

# Thinking & Reflecting

## In Initial Teacher Training

This is a resource for teacher educators looking for ways to facilitate and enhance critical thinking and reflective practice skills amongst their trainees. It has been designed to support tutor-assessors delivering EMCETT's blended-learning models of the new teaching qualifications. Hopefully, it will be of interest to teacher educators in general.



## Foreword

**Thinking and Reflecting in Initial Teacher Training** is one of a short series of pamphlets produced by EMCETT to support new teacher educators and particularly those working with trainee teachers drawn from vocational backgrounds who are generally not graduates.

The diversity of teachers working in the Lifelong Learning Sector reflects that of the sector in which they teach. Unlike the schools sector, teachers working within adult education colleges, community-based settings, custodial environments, commercial and voluntary sector training organisations and (not infrequently) in further education colleges often lack prior educational experience of the type that will prepare them for studying and achieving a Level 5 teaching qualification.

'Skills for Life support: there will be no entry requirement in terms of literacy, language and numeracy skills, but all teachers will need to demonstrate specified standards by the end of their course.' (p8)

[Equipping our teachers for the future](#) (DfES, 2004)

Personal literacy, language, numeracy and ICT needs are also not uncommon making the minimum Level 2 requirement for personal skills, set by the Minimum Core, a challenge in itself. Many providers of the new

ITT programmes, and understandably HEIs, set eligibility requirements (proof of, at least, Level 2 attainment on entry). This raises an important question regarding the accessibility of programmes for the significant numbers of teachers working in the wider sector, and particularly non-FE, and is also contrary to the spirit and letter of ['Equipping our teachers for the future'](#) (DfES, 2004).

Other commonly encountered needs are those often referred to as 'Higher Education Study Skills' and include formal (academic) writing skills, critical thinking, Harvard Referencing, etc.

EMCETT's publications in this series are intended to help teacher educators to facilitate trainee progression through a Level 4/5 ITE programme. To this end, they include the following -

- **Supporting Literacy, Language and Numeracy Needs** in Initial Teacher Training
- **Thinking and Reflecting** in Initial Teacher Training
- **Learning Theory** in Initial Teacher Training
- **Academic Writing Skills** in Initial Teacher Training

EMCETT believes that all trainees, even those with little prior experience of academic programmes of learning and assessment, are able to generate Level 4/5 output, given the right 'scaffolding' and support.

EMCETT-endorsed ITE programmes enable trainees to develop academic skills (critical thinking, reflective practice, academic writing and referencing) alongside the development of their teaching skills and knowledge. These two aspects of development are, however, treated separately, in both delivery and assessment, during the early modules and only come together in the latter part of the CTLLS programme or the Level 5 PTLLS content.

# Contents

	<b>Page</b>
<b>Section 1 Critical Thinking – EMCETT’s Approach</b>	<b>1</b>
1.1 Teachers need to be critically aware of.....	1
1.2 Absolute -Vs- Relativistic Thinking	1
1.3 Critical Thinking and Learning Theory in ITE	3
1.4 The Big Ideas about Teaching & Learning	3
1.5 Deep and Surface Learning	4
1.6 Bloom and Deep Learning (Levels of Thinking)	5
<b>Section 2 Facilitating Critical Thinking</b>	<b>6</b>
2.1 The Nature of Learning	6
2.2 The Nature of Learners	6
2.3 The Nature of Teaching	7
2.4 The Process of Learning	7
2.5 The US Foundation for Critical Thinking	7
2.6 Critical Thinking and Teaching Observations	8
2.7 DeBonos Critical Thinking Tools	8
2.8 Ethnographic Analysis	9
2.9 STEEP Analysis	10
2.10 Values Analysis	10
2.11 Beliefs Analysis	11
2.12 Critical Thinking and Problem Solving	12
2.13 Debates and Critical Discussions	12
<b>Section 3 Exploring Reflective Practice</b>	<b>14</b>
3.1 What is Reflection?	14
3.2 Why is it important?	14
3.3 Reflecting on what?	14
3.4 Models of Reflective Practice	15
3.5 Action Research	17
3.6 Goal Oriented Approaches	18
3.7 The GROW Model	18
3.8 Peer Support and Reflective Practice	18
3.9 The New Professional Standards and Reflective Practice	19
<b>Section 4 Facilitating Critical Reflection</b>	<b>20</b>
4.1 Workshops and Tutorials	20
4.2 Ways to record reflections	20
4.3 Teaching Practice	21
<b>Section 5 Conclusion</b>	<b>22</b>

# 1. Critical Thinking - EMCETT's Approach

## 1.1 Teachers need to be critically aware of:

- the wider factors influencing the curriculum they deliver;
- their own philosophy of teaching and learning;
- their own teaching practice;
- their learners' individual and group needs;
- their own development needs;
- new ideas and approaches;
- key experiences (why things went well/wrong)
- etc.

We also need teachers capable of modelling critical thinking skills in order to help their learners to acquire these skills too. Critical thinking can help to build a society of empowered, rational citizens.

The word "critical" has its roots in the ancient Greek for *discerning judgment* (kriticos) and for *standards* (kriterion). The word therefore suggests, in its simplest form, *discerning judgment based on standards*.

There are numerous models and definitions of critical thinking and little agreement amongst academics about the cognitive processes involved.

EMCETT recommends Moon's (2005) uncomplicated, but well considered, definition of *critical thinking*. Moon argues that good critical thinkers are able to evaluate issues and ideas from different viewpoints (*relativistic*) rather than from a dogmatic, 'black-or-white' positions (*absolute*).

## 1.2 Absolute -Vs- Relativistic Thinking

Moon describes critical thinking as the ability to work with complex ideas and use good evidence to justify a reasonable judgement. In good critical thinking, the evidence, and therefore the judgement, will reflect the context of the judgement. In other words, judgements and the evidence on which they based are not absolute and likely to be different (relative) in different circumstances and contexts. The fully developed capacity to think critically, according to Moon, relies on an understanding that

### Dewey (1933)

Critical thinking is "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends."

### Glaser (1941)

(1) an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experiences, (2) knowledge of the methods of logical inquiry and reasoning, and (3) some skill in applying those methods. Critical thinking calls for a persistent effort to examine any belief or supposed form of knowledge in the light of the evidence that supports it and the further conclusions to which it tends. (Glaser 1941, pp. 5-6).

### Nickerson, Perkins and Smith (1985)

"The ability to judge the plausibility of specific assertions, to weigh evidence, to assess the logical soundness of inferences, to construct counter-arguments and alternative hypotheses."

### Moore and Parker (2005)

Critical Thinking is "the careful, deliberate determination of whether we should accept, reject, or suspend judgment about a claim, and the degree of confidence with which we accept or reject it."

For example, consider a complex issue like euthanasia. Some people will produce a well reasoned argument considering the issue from all angles (relative) whilst others will cling to a more polarised position (absolute), probably as a result of deeply held beliefs.

knowledge is a mental construction that is related to a particular context (relativistic) rather than an *absolute* series of facts. This is similar to the epistemological view that *theories* are attempts to *explain* reality and should not be confused for reality itself. Theories, in the natural science, are no longer seen as universal (absolute) but rather as true within limits (relative).

Experience suggests that a proportion of teacher trainees, drawn from across the wider sector, have not had much opportunity, in their prior educational and life experience, to develop well refined critical thinking and (what is often called) higher education study skills. It is therefore not uncommon for trainees to expect to be instructed about the 'right approach' or the 'officially approved theory'. We need to challenge such expectations, early on, if we are to engage trainee teachers at a deeper level of enquiry and expect them to be effective in doing the same for their learners.

Ideally, we need to explain Moon's distinction between absolute and relative thinking and enable the trainees to challenge their own assertions that a particular theory, view or approach is exclusively 'the right one' (absolute) rather than relative to particular circumstances and limitations. Exploring the relative nature of theories, beliefs and values regarding teaching and learning is an important aspect of critical thinking.

In practice, however, an individual's personal beliefs about teaching, learning and learners is likely to remain hidden unless they can be brought to the surface through academic writing or in communication with peers and tutors. EMCETT particularly favours tutor facilitated, group discussion (virtual or actual) to bring implicit assumptions into an open arena and to maximise exposure to a diverse range of (arbitrary) viewpoints and the relative experiences, values and beliefs that give rise to them.







