding of the difference between assessment and evaluation. Any misunderstandings should then be clarified by reviewing current understanding of assessment and then comparing it with the concept of evaluation, which involves making judgements about the effectiveness of:

- students' learning – using outcomes from formative and summative assessment
- classroom practice – using feedback from observation of classroom practice and personal reflections
- individual lessons and/or learning sequences – in terms of structure, balance, content, learning outcomes, learning materials and resources, facilities and equipment, assessment methods, management of learning, etc.

KQ2 Why is it important for a teacher to reflect on their classroom experiences both as a learner as well as a teacher?

Candidates should be asked to think and explain why, throughout this Unit, they have repeatedly been asked to reflect on their classroom experiences both as learner and as a teacher. In doing so reference should be made to Kolb's (1984) learning cycle and how reflection plays an important part of the learning process. It should be emphasised that if teachers use predominantly active learning approaches in their

practice, then as 'active learners' themselves, they must reflect on their classroom practice in order to learn effectively. However, it needs to be acknowledged that most teachers find critical self-reflection of their classroom practice both challenging and threatening. This is because it forces teachers to be honest with themselves and recognise not only what they do well but acknowledge what aspects of their classroom practice they need to improve.

Candidates should also note that in many professions there is a requirement for practitioners to keep up-to-date with recent developments in their field of expertise if they wish to maintain their 'license to practice'. If it is accepted that this is something teachers should do, then reflective practice will play an important part in helping them to continually up-date and improve their professional practice. By reflecting on classroom practice teachers can also gain a greater understanding of their learners' needs and how they learn. Brookfield (1995) says: "getting inside learners' heads is one of the most difficult tasks teachers face".

KQ3 Why does a teacher need the support of a mentor to reflect and learn from experiences?

Because critical self-reflection is difficult teachers increasingly call on the support of a mentor to help them learn from their experiences. The concept of mentoring has been in existence at least since Ancient Greek times and is a process where one individual (the

mentor) shares her/his knowledge, skills and experience to help develop the personal and professional growth of another individual (the mentee). The process is usually quite informal and meetings take place as and when the mentee needs some specific advice, guidance or support, which requires the mentor to:

- be supportive, empathetic, encouraging and approachable at all times
- act as a sounding board rather than a judge
- encourage the mentee to talk through problems rather than trying to solve them for her/him
- offer positive feedback on what the mentee is doing well
- provide supportive feedback that helps the mentee to identify the next steps required to develop their knowledge, skills, attitudes, etc.
- help the mentee to set their own realistic targets for professional and personal development
- regularly review with the mentee the progress they have made in meeting the agreed targets
- share some of the challenges they have faced from their own experiences when relevant

Candidates must understand the vital role mentors play in the development of their professional practice.

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Learning outcomes – Unit 1

Understanding principles of teaching and learning

KQ4 How does keeping and maintaining a Reflective Journal help a teacher to become a more effective reflective practitioner?

An important part of the reflective practice process is for teachers to keep and maintain a Reflective Journal. The journal itself can take many forms, electronic or hand-written, and consists of records of experiences, feelings, emotions, etc., together with any relevant diagrams, drawings or photographs that will help the teacher to recall critical incidents they want to reflect on. The journal is also a place where they can relate theory to practice. The journal is personal, it is not an academic document, and its main use is as a reminder of what happened during an experience so it can be used as the basis for discussion when meeting with a mentor or collaborating with a colleague.

KQ5 What do you consider to be the key features of an effective lesson?

Candidates should reflect on their recent classroom experiences, and on the learning session taught by an experienced teacher they observed with their mentor, to identify the key features of what they think makes an effective lesson. Each key feature identified should be supported with a brief explanation of why it was effective. Candidates should also be encouraged to support their explanations with references to relevant theories or concepts of teaching and learning.

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Learning outcomes – Unit 2

Teaching an effective lesson

Learning outcome E: Plan a lesson that has clear aims and objectives and a coherent structure.

Key words: lesson plan • learning aim • learning objectives • learning outcomes

Candidates should begin by sharing their existing experiences as a teacher to determine why lesson planning is an important part of a teacher's role. They should then clarify the difference between an aim and an objective. After correcting any misunderstandings they should determine why a lesson plan should have clear aims and objectives and a coherent structure, which consists of a clear beginning, a middle section and a clear conclusion. It needs to be emphasised that effective lesson planning is the basis of effective teaching, but a lesson plan is designed to support the teaching and the learning, not drive it.

Finally, candidates should review their existing knowledge and understanding of metacognition from Unit 1, and explain how having clear objectives that are shared with students helps them to develop their metacognitive skills.

Guidance for summative assessment

Evidence of practice

- A completed *Module 1: Unit 2 Lesson Plan*.

The lesson plan must have clear aims and objectives that make the purpose of the lesson apparent. It must also have a coherent structure with a clear beginning, middle section and conclusion. The beginning of the

lesson should provide some evidence of how links are made with existing learning to develop new learning. The lesson plan should also evidence how the topic being taught is logically sequenced using a variety of teaching methods, student learning activities and formative assessment methods. The learning materials and resources used to support teaching and learning must also be evidenced. Immediately after the lesson has finished candidates should make brief comments, in the box provided within the plan, on what they thought went well in the lesson and what aspects require further improvement. All sections of the lesson plan must be completed.

Evidence of learning

- 1 Explain why a lesson plan must have clear aims and objectives and a coherent structure.

Candidates should begin by explaining why a lesson plan must have clear aims and objectives. They should then explain how they structured the lesson to ensure it was coherent e.g. at the start of the lesson the new learning was introduced by making links with students' existing learning; in the middle section new learning was developed and opportunities provided for it to be applied; in the conclusion the students' learning was reviewed, important learning points reinforced and checks made to make sure all the

learning aims and objectives have been achieved. Wherever appropriate the explanation should be supported with relevant theory.

Recommended resources

Burkill, B. and Eaton, R. (2011). *Developing Teaching and Learning*. Cambridge University Press.

Kyriacou, C. (2104). *Essential Teaching Skills*. Stanley Thornes

Petty, G. (2004). *Teaching Today: A Practical Guide*, 3rd Edition. Nelson Thornes Ltd.

Web-based resources

Cambridge Assessment International Education (2017). *Getting started with Metacognition*

<https://cambridge-community.org.uk/professional-development/gswmeta/index.html>

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Learning outcomes – Unit 2

Teaching an effective lesson

Learning outcome E: Key questions

KQ1 Why is lesson planning an important part of a teacher's role?

Candidates should discuss why lesson planning is an important part of a teacher's role, for example, lesson plans:

- enable a teacher to think about the type of learning they wish to occur in a lesson
- encourage a teacher to think about the structure, content and timing of the lesson
- make sure all required resources are prepared and available
- enable a teacher to reflect on what went well in the lesson, what did not, and the reasons why
- provide a record of the teaching and learning strategies that students responded to positively and whether any are being over or under used
- enable a teacher to check whether assessment strategies have been incorporated to monitor the achievement of each planned objective or outcome

The list is not exhaustive but indicates some of the outcomes that may result from the discussion.

KQ2 What is the difference between an aim and an objective?

To plan coherent lessons candidates must understand the difference between an aim and an objective, for example:

- **aim** - broad statement of intent indicating what the teacher must teach and the students must learn, expressed in vague terms and open to interpretation, for example: know, understand, develop, etc.
- **objective** - describes more precisely what the students are able to do, know or understand as a result of their learning, interpreted by a teacher to plan learning activities or experiences that provide students with opportunities to achieve the learning objectives, for example: list, explain, prepare, select, plan, build, etc.

It should be noted that learning outcomes are often used instead of learning objectives to describe what the students will be able to do, and be assessed on, as a result of their learning. More often than not the learning objectives and learning outcomes are the same. However, there are instances where, in a course of study or a lesson, the teacher wants to develop aspects of student learning that will not be (summatively) assessed. For example, working collaboratively in groups, respecting other people's opinion, participating in a debate, etc. It may also be the case that a learning outcome can assess more than one learning objective.

KQ3 Why must a lesson plan have clear aims and objectives?

Candidates should discuss and determine why a lesson plan must have clear aims and objectives, for example:

- they make the purpose of the lesson very clear in terms of what the teacher must teach and students are able to do as a result of their learning
- helps to keep a teacher focused on what the students must know to meet syllabus requirements, what they should know to increase understanding and what the students could know to increase interest
- informs the students of what they must learn
- make sure students participate in a 'spectrum' of learning to extend and challenge their thinking
- informs what learning must be assessed

The list is not exhaustive but indicates some of the outcomes that may result from the discussion. Candidates should then review samples of their existing lesson plans to judge if they have clearly stated learning aim(s) and objectives.

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Learning outcomes – Unit 2

Teaching an effective lesson

KQ4 What is the basic structure of a coherent lesson?

