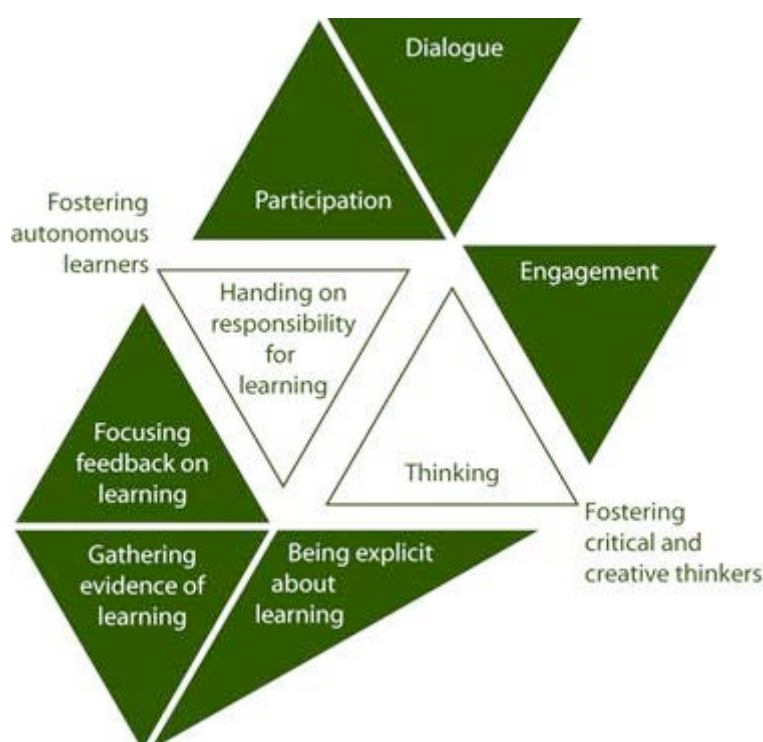


Learning Dispositions and Personal Learning Planning

*“Success involves wanting to learn now, and wanting to carry on learning in the future.”
Journey to Excellence*



by

Eric Young

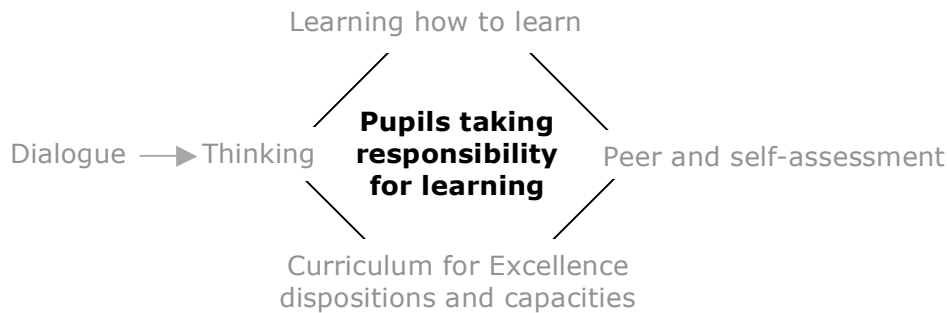
with the participation and engagement of Highland teachers

Building resilience - Becoming reflective - Being resourceful

Personal learning planning represents an extension of self-assessment by students through which they learn how to take greater responsibility for their learning in school and beyond.

Reflective Professionals and Thinking Children

Creating autonomous learners



Curriculum for Excellence: dispositions and capacities

The Highland Council Reflection Framework explores the principles and practice of formative assessment as an effective platform to achieve the purposes of Curriculum for Excellence. If children and young people learn how to become more involved in their own learning and so take greater personal responsibility for it, then they will be well on the way to demonstrating the capacities of successful learners, confident individuals, responsible citizens and effective contributors.

It is important to remember that, in developing these capacities, students need to approach the learning opportunities they encounter favourably disposed to the experience in they are about to engage. Some learners enjoy success easily because they are naturally disposed to learn; many others need to learn how to approach how they set about learning in order to see more clearly how success will benefit them. This is particularly true for young people whose experience of school has not been as good as it might have been.

This booklet has been written after a period of participation and engagement with Highland teachers during which some of the issues involved in motivating children and young people to become more positively disposed towards learning have been explored in some detail.

The Highland model has focused attention on both the affective and cognitive aspects of the dispositions children and young people need to bring to their learning. This thinking skills perspective has enabled us to explore the CfE capacities using the 'indicative descriptors' to understand the attributes and capabilities underpinning the four capacities as suggested in BtC 3.

Learning Dispositions and Personal Learning Planning

Personal learning planning represents an extension of self-assessment by students where they learn how to take greater responsibility for their learning in school and beyond.

Three Rs - resilience, reflection and resourcefulness - provide an overarching framework within which to build an approach to personal learning planning using the principles and practice of formative assessment as presented in the Highland model.

Eric Young

with the participation and engagement of Highland teachers

Contents

- 1 Motivating learning through personal learning planning
- 2 Supporting young people to plan their own learning
 - 1 How do you use assessment in the classroom?
 - 2 Are your students well prepared to take responsibility for their learning?
 - 3 Where do you plan to start?
 - 4 Some general thoughts
- 3 Building resilience
- 4 Becoming reflective
- 5 Being resourceful

Appendices

- 1 The affective and cognitive elements of CfE capacities
- 2 The Highland Model
- 3 Fostering the capacities of Curriculum for Excellence using the Highland Model - teacher version
- 4 Fostering the capacities of Curriculum for Excellence using the Highland Model - student version
- 5 Article: Students' view of intelligence can help grades
- 6 Questionnaires: Theories of Intelligence
- 7 Reflection activity: Words of Praise
- 8 Guidance on Writing Learning Logs
- 9 Learning Log Starter

Motivating learning through personal learning planning

Effective assessment practice is about improvement, improvement in how we learn, improvement in how we set about learning tasks both within and beyond formal education, and improvement in how we estimate progress in learning. It depends on a coherent conception of how assessment contributes to the delivery of the curriculum through skilfully planned teaching and learning. It also requires that we are able to apply that understanding in different ways depending on the purpose of a specific assessment activity.

Curriculum for Excellence sets out a number of aspirations for education in the 21st century. One of these is that the curriculum should be designed according to seven principles: challenges and enjoyment, personalisation and choice, breadth, depth, progression, coherence and relevance. These principles are intended to inform and facilitate the kind of teaching required to ensure that young people emerge from their education as successful learners, confident individuals, responsible citizens and effective contributors.

The extent to which we can achieve this depends on how well teachers and students interact with one another in the classroom and beyond and on the kind of assessments we use to ensure that teaching and learning are as good as they can be.