Absolute Thinking	Relative (Contextual) Thinking
An idea, theory, belief, etc is either 'right' or 'wrong'.	Ideas, theories, beliefs (knowledge) are uncertain - 'right' for some situations, people or times but not for others.
"You can't teach that sort of person."	"I am finding it hard to teach this person but I'm prepared to try other approaches."
"I am an expert in this subject."	"I need to maintain my expertise this subject."
"My learners need to learn from my expertise in this subject."	"My learners may learn more from active learning and from each other than they do from me."
"This way of teaching has always worked for me."	"There may be other ways of teaching this."
"My learners don't 'do theory'."	"There must be ways of helping my learners to be comfortable with theory."

### 1.3 Critical Thinking and Learning Theory in ITE

Over the years, there have been many and varied contributions to the discourse on Learning Theories. A comprehensive knowledge of these theories is a valid aim for the academic study of education. However, in the context of a certificate or diploma in teaching, it is important that we carefully consider how much theory, and which ones, a practising teacher needs to know in order to be highly effective in the classroom. Further, we must avoid theoretical overload at the expense of acquiring the fundamental skills of effective teaching. This view permeates much of the LSIS-funded resources and strands of its Teaching and Learning Programme and EMCETT supports this approach. This is not to say that teachers do not need to have a grasp of the 'big ideas' about learning; rather, it is a question of balance.

Do trainees need a detailed and broad knowledge of the history and key figures behind each theoretical approach, or would it be better that they recognise some of the 'big ideas' that emanate from them?

EMCETT's preferred approach is for trainees to critically evaluate the explicit, and sometimes implicit assumptions (the 'Big Ideas') underpinning various pedagogies and approaches to curriculum. These assumptions often cluster around the main philosophical, psychological or sociological schools of thought, such as:

-  Behavioural
-  Cognitive
-  Humanistic
-  Social Psychological and Sociological
-  Psychodynamic
-  etc

Each of these 'schools' bring implicit assumptions regarding how learners learn - or need to learn - and this then may influence how we believe we should teach. This is also where, as teacher educators, we need be vigilant in spotting 'absolutism' and in grasping the opportunity to explore the 'relative' nature of these 'big ideas'. Some of the 'big ideas' associated with these schools of thought are summarised below, at a level of detail that is probably sufficient to support further study into Learning Theories, should a trainee wish to pursue this further.

### 1.4 The Big Ideas about Teaching & Learning

*Four orientations to learning (after Merriam and Caffarella 1991: 138) reported in Infed - [www.infed.org/biblio/b-learn.htm](http://www.infed.org/biblio/b-learn.htm)*

Aspect	<a href="#">Behaviourist</a>	<a href="#">Cognitivist</a>	<a href="#">Humanist</a>	<a href="#">Social and situational</a>
<b>Learning theorists</b>	Thorndike, Pavlov, Watson, Guthrie, Hull, Tolman, Skinner	Koffka, Kohler, <a href="#">Lewin</a> , Piaget, Ausubel, <a href="#">Bruner</a> , Gagne	Maslow, <a href="#">Rogers</a>	Bandura, <a href="#">Lave and Wenger</a> , Salomon
<b>View of the learning process</b>	Change in behaviour	Internal mental process (including insight, information processing, memory, perception)	A personal act to fulfil potential.	Interaction /observation in social contexts. Movement from the periphery to the centre of a community of practice

<b>Locus of learning</b>	Stimuli in external environment	Internal cognitive structuring	Affective and cognitive needs	Learning is in relationship between people and environment.
<b>Purpose in education</b>	Produce behavioural change in desired direction	Develop capacity and skills to learn better	Become self-actualized, autonomous	Full participation in communities of practice and utilization of resources
<b>Educator's role</b>	Arranges environment to elicit desired response	Structures content of learning activity	Facilitates development of the whole person	Works to establish communities of practice in which conversation and participation can occur.
<b>Manifestations in adult learning</b>	Behavioural objectives Competency - based education  Skill development and training	Cognitive development Intelligence, learning and memory as function of age  Learning how to learn	Andragogy Self-directed learning	Socialization Social participation  Associationalism  Conversation

During workshop time, facilitators should encourage the critical exploration of these constructs of teaching and learning. An examination of the 'big ideas' associated with the major schools of thought can be useful in critically evaluating the 'mind-sets' - values, beliefs and political factors - that may influence curriculum and pedagogy.

## 1.5 Deep and Surface Learning

[West-Burnham's](#) distinction between Deep, Profound and Surface Learning is important for several reasons:

**Teaching and Learning Programme**


### Modes of learning

Professor John West-Burnham's model describes characteristics of different modes of learning. It is not intended to be hierarchical or to reflect academic values. In some contexts shallow learning is entirely appropriate; as he says: 'my knowledge of how my car's engine works is shallow; but I hope that the mechanic's is deep if not profound'.

**Shallow learning** calls largely on memory and replicating information. For example, memorising vocabulary when learning a language is a useful skill but does not necessarily mean the learner understands the language.

**Deep learning** moves beyond this and towards greater reflection and understanding. Learners are more actively involved in creating their own knowledge and understanding, interpreting, contextualising and applying this knowledge. Crucially, deep learning moves the learner into higher order thinking or metacognition where they take greater active control of the cognitive processes involved in learning (eg planning, monitoring comprehension and evaluating progress).

**Profound learning** builds on shallow and deep learning and takes it to a different level altogether. Professor West-Burnham suggests that profound learning is about redefining both problem and solution: 'Profound learning is about the more arcane branches of philosophy but it is also about the qualities of a counsellor, the skills of a joiner and the moral insights of a child'.



**Models**

- it distils earlier cognitive models into one straightforward and, hence, practical model;
- it can, in itself, prompt a useful critical review of teaching and learning;
- it is clear that deep and profound learning encapsulate the ability to critically evaluate information and knowledge;
- shallow learning accords well with Moon's notion of absolute thinking whereas, deep and profound learning clearly requires the ability to think in relative terms.

This model should therefore be considered as one of the 'Big Ideas' that trainees would benefit from knowing. It is worth noting, at this point, that most - if not, all - of these 'windows' on critical thinking apply equally to learners as they do to trainee teachers. In

other words Deep and Profound Learning should typify teachers' own learning as well as their learners'.

(Note: The resources illustrated on this page are drawn from the LSIS Subject Learning Coach Programme [www.thesubjectlearningcoach.net](http://www.thesubjectlearningcoach.net))

For more information visit [www.subjectlearningcoach.net](http://www.subjectlearningcoach.net)

## Modes of learning

Professor John West-Burnham

	Shallow What?	Deep How?	Profound Why?
Means	Memorisation	Reflection	Intuition
Outcomes	Information	Knowledge	Wisdom
Evidence	Replication	Understanding	Meaning
Motivation	Extrinsic	Intrinsic	Moral
Attitudes	Compliance	Interpretation	Challenge
Relationships	Dependence	Independence	Interdependence
	Single loop	Double loop	Triple loop

© Learning Coach Skills Improvement Service (LSIS) 2019

The West-Burnham model has a distinct resonance with the more well-known Bloom's Taxonomy of Cognitive Skills which provides a 'route-map' for interpreting 'levels of learning', defining learning objectives and for scaffolding deeper learning.

## 1.6 Bloom and Deep Learning (Levels of Thinking)

Bloom's Taxonomy of cognitive skills offers a well-known model of how trainees can be encouraged to think more 'deeply' and critically about issues and ideas. The various levels in the Bloom model point to ways of questioning trainees to encourage critical thinking.

### Knowledge/Comprehension

What? Who? When? What is an example of x? What is meant by .....? What is another way of explaining...? Can I describe x in my own words?

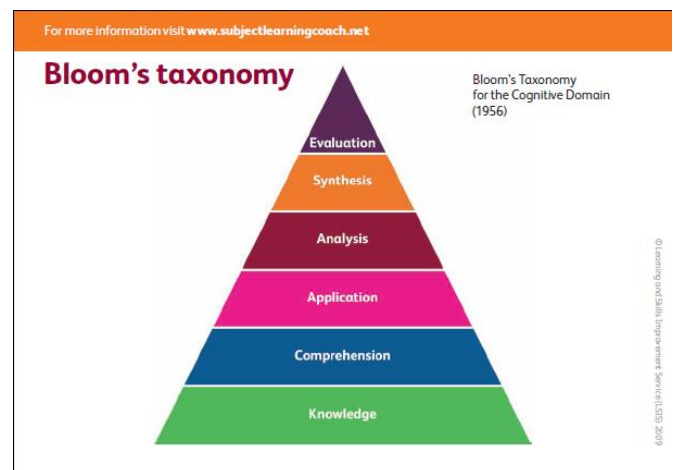
**Application** How is it used? What does it relate to? In what situations ...?