Candidates must know that the basic structure of a coherent lesson consists of:

- a clear beginning – students informed of the new learning to be developed, which is introduced by making links with existing learning
- a middle section – to develop, apply and consolidate new learning
- a clear conclusion – to summarise the lesson, reinforce important learning points and check all the learning objectives have been achieved

Candidates should be encouraged to analyse each of the three distinct sections and support their analysis with relevant theory, for example:

- making links with existing learning to develop the new learning – constructivist in approach
- apply and consolidate new learning – students participating in active learning approaches with time and opportunities being provided to reflect on their new learning
- reinforce learning points - at the end of the lesson providing students with time to reflect on their experiences, part of active learning

Candidates may also make links with relevant behaviourist, cognitivist or humanist theories but the emphasis should be on promoting active learning strategies.

KQ5 How does having clear aims and objectives, and sharing them with students, help to develop their metacognitive skills?

Candidates should review their existing knowledge and understanding of metacognition from Unit 1 and then consider how having clear objectives, and sharing them with students, helps to develop their metacognitive skills. Candidates should understand that clear learning goals are necessary for students to effectively apply their metacognitive strategies and then monitor their progress towards achieving those goals.

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Learning outcomes – Unit 2

Teaching an effective lesson

Learning outcome F: Teach a lesson using active learning approaches to engage and motivate students to learn.

Key words: advance organisers • active learning • motivation

Candidates should begin by reviewing why teachers build new learning on the students' existing learning and understand how it is constructivist in approach. Their learning can then be extended by introducing the concept of advance organisers, which are strategies based on active learning approaches that are used by teachers to help students 'connect' the required new learning to what they already know. Because students recognise that the topic they are beginning to learn is not totally new, and can be related to something they are already know, then this helps to engage and motivate them to learn.

Candidates should then reflect on their learning and experiences from Unit 1, and in particular their experience of observing an experienced teacher, to confirm reasons why using active learning approaches helps to engage and motivate students to learn. They must also understand how the selection, design and use of learning resources can have an impact on how effectively students are engaged and motivated to learn. This is particularly relevant with the increasing use of digital technology based resources. However, teachers need to be aware of how such resources can be used effectively and what are the benefits, barriers and challenges to using it.

Finally, candidates should extend their knowledge and understanding of the concept of metacognition and

how to apply it in practice to help engage and motivate students to learn. If students understand not just what they learn but also how they learn, then when learning becomes difficult the use of their metacognitive skills will help to keep them engaged and motivated to learn.

Guidance for summative assessment

Evidence of practice

- A completed *Module 1: Unit 2 Observation Feedback Form*

Pre-observation discussion

The first section must evidence what the candidate wants to develop in their teaching practice as a result of teaching this lesson. The candidate and mentor should agree a minimum of three and a maximum of five intended outcomes, which should include something 'new' the candidate wants to try out in their practice. The intended outcomes should not be too ambitious at this stage of the programme but must focus on the students' learning as well as the candidate's teaching. It's also important to stress that these are the candidate's personal learning outcomes and not the students, which are evidenced in the lesson plan.

The second section identifies the agreed focus for the observation, which must be based on the syllabus

learning outcomes E, F and G. This means the feedback will make reference to:

- lesson planning – did the plan have clear aims and objectives and a coherent structure
- teaching and learning – were active learning approaches used and did they engage and motivate the students to learn
- assessment – was the students' learning regularly checked at different stages of the lesson using appropriate formative assessment methods

Observation record

Mentors must provide feedback that focuses on the agreed intended learning outcomes and in particular on the teaching method or learning activity that is 'new' to the candidate's practice. The feedback must be analytical and not simply describe what the teacher and the students did in the lesson, which is evidenced in the lesson plan. A most important part of the feedback will be to establish if all of the students met the intended learning objectives or outcomes. The feedback on the key strengths and areas for development must also focus on those aspects that were agreed in the pre-observation discussion.

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Learning outcomes – Unit 2

Teaching an effective lesson

Post-observation discussion

The candidate and mentor should preferably meet a short time after the lesson observation so they have both had time to reflect on the lesson. Their discussion should be based on what was agreed in the pre-observation meeting but the context can be widened if thought necessary. The discussion should conclude with agreement on what the candidate should be looking to develop and improve in the next observed lesson.

Evidence of learning

2 Explain why new learning should be built on students' existing learning.

The explanation must evidence knowledge and understanding of why new learning should be built on the students' existing learning, and must be supported with reference to appropriate theories, concepts or principles of learning and teaching. Where possible the evidence should also stem from the candidates' practice, and in particular from the lesson observed by their mentor.

Web-based resources

Cambridge Assessment International Education (2017). *Getting started with Active Learning*

<https://www.cambridge-community.org.uk/professional-development/gswal/index.html>

Cambridge Assessment International Education (2017). *Getting started with Metacognition*

<https://cambridge-community.org.uk/professional-development/gswmeta/index.html>

Petty, G. (2017). *Active Learning*.

<http://geoffpetty.com/for-teachers/active-learning/>

Watkins, C. (2008). *Active learning is better learning. Managing Schools Today*.

<http://www.chriswatkins.net/wp-content/uploads/2015/07/Watkins-09-2-active-SLT.pdf>

Recommended resources

Burkill, B. and Eaton, R. (2011). *Developing Teaching and Learning*. Cambridge University Press.

Petty, G. (2004). *Teaching Today: A Practical Guide*. 3rd Ed. Nelson Thornes Ltd.

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Learning outcomes – Unit 2

Teaching an effective lesson

Learning outcome F: Key questions

KQ1 Why should new learning be built upon students' existing learning?

Learning anything new is difficult so teachers should link it to what the students already know, which is constructivist in approach and based on active learning principles. Ausubel's (1968) concept of advance organisers is based on this principle and is an approach adopted by many teachers in their classroom practice to introduce new learning.

An advance organiser is not a summary or review of a previous lesson and doesn't provide a structure for the current lesson. What it does is provide a structure for student thinking so they can link the required new learning to their existing learning, it acts as a 'conceptual bridge'. The students' existing knowledge about a concept is the most important factor in whether new material will be meaningful and how well it can be learned and retained. Analogies and metaphors are frequently used as advance organisers because they help students recognise that the topic they are beginning to learn is not totally new and can be related to something they are already know and are comfortable with. This not only helps the students better understand the new concept but also helps to engage and motivate them to learn.

KQ2 Why do active learning approaches to teaching and learning help to engage and motivate students to learn?

Education research indicates that when students participate in active learning, rather than being passive spectators, their learning is much more effective because they engage and are motivated to learn. Chickering and Gameson (1997) emphasise:

"Learning is not a spectator sport. Students do not learn much just sitting in classes listening to teachers, memorising pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write reflectively about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves."

Another key factor in creating a climate for active learning is the use of pair or group work, which also provides students with opportunities to talk about what they are learning. Chickering and Gameson (1997) maintain that:

'Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's ideas and responding to others improves thinking and deepens understanding.'

Candidates should reflect on their learning and experiences from Unit 1, and in particular their

observation of an experienced teacher, to confirm reasons why active learning approaches help to engage and motivate students to learn. For example:

- the students were encouraged to 'think hard' rather than passively receive information from the teacher
- the students were involved in activities that promote deep rather than surface learning
- the students were learning through social interaction i.e. pair and group work
- the students' learning was connected to the real world, it was meaningful

KQ3 How does the selection, design and use of resources enhance learning, and engage and motivate students to learn?

The function of resources is to enhance learning so their selection, design and use can have a significant impact on the students' learning and achievement. Candidates should review the range of resources they use in their classroom practice and then consider how they are used to:

- arouse student interest and motivate them to learn
- promote student knowledge and understanding
- develop cognitive, psychomotor and attitudinal skills
- reinforce learning
- support diverse student needs
- enliven the learning experience

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Learning outcomes – Unit 2

Teaching an effective lesson

The use of Digital Technologies (DT) is also becoming increasingly important to support learning. Teachers need to be aware of how DT can be used effectively and what are the benefits, barriers and challenges when using it.

KQ4 What questions can students ask of themselves at the beginning, during and at the end of a given task or activity?

This key question is associated with the concept of metacognition and the processes involved when learners plan, monitor, evaluate and make changes to their own learning behaviours. At the beginning of an activity it is helpful if students ask themselves:

'What am I being asked to do?'

'Which strategies will I use?'

'Are there any strategies that I have used before that might be useful?'

During the activity it will help if students ask themselves:

'Is the strategy that I am using working?'

'Do I need to try something different?'

At the end of the activity the students should then ask themselves:

'How well did I do?'

'What didn't go well?'

'What could I do differently next time?'

'What went well?'

'What other types of problem can I use this strategy for?'

By getting students from primary level upwards to think about how they think and reflect not just on what they learned but how they learned, will help them to become more independent learners and raise both achievement and attainment levels.



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Learning outcomes – Unit 2

Teaching an effective lesson

Learning outcome G: Teach a lesson in which students' learning is regularly checked at suitable stages using appropriate formative assessment methods.

Key words: formative assessment methods • effective questioning

Effective teachers know that a typical lesson never goes exactly as planned but are skilled at checking the current status of student understanding to make sure they are making the required progress in their learning. They do this by using different formative assessments methods, both planned and unplanned, throughout a lesson to enable students to show their thinking and progress in learning.