If assessment is practised coherently and consistently as an integral part of learning and teaching, the seven principles of curriculum design will be addressed and meaningful opportunities will be provided for children and young people to demonstrate the attributes and capabilities associated with the four capacities of Curriculum for Excellence.

Opportunities such as those required to help children and young people develop the capacities of Curriculum for Excellence will be more complex than those associated with traditional schooling. They look towards not just the knowledge, understanding and skills they need to demonstrate competence in various curriculum areas, but also the dispositions they bring to learning, their determination to succeed, regardless of how intelligent they think they are. The aspirations of Curriculum for Excellence are for all young people, not just those regarded as able to demonstrate academic success.

This represents a considerable challenge for teachers, schools and the wider educational system. In order to reach all young people, we need to develop approaches to teaching and learning which are inclusive and which recognise that, to sustain and support improvement for all, we need to deal with both the cognitive and the affective dimensions of learning.

In large measure, this will depend on the extent to which we are able to fuse together these two dimensions in the approaches to assessment we adopt in the classroom, in the school and in the wider education community. Achieving an effective balance between the cognitive and the affective dimensions of learning will be particularly important in helping children and young people to apply their experience of improved classroom assessment practices to how they plan and evaluate their own learning, both in formal education and beyond it.

Supporting young people to plan their own learning

1

How do you use assessment in the classroom?

First, we need to assume competence in the use of assessment to support everyday classroom learning. The starting point in helping students to take greater responsibility for their learning is their familiarity with the various practices associated with formative assessment. Is their experience such that they use learning objectives and criteria for success regularly to understand and monitor everyday classroom activities? Do they experience good quality classroom dialogue that helps them to identify and assess their progress? Are they able to give, get and use feedback to improve their learning?

Before we can reasonably expect children and young people to take greater responsibility in planning and evaluating their own learning, they need to have developed a habit of self-assessment based on familiarity with and application of the assessment practices they have been exposed to by their teachers.

2

Are your students well prepared to take responsibility for their learning?

Second, they need to know that successful learning is up to them. In particular, they need to believe that personal improvement comes from things they have control over, not things that they might believe are beyond their power to change. Improvement is possible for all, regardless of ability or intelligence. Indeed, effort makes you more intelligent, and being told you're intelligent doesn't guarantee success. More likely, failure sits in wait for anyone who thinks that their intelligence means they don't have to try hard.

The dispositions we bring to learning, how we feel about it exert a strong influence on our prospects for success and children and young people need to feel well disposed to their learning from the outset.

3

Where do you plan to start?

Third, the processes involved in personal learning planning are related but, to a significant extent, distinct. The basic processes are:

- a learning target or priorities is set
- activities designed to achieve the target are planned
- the activities are undertaken
- progress towards achieving the target is evaluated as the activities are carried out and afterwards
- the evaluation is used to inform the next cycle of target setting, planning, doing and reviewing.

In helping children and young people to plan their own learning, the processes involved are best introduced gradually and progressively. Rather than beginning with the most difficult element - setting personal learning priorities - it may make more sense to start with activities through which students can learn how to reflect on the learning that they are already involved in day by day.

The other processes involved can then be built around habits of evaluation and reflection which have been well established through everyday classroom activities.

4

Some general thoughts

Personal learning planning can be seen as an extension of self-assessment by students where students learn how to take greater responsibility for their learning in school and beyond.

Three Rs - resilience, reflection and resourcefulness - provide an overarching framework within which to build an approach to personal learning planning using the principles and practice of formative assessment as presented in the Highland model. They also serve to highlight the distinctive emotional,

cognitive and behavioural factors likely to influence how teachers might foster independent learning as a way of helping children and young people to develop the capacities at the heart of Curriculum for Excellence.

In building resilience to setbacks in their learning, in reflecting on the nature of their successes and failures and in learning how to be resourceful in identifying different ways of dealing with difficulty, students can build a repertoire of ideas, tools and approaches which will sustain effective learning over time. These three Rs - resilience, reflection and resourcefulness - offer an overarching framework within which the different emotional, cognitive and behavioural influences on autonomous learning can be explored.

Learning logs, diaries and journals can provide a structure in which individuals begin to see that successful learning is a realistic goal for everyone, no matter their ability. This can be complemented by activities designed to give students opportunities to develop the approaches and strategies they can use in learning how to think both as an integral part of specific learning contexts and as a function of learning how to learn.

By approaching personal learning planning in this way, students can build gradually and securely the resilience, reflection and resourcefulness that will help them to pursue their own learning priorities at a later stage when they are ready to identify them by themselves.

Building Resilience

Children and young people need to understand that learning is a personal journey under the control of the individual learner. Teachers have a critical role in stimulating and supporting it, but responsibility for the learning rests with the individual who should be actively engaged every step of the way.

Carol Dweck has explored how students' beliefs about themselves affect their disposition to learn. She has been instrumental in helping us to understand that successful learning depends at least as much on the effort we are able to put into a task as it does on the initial ability we bring to it. Her work on the implicit theories of intelligence or mindsets that influence how we respond to the difficulties encountered while learning have helped us to understand the factors that can either sustain or undermine our capacity to learn. If, through a fixed mindset, we believe that our intelligence is static, we will want to avoid difficulty because it exposes our limitations. On the other hand, if we believe that intelligence can grow through effort, we are more likely to welcome the challenge of learning something new. To enjoy this challenge, children and young people need to learn how to become resilient in dealing with the obstacles that invariably stand in their way and their teachers have an important role to play in helping them to achieve this.

How we approach classroom assessment can influence how students feel about their capacity to learn. Here are ten ways in which classroom assessment can help to build a positive attitude to learning:

1

Using weak answers

Weak, incorrect or incomplete answers present valuable opportunities to build understanding and resilience. If a student gives an answer that needs improvement, don't say "No" or give the correct answer. Instead, say "Wait there till we see what others think" and gather some ideas from other students. Bring these answers back to the first student and ask: "Which answer do you like best?" This avoids 'fixing' negatively on one student and involves the rest of the class while keeping the first student listening and thinking. Used regularly, taking an answer round the class helps students recognise the value of persistence.

2

Focussing on the task

When giving feedback about a difficulty, don't be discouraging by focusing on the person rather than the task. Comments like "You used to be good at this" or "You're not getting the hang of this, are you?" give the impression that you don't think the student is up to the task.

Conversely, comments like "This seems to be a problem" or "This is difficult, isn't it" imply that the task itself is troublesome. A helpful suggestion about approaching the problem provides the incentive and direction to deal with the difficulty.