**Analysis** Why? How? What is the reason for ...? What evidence is there to support the conclusion? What are the causes of ...? How does this fit together?

**Synthesis** If x happens, then what next? What does the theory predict will happen? What are my own conclusions on the basis of the information available? How does x relate to y?

**Evaluation** Is this good or not, why? Is this reasonable or not, and why?

The following sections offer a range of perspectives and approaches that can be used as a basis for critical evaluation of some of these 'big ideas'.



Teaching and Learning Programme

**Bloom's taxonomy**

Bloom's taxonomy identifies six levels of learning, each requiring a different kind of thought process. Applying Bloom's taxonomy involves use of a range of strategies, including questioning, to encourage learners to employ a variety of cognitive processes and improve their ability to learn at deeper levels.

**Knowledge**  
The learner is challenged to describe or identify, often in terms that answer the question who, what, where or when.

**Comprehension**  
The learner is asked to translate or predict, involving them in selecting facts to describe, compare, contrast or explain something.

**Application**  
This encourages learners to apply information they have learned to solve a problem or demonstrate a solution, often using terms such as solve, apply, classify or select.

**Analysis**  
The purpose is to help learners to organise information and analyse evidence to support statements. It involves inferential thinking, prediction and explanation, and may involve terms such as why, identify, conclude or determine.

**Synthesis**  
The learner is challenged to develop their creative thinking. This differs from analysis and application because it allows for a variety of creative answers. Terms such as plan, predict, compose or propose may be used.

**Evaluation**  
Learners are asked to make assessments and judgements, using comparisons. This also elicits creative thinking and may involve terms such as judge, decide, assess and justify.

**Models**

LSIS

## 2. Facilitating Critical Thinking

The following sections highlight potential ideas and issues for critical evaluation. These could be explored through group discussion, debate and exercises based on the adoption and development of a particular view. The US Foundation for Critical Thinking (see below) has a useful model and on-line tool that could be used in exploring any of the viewpoints listed below or those, above, emanating from Merriam and Caffarella's (1991) 'Four Orientations to Learning'. The key aim, in all cases, should be to realise the relative merits of each approach or viewpoint.

### 2.1 The Nature of Learning

'Big Idea'	Exploration
Learning as: <ul style="list-style-type: none"> <li>■ a natural (inevitable) process;</li> <li>■ a constructed, institutionalised process;</li> <li>■ politically driven;</li> <li>■ empowerment;</li> <li>■ disempowerment;</li> <li>■ social engineering;</li> <li>■ personal growth;</li> <li>■ a change process.</li> </ul>	Trainees should be encouraged to explore and evaluate these perspectives - <ul style="list-style-type: none"> <li>■ Are they valid?</li> <li>■ How would they impact on teaching &amp; Learning?</li> </ul>
Learning for: <ul style="list-style-type: none"> <li>■ work;</li> <li>■ society;</li> <li>■ human potential;</li> <li>■ individual attainment;</li> <li>■ etc.</li> </ul>	Polarised views should be challenged. For example is <i>learning-for-work</i> dehumanising ('factory fodder') or empowering (social inclusion and mobility)? <p><i>Is human potential best achieved through education for education's sake or might it be achieved through work?</i></p> <p>What is the relationship between <i>work</i> and <i>society</i>?</p>
Knowledge -Vs- Skill Academic -Vs- Vocational Education -Vs- Training	Is it possible to learn a skill without acquiring knowledge? (or vice versa)? <p>Is being <i>academic</i> about <i>knowledge</i> itself or is it a <i>culturally formalised way of acquiring knowledge</i>?</p> <p>How useful would a population of knowledgeable but unskilled workforce for society?</p>

### 2.2 The Nature of Learners

The following list offers some possible ways of critically evaluating ideas and beliefs about the nature of learners.

- Adult Learners - do they learn differently to children and, if so, how?
- Values and beliefs regarding learning and learners (how do they influence practice)?
- Motivation, challenge and success/failure (are we all the same or are we different?)
- Prior good/bad learning experiences (how do they influence current learning)?
- Are there *types* of learners (e.g. identifiable traits such as Learning Styles)?
- What is Intelligence (is it still a useful concept)?
- Do learners need to receive knowledge or 'grow' knowledge?

## 2.3 The Nature of Teaching

To what extent do we impose our views, approaches, theories, styles, etc on our learners? What are our values and beliefs about teaching? Is it the teacher's role to impart knowledge or to facilitate learning, or both? These questions are fundamental to the ethos and practice of education and warrant frequent exploration with trainees.

Where on the continuum are we?	
TEACHER CENTRED APPROACH	LEARNER CENTRED APPROACH
<b>Pedagogy</b> <b>Didactic</b> <b>Teaching</b> <b>Directive</b>	<b>Androgogy</b> <b>Experiential</b> <b>Facilitating</b> <b>Supportive</b>

Note the use of educational jargon in the table above. It can be useful for trainees to maintain their own glossary of educational terms. Some trainees may object, in principle, to the use of jargon, but this should be challenged on the grounds that its usage is intended to empower trainees rather than to exclude them.

## 2.4 The Process of Learning

The following list offers some possible ways of critically evaluating ideas and beliefs about the nature of the learning process.

- Taught or self-directed learning - what should the balance be and what are the conditions that facilitate either?
- Individual or collaborative learning - which is best for what, who and for when?
- Experiential, reflective, theoretical learning - how are they different and how can they be related?
- What are the conditions that promote engagement or disengagement of learners?
- Deep, Surface and Profound Learning - what does these mean?

The screenshot displays the 'Elements of Thought' model from the Foundation for Critical Thinking. The central circle is divided into eight segments, each representing a different element of thought. The segments are: Point of View (frame of reference, perspective, orientation), Purpose (goal, objective), Question at issue (problem, issue), Information (data, facts, observations, experiences), Interpretation and Inference (conclusions, solutions), Concepts (theories, definitions, axioms, laws, principles, models), Assumptions (presupposition, taking for granted), and Implications and Consequences. Each segment is accompanied by a brief explanation and a list of questions to target that purpose. For example, the 'Purpose' segment asks: 'What is your goal, your objective, what you are trying to accomplish. We also use the term to include functions, motives, and intentions. You should be clear about your purpose, and your purpose should be justifiable. Questions which target purpose: • What is your goal, your objective, etc? • What is the objective of this assignment task, job, experiment, policy, strategy, etc? • Should we question, refine, modify our purpose (goal, objective, etc)? • What is the purpose of this meeting (chapter, relationship, action)? • What is your central aim in this line of thought? • What is the purpose of education? • Why did you say...?' The interface also includes a 'RESET VIEW' button and a section for 'Use the elements with sensitivity to Intellectual Standards' with buttons for Clarity, Accuracy, Precision, Relevance, Depth, Breadth, Logic, Significance, and Fairness.

## 2.5 The US Foundation for Critical Thinking

The US [Foundation for Critical Thinking](http://www.criticalthinking.org) offers an interesting alternative perspective on critical thinking in the form of an on-line, interactive model. The model provides useful ways of distinguishing facts from assumptions and for exploring both subjectivity and objectivity in critical thinking. See -

<http://www.criticalthinking.org/CTmodel/CTModel1.cfm>

The online version of this tool could be deployed as scaffolding to support a detailed critical analysis of a particular topic.

## 2.6 Critical Thinking/Reflection and Teaching Observation

Teaching observation processes in EMCETT’s blended-learning models of ITE delivery include open questions to prompt critical reflection by the trainee and related feedback by the observer. They are therefore examples of ‘scaffolding’ used to facilitate critical thinking and reflection skills.