Candidates should review the formative assessment methods commonly used by teachers in their classroom practice to check the students' learning, identifying the advantages and limitations of using each method. Because questioning is used in most if not every lesson, candidates should identify strategies that can be used to make the use of student questioning more effective.

Guidance for summative assessment

Evidence of practice

- A completed **Module 1: Unit 1 Observer Feedback Form**.

The mentor must provide feedback on how successfully the candidate regularly checked the students' learning at different stages of the lesson using appropriate formative assessment methods.

Evidence of learning

- 3 Identify the assessment methods used during the lesson and explain why they were used.

The assessment methods identified must be those used in the observed lesson and correspond to those evidenced in the lesson plan. The explanation for why they were used should be supported with reference to relevant theory where applicable. If any unplanned assessments were used the candidate must explain their thinking behind why they were used.

Recommended resources

Burkill, B. and Eaton, R. (2011). *Developing Teaching and Learning*. Cambridge University Press.

Petty, G. (2004). *Teaching Today: A Practical Guide*. 3rd Ed. Nelson Thornes Ltd.

Wiliam, D. (2011). *Embedded Formative Assessment*. Solution Tree Press.

Web-based resources

Wiliam, D. (2012). *Embedded Formative Assessment*
<https://www.youtube.com/watch?v=B3HRvFsZHoo>

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Learning outcomes – Unit 2

Teaching an effective lesson

Learning outcome G: Key questions

KQ1 What are the advantages and limitations of commonly used formative assessment methods used by teachers in their classroom practice?

Candidates should refer to the commonly used formative assessment methods they identified in Unit 1. Each method should be analysed to identify its advantages and limitations when used in classroom practice, both from a teacher's and a student's perspective. It is anticipated the methods analysed would include teacher questioning, direct observation, written short answer questions, written multiple choice questions, matching flash cards, matching block questions, practical skills test, group presentations, etc.

KQ2 Why is it important to check the students' learning at different stages in a lesson?

Candidates must understand why it is important to formatively assess the students' learning at different stages in the lesson, for example:

- at the beginning of the lesson – to check students' understanding of previous learning so relevant links can be made to develop the required new learning
- in the main part of the lesson – to support and monitor the students' new learning as it is being developed, applied and consolidated
- at the end of the lesson – to check if all the learning objectives have been achieved and if there are still any 'gaps' in the students' learning.

KQ3 What strategies do teachers use to make classroom questioning effective?

Questioning is the most commonly used formative assessment method used by teachers in their classroom practice. Research has shown they can ask up to 400 questions in a day. However, teachers do not always use questioning effectively, so candidates should discuss what strategies could be used to make it more effective, for example:

- use more open than closed questions to develop higher order thinking skills
- only ask one question at a time
- use a 'no hands' approach so particular students do not dominate answering
- show respect for all student answers, whether right or wrong, so they feel safe and secure
- ask probing follow up questions
- provide sufficient 'wait time' between asking a question and a student answering
- encourage students to collaborate before answering a question
- encourage students to ask their own questions.

The list is not exhaustive but reflects some of the strategies candidates might discuss.

KQ4 Why must students be provided with opportunities to show their thinking and progress in learning?

It can be argued that anything students do can be used for formative assessment purposes, so there is no shortage of opportunities for them to show their thinking and progress in learning. However, many teachers fail to use such opportunities, which often leads to some students getting 'lost' in their learning and dis-engaging from the learning process. At each stage of a lesson teachers should be using formative assessment methods to find out what the students know and what they don't understand. In doing so they can make decisions on whether further teaching is required or they can move the lesson forward. Even though a lesson has been meticulously planned there is no point in thoughtlessly following it if some of the students at some stages of the lesson have not understood the required learning.

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Learning outcomes – Unit 2

Teaching an effective lesson

Learning outcome H: Evaluate a lesson, using feedback from an observer and their own reflections to develop future practice.

Key words: observer feedback • reflective thinking

To evaluate a lesson relying only on self-reflection is very challenging, no matter how experienced the teacher. The classroom is a very dynamic environment and it is easy for a teacher to miss important aspects of the lesson that are evident to an outside observer. That's why feedback from an experienced observer makes the evaluation process more rigorous in identifying lesson strengths and areas that require further development.

Candidates will find it helpful to review the key features of what makes an effective lesson that were identified in Unit 1 and then, as a result of studying this unit, clarify their up-to-date thinking. It is important to focus only on key features, and in doing so establish that the primary feature or 'measure' is to decide if all the students achieved all the intended learning objectives.

Guidance for summative assessment

Evidence of practice

- A completed **Module 1: Unit 2 Observation Feedback Form**

The outcomes evidenced in the post-observation discussion will result from observer feedback and the candidate's own reflections. They must be based on

what was agreed in the pre-observation meeting, highlighting both strengths and areas or development in future practice.

Evidence of reflection

- 1 Evaluate the effectiveness of the lesson, highlighting what aspects helped to engage and motivate the students to learn.

Candidates must use the lesson observation feedback from their mentor, and their own reflections, to evaluate the effectiveness of the lesson so it is drawn from valid and sound evidence. At least two but no more than four aspects of the lesson that helped to engage and motivate the students to learn should be highlighted. The evidence must be supported with relevant theory or information sources.

- 2 Evaluate the impact your new learning and experiences from Unit 2 have had on your practice and how this will help you to prepare for Unit 3.

Candidates should evidence at least two but no more than four aspects of their learning and experiences from Unit 2 that have had an impact on their classroom practice. One of the aspects evaluated should be the teaching method or learning activity they wanted to develop in the lesson that was 'new'

to their practice. Candidates must focus on evaluating the impact this teaching method or learning activity had on the students and their learning.

Recommended resources

Burkill, B. and Eaton, R. (2011). *Developing Teaching and Learning*. Cambridge University Press

Pollard, A. (2008). *Readings for Reflective Teaching*. London: Continuum.

Wallace, S. (2007) *Teaching, Tutoring and Training in the Lifelong Learning Sector*, 3rd Edition. Learning Matters

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Learning outcomes – Unit 2

Teaching an effective lesson

Learning outcome H: Key questions

KQ1 What are the features of an effective lesson?

Because so many features are associated with an effective lesson candidates should, at this stage of the programme, identify them in broad rather than specific terms. Using their learning from Unit 1 and this unit, candidates should be advocating that an effective lesson:

- has clear aims and objectives/outcomes that are shared with students so they know what they must learn
- engages and motivates students to learn by: building new learning on their existing learning; using active learning approaches; providing opportunities for students to work in pairs and groups; etc.
- provides students with time and opportunities to reflect and apply their learning
- uses resources effectively to support the students learning
- makes regular checks on the students' learning using appropriate formative assessment methods
- provides sufficient time for a conclusion to check that all the required learning objectives or outcomes have been achieved and to identify any 'gaps' in the students' learning that must be addressed in the next lesson

This list is indicative of anticipated candidate responses but it is expected they will add to the list and in doing so demonstrate how their knowledge and understanding of what makes an effective lesson is now broader and deeper.

KQ2 Why is it important to determine if all the students achieved all the intended learning objectives or outcomes in a lesson?

For a lesson to be considered successful a teacher must be certain, as far as reasonably possible, that all the students have achieved all the intended learning objectives or outcomes. Whilst the students' progress in their learning should be continually monitored throughout a lesson using appropriate formative assessment methods, all the intended learning objectives or outcomes must be checked during the conclusion of the lesson. However, this is often the least effective part of many teachers' lessons because they leave too little time to review and check the required student learning.

Candidates have already established that teachers should not move forward in a lesson until the students' progress in their learning has been checked and they all understand the required learning. This principle must also be applied in sequences of lessons. If at the end of a lesson a teacher establishes there are still 'gaps' in the students' learning, then this must be the starting point for the next lesson, despite what the lesson planning sequence indicates.

KQ3 Why does observation feedback provided by a mentor help to evaluate a lesson more rigorously than relying only on self-reflection?

Relying only on self-reflection to critically evaluate a lesson is very difficult. That's why observation of a lesson by an experienced mentor, and then using their feedback to evaluate the lesson, makes the process more rigorous.

To help candidates critically evaluate the effectiveness of a lesson the feedback from a mentor must:

- be analytical and not simply describe what the teacher and the students did in the lesson
- focus on the agreed intended learning outcomes and in particular on the teaching method or learning activity that is 'new' to the candidate's practice
- indicate how effectively the learning associated with learning outcomes E, F and G were evidenced in the lesson
- confirm, as far as possible, that all of the students achieved all of the intended learning objectives or outcomes
- highlight key strengths and areas for development related to the agreed intended learning outcomes

Both candidates and mentors must be aware that lesson observation is a supportive process. Much of its value will be in the follow up professional discussion, where the feedback is used to critically evaluate what aspects of the lesson went well and what requires further development.

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Learning outcomes – Unit 2

Teaching an effective lesson

KQ4 What new learning and understanding have you recently acquired from reading, research and discussion during individual study, and from applying new ideas and approaches in your workbased practice?