3

Dealing with negative feelings

Respecting children's feelings is better than trying to bully them out of negative attitudes. Empathise. Avoid dismissing what children are saying or feeling, and indicate that negative thoughts can be a signal to do things differently. Acknowledge their feelings with a sound or a word - "Mmm", "I see" - or with a sentence: "I can see you're disappointed." Identify with them: "I know it's upsetting when you get things wrong."

One of the most valuable things adults can give children is interest and attention. The ability to engage with students will be appreciated much more than a quick word of praise. Giving encouraging verbal feedback may have its own motivating effect simply because it expresses interest in and involvement.

4

Praising effort and technique

Telling children that they are clever can give them the impression that looking smart is more important than actually accomplishing something and so encourage them to avoid at all costs anything that risks making errors or revealing their ignorance.

Focusing on processes like their effort or their strategies can motivate children in a way that allows them to withstand and even thrive on setbacks.

5

Encouraging quietly

Keep children involved with quiet encouragement. Say very little and offer minimal direction. “Mm-hmm” can encourage a hesitant start by suggesting that you’re still listening. Others worth using:

Tell me more	Oh?	For instance?	I see	Right
Then?	And?	Go on	So?	

Don’t imply agreement or disagreement. “Right” does not mean you agree but “Yes, I hear what you are saying. Go on.” Another way of giving quiet encouragement is to repeat a wrong or incomplete answer, with an inflection that turns it into a question:

Teacher: Why does the magnet stick to the fridge door?

Student: Because it is metal.

Teacher: Because it is metal?

6

Responding to weaknesses

Normally, we want to acknowledge students’ responses in a positive way. Students need the confidence to offer their ideas and answers without fear of even the mildest ridicule. There will be times when the nature of a student’s response makes it difficult to acknowledge it without being negative in some way. If it’s too risky to take the response round the class and bring it back again, try to play it down in some other way, e.g. by using signals that can be either non-verbal (a smile, a look, a thumbs up, a frown etc) or verbal (repeating, echoing, paraphrasing, praising, correcting, prompting and probing etc).

7

Being selective, specific and positive

Students shouldn’t feel overwhelmed by being asked to deal with too many things at once. Comments can be kept positive and specific by sandwiching what should be improved between two positive comments. The first positive comment can be about what’s good in a piece of work. The improvement can come next to be followed with a helpful suggestion about how to make the improvement.

All three points should be specific. “Good, now work on sentences” or “Well done. Practise more fractions” aren’t enough. A learning intention asking students to use description in their writing might provoke a comment like “Good work, John. I liked when you described the Sun as a ‘ball of fire’ but you need to think more about what to say about the water. Try thinking about how it reflects things.”

8

Following up on feedback

Assessment only becomes formative if it is actually used to guide future learning. So students should use feedback to improve. Ask students to number all the pages in their jotters. Have them construct two columns on the inside cover, one for you and one for them. Once you have marked a piece of work, note down the page numbers and the date in your column and sign it. Students should do the same in the opposite column once they have done the follow-up work required. Don’t mark the next piece of work until they have. If parents complain, explain why and use the evidence to support your stance.

9

Self-correcting

Students can learn about self-evaluation from guided self-correction. Checking for obvious errors is a useful exercise for both students and teachers; it helps to define what ‘obvious’ means to different people and that could influence future plans for learning. Self-correction provides opportunities in some subjects to practise alternative routines to confirm answers. For example, in mathematics, a calculation could be checked by using:

- inverse calculations
- equivalent calculations
- knowledge of odd and even

Research suggests that self-correction doesn’t encourage students to be more generous to themselves than their work merits. Quite the reverse. Getting students to self-correct actually encourages personal responsibility for work done.

10

Using talk or learning partners

Formative assessment encourages students to talk honestly and confidently about their learning, even when it’s unsuccessful. Peer-partners can help students to be open about their thoughts and feelings. The most important things that students come up with can be posted on a classroom notice-board as a constantly changing record of what the class thinks and feels about learning.

Becoming Reflective

Students need to acquire a language for learning and for assessment to talk about what is to be learned and why, how it is being learned and how well. Teachers and students can then successfully share their understandings of what learning looks like and begin to talk about how both the formative and summative uses of assessment can be brought together in a coherent and constructive way to help them develop the skills of self-assessment in which personal learning planning should be grounded.

This shared language also provides a vocabulary for talking about the criteria and related standards to apply when judging the quality of activities undertaken and work done. In reflecting on their progress in completing a task, children and young people need to understand the criteria that should govern their judgements and the appropriate standards to apply.

Here are ten ways of encouraging students to reflect closely on their learning.

1

Giving students a nose for quality

To practise the skills needed to set and use success criteria, learners need some idea of what a good piece of work looks like. Teachers can give students experience of this by examining (modelling) with them specific examples of different kinds of work and discussing the criteria and standards to consider when judging their quality.

2

Involving students in making judgements about quality and success

Involving students in the process of identifying the criteria to use in assessing their work helps them to engage with their own learning. This need not take long: “How will we know if we have achieved this?” Often, it will be one statement. Sometimes, it may be worth taking more time to negotiate appropriate criteria. This helps students to assimilate a real understanding of quality before embarking on a new piece of learning.

3

Focussing on observable behaviours

Useful success criteria are clear and concrete. This is easy if the outcome is closed, like a single answer solution, but more difficult where tasks are open-ended as in writing an essay or practising personal and interpersonal skills. Overcome this by referring to observable behaviours: “What will good look like or sound like in this instance?” or “What will be a fair effort and what will fall short of being acceptable?” Some other examples:

- “What will a good book report, essay, poster, graph, presentation etc. look like?”
- “What does a good discussion look, sound and feel like?” (Possible criteria: one person talking at a time; no interruptions; good body language; eye contact; people asking questions, agreeing and disagreeing.)
- “What will it look, sound and feel like if your audience appreciates your presentation?” (Possible criteria: no fidgeting; eye contact with the speaker; no talking; people nodding and smiling; responses when invited; questions asked if invited, applause at the end.)

4

Sharing the big picture

The value and effectiveness of learning objectives and criteria for success is enhanced further if students know why learning something will help them. This doesn't have to be done in a heavy-handed way, an “aside” offered at an early stage can show how the learner will benefit from a particular piece of learning. Big picture goals can also be explored quite simply by asking children to say why they think they are learning something.

5

Checking on prior knowledge

It's always important to start off a new lesson or topic from a point that acknowledges the prior learning of everyone in the group. One way of doing this is to carry out a quick check to establish what students already know about the topic.

First, ask each student to write down everything they know about the topic to be taught. If they know how to use concept maps, they can produce a map of their current understandings. Alternatively, they can be asked three short, key questions on the topic, stressing that they are being asked to help you check what they already know, not to test them.

A quick scan of the answers as you walk round the classroom will give you an idea of what the group already knows and might even persuade you to modify your lesson plan.