### (ICD) Teaching Observation: *Videoed teaching and tutor review* (3hrs)

Trainee Name: Session: Date: Time: Other Staff Present (Role?):		Student Profile:
Any Other Relevant Information:		
<b>Personal Critical Reflection</b>	<b>Tutor’s Evaluation</b>	<b>Assessment Criteria</b>
What organisational, statutory or other regulations were most significant in relation to this session?		TPPEL 2.2
How did you ensure that your session created a purposeful and inclusive learning environment where learners felt safe, secure, confident and valued.		PEL 2.1 TPPEL 2.3 Prof Stds BP 1.1
To what extent were learners enthused and engaged during your session?		PEL 3.1 Prof Stds BP 1.3

## 2.7 DeBono’s Critical Thinking Tools

DeBono’s thinking tools are useful in providing the scaffolding to enable trainees to avoid judgements based on absolute thinking and to consider a range of viewpoints (relativistic thinking) when evaluating information or making decisions.

### CAF: Consider All Factors (without judgement)

*Factors* could relate to ‘causes’ (e.g. likely causes of disengagement in learners) or ‘effects’ (e.g. the impact of using social networking to support learning). Without *judgement* refers to the need to not let values, beliefs, etc influence an objective review of all factors.

### EBS: Examine Both Sides

This is useful when exploring different opinions, preferences and viewpoints and encourages learners to see an issue from other than their own perspective.

### ADI: Agree, Disagree, Irrelevant

Whereas CAF and EBS seek to postpone judgement, ADI encourages its exploration by asking learners to consider ‘where they stand’ in relation to a single topic or set of factors.

### PMI: Plus, Minus, Interesting

This is another *judgement* tool to encourage a wide ranging evaluation of new information or learning.

## Po: Provocative Operation

This thinking tool encourages creative thinking by offering a provocative statement for learners to 'wrestle with', consider different scenarios and to generally 'think outside of the box'. DeBono offers four different types of 'Po Thinking'.

- Reversal – “teachers should try to stop learners from learning”
- Exaggeration – “we assess all of the time”
- Distortion – “learners stop learning after your 3<sup>rd</sup> lesson with them”
- Wishful – “teachers should get a bonus for every learner who succeeds”

## Exlectics

With big ideas, approaches or information there is a greater the chance that we may only agree with them, in part/s. This is DeBono's term for extracting the parts that are useful, or with which we agree, and avoiding rejecting the good bits because we cannot accept the whole - avoiding “throwing out the baby with the bathwater”.)

## The Six Thinking Hats



### The White Hat

what information is available and what is needed?



### The Red Hat

What are our intuitions, feelings and hunches about this?



### The Black Hat

What might be difficult?  
What could go wrong?



### The Yellow Hat

What would be the value or benefits?  
Why might this work well?



### The Green Hat

What are the alternatives? Let's be creative.



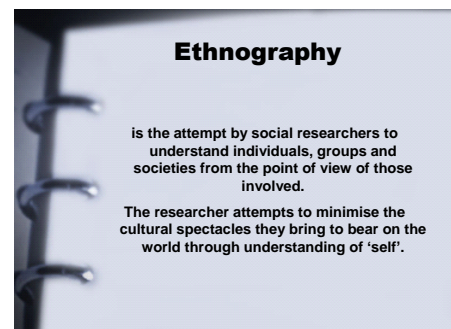
### The Blue Hat

How can we best manage our thinking processes?

DeBono's six thinking hats enable groups (or individuals at different times) to analyse and evaluate any topic or issue from a range of different critical viewpoints. They can be used systematically to facilitate critical thinking across the full range of perspectives (hats) or in just those aspects in which evaluation is currently weak. The 'hats' can also be useful in understanding how different people come to quite different conclusions based on application of habitual (and narrow) evaluation criteria.

## 2.8 Ethnographic Analysis

This is about being able to understand individuals and groups from within their socio-economic and cultural context rather than from within our own (which may be very different). This is very important in teaching a diverse range of learners and helps us to avoid making judgements about them based on **our own** particular values and beliefs, acquired through our unique life experiences.



Trainees could produce a self-profile (see left) as an individual reflective account or could share it in small groups. A group-based approach will help them to appreciate how different group members' life experiences can lead to very different viewpoints. We all see the world through *cultural spectacles* (which is similar to the familiar notion of 'rose-tinted spectacles' but not necessarily with a positive spin).

**SELF-PROFILE**

Please document the following:  
 (Your) social background  
 (Your) Age  
 (Your) Gender  
 (Your) Ethnicity  
 (Your) Education and qualifications  
 (Your) Work experience and skills

Give an account of the way in which your personal beliefs, interests, experiences and expertise might have a bearing on your professional practice.

Use this profile to reflect on your learners and to consider how the following might influence your opinions and perceptions:

**Personal beliefs** – relating to teaching and learning (politics, values, standpoints)

**Personal experiences** – relating to teaching and learning (incidents having affected or affecting self/family/friends)

From the point of view of critical thinking, this helps trainees to understand that:

- our (cherished) viewpoints are arbitrary (or relative) rather than absolute (in the sense of 'truth');
- our cultural spectacles can prevent us seeing things like our learners do (this is not saying you have to agree with them, or anyone else, but it is saying that, as a teacher, we must try to understand how the circumstances of our learners' lives affects them as learners);

- our 'up-bringing' (the social, economic and cultural influences) impacts on how we relate to learners and others.

## 2.9 STEEP Analysis

The STEEP framework facilitates a creative exploration of key drivers that influence people, situations or things. Trainees can therefore use the framework to explore the influences that shape most aspects of education policy and practice as well as their own and their learners' values, beliefs and behaviours.

**STEPP stands for:**

- Social
- Technological
- Economic
- Environmental
- Political

[Mindmaps](#) are useful as a means of capturing a group-based, creative exploration of the 'STEPP' factors influencing a given topic. Trainees might also work in small groups on one or more of the factors (analysis) in the framework and put them together as a [jigsaw](#) activity (synthesis).

As an example of this activity, it can be useful if trainees complete a STEEP analysis on the causes of literacy, numeracy or language (ESOL) needs or poor motivation, etc.

## 2.10 Values Analysis

Analysing our own personal values is a useful exercise for understanding our own perceptual filters. ethnography and how we may project our viewpoints onto others .

The process is essentially introspective and starts by listing what we really value in a sample of important and relevant categories (the following is an example). The following is an example

What do I value about -

WORK?	FAMILY/FRIENDS?	HOBBIES/INTERESTS?	LEARNERS?
<i>'Opportunities to do things better for myself and others.'</i>	<i>'Trust and support.'</i>	<i>'Me-time. To be expert in a non-work thing.'</i>	<i>'When learners enjoy learning and achieving.'</i>

Now reflect on "Why is this important to me?"

<i>'Because I enjoy changing things for the better.'</i>	<i>'I can be myself without fear of judgement.'</i>	<i>'I need to get away from the pressures from time to time and I enjoy it when people recognise that I am quite good at it.'</i>	<i>'Because it makes me feel useful in a positive way.'</i>
--	---	---	---

## Now reflect on "Why is this important to me?"

<i>'Because I want to make a positive difference to people's lives.'</i>	<i>'It gives me space to evaluate what is important and 'grow'.'</i>	<i>'It gives me space. I want to feel good about myself.'</i>	<i>'I feel good about myself.'</i>
--	--	---	------------------------------------

## So, what are my core values?

<p><i>'I like to feel good about myself by:</i></p> <ul style="list-style-type: none"> <li><span style="color: purple;">■</span> <i>helping others to change things for the better;</i></li> <li><span style="color: purple;">■</span> <i>being good at doing things myself;</i></li> <li><span style="color: purple;">■</span> <i>having opportunities to become good at things.'</i></li> </ul>
---

Following this exercise (probably best done, initially, as an individually private activity) it is then useful to consider how this 'value-base' might influence how we see and judge others, including learners.

### 2.11 Beliefs Analysis

Like values, personal beliefs can also be a fruitful focus for critical reflection because we tend to regard our own as absolutes rather relative and arbitrary (as Moon, above). The following exercise illustrates the arbitrariness of beliefs and their consequent impact on thought and behaviour. It is based on psychological research into beliefs, cognition and behaviour.