Candidates should be provided with opportunities to share their new learning and understanding recently acquired from reading, research and discussion during individual study, and from applying new ideas and approaches in their work-based practice. Some recently acquired new learning could focus on topics studied in Unit 2 such as:

- active learning – teachers in the highest achieving school systems of the world use active learning approaches (Hattie, 2009)
- motivation – mindset for learning (Dweck, 2006)
- social learning - use of pair and group work (Vygotsky, 1978)
- questioning – using Bloom's (1965) taxonomy to develop higher order thinking skills
- metacognition – strategies for implementation (Perkins, 1992)

Candidates must be continually reminded that a great deal of their learning will stem from the individual study and collaborative learning, and the work-based learning elements of the course.

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

Learning outcome I: Plan a sequence of lessons that are coherent and have well-defined links to previous learning and the learning objectives.

Key words: lesson transitions • active learning • constructivism • inclusive learning •

Candidates should build on their learning and experiences from Unit 2 to further develop their skills in planning individual lessons that are part of a sequence of lessons or 'blocks of learning'. The design of their lesson plans must not only be coherent but also evidence well-defined links to the candidates' previous learning. This is because in different stages of the lesson, but particularly at the start of a lesson, the introduction of any new learning should be linked to the students' existing learning; it is constructivist in approach.

The planned teaching methods, learner activities, formative assessments and resources that are included in the content of the plan must have well-defined links to the learning objectives so that the students have opportunities to progress their learning and achieve.

Guidance for summative assessment

Evidence of practice

- a completed **Module 1: Unit 3 Lesson Plan**

The lesson plan must evidence:

- clear aims and objectives that make the purpose of the lesson apparent
- a coherent structure with a clear beginning, middle section and conclusion that have well-defined links to the students' previous learning
- the use of a variety of teaching methods and student learning activities that have well-defined links to the learning objectives
- a range of formative assessment methods that are used to support and monitor the students' learning
- a variety of learning materials and resources to support learning and teaching

Candidates must complete the section that provides information on aspects of the lesson they think makes the lesson inclusive. For example, using a variety of learning activities to meet the students' learning needs, differentiating an activity by task outcome, directed questioning using closed and open questions, etc.

Recommended resources

Kyriacou, C. (2104). *Essential Teaching Skills*. Stanley Thornes

Petty, G. (2004). *Teaching Today: A Practical Guide*, 3rd Edition. Nelson Thornes Ltd.

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

Learning outcome I: Key questions

KQ1 What are the key features of a coherent lesson plan?

Candidates should begin by reviewing the basic structure of a lesson plan that was identified in Unit 2. Their knowledge and understanding should then be reinforced and extended by identifying the key features of a coherent lesson plan that is part of a sequence of lessons, for example, the lesson plan evidences:

- clear learning aim(s) and objectives
- a clear beginning, middle section and conclusion
- an introduction that makes links with the students' existing learning from previous lesson(s) to develop new learning
- topic content that is logically sequenced
- a variety of teacher activity and teaching methods that promote active learning
- a variety of learning activities to engage and motivate students to learn
- learner activities that are predominantly based on active learning approaches
- opportunities for the students to reflect and apply their learning
- a variety of formative assessments methods used throughout the lesson to support and monitor the students' learning
- a variety of learning materials and resources that will support teaching and the students' learning

- sufficient time allocated to conclude the lesson to review the students' learning and make sure they have achieved the intended learning objectives or outcomes
- aspects of the lesson that made the learning inclusive

The list is indicative of the key features candidates might identify and then use to check their lesson plans are coherent.

KQ2 Why should teachers plan sequences of lessons?

Planning sequences of lessons is the process of designing several individual plans for lessons that will be taught consecutively. The main purpose for doing this is to create smooth transitions between lessons so that all the required learning objectives or outcomes for a unit or block of learning can be accommodated. Other benefits to be gained from planning sequences of lessons include:

- smoother transitions in learning – both in lessons and between lessons, presenting learning content in an orderly manner enables the students to be better prepared to engage with the required new learning when presented
- identifying when some students may require additional teacher support (scaffolding) – areas of potential learning difficulty can be anticipated and the teacher can plan to provide additional support

- improved organisation – learning materials and resources can be prepared in good time and be readily available if the rate of learning progression is faster than anticipated
- knowing when to differentiate the learning - to meet as far as possible the different learning needs of the students
- future planning – by predicting how long it will take to cover certain material, and then seeing how long it actually took when the lessons were delivered, enables a teacher to modify future plans based on their previous experience
- knowing when and how assessment checks must be made - optimal points for checking the students' understanding of the learning material can be identified and what assessment methods are most appropriate.

KQ3 Why should the content of lesson plans have well defined links to the students' previous learning and the learning objectives?

The content of a lesson plan that has well defined links to the students' previous learning is usually evidenced in the introduction phase of the lesson, but links may also be evidenced in other stages of the lesson when appropriate. The reason for making these links, which has already been established in Units 1 and 2, is that research by those such as Kolb (1984) and Hattie (2009) indicate that students learn more effectively

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

when ‘new’ learning is associated with their existing learning. The approach is rooted in the concept of constructivism, which has at its core the concepts of active learning and reflection.

The content of a lesson plan must also have well defined links to the learning objectives of the lesson because it has already been established that an effective lesson is one where all the students achieve all the required learning objectives. To help make this happen the planned teaching methods, learner activities, formative assessments and resources must be linked to the required learning objectives.

KQ4 Why should teachers use a variety of teaching and learning strategies when planning sequences of lessons?

If a teacher only uses a limited variety of teaching and learning strategies in their classroom practice then some students may be at a disadvantage because they may not have any opportunities to learn in the way they like to learn. It has already been established that every student constructs their own personal meanings or understanding of their experiences and learns in their own ‘unique’ way. Therefore, when planning a sequence of lessons a teacher should use a variety of teaching and learning strategies that will contribute to meeting some of the students’ learning needs and make the lessons more inclusive.

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

Learning outcome J: Teach lessons that are effectively managed using active learning strategies and where learning is often differentiated.

Key words: managing lessons • active learning strategies • differentiation

A teacher's ability to manage lessons effectively, which is both complex and demanding, has a direct impact on the effectiveness of the students' learning. This means they must be able to use a wide range of teaching and learning strategies, at very high levels of skill, in order to provide students with opportunities to achieve their full learning potential. It would be easy to assume that if a teacher establishes and maintains classroom discipline, then a lesson could be regarded as being effectively managed. But this is not correct, because if the students did not learn what was meant to be learned, or have not made the progress in their learning that was expected, then in reality the teacher has not effectively managed the lesson. Two critical factors that contribute to effectively managed lessons are the use of active learning strategies and learning that is differentiated.

In this unit candidates should identify the teaching and learning strategies they use in their classroom practice that lend themselves to active learning approaches, for example, the use of directed questioning, case studies, matching games, etc. They should also identify strategies that do not lend themselves well to active learning approaches but which teachers cannot avoid using, for example, lecture or teacher talk, skills demonstration by the teacher, students watching a video, etc. They should

then identify ways in which these strategies can be implemented in a more student participatory active learning manner.

Petty (2010) says the concept of differentiation is not new and used to be called 'mixed ability teaching'. Then it was realised that learners not only had different abilities but had differences in the ways they learn, their levels of motivation to learn, their previous learning experiences, the levels of support needed to learn, etc. As a result the term 'mixed ability' was replaced by the word 'differentiation', which according to Petty:

'... is the process by which differences between learners are accommodated so that all students in a group have the best possible chance of learning. We used to teach subjects and classes - now we teach students.'

Candidates should review the teaching and learning strategies they mostly use in their classroom practice and analyse them in terms of how well they lend themselves to being differentiated. They must appreciate that not all teaching and learning can be differentiated, but by knowing when and how to differentiate the students' learning does make lessons more inclusive and according to Hewlett et al (2008) is critical for student achievement and development.

Guidance for summative assessment

Evidence of practice

- a completed **Module 1: Unit 3 Observer Feedback Form**

Pre-observation discussion

The first section must evidence what the candidate wants to develop in their teaching practice as a result of teaching this lesson. The intended outcomes should be based on the key outcomes from the Unit 2 post-observation discussion and whatever 'new' aspect of their practice the candidate wants to develop in this lesson. It is recommended a minimum of three and a maximum of five intended outcomes are identified and the 'new' aspect is related to using an active learning approach that is differentiated. It's important to remind candidates that these are their personal learning outcomes and not the students, which are evidenced in the lesson plan.

The second section identifies the agreed focus for the observation, which must be based on the syllabus learning outcomes I, J and K. This means the feedback will make reference to:

- lesson planning – did the plan have clear aims and objectives, a coherent structure, well-defined links to previous learning and the learning objectives

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

- teaching and learning – was the lesson effectively managed using active learning strategies and was some of the learning differentiated, when and how
- assessment – did the formative assessment methods both support and monitor the students' learning

Observation record

Mentors must provide feedback that focuses on the agreed intended learning outcomes and in particular on the teaching method or learning activity that is 'new' to the candidate's practice. The feedback must be analytical and not simply describe what the teacher and the students did in the lesson, which is evidenced in the lesson plan. A most important part of the feedback will be to establish if all of the students met the intended learning objectives. The feedback on the key strengths and areas for development must also focus on those aspects that were agreed in the pre-observation discussion.