6

Using comments only

Giving just a mark does not help anyone learn, so, teachers often supplement their marks with comments to point out what can be improved and how. However, a large body of research suggests that regularly giving a mark or a grade leads children to put more store on the mark than on any comment. Children who get a good mark ignore the comments because they don't think they need to do better and those receiving a poor mark are disappointed and don't read the comments. Give marks only occasionally and use comments to help direct future efforts.

7

Finding room for improvement

Assessment is all about improvement, no matter how good the last piece of work. Sometimes this can mean encouraging able students to be more demanding about their own work. Able students can be asked to review the work of other able students to find out for themselves where they might set higher standards. Outstanding work from another class or a previous class can be used to similar effect.

8

Evaluating quality

The travelling sticky illustrates how the habits of self-assessment and self-evaluation can be promoted and supported in simple ways. Every student puts a sticky or Post-it note on the work they think reflects the best they can achieve. Once a sticky is in place, the student is expected to explain to a partner or a small group of peers the reasons for putting it there. After some time has passed, students might reconsider the placing of their sticky.

9

Peer assessing homework

Work done at home is ideal material for assessment by other students. Both the author of the homework and the student assessing it benefit. Peer assessment can be used with anything from correction (with or without a checklist) to more complex productions.

10

Talking about thinking

Formative assessment helps to sort out the things that go wrong in learning. Being stuck is good, an opportunity to learn something new and find out what works. Talk with students about the strategies they use when they don't know the meaning of a word or can't do a sum. This helps them to identify the strategies that work for them, and how to use them to become 'unstuck'.

Being Resourceful

Children and young people need support and guidance in building a repertoire of what they can think about and do to keep their learning on track as it develops. This repertoire grows with experience and provides a variety of strategies and tools to use to sustain their learning as it progresses. Teachers and others involved in the education of children and young people have a lot to offer in helping students build and use it effectively. In essence it consists of how creative and critical thinking is used to direct and evaluate learning.

Here are ten things which can help students begin to put together a repertoire of approaches which they can use to become resourceful in the course of their learning.

1

Helping children work with targets

Don't expect students to know immediately how to use targets. Once a target has been set, children need help in working with it. A target is an end point. It need not include directions on how to close the gap between where you are and where you ought to be. As well as a target, children need examples, models of success, strategies to use and checks and reminders to guide them on their way.

2

Setting bigger learning goals in a meaningful context

There is enough evidence to suggest that having big picture goals influences how successful people achieve their ambitions. Yet, it can be difficult to see how such goals might relate to daily classroom activity. Some maths teachers decided to explore the effect of encouraging students to think about their classroom activities as helping them to "become a mathematician" by asking questions, trying things out, looking for connections and asking why.

This provided a meaningful context in which to explore mathematical ideas and moderated the normal image of maths as a subject with a lot of rules to learn. When asked what they had learned, students made statements about these features of becoming a mathematician and commented on the specific content they were working on. As a result, they were able to show that they could understand bigger goals and aims and be forward looking in their own learning.

3

Using checklists

As students peer and self-assess, they will probably need help in using success criteria. An efficient way to do this is to create checklists for students to use on their own. There are different ways of doing this:

- a checklist: list the success criteria with checkboxes for students to mark if they think it has been achieved. The completed sheet can be used as evidence.
- a sliding scale: create a scale (e.g. 1 – 5 or 1 – 10) to allow students to score a piece of work on each criterion you want to assess.
- descriptions: describe different levels of success in meeting the criteria identified by a short description which can be linked to an estimate of success, e.g. exceeded success criteria, met success criteria, fell short of success criteria. A space for comments can also be provided.

4

Self-correcting

Students can learn about self-evaluation from guided self-correction. Checking for obvious errors is a useful exercise for both students and teachers; it helps to define what 'obvious' means to different people and that could influence future plans for learning. Self-correction provides opportunities in some subjects to practise alternative routines to confirm answers. For example, in mathematics, a calculation could be checked by using:
inverse calculations

equivalent calculations
knowledge of odd and even

Research suggests that self-correction doesn't encourage students to be more generous to themselves than their work merits. Quite the reverse. Getting students to self-correct actually encourages personal responsibility for work done.

5

Developing paired marking with response partners

Response partners offer an honest assessment of how well a piece of work meets the success criteria and what can be improved. In paired marking, students need to understand both their marking role and the learning intentions and success criteria they're working with.

To remind everyone, a child friendly description of their role should be displayed in the classroom: "A response partner is someone who tells me the truth about my work and helps me make it better."

In identifying the pairs yourself, taking both personal relations and ability into account, if possible. Encourage dialogue rather than telling each child to take turns at being teacher. Ground rules about listening, interruptions and confidentiality etc should be decided and displayed prominently.

Partners should point out first what they like and then suggest an improvement based on the learning intention. To keep positive, tell students to identify more strengths than improvement points.

Paired marking can work at all stages. In early years, pairs can meet on their own magic spot on the carpet to talk about their work. Children can be trained in their roles through modelling with the whole class, watching paired marking in action and other routines.

6

Sharing learning

Self-assessment and self-evaluation are habits that can be learned from regular and frequent repetition of simple activities. Students can practise assessing their own learning by asking them to reflect on what they have learned at the end of a lesson or the day. By making it the normal way for a lesson or the day to end, it will become part of the routine. This can be done in different ways:

- ask students to think of something they learned today and get a few to say what that was
- allow a minute for silent reflection
- ask students to write down something they learned
- ask students to spend 30 seconds telling their neighbour what they learned today.

7

Debriefing regularly

Discuss with students their successes and difficulties. Talking will help them understand how they learn and feel able to cope with problems. Even high flyers will be reassured that learning can be difficult at times.

Written self-evaluation can limit thinking to what children can write. So it may be better to finish early and hold a short discussion led by a poster displaying prompts, e.g.:

- What really made you think?
- What did you find difficult when you were learning...?
- What helped you when something got tricky ...?
- What do you need more help with about learning to...?
- What are you most pleased with about learning to...?

Start the debrief by asking about the learning intention and success criteria. Keep pulling discussion back to these as a frame for students' responses and to let you exclude irrelevant comments. Remember, though, learning is messy and children may well have learned unintended things. Acknowledge this and celebrate it if possible. Students may respond slowly to begin with, and possible answers can be modelled. As familiarity grows, the poster may become redundant.

8

Getting students to prepare their own test questions

Research suggests that students who revise for tests by preparing and answering their own test questions, perform better in unseen tests than those who prepare in more conventional ways.

Why this should be so is not so difficult to understand. Preparing your own test questions calls for, and so develops, an overview of the topic. Students also have to think about what makes a good question and, in doing so, they need to have a clear understanding of the subject material.