<i>'I make my own life'</i> People who believe this statement is true -	<i>'Life makes me what I am'</i> People who believe this statement is true -
- have what sort of approach to life?	- have what sort of approach to life?
- also believe?	- also believe?
- have these capabilities and/or limitations?	- have these capabilities and/or limitations?
- do and/or say?	- do and/or say?
- feel?	- feel?
<b>PROACTIVE/EMPOWERED</b>	<b>REACTIVE/DISEMPOWERED</b>

Based on: Phares, E. J., (1968) *Differential Utilization of Information as a Function of Internal-External Control*, Journal of Personality (December), pp. 649-662 - and - Rotter, J. (1966). *Generalized expectancies for internal versus external control of reinforcements*. Psychological Monographs, 80, Whole No. 609.

Trainees can consider where on the continuum of 'empowerment-disempowerment' they consider themselves to be (most will profess to be somewhere in between but some will be brave enough to adopt a more definite position at one or other of the poles). They may then consider where their learners are on the continuum and whether they can identify

people at the extremes. The table above could be completed individually and shared within a group or it could form the focus for a whole-group discussion. This exercise is usefully followed-up with an exploration of the implications of empowerment and disempowerment within teaching and learning.

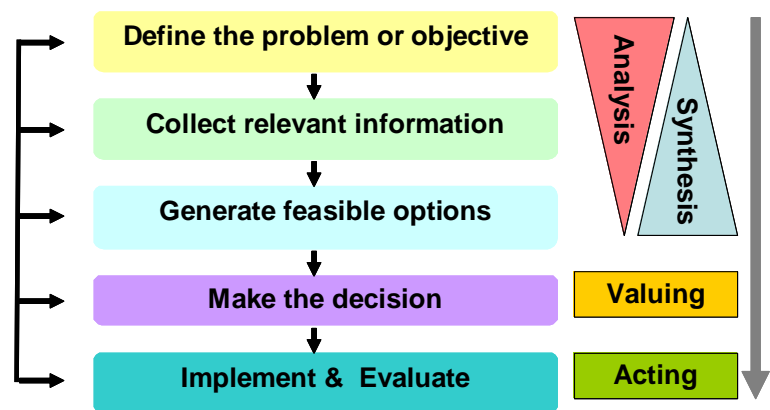
- How well can a relatively empowered person understand (or not) and engage with others who are relatively disempowered?
- What are the implications of disempowerment for teaching and learning?
- How does a disempowered person become more empowered?
- What is (or not) the responsibility of the teacher in re-empowering learners?

## 2.12 Critical Thinking and Problem Solving

A standard model of problem solving can form the basis of a critical thinking exercise. The model on the right is interesting because it highlights analysis and synthesis as well as value-based evaluation/judgement and evaluation of decisions made through experience.

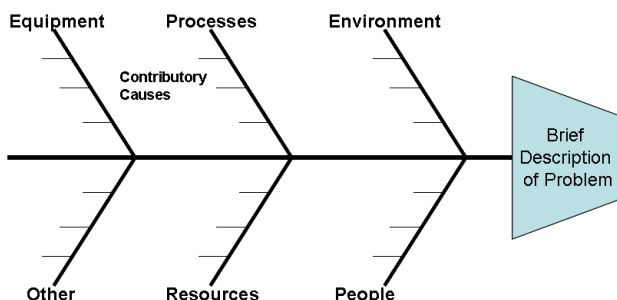
A range of other problem solving techniques can similarly be used to scaffold critical thinking. For example, 'Fishbone Analysis' can be used to identify multiple

### Problem Solving & Decision Making: The Classic Approach



causes that give rise to a particular situation such as difficult behaviours occurring in the classroom.

The illustrated 'Fishbone' has particular labels attached to the 'bones', but are totally arbitrary. Having defined a problem (written in the 'fish's head') trainees could first debate what the relevant or likely categories of causal factors might be, before identifying specific examples under each category



(contributory causes).

## 2.13 Debates and Critical Discussions

Debates, and less formal critical discussions, can be used to facilitate critical thinking and, in particular, the ability to argue a point with clarity and coherence. It can be particularly helpful for trainees to argue from a position which is not their own – enabling them to step outside of familiar or comfortable 'frames of reference'. Debates and critical discussions typically allow opinions, beliefs and values to surface, enabling trainees to identify and challenge them. **It is therefore important that effective 'groundrules' are in place to ensure constructive, positive challenging.**

Ideas about the nature of teaching, learning and learners could be the focus of debates and critical discussions, during workshop time.

'Theory X' People:	'Theory Y' People:
<ul style="list-style-type: none"> <li>• are inherently lazy;</li> <li>• are self-centred;</li> <li>• are prepared only to work when this is unavoidable;</li> <li>• do not want or accept responsibility;</li> <li>• are resistant to change.</li> </ul>	<ul style="list-style-type: none"> <li>• are naturally inclined to work and enjoy it;</li> <li>• are self-controlled and internally motivated to work;</li> <li>• seek rewards in terms of self-esteem and sense of achievement and purpose;</li> <li>• are willing and able to direct personal effort towards a wider good.</li> </ul>

McGregor's two extremes (left) of how people - originally, managers - see others can be usefully refocused on teachers and how they see learners. Clearly, these are idealised, extreme positions with many 'shades of grey' in-between. Asking trainees to adopt these extreme positions in debate can be informative and - if done right - fun.

Adapted from D McGregor (1960) *The Human Side of the Enterprise*, McGraw Hill

Another approach would be to use a 'Think Piece'; a short article, diagram, picture, etc used to stimulate critical discussion, like the example below.

### Vocational Education & Training - Factory Fodder?

Fritz Lang's film masterpiece, *Metropolis*, shows the worker as part machine and machines becoming the same as people. Aldous Huxley's futuristic novel *Brave New World* depicts programmed humans graded into classes, with the lower classes being little more than unthinking brutes who can work on routine manual jobs. The term 'robot' was coined to describe the man-machine that the modern production systems seemed to be trying to create.

This thinking infused and dominated our approach to industrial training. Workers needed little more than basic training in routine skills to perform routine tasks. Artisans, who inconveniently had to think, were offered a few more skills and a wider range of tasks. Social skills like planning, problem solving and communication were a danger and could reduce productivity. Team working was discouraged as being dangerously unproductive. Production was based on lines, with each individual strictly segregated; production control and flow was handled by conveyors, supervisors and other labourers. Each operation was further and further subdivided to the extent that in some industries an entire job could be described as a manual operation with a total cycle time measured in seconds. A whole profession, work measurement and work study, arose to co-ordinate and control this system. Another profession, skill instruction, supported it. In this environment the only important training input was routine manual skills. The only measured outcomes were speed and quality. The only reward system was piece rates. The role of VET was to support this system: to train in routines, procedures and good work disciplines.

[from Mansfield, B. & Mitchell, L. (1996) *Towards a Competent Workforce*, Gower. P40]

The extract, above, appears to be highly critical of work-related training. The authors, however, make a powerful case that work-based learning, over the last 20 years, has often provided a more effective pathway to broad learning, personal development and social fulfilment than formal education that claims to strive directly for this outcome.

## 3. Exploring Reflective Practice

'The unexamined life is not worth living.' Socrates

### 3.1 What is reflection?

Too often, trainees just 'don't get' *reflection* (or reflective practice) – just talking about it seems to reinforce a perception that it is a special thinking skill, somewhat outside of normal experience. Some trainees feel that it is something that other people seem to understand and be able to do quite easily whilst they feel embarrassed at not being able to locate the secret key to unlock its mysteries. The truth, however, is that reflection is nothing more than *thinking* - which we all do, naturally and frequently - and it is not so much the 'doing of it' that is the issue, it is how we capture and record it in a systematic way that is important.

#### 3 Facts about Reflection

- we are all doing it most of the time
- the trick is not doing it but capturing it in a structured way that supports development.
- we may be doing it differently to our colleagues (and this is OK!).

It is therefore important to realise that reflection is not something to be developed; rather, it is a process to be recognised and, within that recognition, there needs to be room for the understanding that different people tend to do it differently. These differences reflect the same differences that educators already understand, in that: some of us tend to visualise whilst others may verbalise; some may focus on the emotional feel of an idea or an incident, whilst others seek to understand cause and effect. Also, some of us like to reflect on ideas and concepts, making it hard for us to understand others who need to grapple with things and experiences. It is important, therefore, to understand that others' reflective processes may be quite different to our own and this then has the potential to introduce confusion and miscommunication into any discussions or sessions on the topic.