Post-observation discussion

The candidate and mentor should preferably meet a short time after the lesson observation so they have both had time to reflect on the lesson. Their discussion should be based on what was agreed in the pre-observation meeting but the context can be widened if thought necessary. The discussion should conclude with agreement on what the candidate

should be looking to develop and improve in their future practice.

Evidence of learning

1 Explain why learning activities are frequently differentiated

Candidates must evidence their knowledge and understanding of the concept by explaining why learning activities are frequently differentiated. The evidence must be supported with reference to when and how the students' learning was differentiated on at least one occasion in the observed lesson. The explanation must also be supported, where appropriate, with relevant theory.

2 Describe the strategies you use to manage lessons effectively

Candidates must describe at least two strategies used to manage the observed lesson effectively. The description must be supported, where appropriate, with relevant theory.

Recommended resources

Kyriacou, C. (2009). *Effective Teaching in Schools*. 3rd Ed. Nelson Thornes

Tomlinson, C. A. (2014). *The Differentiated Classroom: Responding to the Needs of All Learners*, 2nd Edition. Association for Supervision & Curriculum Development.

Web-based resources

Cambridge Assessment International Education (2017). *Getting started with Active Learning*

<https://www.cambridge-community.org.uk/professional-development/gswal/index.html>

Petty, G. (2017). *Differentiation*.

<http://geoffpetty.com/training-materials/differentiation/>

Petty, G. (2017). *Active Learning*.

<http://geoffpetty.com/for-teachers/active-learning/>

Watkins, C. (2008). *Active learning is better learning*. Managing Schools Today

<http://www.chriswatkins.net/wp-content/uploads/2015/07/Watkins-09-2-active-SLT.pdf>

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

Learning outcome J: Key questions

KQ1 What strategies can be used to manage lessons effectively?

To manage lessons effectively teachers must use a wide range of strategies, at very high levels of skill, which provides students with opportunities to achieve their full learning potential. To illustrate the complexity of classroom dynamics, candidates should reflect on their teaching experiences to identify strategies they use to manage their lessons effectively, for example:

- establishing positive teacher-student and student-student working relationships that are built on trust, openness, honesty, courtesy, etc.
- informing students of the purpose of activities to make the learning meaningful
- providing clear instructions on what students must do and when to do it
- signaling clear transitions within the lesson and in learning activities
- matching the pace of the lesson to the learning progress of the students
- using formative assessments and feedback to inform students of their progress in learning
- providing opportunities for students to reflect and then apply their new learning
- correcting students' misunderstanding or misconceptions before progressing learning
- scaffolding the students' learning when extra support is required

- using language appropriate to the age and attainment levels of the students
- establishing and maintaining classroom discipline
- using appropriate praise to motivate students to learn and build their esteem, confidence, etc.

The list is not exhaustive but is indicative of the wide range of strategies teachers use to manage lessons effectively.

KQ2 Why should teachers use a variety of teaching methods and learning activities that are mainly based on active learning approaches?

It has already been established that teachers should use a variety of teaching methods and learning activities in their classroom practice because it provides opportunities for students to learn in ways in which they like to learn. It was also established in Units 1 and 2 that active learning is considered to be 'better learning' (Watkins, 2008) because it promotes:

- active engagement – with activities, ideas, resources, other students, etc.
- active sense-making – standing back from the experience, reflecting to create knowledge, extracting meaning and consequences

Teachers who use a variety of teaching methods and learning activities in their classroom that are mainly based on active learning approaches encourage students to call upon their existing knowledge of what is being studied, question assumptions they may hold, and then help them to adjust their thinking to develop

new understandings. An important part of a teacher's role in facilitating active learning is to understand that individual students approach learning a topic in their own unique ways and they must work with them in adding to or reconstructing their understandings.

KQ3 How can learning be differentiated to meet the needs of students across the full range of abilities?

Differentiating the students' learning is an important feature of inclusive learning because the teacher is trying to make sure that all students learn well, despite their many differences. In their classroom practice teachers differentiate the students' learning in many different ways. For example, learning can be differentiated by:

- task design - involves setting different tasks for students of different abilities or setting tasks for all students that get progressively harder
- task outcome - all students undertake the same task but a variety of results is expected and acceptable
- questioning – using a combination of closed and open questions that challenge the students' low order and high order thinking skills
- support – students receive varying amounts of support from the teacher (teacher scaffolding of learning)
- grouping – enables students at different levels of ability to support each other's learning (peer scaffolding)

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

- pace - the available time is used flexibly in order to meet the students' needs
- dialogue – teacher facilitates problem solving by identifying which students need detailed explanations in simple language and which students can engage in dialogue at a more sophisticated level
- formative assessment – carried out on an on-going basis so that teaching can be continuously adjusted according to the students' needs
- resources – some students work with more advanced resources than others

The list is not exhaustive but indicates the range of strategies teachers use to differentiate learning.

KQ4 How can teachers develop the higher-order thinking skills of all students?

In lessons all students need to be 'challenged' and their learning extended. To do this the teaching and learning strategies employed should require them to use both their higher order and lower order thinking skills in order to promote deep rather than surface or rote learning. The strategy most commonly used by teachers in their classroom practice to develop the students' higher order thinking skills (HOTS) is questioning, and the types of questions a teacher asks should be 'open questions' as they require deeper levels of thinking. Having a good understanding of

Bloom's (1965) taxonomy can help to formulate such questions, for example:

- analysis – how would you use ...?, what would result if ...?, how would you organise ...?, etc.
- synthesis – how would you improve ...?, what would happen if ...?, how do you create?, etc.
- evaluation – what is your opinion of ...?, why did you select ...?, why was it better than ...?, etc.

Other strategies teachers can use to develop the students' higher order thinking skills include:

- connecting concepts – students connect one concept to another concept , for example, constructivism to active learning and then active learning to reflective practice
- use of graphic organisers – encourages students to connect concepts
- making inferences – students make inferences from looking at a photograph, participating in a role play activity, etc.
- using problem solving strategies – students use step-by-step and alternative methods to solve problems
- encourage creative thinking – students invent, imagine and design what they are thinking

It is useful when considering strategies to develop the students' higher order thinking skills to make connections with the concept of differentiation and how each strategy can potentially be differentiated to meet the needs of students across the ability range.

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

Learning outcome K: Teach lessons using formative assessment methods to support and monitor the students' learning.

Key words: principles of assessment • assessment for learning • formative feedback

The term 'formative assessment' often means nothing more than an assessment that is carried out frequently during a lesson to check the students' understanding of the topic being taught. When used in this context formative assessment does not support the students' learning or involve them in the assessment process. This is why the term Assessment for Learning (AfL), which has the explicit purpose of supporting as well as monitoring student learning, is now more commonly used and can be defined as:

"The process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there." (Broadfoot et al, 2002, pp.2–3).

If candidates are to use formative assessment methods effectively in their classroom practice so they support and monitor the students' learning, then a good understanding of the concept of AfL, and how it is applied in practice, is required. The concept came to prominence after the publication of a report by Black and Wiliam (1998), which provided evidence of significant gains in student learning and achievement after adopting AfL classroom practices. At its core the report identifies four key elements of classroom practice that help students to learn more effectively:

- focus on learning –clarify learning intentions and

success criteria for students to achieve the required learning

- effective questioning - importance of using effective questioning strategies to advance the students' learning
- formative feedback - effective when focused on learning intentions and success criteria, students given opportunities to talk about and reflect on their learning and how it might be improved, peer and self-assessment also contribute to formative feedback
- scaffolding reflection – helps students to develop thoughtful approaches to their learning so they know what strategies work best for them and can apply these in different contexts (metacognition)

Candidates should note that the four key elements of practice are interrelated and can be delivered through different teaching and learning approaches that have at their core the concept of constructivism, which is related to the concepts of active learning and reflection.

Finally, candidates should deepen their knowledge and understanding of why feedback is considered to be such an important part of formative assessment

practice by reviewing recent research by Hattie

(2009). He identifies feedback from formative assessments as the teaching method that has the greatest impact on student learning. The work of Marzano et al (2004) also supports the view that when formative feedback informs students on where they are in their learning, what they need to do next and how to do it, this has a significant impact on their learning, no matter what their ability or attainment level.

Guidance for summative assessment

Evidence of practice

- a completed **Module 1: Unit 3 Observer Feedback Form**

The mentor must provide feedback on how successfully the candidate used formative assessment methods to support and monitor the students' learning.

Evidence of learning

3 Explain how formative assessment and feedback supports student learning.

The explanation must evidence a candidate's knowledge and understanding of how formative assessment and feedback is used to develop students' learning using at least one example from the observed lesson. Reference should be made to the concept of

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

AfL and how formative assessment and feedback not only help students to progress their learning but also informs a the teacher of what they must do to improve their future teaching practice so all students learn and achieve.

Recommended resources

Black, P. and Wiliam, D. (1998). *Inside the black box: raising standards through classroom assessment*. King's College, London.