One other whole class benefit is that the best questions can then be used for class revision or even a class test. In this way, students can see tangible evidence that their work has been valued.

9

Preparing for tests and exams with traffic lighting

By traffic lighting a list of key words or topics on which a test will be set, students can identify the areas where they feel their learning is secure (green), and where they need to concentrate their efforts (amber or red). This forms the basis of a revision plan. Students can identify questions in past examination papers that test their red (and amber) areas and use personal and group revision time to help them cover the topics where they are weakest

10

Using learning logs or journals

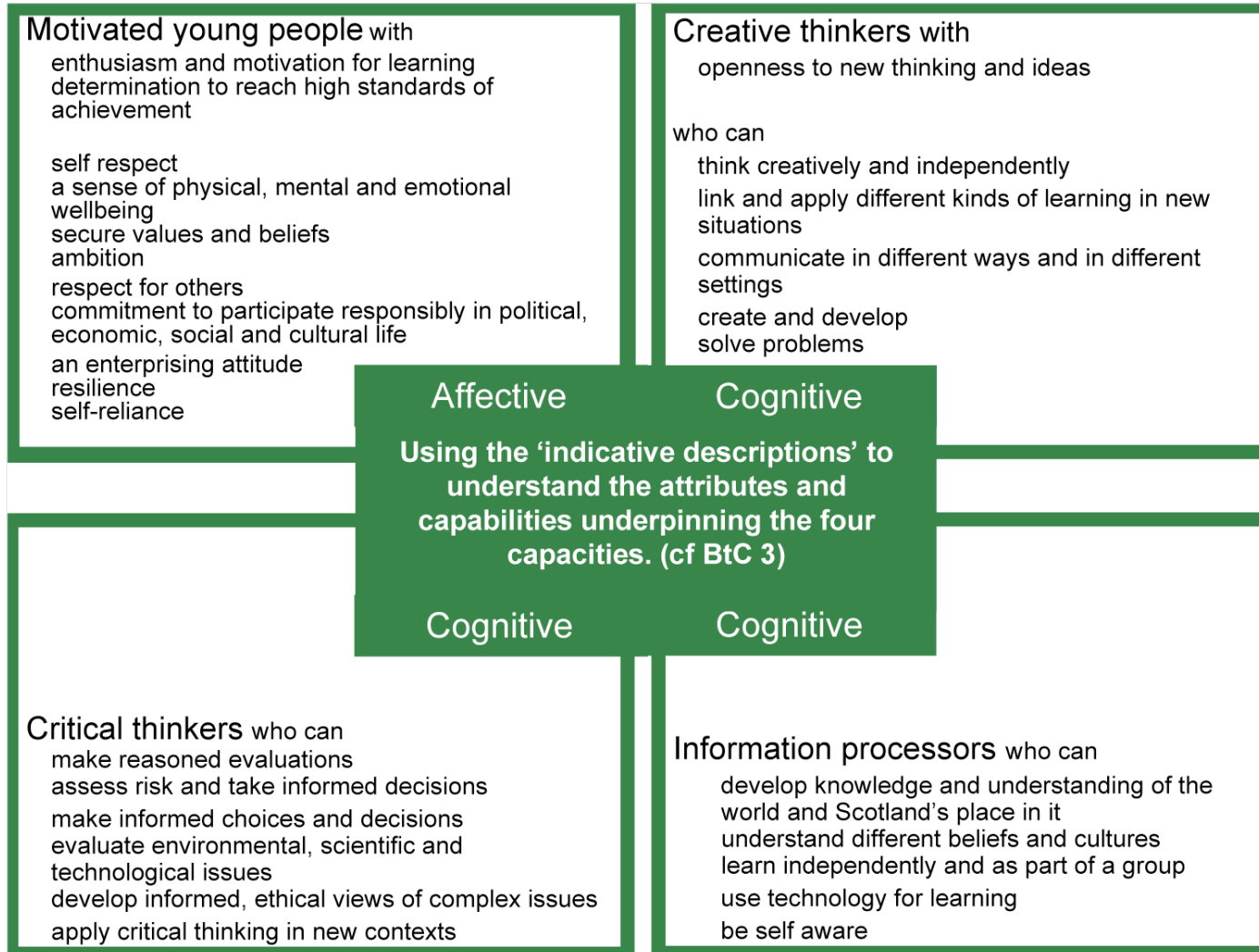
Learning logs or journals let students keep notes of their thoughts and feelings about their work. To help them use it conscientiously, students should have time in class to complete it. It may also provide information for progress reports, etc.

A typical log might ask students to complete at least three sentences from a list of statements like:

- The most important thing I learned this week was...
- What I found most interesting today was...
- What surprised me most was...
- What I enjoyed most about today was...
- One thing that still puzzles me is...
- What I need help with is...
- What pleased me most was...
- Right now I feel...
- Today might have been more helpful for me if...

Some of these can be displayed on the classroom wall.

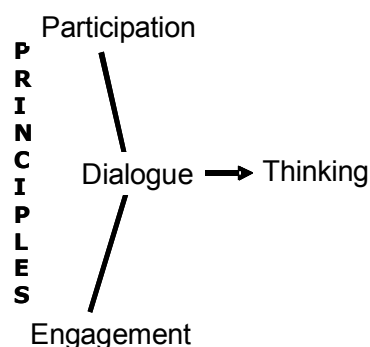
Appendix 1 – The affective and cognitive elements of curriculum for excellence capacities



Appendix 2: The Highland Model

The first two aims of the Highland journey involved exploring what it means to embed and extend formative assessment. Through articulating a set of underlying principles together with a critical examination of the practice of formative assessment as outlined in the research which underpinned *Inside the black box*, a more coherent conception of formative assessment was developed. The principles together with a clear focus on the centrality of peer and self assessment provided a context for beginning to unpack what it means to ‘help students take greater responsibility for their own learning’. The three sections of the model are outlined below.

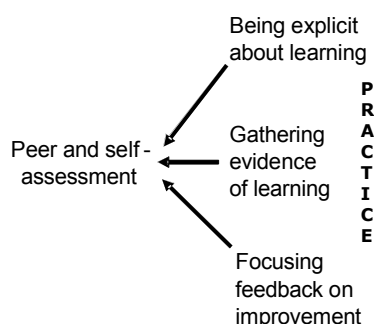
The principles of formative assessment



After extensive investigation and discussion with practitioners, SMT and researchers, the four principles set out opposite were developed. If children are to become engaged in their own learning, they need to be thinking for themselves and teachers can stimulate and support this by encouraging active classroom participation through dialogue designed to both investigate learning as it occurs and dispel misunderstandings before they get in the way of future learning.