In teacher education, as in many other professional areas nowadays, we often link the idea of reflecting on professional practice (or on theory) to that of 'critical thinking' and consequently refer to 'critical reflection' in which we go beyond mere reverie, remembering or attention and mentally explore, examine or question whatever it is that we are reflecting on.

### 3.2 Why is reflection important?

Most professions (such as law, medicine, social work, etc) nowadays, require their practitioners to engage in reflective practice/critical reflection. Donald Schön (1983) has claimed that the ability to learn through continuous reflection on action is a key defining feature of being a 'professional'. Schön further argues that a "battery" model of professional training (whereby students are charged up with knowledge and skills in order to discharge them later, in practice) is no longer valid in the rapidly changing work environment. For more information on Schön and other related theorists see -

### 3.3 Reflecting on what?

Teachers can usefully reflect on experiences arising in their professional practice or on an idea that relates (or might relate) to professional practice. Some examples of 'experiences' and 'ideas' are listed below.

Experiences of -	Ideas, such as a -
<ul style="list-style-type: none"> <li>■ a technique</li> <li>■ a resource</li> <li>■ an incident</li> <li>■ an environment</li> <li>■ an occasion</li> <li>■ learning discussion</li> </ul>	<ul style="list-style-type: none"> <li>■ theory/principle/concept</li> <li>■ strategic approach</li> <li>■ thought/insight</li> <li>■ value/aspiration</li> <li>■ opinion/belief</li> <li>■ expectation/concern</li> </ul>

These two approaches can be seen as poles of the reflective process in which reflection is most effective when it involves movement from one side of the continuum to the other. It is interesting to speculate whether different individuals prefer to move in different directions along this continuum depending on their preferred learning styles.

For example, Activists may prefer to start with an experience first and then consider how that relates to theories or principles of learning. A Theorist, however, might like to think about a teaching strategy, first, and then test it out in practice. Teachers, however, like learners, should practice reflection in both of these directions and avoid falling prey to a 'learning style stereotype'. (Note: there has been much criticism of a simplistic approach to 'learning styles' and the methods by which it is determined. See Coffield et al (2004) for a far more comprehensive and critical view of this subject.

COFFIELD F, MOSELEY D, HALL E and ECCLESTONE K (2004) *Should we be using Learning Styles? What research has to say to practice* London; Learning and Skills Development Agency.

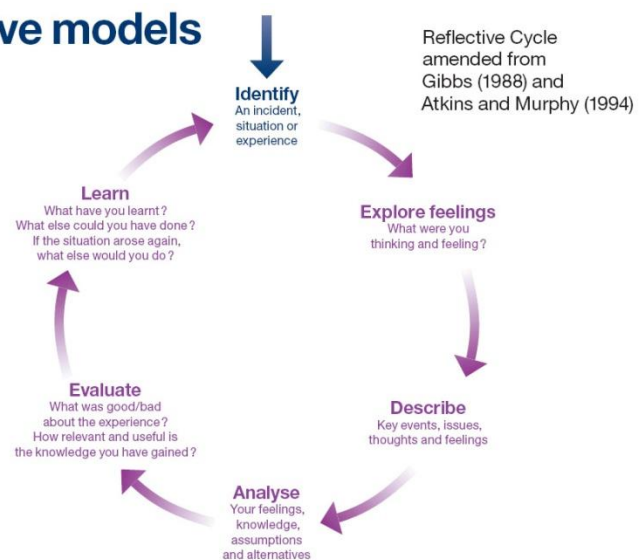
### 3.4 Models of Reflective Process

Encouraging trainees to move backwards or forwards between experience and ideas could be thought of as a two-stage process of reflection. Other models of reflection describe or involve more stages. Several such models are presented, below.

Various (cyclical) models of experiential learning can provide a useful 'thinking framework' for critical reflective practice. Professor Graham Gibbs' model of reflective practice is one which most educationalists are familiar with.

There are clear similarities here with Kolb's (1984) and Honey & Mumford's models of experiential learning. Go to this [link](#) for a more detailed (than usual) explanation of this model.

### Reflective models



Any of these models could provide a framework for individual or peer supported reflection. Note that the Gibbs model starts at the top with a description of something that has happened, anchoring this approach in reflection on 'practice' rather than on 'ideas'. Kolb's or Honey & Mumford's models, used as a basis for reflection, allow 'entry' at any point of the cycle, followed by a continuation around the cycle.

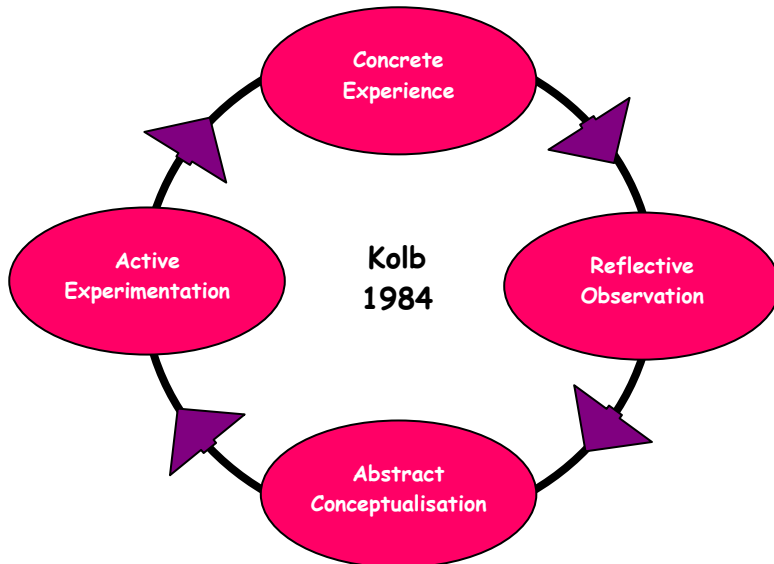
### Example A:

Trainees watch a video or role-play of a particular teaching technique (Reflective Observation).

They then think about (individually or collectively) what key principles are displayed within the demonstration (Abstract Conceptualisation).

They then try out the technique for themselves (Active Experimentation).

Finally they consider (and share?) how it went (Concrete Experience).



### Example B:

A trainee reads about a pedagogical idea such as 'engaged learning' (Abstract Conceptualisation).

The trainee then tries out some strategies to encourage engaged learning (Active Experimentation).

They record how it went and how they felt about it (Concrete Experience).

They then arrange to shadow another teacher who is experienced in the use of engaged learning strategies (Reflective Observation).

Finally, they re-evaluate their views about engaged learning, in light of stages 1 to 4 (a return to Abstract Conceptualisation).

(Note: trainees could continue to 'move' around the cycle, further refining and developing their skills and knowledge - a sort of 'learning spiral'.)

### Johns' model of reflection (1994)

This model was developed in a healthcare context but can be redirected at teaching practice. It focuses on experience and provides some scaffolding to enable trainees to learn from it.

#### Description

Write a description of the experience

What are the key issues within this description that I need to pay attention to?

#### Reflection

What was I trying to achieve?

Why did I act as I did?

What are the consequences of my actions?

- For the patient and family
- For myself
- For people I work with

How did I feel about this experience when it was happening?

How did the patient feel about it?

How do I know how the patient felt about it?

#### Influencing factors

What internal factors influenced my decision-making and actions?

What external factors influenced my decision-making and actions?

What sources of knowledge did or should have influenced my decision making and actions?