Reece, I. and Walker, S. (2003). *Teaching, Training and Learning: a practical guide*, 5th Edition, Business Education Publishers Ltd

Wiliam, D. (2017). *Embedded Formative Assessment: Strategies for Classroom Assessment That Drives Student Engagement and Learning*, 2nd Edition. Solution Tree Press.

Web-based resources

Assessment Reform Group (2002). *Assessment for Learning: 10 Principles*.

<https://www.aaia.org.uk/content/uploads/2010/06/Assessment-for-Learning-10-principles.pdf>

Cambridge Assessment International Education (2017). *Getting started with Assessment for Learning*

<https://cambridge-community.org.uk/professional-development/gswafl/index.html>

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

Learning outcome K: Key questions

KQ1 What is your understanding of the basic principles of assessment?

Candidates should explain their existing understanding of the following basic principles of assessment:

- validity – how well a test 'measures' the knowledge and skills it is designed to assess
- reliability – how well a test consistently measures what it is supposed to measure
- fairness - provide all students with an equal opportunity to demonstrate the extent of their learning

Any misunderstandings must be corrected before candidates review and evaluate the assessments methods they use in their classroom practice, both formative and summative, in terms of their validity, reliability and fairness.

Candidates can then extend their knowledge and understanding of the principles of assessment by reviewing the following:

- norm referencing – compares one student's performance with that of everyone else being assessed
- criterion referencing – describes what a student knows and can do without reference to the performance of others
- assessment criteria - specifies the standard required

to achieve a learning outcome

- success criteria – summarises the key steps a student needs to evidence in order to meet a learning outcome
- achievement - measures the improvement in performance of a learner over a period of time as the result of a process of learning, which is reflected in their grades
- attainment - is the level or standard reached by a learner at the end of a learning sequence or learning programme that is evidenced by test or examination results

KQ2 How do you use formative assessment in your practice to support as well as monitor your students' learning?

Candidates should identify the formative assessment methods they most commonly use in their classroom practice and analyse how effectively they support as well as monitor their students' learning in terms of:

- design – ease of design in terms of time, cost, skills required, etc.
- implementation – ease of use in practice
- support – ease of use to support individuals and groups of students
- levels – ease of assessing levels in the cognitive, psychomotor and affective domains

- differentiation – ease of differentiating the assessment method
- involvement – ease of involving students in the formative assessment process
- feedback – ease of providing feedback.

KQ3 Why does having an understanding of the concept of Assessment for Learning (AfL) help a teacher to use formative assessment methods more effectively?

The concept of Assessment for Learning (AfL) came to prominence after the publication of a report by Black and Wiliam (1998), which provided evidence of significant gains in student learning and achievement after adopting AfL classroom practices. These findings encouraged many teachers to implement AfL strategies in helping their students to become more effective learners rather than simply teaching to tests. But what is the thinking behind the concept of AfL and how does having an understanding of it help a teacher to use formative assessments more effectively in their classroom practice?

The explicit purpose of AfL is to use assessment as part of teaching and learning process to develop and support the learners' learning, so it is formative in nature. AfL focuses on where the students are in their learning and what they might do to move it forward. The Assessment Reform Group (2002) provided this definition of AfL:

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

"Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there."

An important element of the thinking behind the concept of AfL is that students need to be involved in formative assessment processes if their learning is to improve. This has major implications for classroom teaching and learning practices because improving learning through formative assessment is dependent on a number of key elements, for example:

- students focus on their learning rather than the learning activity – this requires clear learning intentions and success criteria that students understand
- teachers using effective questioning – important strategy to advance students' learning
- students assessing their own learning and the learning of their peers
- students provided with effective formative feedback – giving only marks or grades has little impact on improving learning, students require quality feedback that focuses on how they can progress their learning
- scaffolding reflection – providing opportunities for students to discuss their learning, share their understanding and seeing mistakes as learning opportunities

- adjusting future teaching and learning as a result of formative assessment outcomes

It's important to note that these elements of practice are interrelated and can be delivered through different classroom approaches.

KQ4 Why is providing formative feedback an important part of AfL practice?

Candidates should now extend their learning by examining in more detail why providing formative feedback is an important part of AfL practice. They must understand that if effective feedback is going to improve learning, then a student needs to know three things:

- where they are in their learning
- where they need to go in the next steps of their learning
- how to get there, what improvements they can make

Suggestions for improvement should enable a student know what gaps they have in their learning and what they need to do to take it forward. This means the feedback must be constructive and focus on the student's work and not the person. An AfL culture embraces the notion that everyone has areas for improvement, even the highest attaining students. With an emphasis on effort rather than ability, formative feedback helps to motivate students to

learn, builds their self-confidence and sends a clear message that everyone can improve. One of the ten AfL research-based principles to guide classroom practice identified by the Assessment Reform Group (2002) is that students should receive constructive guidance about how to improve, which means:

"Learners need information and guidance in order to plan the next steps in their learning. Teachers should pinpoint the learner's strengths and advise on how to develop them; be clear and constructive about any weaknesses and how they might be addressed; provide opportunities for learners to improve upon their work."

Candidates must also understand that the outcomes of formative assessment and feedback to students also informs teachers of what they must change or adjust in their future classroom practice so all students learn and achieve. However, formative assessment data rarely gets acted on, which results in the teaching never changing direction. That's why Wiliam (2006) says that formative assessment only becomes AfL when the evidence of student learning is actually used to adapt the teaching to meet the students' learning needs.

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

Learning outcome L: Evaluate lessons to identify strengths and areas for further development in classroom practice.

Key words: reflective practitioner • analysis

In Unit 3 candidates have planned, taught and observed a lesson from a sequence of lessons, so a more detailed analysis and subsequent evaluation is required to identify strengths and areas for further development in their classroom practice. The analysis must be based on valid and reliable evidence, which means using the observation feedback provided by the candidate's mentor, together with the candidate's own reflections from their Reflective Journal and Teaching Activity Log.

Reflection is an essential skill that all teachers should develop but the process is demanding, particularly when having to think about everything that happened in a lesson. Therefore, the evaluation of a lesson at this stage of the programme should focus on the key aspects of classroom practice that have been developed in Module 1, for example:

- planning – did the lesson plan:
 - have clear aims and objectives and a coherent structure
 - have well-defined links to previous learning and the learning objectives
- teaching – did the teacher:
 - use active learning approaches to engage and motivate the students to learn
 - effectively manage the lesson

- learning – did the students:
 - participate in activities that were sometimes differentiated to meet their learning needs
 - participate in pair and group work activities to support each other's learning
- assessment:
 - was the students' learning regularly checked at suitable stages of the lesson
 - did the teacher use a variety of formative assessment methods to support and monitor the students' learning

To keep the reflective process focussed and critically evaluative, candidates should then ask themselves the following questions:

- 1 What went well in the lesson, what aspects do I consider to be key strengths?
- 2 Why did these aspects go well and how do I know they went well?
- 3 What did not go so well in the lesson, what aspects require further development?
- 4 Why did these aspects not go so well and how do I know they didn't go so well?
- 5 What have I learned about my teaching practice and the students' learning?

Candidates can then use the outcomes from these questions to identify the key strengths and areas for further development in their classroom practice. The outcomes can also be used to make judgements on the impact their teaching has had on the students' learning.

Guidance for summative assessment

Evidence of practice

- a completed **Module 1: Unit 3 Observer Feedback Form**

The outcomes evidenced in the post-observation discussion will result from observer feedback and the candidate's own reflections. They must be based on what was agreed in the pre-observation meeting, highlighting both lesson strengths and areas for further development in classroom practice.

- a completed **Module 1: Unit 3 Teaching Activity Log**

Candidates must submit two sample entries from their Reflective Journal that evidence their thinking immediately after finishing the observed lesson. Although any aspect of the lesson can be referred to, candidates are advised to make sure one sample entry is a reflection on the teaching or learning activity they were developing that was 'new' to their practice.

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

Evidence of reflection

- 1 Analyse the range of activities used across a sequence of lessons, and judge the impact your teaching has had on your students' learning.

The analysis should identify what teaching and learning activities used across a sequence of lessons had a positive impact and accelerated the students' learning, and what activities did not. Candidates can support their analysis with mentor feedback and self-reflection from the observed lesson and from entries in their Teaching Activity Log. They are advised to identify at least two activities that had a positive impact on the students' learning and at least two that require further development. The analysis must be supported with relevant theory and information sources.

- 2 Evaluate the significant developments in your own professional practice as a result of your Certificate programme experiences, and those aspects that require further development in the future.

Finally candidates should reflect on all features of their Certificate (Module 1) learning experiences to evaluate the significant developments in their professional practice and identify those aspects that require further development. Because the focus of the evaluation is on significant developments and aspects that require further development, candidates are

advised to comment on features such as using active learning approaches, differentiating learning, using formative assessment to support and monitor student learning, developing students' metacognitive skills, etc.

Recommended resources

Pollard, A. (2008). *Readings for Reflective Teaching*. London: Continuum.