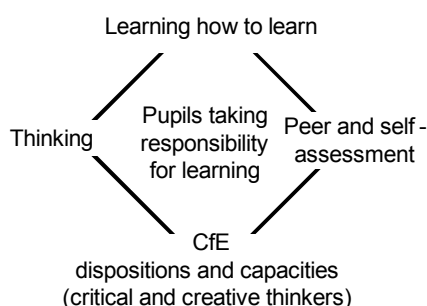
The Highland Council CPD Reflection Framework is based on the understanding that these principles have an important practical role to play: if used to guide classroom practice, they offer the prospect that the significant gains observed by recent research in assessment practice are most likely to be regularly and consistently realised.

The practice of formative assessment



The acid test of embedding formative assessment is not that teachers are using the right strategies in the classroom but that students are engaged in assessing their own learning. To emphasise the important of this, the commonly discussed strategies were placed within a context which offered a coherent and consistent approach to classroom assessment. The first three identify what Black and Wiliam have called the evolution of good teaching; the fourth identified the purpose of such teaching, self-assessment by students, which they described as an ‘essential’ part of formative assessment. It is also an important link with an emerging focus for HMIE inspections: students taking greater responsibility for their own learning. In A Curriculum for Excellence too, success in achieving the purposes and principles of the curriculum is only likely if students are able to become much more actively involved in their learning.

Handing over responsibility



The Highland Council CPD Reflection Framework recognises the importance of the role teachers play in helping students to take greater responsibility for their own learning.

It also understands that building independent, self-motivated learners often requires both students and teachers to change well-established classroom habits and practices. In seeking to provide the stimulus and support for meaningful change in how teachers and students interact in the classroom, the framework has drawn together a number of well-established strands including thinking, peer and self-assessment, and metacognitive discussion to provide a practical framework within which teachers can explore different ways in which they can hand on to their students greater responsibility for managing and evaluating what they are learning.

Appendix 3: Fostering the capacities of Curriculum for Excellence using the Highland Model - teacher version

Exploring the principles of formative assessment	
<p>Dialogue To what extent are interactions in my classroom based on high quality dialogue?</p>	
Developing formative assessment practices	
<p>Peer and self-assessment To what extent do I give structured and regular opportunities for self-assessment by pupils?</p>	
Creating autonomous learners	
<p>Pupils taking responsibility for learning To what extent do I show pupils that successful learning requires effort and purposeful thinking on their part?</p>	
<p>Affective aspects:</p> <ul style="list-style-type: none"> • Learning dispositions 	<p>Cognitive aspects:</p> <ul style="list-style-type: none"> • Critical thinking • Creative thinking • Information processing

Appendix 4: Fostering the capacities of Curriculum for Excellence using the Highland Model - student version

Exploring the principles of formative assessment	
<p>Dialogue To what extent do I have opportunities to think about my learning by taking part in good classroom dialogue involving my teacher and other students?</p>	<p><i>I'm engaged in my learning because I participate with others in great classroom dialogue.</i></p> <p style="text-align: right;">Creative Thinking <i>Shaping my learning</i></p>
Developing formative assessment practices	
<p>Peer and self-assessment How well prepared am I to assess my own work and the work of my classmates?</p>	<p style="text-align: right;"><i>Knowing what I'm learning and what to look for in my work</i></p> <p style="text-align: center;">Critical thinking <i>Assessing my work</i></p> <p style="text-align: right;"><i>Thinking about the quality of what I'm doing as I work</i></p> <p style="text-align: right;"><i>Improving my work through feedback from others and myself</i></p>
Creating autonomous learners	
<p>Pupils taking responsibility for learning To what extent am I encouraged to believe that successful learning requires effort and purposeful thinking on my part?</p>	<p style="text-align: center;"><i>Talking about my learning</i> <i>What? How? Why?</i></p> <p style="text-align: center;"><i>Creative thinking</i> <i>Taking greater responsibility for my learning</i> <i>Critical thinking</i></p> <p style="text-align: center;">Learning dispositions <i>Resilience, Reflection, Resourcefulness</i></p>
<p>How I feel about my learning:</p> <ul style="list-style-type: none"> • Learning dispositions • Feedback • Personal learning planning 	<p>How I use thinking to improve my learning:</p> <ul style="list-style-type: none"> • Critical thinking • Creative thinking • Information processing

Appendix 5: Students' view of intelligence can help grades by *Michelle Trudeau*, broadcast February 15, 2007

This transcript of a radio broadcast reports a new study by Carol Dweck exploring differences in how students regard their intelligence and the effect of this on their capacity to apply effort in their learning. When students think that intelligence is fixed, they believe learning should be easy and so, when it isn't, they avoid the challenge. On the other hand, when they have a growth mindset, they see learning as a challenge worth meeting. The broadcast introduces what's involved in helping students to adopt a growth mindset.

A new study in the scientific journal *Child Development* shows that if you teach students that their intelligence can grow and increase, they do better in school.

All children develop a belief about their own intelligence, according to research psychologist Carol Dweck from Stanford University.

"Some students start thinking of their intelligence as something fixed, as carved in stone," Dweck says. "They worry about, 'Do I have enough? Don't I have enough?'"

Dweck calls this a "fixed mindset" of intelligence.

"Other children think intelligence is something you can develop your whole life," she says. "You can learn. You can stretch. You can keep mastering new things."

She calls this a "growth mindset" of intelligence.

Dweck wondered whether a child's belief about intelligence has anything to do with academic success. So, first, she looked at several hundred students going into seventh grade, and assessed which students believed their intelligence was unchangeable, and which children believed their intelligence could grow. Then she looked at their math grades over the next two years.

"We saw among those with the growth mindset steadily increasing math grades over the two years," she says. But that wasn't the case for those with the so-called "fixed mindset." They showed a decrease in their math grades.

This led Dweck and her colleague, Lisa Blackwell, from Columbia University to ask another question.

"If we gave students a growth mindset, if we taught them how to think about their intelligence, would that benefit their grades?" Dweck wondered.

So, about 100 seventh graders, all doing poorly in math, were randomly assigned to workshops on good study skills. One workshop gave lessons on how to study well. The other taught about the expanding nature of intelligence and the brain.

The students in the latter group "learned that the brain actually forms new connections every time you learn something new, and that over time, this makes you smarter."

Basically, the students were given a mini-neuroscience course on how the brain works. By the end of the semester, the group of kids who had been taught that the brain can grow smarter, had significantly better math grades than the other group.

"When they studied, they thought about those neurons forming new connections," Dweck says. "When they worked hard in school, they actually visualized how their brain was growing."