**Alternative strategies**  
**Could I have dealt better with the situation?**  
**What other choices did I have?**  
**What would be the consequences of these other choices?**

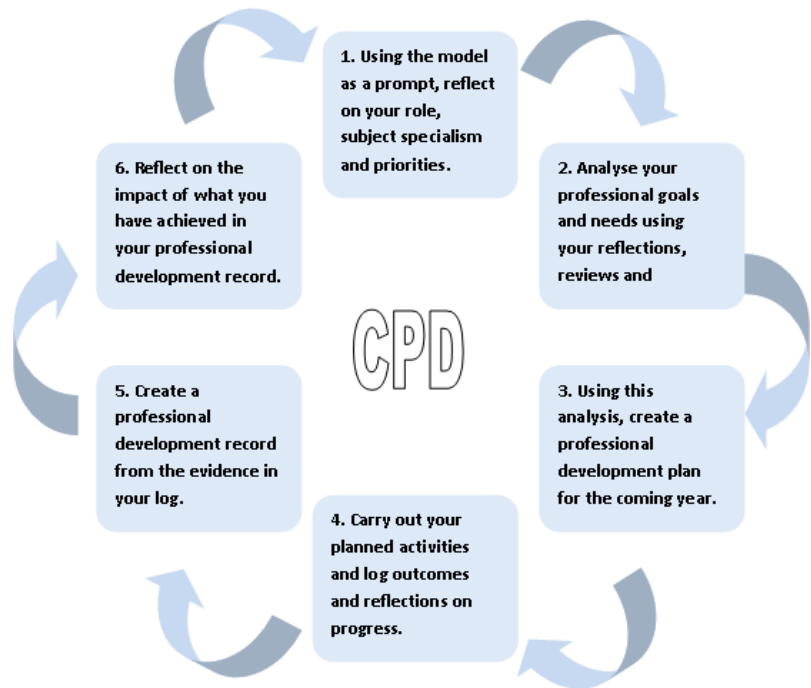
---

**Learning**  
**How can I make sense of this experience in light of past experience and future practice?**  
**How do I NOW feel about this experience?**  
**Have I taken effective action to support myself and others as a result of this experience?**  
**How has this experience changed my way of knowing in practice?**

**The Institute for Learning’s CPD Model**

The Institute for Learning’s model of continuing professional development follows a similar process of experiential learning but takes a wider view of personal development over a longer period of time.

It is interesting to note that reflective practice involves steady, incremental changes in the ways in which do things. Further, there is an implication that the changes made to practice through reflection are positively directed at improving the experience of both teaching and learning. Reflective practice, viewed in this way, is also a process of change and quality improvement that can have a powerfully transforming effect on whole institutional quality and achievement, particularly when carried out collaboratively as part of peer-supported or team-based activities. Collaborative reflective practice is the foundation of *Action Learning Sets, Communities of Practice, Learning Teams, High Performance, Learning Organisations* and *Learning Cultures* (try a Google search on any of these terms for more information).



**Rolfe et al Reflective Model**

Teaching and Learning Programme  
**Reflective models**  
 Amended from Rolfe et al. (2001)

**Models**

<b>What...</b>	... is the situation? ... am I trying to achieve? ... actions did I take? ... was the response of others? ... were the consequences?
<b>So what...</b>	... does this teach me? ... was I thinking and feeling? ... other knowledge can I bring to the situation? ... is my new understanding of the situation?
<b>Now what...</b>	... do I need to do to improve things? ... broader issues need to be considered if this action is to be successful? ... might I do differently in the future? ... might be the consequences of this action?

This model from Rolfe et al and endorsed by the LSIS Subject Learning Coach programme is liked by many for its simplicity.

**3.5 Action Research**

Action Research can be considered to be an extension of reflective practice and experiential learning. It involves the same processes of reflecting critically on the current situation or practice, trying

something different and evaluating the result. The differences are that it incorporates some fundamental principles of pure research such as:

- identifying a valid evidence-base to support the planned change/s;
- the use application of more formalised measurement procedures to help substantiate a valid evaluation of the resulting impact.

### 3.6 Goal Oriented Approaches

A useful motivation for reflective practice is the desire to achieve a positive change - such as wanting to achieve better outcomes - or to avoid the recurrence of unsatisfactory teaching experiences. (The IfL model, above, introduces this goal setting stage into the reflective cycle.) This approach targets reflective practice at a particular goal, benchmark or general improvement and points us in the direction of potential resources for reflective practice within the context of coaching and mentoring. One such resource is the GROW model which is strongly promoted in the LSIS-endorsed Subject Learning Coach and Advanced Learning Coach Programmes.

### 3.7 The Grow Model

GROW is a non-directive model of coaching. It stands for:

- **G**oals – what you want to achieve
- **R**eality – where are you right now in relation to your goals?
- **O**ptions – how you might try to achieve your goals
- **W**ill – what you will do to implement your chosen option.

The GROW model of coaching	
Stages	Helpful questions
Goals	<ul style="list-style-type: none"> <li>● What is the area in which you want to make changes?</li> <li>● What specific outcomes do you want to achieve?</li> <li>● How will achieving these outcomes help you in the longer term?</li> </ul>
Reality	<ul style="list-style-type: none"> <li>● What are you doing currently in the area in which you want to make changes?</li> <li>● What have you tried so far?</li> <li>● What has stopped you from doing more?</li> <li>● What, if any, personal resistances or internal obstacles do you have to taking action?</li> <li>● What resources (people or things) do you need?</li> <li>● What obstacles might get in the way of making changes?</li> </ul>
Options	<ul style="list-style-type: none"> <li>● What are you thinking of doing?</li> <li>● What possibilities have you considered?</li> <li>● What else might you try?</li> <li>● What are the advantages of doing what you're suggesting? Are there any disadvantages?</li> <li>● Would you like any suggestions from other people?</li> </ul>
Will	<ul style="list-style-type: none"> <li>● Which options will you choose?</li> <li>● To what extent do these meet your objectives?</li> <li>● How will you measure your success?</li> <li>● Precisely when are you going to start and finish your action steps?</li> <li>● On a scale of one to ten, how committed are you?</li> <li>● What would it take to raise your level of commitment closer to ten?</li> <li>● How can I support you?</li> <li>● Is there anything else we need to talk about right now?</li> </ul>

As can be seen from the table to the right, the GROW model can support a critically reflective evaluation of potential ways to change and improve professional practice.

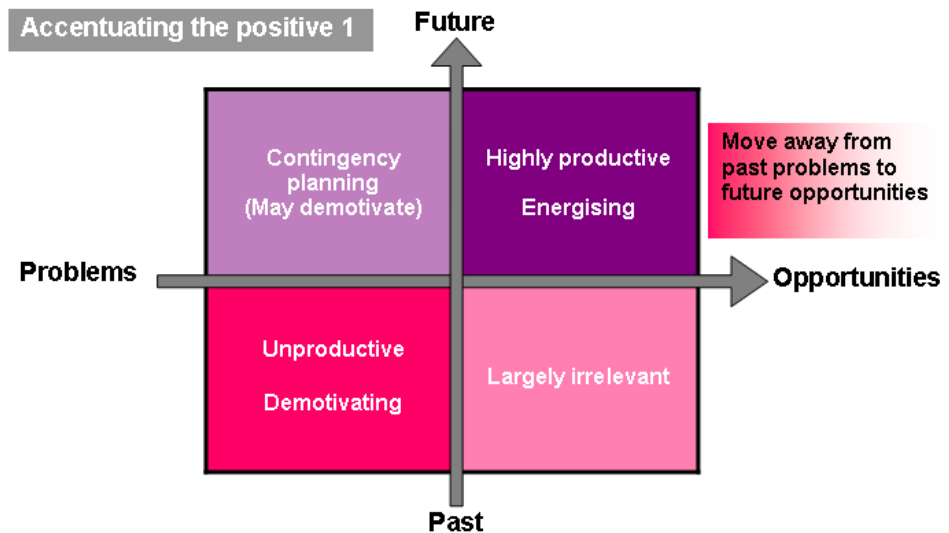
The GROW model is, of its nature, an empowering route-map to personal change and, as such, moves an individual from a fixed position (absolute) in which the status quo prevails to a more resourceful position in which relative options can be considered.

### 3.8 Peer Support and Reflective Practice

Many of the above techniques and models can be adapted for use in peer-to-peer support groups. This could be trainees working in pairs or in more substantial Action Learning Sets. In this situation, it is important that trainees understand and have practiced the skills of Active Listening (see, for example –

<http://edis.ifas.ufl.edu/he361> and [http://www.excellencegateway.org.uk/media/KSSP/c04\\_listenact\\_eng.pdf](http://www.excellencegateway.org.uk/media/KSSP/c04_listenact_eng.pdf)).

It can also be helpful for trainees to practice some of the core skills of [motivational dialogue](#) to avoid dwelling on past problems and to look forward to future opportunities. Typical questions to help trainees to focus on future opportunities and to avoid dwelling on past problems are listed to the left.