Wallace, S. (2007) *Teaching, Tutoring and Training in the Lifelong Learning*, 3rd Edition. Learning Matters

Web-based resources

Cambridge Assessment International Education(2017)
Education Brief 4: *The Cambridge learner and teacher attributes*
<http://www.cambridgeinternational.org/images/271189-the-cambridge-learner-and-teacher-attributes.pdf>

Organisation for Economic Co-operation and Development
(2005) *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*, 6th edn. Paris, OECD Publishing.
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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

Learning outcome L: Key questions

KQ1 What criteria can be used to judge the effectiveness of a lesson?

Judging the effectiveness of a lesson is never easy. To assist a teacher in what to think about when they reflect on the lesson, or what a colleague should look for when observing the lesson, criteria in the form of a rubric can be used. Candidates can create suitable criteria by basing them on the features of an effective lesson that were identified in Unit 2 and aspects of professional practice that have been developed throughout Module 1. Because numerous features will have been identified, candidates might find it beneficial to group them under different headings, for example:

Planning – did the lesson plan:

- have clearly stated aims and objectives so the purpose of the lesson was apparent
- have a coherent structure
- show well-defined links to previous learning and the learning objectives or outcomes
- show a variety of teaching and learning activities that were mainly based on active learning approaches
- show teaching and learning activities that were sometimes differentiated
- show a variety of formative assessment methods that were used to support and monitor the students' learning throughout the lesson
- show a range of resources used to support both learning and teaching

Teaching – did the teacher:

- demonstrate sound subject knowledge and enthusiasm for the topic being taught
- use mainly active learning approaches to facilitate student learning
- communicate effectively when making presentations and giving classroom instructions
- use effective questioning techniques that challenged and extended the students' learning
- provide students with opportunities to reflect, think and apply their learning
- provide support to all students to make the learning inclusive
- manage the lesson effectively so all the students were engaged and motivated to learn

Learning – did the students:

- know and understand what was expected of them in the lesson
- participate in activities that were mainly based on active learning approaches
- have time to think and opportunities to apply new learning and ideas
- participate in activities that were frequently differentiated to help meet their learning needs
- participate in a range of activities where their learning was supported, challenged and extended by the teacher and their peers
- frequently contribute to the lesson using their existing learning and experiences and have

opportunities to clarify any misunderstandings they had in their learning

- participate in pair and group work to support each other's learning

Assessment – did the students:

- know and understand the learning outcomes to be achieved
- have their existing learning checked before any new learning was developed
- have their learning supported and monitored throughout the lesson using suitable formative assessment methods
- have opportunities to assess their own and each other's learning
- receive formative assessment feedback that was clear, helpful and supportive
- know and understand how their learning was progressing and what they needed to do to improve their future learning
- have their future learning 'shaped' using the outcomes of formative assessment

Any criteria developed can then be used to critically evaluate lessons in order to identify strengths and areas for further development in classroom practice.

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Learning outcomes – Unit 3

Facilitating active learning through effective teaching and assessment

KQ2 Why is it important that observer feedback and self-reflection identifies both strengths and areas for further development in teaching and learning when evaluating lessons?

A colleague who observes a teacher's lesson is often referred to as a 'critical friend'. But this does not mean their purpose is to criticise what they observe, in fact it's quite the opposite. Observation of a teacher's classroom practice must be seen as a supportive process where strengths and areas for further development, in both learning and teaching, should be identified. All too often observer feedback and teacher self-reflection focuses on the teacher and the teaching rather than the students and their learning, mainly because it's easier and less demanding. This is where using clearly defined criteria can assist both the teacher and the observer in identifying strengths and areas for development in learning and teaching.

A common misconception when evaluating lessons is that only the areas of learning and teaching identified as requiring further development need to be improved in future practice. This is not correct. Even though an area of learning or teaching is considered a strength, it can always be improved.

Evaluating lessons within a sequence of lessons can, if carried out skillfully, more effectively support a teacher in making improvements to their future professional practice rather than evaluating disparate lessons. In effect what happens is the learning cycle of 'teach, reflect, learn and apply' becomes part of a spiral of learning, which helps to continually improve a teacher's classroom practice and make the students' learning more effective.

KQ3 How can teachers 'measure' the impact their teaching has had on the students' learning?

Many international education systems now acknowledge that improving the effectiveness of a teachers' professional practice is an essential factor in improving student achievement. This recognition has been based on a great deal of recent research that indicates teachers are the most significant resource in schools and are critical in raising education standards. For example, one of the major findings in the OECD Report 'Teachers Matter: Attracting, Developing and Retaining Effective Teachers' (2005, p2) states:

"... teacher quality" is the most single important school variable influencing student achievement".

Clearly, effective teaching has a very significant impact on student learning and achievement, but what does effective teaching look like and how can it be measured? There are a variety of methods for measuring teaching effectiveness. Some examine teachers' practices directly, whereas others focus on student outcomes. Therefore no single method provides a complete picture of a teacher's effectiveness. The following identifies the three most common ways in which teacher effectiveness is 'measured':

- results from student tests - standardised tests can provide an efficient way to measure how well students have learned basic content
- classroom observation – is the most commonly used method of 'measuring' teacher effectiveness but is very time consuming and can be very subjective unless clear criteria is used

- student surveys – provide feedback on student engagement on which to base teaching effectiveness

KQ4 How are you developing the Cambridge learner and teacher attributes in your professional practice?

Candidates should review the Cambridge (2015) learner and teacher attributes and explain how they are being developed in their professional practice. Reference should be made to each of the five attributes, namely: confident, responsible, reflective, innovative and engaged. Cambridge introduced these attributes in recognition of the fact that in order to be successful in completing Cambridge qualifications, and then in higher education and the modern world of work, students need to demonstrate these habits in learning.

The Cambridge teacher attributes reflect the fact that excellent teaching involves nurturing these habits in students as well as teaching subject knowledge and understanding. The Cambridge approach to learning and teaching is clearly rooted in constructivism, which Hattie (2009) views as a theory of knowing, not of teaching. Whilst acknowledging that it's what the student does that leads to effective learning, it's must also be recognised that it's what the teacher does to create and maintain the right conditions for learning to happen that is a vital part of the process. Over the past 20 or 30 years it has been fashionable in the educational world to focus purely on learning and 'downplay' the significance of teaching, and so by implication the role of teachers. In the Cambridge approach, teaching and learning are not seen as two distinct activities but are intertwined elements of a single reciprocal process.

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Assessment criteria – Introduction



Assessment criteria are used to enable candidates to know what they need to do to achieve the learning outcomes. They are an indication of achievement at a certain level. They are evaluative and holistically applied to the whole portfolio.

When assessing a portfolio the examiner will first establish that each learning outcome has been evidenced to the standard required, which is FHEQ Level 4. Once they have assessed that all the learning outcomes are evidenced the examiner will use the assessment criteria to judge how well the learning outcomes have been met. To achieve an overall Pass grade all four assessment criteria need to be met. To receive an overall Distinction three criteria need to be awarded a distinction grade with the fourth awarded at least a Pass grade. Once the examiner has marked all the candidates portfolios from that Centre they will complete the *Centre Feedback Form*. This is designed to help guide the Programme leader in developing the quality of their programme.

Candidates will be assessed for the Certificate according to the following criteria, applied to the portfolio as a whole.

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Assessment criterion 1

Understanding teaching and learning

Distinction	Demonstrates a well-focused understanding of relevant concepts and principles with evidence of analysis of strengths and weaknesses. Applies relevant concepts and principles to own practice with evidence of critical evaluation and limitations.
Pass	Demonstrates a broad understanding of relevant concepts and principles and is able to apply these in a meaningful way to own practice.
Fail	Demonstrates inadequate or poor understanding of relevant concepts and principles. Application to own practice may be very limited, inadequate or inappropriately applied.

A candidate will demonstrate their understanding of teaching and learning throughout their portfolio. Lesson plans, observer feedbacks and their teaching activity log provide evidence of how their practice is underpinned by knowledge and understanding of concepts and principles of teaching and learning. The explanations and descriptions in a candidate's evidence of learning must demonstrate a broad understanding of relevant concepts and principles of teaching and learning by applying them to their own practice in a meaningful way. In their evidence of

reflection candidates must support all analyses and evaluations with relevant concepts and principles of teaching and learning. A candidate who meets these standards will secure a pass grade for this criterion.

To be awarded a distinction grade a candidate must demonstrate a secure and well-focused understanding of relevant concepts and principles of teaching and learning, and is able to apply them to own practice with evidence of critical evaluation.

Key Skills:

- application of theory to practice
- analysis
- critical evaluation

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Assessment criterion 2

Developing thinking and practice

Distinction	Evidences effective practice, with a well-focused understanding of relevant theories and principles underlying practice in teaching, and applied to own practice. Evidence of reflective evaluation of own practice, and identification of learning from experience.
Pass	Evidences effective practice, with a sound and largely accurate understanding of relevant theories and principles underlying practice in teaching. Some evidence of application of theories and principles to own practice. Some evidence of reflective evaluation.
Fail	Little or poor evidence of linking effective practice with theories and principles. Limited or inaccurate understanding of relevant theories and practice. Little evidence of application of theories to and principles to own practice.