Dweck says this new mindset changed the kids' attitude toward learning and their willingness to put forth effort. Duke University psychologist, Steven Asher, agrees. Teaching children that they're in charge of their own intellectual growth motivates a child to work hard, he says.

"If you think about a child who's coping with an especially challenging task, I don't think there's anything better in the world than that child hearing from a parent or from a teacher the words, 'You'll get there.' And that, I think, is the spirit of what this is about."

Appendix 6: Theories of Intelligence

These simple questionnaires are used to investigate people's view about intelligence. In both cases, agreement with the statements indicates a fixed mindset while disagreement with them indicates a growth mindset. Try them yourself, and use them with your colleagues and pupils. When using them, don't think about the responses you think you *should* give; be honest and encourage other to be honest too.

Theories of Intelligence Scale Self Form for Adults

1	2	3	4	5	6
Strongly agree	Agree	Mostly Agree	Mostly Disagree	Disagree	Strongly disagree

This questionnaire has been designed to investigate ideas about intelligence. There are no right or wrong answers. We are interested in your ideas.

Using the scale above, please indicate the extent to which you agree or disagree with each of the following statements by writing the number that corresponds to your opinion in the box next to each statement.

	1	You have a certain amount of intelligence, and you can't really do much to change it.
	2	Your intelligence is something about you that you can't change very much.
	3	To be honest, you can't really change how intelligent you are.
	4	You can learn new things, but you can't really change your basic intelligence.

"Kind of Person" Implicit Theory Others Form for Adults

Using the scale above, please indicate the extent to which you agree or disagree with each of the following statements by writing the number that corresponds to your opinion in the box next to each statement.

	1	The kind of person someone is, is something very basic about them so it can't be changed very much.
	2	People can do things differently, but the important parts of who they are can't really be changed.
	3	As much as I hate to admit it, you can't teach an old dog new tricks. People can't really change their deepest attributes.
	4	Everyone is a certain kind of person, and there is not much that can be done to really change that.

From *Self-theories: their role in motivation, personality and development* by Carol Dweck, Psychology Press, 2000.

Appendix 7: Words of Praise

Words of Praise

Every word or action from a teacher or parent to a child sends a message. Are they messages that say *You have permanent traits and I'm judging them?* Or are they messages that say *You're a developing person and I'm interested in your development?*

Praising children's intelligence or talent, tempting as it is, sends a fixed mindset message. It makes their confidence and motivation more fragile. Instead, try to foster a growth mindset by focusing on the processes they used - their strategies, efforts or choices.

(adapted from Mindset, p205)

The 99 words of praise below came from a school website (www.sd40.bc.ca/kelvin/compliments.htm). In the light of the extract above, mark each comment with an "I" if it praises intelligence or talent or with a "P" if it focuses on a process of some kind.

<input type="checkbox"/>	Great!	<input type="checkbox"/>	Phenomenal!	<input type="checkbox"/>	Superb!
<input type="checkbox"/>	Cool!	<input type="checkbox"/>	Out Of Sight!	<input type="checkbox"/>	Excellent!
<input type="checkbox"/>	Unbelievable Work!	<input type="checkbox"/>	Two Thumbs Up!	<input type="checkbox"/>	You've Got It!
<input type="checkbox"/>	Way To Go!	<input type="checkbox"/>	Terrific!	<input type="checkbox"/>	Outstanding Performance!
<input type="checkbox"/>	You've Outdone Yourself!	<input type="checkbox"/>	Marvellous!	<input type="checkbox"/>	Your Help Counts!
<input type="checkbox"/>	Amazing Effort!	<input type="checkbox"/>	Bravo!	<input type="checkbox"/>	Exceptional!
<input type="checkbox"/>	Breathtaking!	<input type="checkbox"/>	Wonderful!	<input type="checkbox"/>	You're Special!
<input type="checkbox"/>	Keep Up The Good Work!	<input type="checkbox"/>	First Rate Work!	<input type="checkbox"/>	Fantastic Work!
<input type="checkbox"/>	You Should Be Proud!	<input type="checkbox"/>	I Knew You Had It In You!	<input type="checkbox"/>	Very Good!
<input type="checkbox"/>	Stupendous!	<input type="checkbox"/>	Sensational!	<input type="checkbox"/>	A+ Work!
<input type="checkbox"/>	What An Imagination!	<input type="checkbox"/>	Awesome!	<input type="checkbox"/>	You're A Great Example!
<input type="checkbox"/>	You Made It Happen!	<input type="checkbox"/>	You're A Real Trooper!	<input type="checkbox"/>	It Couldn't Be Better!
<input type="checkbox"/>	Good For You!	<input type="checkbox"/>	You're A Good Sport!	<input type="checkbox"/>	You Made The Difference!
<input type="checkbox"/>	Take A Bow!	<input type="checkbox"/>	Super Job!	<input type="checkbox"/>	You're Unique!
<input type="checkbox"/>	It's Everything I Hoped For!	<input type="checkbox"/>	How Thoughtful Of You!	<input type="checkbox"/>	Nice Going!
<input type="checkbox"/>	You're A Class Act!	<input type="checkbox"/>	Well Done!	<input type="checkbox"/>	You're Inspiring!
<input type="checkbox"/>	How Artistic!	<input type="checkbox"/>	You Go The Extra Mile!	<input type="checkbox"/>	Hooray For You!
<input type="checkbox"/>	Great Answer!	<input type="checkbox"/>	You Deserve A Hug!	<input type="checkbox"/>	High Five!
<input type="checkbox"/>	Extra Special Work!	<input type="checkbox"/>	Wow!	<input type="checkbox"/>	You're Getting Better!
<input type="checkbox"/>	You're Tops!	<input type="checkbox"/>	You're Amazing!	<input type="checkbox"/>	What A Great Idea!
<input type="checkbox"/>	You Figured It Out!	<input type="checkbox"/>	You've Got What It Takes!	<input type="checkbox"/>	You're Neat!
<input type="checkbox"/>	You're A Joy!	<input type="checkbox"/>	You're A Shining Star!	<input type="checkbox"/>	Spectacular Work!
<input type="checkbox"/>	You're #1!	<input type="checkbox"/>	You Tried Hard!	<input type="checkbox"/>	The Time You Put In Shows!
<input type="checkbox"/>	Remarkable!	<input type="checkbox"/>	Far Out!	<input type="checkbox"/>	How Extraordinary!
<input type="checkbox"/>	You're A Winner!	<input type="checkbox"/>	You Came Through!	<input type="checkbox"/>	That's Incredible!
<input type="checkbox"/>	5 Star Work!	<input type="checkbox"/>	You're Super!	<input type="checkbox"/>	You Can Do It!
<input type="checkbox"/>	You're The Greatest!	<input type="checkbox"/>	Sweet!	<input type="checkbox"/>	Great Effort!
<input type="checkbox"/>	How Original!	<input type="checkbox"/>	What A Genius!	<input type="checkbox"/>	You're A Natural!
<input type="checkbox"/>	Very Brave!	<input type="checkbox"/>	You're A Pleasure To Know!	<input type="checkbox"/>	Way To Go!
<input type="checkbox"/>	You're Sharp!	<input type="checkbox"/>	Congratulations!	<input type="checkbox"/>	I'm Proud Of You!
<input type="checkbox"/>	Thank You For Caring!	<input type="checkbox"/>	I'm Impressed!	<input type="checkbox"/>	You're Very Talented!
<input type="checkbox"/>	Great Discovery!	<input type="checkbox"/>	You're A Champ!	<input type="checkbox"/>	Right On!
<input type="checkbox"/>	You're So Kind!	<input type="checkbox"/>	Thanks For Helping!	<input type="checkbox"/>	You're A-OK!
<input type="checkbox"/>	Magnificent!	<input type="checkbox"/>	You've Earned My Respect!	<input type="checkbox"/>	You've Made Progress!
<input type="checkbox"/>	Outstanding Effort!	<input type="checkbox"/>	Neat Work!	<input type="checkbox"/>	I Love It!