**Accentuating the positive 2**

- How will you make that happen?
- What help will you need?
- In what ways might you improve this?
- What are the options?
- Where will you be doing this?
- What could you do about that?
- What's your preferred outcome?
- When will be the best time?
- How will that help?
- What will the end result look like?

You will, no doubt, note similarities between this approach and questions used in the GROW model described above.

**3.9 The New Professional Standards and Reflective Practice**

Trainees following EMCETT’s blended-learning ITE are required to map their progress, at the end of each module, to the new (LLUK) professional standards. Using the professional standards in this way encourages critical reflection on the

trainees’ professional practice whilst also meeting IfL’s requirements for recording CPD and Professional Formation.

**Domain B Learning and teaching**

<b>(BS1) This is about my commitment to – maintaining an inclusive, equitable and motivating learning environment.</b>			
<b>BK 1.1</b> I need to know and understand – <b>ways to maintain a learning environment in which learners feel safe and supported.</b>	<b>BP 1.1</b> I need to – <b>establish a purposeful learning environment where learners feel safe, secure, confident and valued.</b>	<b>Where Have I Covered This?</b> (Activity Ref)	<b>More Development Please</b>
<b>BK 1.2</b> I need to know and understand – <b>ways to develop and manage behaviours which promote respect for and between others and create an equitable and inclusive learning environment.</b>	<b>BP 1.2</b> I need to – <b>establish and maintain procedures with learners which promote and maintain appropriate behaviour, communication and respect for others, while challenging discriminatory behaviour and attitudes.</b>	<b>Where Have I Covered This?</b> (Activity Ref)	<b>More Development Please</b>
<b>BK 1.3</b> I need to know and understand – <b>ways of creating a motivating learning environment.</b>	<b>BP 1.3</b> I need to – <b>create a motivating environment which encourages learners to reflect on, evaluate and make decisions about their learning.</b>	<b>Where Have I Covered This?</b> (Activity Ref)	<b>More Development Please</b>

<b>(BS2) This is about my commitment to - applying and developing my own professional skills to enable learners to achieve their goals.</b>			
<b>BK 2.1</b> I need to know and understand – <b>principles of learning and ways to</b>	<b>BP 2.1</b> I need to - <b>provide learning activities which meet curriculum requirements and</b>	<b>Where Have I Covered This?</b> (Activity Ref)	<b>More Development Please</b>

## 4. Facilitating Critical Reflection

### 4.1 Workshops and Tutorials

Teacher educators can help trainees to reflect on and to critically evaluate their practice, new ideas and new approaches through a variety of processes. For example during workshops or tutorials, trainees could, with peer and tutor support:

1. share experiences (see 3.3) and explore possible causes, impacts, explanations, etc;
2. share ideas (see 3.3 and 4.2, below) and explore actual or possible examples in practice;
3. explore different models of reflective practice, applying it to a real-life example;
4. practice the GROW coaching model and Motivational Dialogue techniques in triads (coach, coachee, observer).

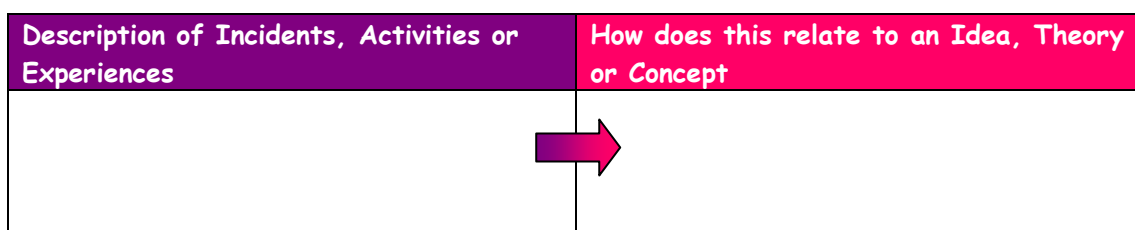
### 4.2 Ways to record reflections

There is no single way to record reflections. Trainees may vary considerably as to how they capture, develop and present reflections. They may vary, for example, in:

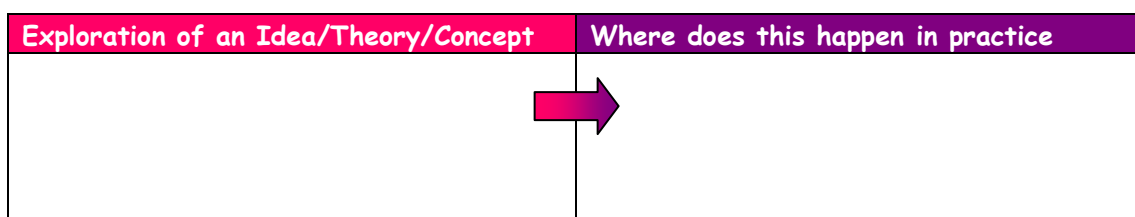
- relative formality of writing (elaborate prose or telegraphic bullets/notes);
- the means of capture (note pad, mobile phone, PC, dictaphone, etc);
- the initial focus (experience or ideas);
- the degree to which emotional responses are expressed;
- the degree to which the trainee is willing to share their reflections;
- etc.

Some interesting approaches are described below but are not intended to be exemplars, in any sense. The first two are useful in enabling trainees to 'come at' reflection from two different directions (experience or ideas/concepts). The third approach is a useful tip for capturing reflections when they arise using a PC and Microsoft Outlook.

#### Version 1



#### Version 2



The table below lists other ways in which trainees can be encouraged, individually or in groups, to reflect by moving between 'experience' and 'ideas'.

Take an Experience	Take an Idea
What were the likely causes? How did it come about? What has happened as a result?- or What is likely to happen as a result? -or What did I learn from this? -or What can I learn from this? What was good about this? -or What was not good about this? Do I need to change anything - if so, what? What ideas/theories might shed light on this?	How does this relate to my experience? What would be necessary to make it a reality? How would this be different? What might prevent this from being a reality? What predictions does it make? -or What outcomes might it lead to? What would be a good test of this? Create a scenario that would illustrate this idea. Seek out examples in practice.

This method of capturing reflections is based on the principle that we are usually never too far away from a PC and can therefore record our thoughts before they evaporate as we become side-tracked by other issues arising. The method involves writing the reflection into an e-mail and posting it back to our in-box. If the 'subject line' contains a consistent element (e.g. 'Reflection'), the message can be filtered into a dedicated Outlook folder. The reflection can then be copied easily into a Word document and refined at a later point.

### Maintaining a Reflective Log to record Incidental & Work-Related Learning

Send yourself an email and store it in a separate 'Learning Log' folder

**To:** (yourself)  
**Subject:** (PCE Learning Log - <key word>)  
**Suggested content headings for email:**

- 1) Brief description of activity/experience/reflection
- 2) What might this be relevant to?
- 3) Brief pointers for follow-up
- 4) Location of any related materials/resources
- 5) Any web-links?

### 4.3 Teaching Practice

Trainees should be encouraged to reflect briefly on each teaching session they deliver, and as soon as they can after the event. The record may fairly comprehensive if something worthy of note occurred or be little more than a reminder to reflect more fully on an event at a later, more convenient, time. Maintaining a record of post-session reflections is a useful discipline because it enables trainees to become more aware of trends that may be less apparent from a more ad hoc approach. An example of a typical proforma to support post-session reflections is shown below.

<b>Teaching Record</b>				Trainee Name:	Page:
SESSION DATE	TOPIC	HOURS	REFLECTION (brief notes or cross-reference to relevant document)	VALIDATION (comments by line-manager, mentor or other relevant person - if observed, cross-reference to document)	

## 5. Conclusions

The approaches, ideas and exercises presented in this pamphlet are not intended to be definitive or exhaustive. They are offered for critical review and for evaluation in practice. It is EMCETT's vision that teacher education colleagues will wish to engage more deeply with this resource by sharing with us any ideas on how to improve it or to add to it from the benefit of their own experience.

All feedback is welcome.

Contact:

**Ian Grayling**

**Executive Director**

**emCETT**

east midlands centre for excellence in teacher training

**[iang@slcollege.ac.uk](mailto:iang@slcollege.ac.uk)**

**p: 0116 264 3521**

**m: 0791 262 3117**

**c/o South Leicestershire College**

**Blaby Road, South Wigston**

**Leicestershire LE18 4PH**