A candidate will demonstrate their developing thinking and practice throughout their portfolio. In their evidence of practice a candidate's lesson plans, observer feedbacks and their teaching activity log will provide evidence of their effective classroom practice and how it is underpinned by an understanding of relevant theories, concepts and principles of teaching and learning. In a candidate's evidence of learning all explanations and descriptions must demonstrate how their developing thinking and practice is based on an understanding of relevant theories, principles and concepts of teaching and learning that have been applied to their own practice. In their evidence of reflection candidates must demonstrate how they

have evaluated their own practice to learn from experience. A candidate who meets these standards will secure a pass grade for this criterion.

To be awarded a distinction grade, a candidate must demonstrate a secure and well-focused understanding of relevant theories, concepts and principles of teaching and learning that support their practice, evidence reflective evaluation of own practice, and demonstrates they are learning from experience.

Key skills:

effective classroom practice
application of theory to practice
reflective evaluation

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Assessment Criterion 3

Analysis and discussion

Distinction	Analyses questions and issues arising from study, inquiry, discussion, and experience, in a well-focused manner, supported by relevant and useful examples drawn from valid and reliable evidence. Evidence of a range of information sources to inform analysis and discussion. Well-structured work.
Pass	Analyses questions and issues arising from study, inquiry and experience in a sound and largely appropriate manner. Some use of relevant examples drawn from sound evidence. Use of some different information sources to inform analysis and discussion. Structured approach to analysis and discussion.
Fail	Descriptive accounts, with inaccuracies and misunderstandings in places. Opinions and views expressed, but without links to evidence and/or relevant examples. Work likely to be poorly organised and structured.

A candidate must demonstrate their skills of analysis and discussion in both their evidence of learning and reflection when considering questions and issues arising from their studies, inquiries or experiences. The work must be structured to make the issue or question being analysed or discussed apparent and supported with relevant examples drawn from sound evidence. Different information sources such as textbooks, web page or site, journals or articles related to teaching and learning, etc. must be used to inform analysis and discussion and referenced appropriately. A candidate who meets these standards will secure a pass grade for this criterion.

To be awarded a distinction grade for this criterion any analysis or discussion of questions and issues arising from their study, inquiry or experience must be well-focused and supported by relevant examples drawn from valid and reliable evidence. The work must be well-structured and a range of information sources used to inform analysis and discussion must be evidenced and correctly referenced.

Key skills:

analysis
reasoning
research

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Assessment criterion 4

Communication and presentation

Distinction	Presents ideas, arguments and information in a well-structured and consistent manner. Professional approach to presentation of work, with opinions only given when justified and/or backed up by evidence. Academic conventions followed, with appropriate referencing to published work or other accepted sources of evidence.
Pass	Presents ideas, arguments and discussions in an orderly and generally consistent manner. Professional approach to presentation of work. Opinions may be expressed at times without evidential or other accepted support. Academic conventions mostly followed, with attempt to reference appropriately.
Fail	Work demonstrates significant weaknesses in presentation and may be poorly structured, not well organised and not presented in a professional manner. Opinions may be given at length without any attempt to provide support from other sources.

A candidate must structure their work so that all required explanations, descriptions, analyses and evaluations are presented in an orderly and consistent manner that aids effective communication of their understanding, thinking, ideas arguments, information, etc. When opinions are expressed they should be supported with reference to relevant theories, concepts or principles of learning and teaching. This means a candidate must follow academic conventions and reference their work appropriately, preferably using the Harvard style of referencing. A candidate who meets these standards will secure a pass grade for this criterion.

To be awarded a distinction grade for this criterion a candidate must structure their work in a clear and consistent manner that effectively communicates their understanding, thinking, ideas arguments, information, etc. Opinions are only given when supported with reference to relevant theories, concepts or principles of learning and teaching. Academic conventions are consistently followed with appropriate referencing to published work or other accepted sources of evidence, preferably using the Harvard style of referencing.

Key skills:
structure and presentation of work
academic conventions
referencing

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Key words

Academic conventions - these are the most generally established view of what is accepted usage. These include:

- Avoid using colloquialisms and slang.
- Avoid using abbreviations and contractions.
- Avoid using personal pronouns such as I, we, you.
- References must be used as evidence of deep and wide reading.

Active learning – based on the theory of constructivism, 'active learning' describes a classroom approach which acknowledges that learners are active in the learning process by building knowledge and understanding in response to learning opportunities provided by their teacher; learners are engaged in a variety of learning activities that challenge their thinking.

Active learning strategies – are teaching methods and learning activities that lend themselves to active learning approaches, they make students think.

Advance organisers - *"The most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly."* (Ausubel, 1968)

Analysis – process of breaking a theory, concept, process, etc. into its constituent parts and then considers each part using arguments and evidence for and against as well as considering how these parts interrelate to one another.

Assessment - a process through which evidence, produced by a learner, is collected in a planned and

systematic way and used to make a judgment about that learner's learning.

Application of theory to practice - to successfully apply theory to practice a learner needs to identify the key principles of the theory and to use these to guide their teaching practice.

Assessment for Learning (Afl) – essential teaching strategies during learning to help teachers and students evaluate progress in terms of understanding and skill acquisition, providing guidance and feedback for subsequent teaching and learning.

Critical evaluation - consideration of the effectiveness, value and validity of an action, process or product; being able to say why something was or was not effective, worthwhile or valid.

Collaborative learning – students work together in small groups or pairs on clearly defined learning tasks or activities.

Constructivism – a philosophy of learning based on the concept that people construct their own understanding by reflecting on their personal experiences, and by relating the new knowledge with what they already know. Individuals create their own mental-models, known as 'schemas', to make sense of the world. Individuals accommodate new knowledge by adjusting their schemas.

Differentiation - is defined by the Training and Development Agency for Schools as:

'the process by which differences between learners are accommodated so that all students in a group have the best possible chance of learning'. (Bartlett, 2015)

Effective questioning – requires the use of both closed and open type questions, and different strategies, to make sure all students participate in the learning process.

Evaluation – a term that covers making judgements in a broad context such as the effectiveness of students' learning, a teacher's classroom practice, individual lessons, sequences of lessons, learning programmes, etc.

Extrinsic motivation – a student is motivated to learn by external factors such as rewards, social recognition, fear of punishment, etc. This kind of motivation focuses people on rewards rather than action.

Formative assessment – activity that takes place continuously during a learning programme to support students' learning, monitors their learning progress and helps to inform their future learning and the teacher's teaching practice.

Formative assessment methods – are used to support and monitor the students' learning at different stages in a lesson so that adjustments can be made to bridge any 'gaps' in their learning.

Formative feedback – is information communicated to the student that provides guidance about their next steps in learning.

Inclusive learning - education which is available for everyone; trying to meet the needs of all learners and providing access to education to learners with special needs.

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Key words

Intrinsic motivation – a student is motivated to learn by internal factors and the desire to do things because they enjoy doing them, such as being successful at what they do, being connected with others, having autonomy, etc.

Learning - *"Learning ... that reflective activity which enables the learner to draw upon previous experience to understand and evaluate the present, so as to shape future action and formulate new knowledge."*
(Abbott, 1994)

Learning aim - a broad statement of intent indicating what the teacher must teach and the students must learn.

Learning objectives – these are statements that define the expected goal of a curriculum, course, lesson or activity in terms of demonstratable skills or knowledge that will be acquired by a student as a result of instruction.

Learning outcomes – these specify what learners know, understand and/or are able to demonstrate after completing a process of learning.

Lesson plan – a guide designed by a teacher to organise classroom learning, teaching and assessment in an individual lesson.

Managing lessons – a teacher's ability to use a wide range of teaching and learning strategies to provide students with opportunities to achieve their full learning potential.

Metacognition – this term is used to describe 'thinking about thinking'; it describes the process involved when learners plan, monitor, evaluate and make changes to their own learning behaviours.

Models of learning – technique used to interpret and simplify the complex concept of learning to make it more understandable.

Motivation – a person's desire or willingness to participate in the learning process.

Observer feedback – feedback from observation of a teacher's lesson that's focused on the intended outcomes of the observation and is analytical in content.

Plan a sequence of lessons – process of planning several lessons that will be taught consecutively in order to create smooth transitions between lessons and make sure all the required learning objectives for a unit or block of learning can be accommodated.

Principles of assessment – concepts or ideas that underpin any assessment e.g. validity, reliability, norm referencing, etc.

Reflection – is to think systematically about an experience, activity, etc.

Reflective practitioner – is a teacher who systematically thinks about their classroom experiences in order to develop, change and improve their professional practice.

Reflective thinking – according to Dewey (2007) is:

"... an active, persistent, and careful consideration of a belief or supposed form of knowledge."

Research - Research is the foundation of any essay writing. When you write a research paper you build on what you already know and find out what experts know. This involves surveying a field of knowledge in order to find the best possible information in that field.

Summative assessment – typically end-of-learning assessment tasks, such as examinations and tests, to measure and record the level of learning achieved, for progression to the next level or for certification.

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