Appendix 8: Guidance on Writing Learning Logs

What is Reflective Learning?

Reflection is really just another name for an organised approach to thinking. Most of us reflect in things that have happened throughout the day or in the past. Usually we do this in idle moments; on the bus going home, in the car, in the bath or in bed. If something bad has happened or we anticipate something difficult, this reflection is more like worrying or anxiety.

When we **purposefully** think about some event or experience with a view to improving how we act or react, it is called *reflective learning* or *reflective practice*.

The tool used in many cases to record and reflect upon learning is a LOG or JOURNAL or DIARY.

Are YOU a Reflective Learner?

Some people are naturally good at reflecting – they enjoy thinking about their experiences, like recording them and find it easy to reflect upon what has happened. Other people are ACTIVE learners. They do not necessarily enjoy reflection and prefer to get on with the next task rather than think about what they have learnt. Whether you are reflective or active in your approach, you will need to practice writing and thinking reflectively.

How will logs help me?

As you develop your skills as a reflective learner you will become more self-aware, self-critical, honest about yourself, more open to criticism and feedback, more objective and more motivated to improve your performance. A structured approach helps you to reflect on your learning and to understand your own learning processes.

What is a Learning Log?

A learning log is a simple, fairly informal tool to help you to understand, reflect upon and so learn through what you experience. A learning log can be within a set format or you can design your own.

Often the log is within a set word length. They do not have to be long winded or complicated; usually brief and to the point is best.

How to go about writing a log

1 Select a suitable event

Try to choose an experience, event or activity that actually means something to you. If you just choose something at random you probably won't be able to make a very meaningful log.

Experience suggests that the WORST experiences often result in the BEST learning logs. Very positive experiences are sometimes a little bland when in log form.

Choose something that happened that you genuinely learnt something from.

Don't try to write about a huge piece of learning like a whole week's work experience or an entire project in one sitting. Select something simple that involves a specific event in your learning.

2 Write it whilst it is fresh in your mind

If you leave it too long the event will become lost in time. Write on the day it happens if possible. You will be recording feelings and ideas that may otherwise become distorted with time.

Objective and Subjective

It is often useful to students to understand the difference between objective and subjective recording.

The first part of the log should be objective – that is a record of what actually occurred as nearly as possible without emotion or comment. It is arguable that any record of anything can be totally objective but stick to verifiable facts as far as possible.

The reflective part will always be subjective – this is a record of what YOU think, feel, believe and conclude. (It can be difficult to get used to writing like this as academic work trains you to write only objectively – but that is what is needed).

Objective = free of bias, based on fact, rather than thoughts or opinions

Subjective = biased, opinion, personal, individual, based on inner experience

Questions to ask yourself

Students sometimes find it difficult to know what to put in their logs. You could ask yourself questions such as these to prompt your thoughts;

- What did I expect from the experience?
- Did it work out that way?
- How did I feel before, during and after the experience?
- What was the impact of other people in the learning?
- What was the most successful part of the experience?
- What was the least successful?
- Would I use a similar approach in the future?
- What would I do the same?
- What would I do differently?
- What skills abilities or knowledge did I use?
- What skills abilities or knowledge could I develop now?

What should be in the log

You need to include:

- Your name and date of writing the log
- Number of log (if you are writing several to cover an extended piece of work)
- Short description of the experience or event - what happened, when it happened, where, who was there, what was the context.
- Key learning outcomes, reflecting on your learning. What you learnt. How did you feel and what were you expecting before the experience, what did you feel and think during the experience and what after?
- How you applied, are applying or will apply what you learnt - what next?
- Any action points/further information or development requirements - review

In the log example at the end of this paper, there are 4 sections and these are typical of the content you would be expected to generate in your logs.

Here are some sentence starters to help you write your logs:

- The best part about...
- I think ... will happen.
- The key idea from this was...
- This reminds me of...
- Today I was very successful because...
- Today I was unsuccessful because...
- Today I had a problem trying to...
- Tomorrow I will try to solve that problem by...
- Today was the first time I ever...
- The easiest part of ... was...
- The hardest part of ... was...

I need help with ... so tomorrow I will...
I am proud of myself today because I...
The most helpful source of information is/was ... because...
Today, I changed the way I ... because...
One thing I learned today is...
One thing I learned today about how I behave is...
One thing I learned today about myself is...
One thing I learned today about how I learn is...
I used time well today because I...
I need to do a better job of ... tomorrow ... because...

Appendix 9: Learning Log Starter

Reflective Learning Log

Student NameDate
 Log Number.....

What happened?
<p>Here you would describe objectively as clearly as possible what happened in the experience, event or activity. You would answer the questions What? Where? When? With whom?</p>
Your reflection
<p>Here you would explain what you experienced, based on your own thoughts, ideas What were you thinking and feeling? What was your personal behaviour? What did you experience before during and after the learning?</p>
What next? How do I plan to change what I do
<p>This is evaluation, building on the objective and subjective sections. What do you now think about the learning? What was good and bad? What else could you have done? If it happened again, what would you do? What would you change? How will you apply this learning in the future?</p>
Evaluation and review
<p>You can only really review the learning if you have had a chance to try to do it again. This means sometimes you will be able to review and sometimes you won't. Reflect on the learning processes you have gone through. Be critical about yourself. Did something go well? Then what did I learn from it? How can you build on it? Did something go badly? Then exactly what went wrong? How can you fix it, overcome difficulties, and improve upon it? Have your ideas changed? If so, why?</p>