NCCA

An Chomhairle Náisiúnta Curaclaim agus Measúnachta
National Council for Curriculum and Assessment

workshop **FOCUS ON LEARNING**

03 FORMATIVE
FEEDBACK

Note to Facilitators

What is the aim of this booklet?

This is part of a set of four booklets aimed at developing assessment practice for teachers in Ireland. Although it is primarily for teachers involved in junior cycle developments, the material and approaches can be used across all sectors. The set of booklets and associated materials are intended to be used in a flexible way to allow teachers to explore a range of approaches that will enable them to develop a coherent approach to assessment.

How is the booklet to be used?

Schools may choose to use and adapt the material in any way to suit their own context. It is recommended that you start with the **slide presentation**. You may then find it helpful to follow the steps outlined below or you can develop your own workshop plan. These resources are aimed at facilitating both whole staff discussion and subject-based discussion. Where possible, we would encourage using the material on a school-wide basis as research evidence indicates that changes in assessment practice are more likely to become embedded if they are introduced on a systematic basis across a whole school.

If you are planning to facilitate a workshop with staff please consult the *Facilitator's Guide* which can be downloaded at www.juniorcycle.ie/assessment.

Step 1.

The slide presentation can be used to introduce key ideas about feedback to a whole staff group. The final slide in the presentation contains some prompts for staff discussion based on the main messages of the presentation.

Step 2

Following this presentation it is recommended that staff might watch and discuss Geoff Petty explain the kind of information that students need to receive in their feedback.

▶ **Geoff Petty 'Medals and Missions' Video** (1 min. 22)

They might also watch and discuss Dylan William's short video in which he explains some of the characteristics of good feedback

▶ **Dylan William 'Feedback on Learning' video** (3 min. 17)

Page Legend

Worksheets
The following symbol is used throughout the booklet to show activities and worksheets that can be photocopied for use in a workshop.

Prompt questions for staff discussion:

In Geoff Petty's video he concludes:

'It's information rather than grades that students require in order to improve'

In Dylan Wiliam's video he says:

'There's lots of different ways of looking at feedback, but a very important way of looking at feedback is whether its ego involving or task involving…And what the research shows very clearly is that ego involving feedback is rarely effective and, in fact, can lower achievement.'

He concludes:

'What we need to do is to give students feedback that helps them move forward. Give them feedback that makes it clear that ability is incremental rather than fixed.'

Discuss how these statements relate to your experience and practice. What are the benefits and challenges of providing more feedback and fewer grades?

Step 3

Following on from these discussions you can now explore the workshop materials in this booklet. These activities can be approached and undertaken in any order that suits the school context, and it is not necessary or intended for them to be approached in the sequence presented in the booklet.

Step 4

Print off the discussion cards and posters. These can be used to stimulate further discussion and thinking or they can be displayed around the school to reinforce the key messages and to help staff to further develop their practice in this area.

Encourage staff to engage with the material included in the recommended reading section.

Why does feedback matter?

As teachers, we all want to improve student learning and student achievement. But how do we know what interventions or teaching strategies work best? The work of John Hattie, Professor of Education University of Auckland is very informative in answering this question. In his definitive work '*Visible Learning; a synthesis of over 800 meta-analyses relating to achievement*' (London; Routledge, 2009), Hattie analysed thousands of different pieces of research and he identified those things which work best and therefore are worth doing if we want to improve student learning.

He concluded that there are a number of teaching strategies that can lead to an improvement of more than one grade to students' learning. He created a table showing these teaching methods and feedback is shown as the most important thing a teacher can do to improve student achievement (See slide 3).

> *The most powerful single moderator that enhances achievement is feedback.* **The most simple prescription for improving education must be dollops of feedback.** *This does not mean using many tests and providing over-prescriptive directions. It means providing information about how and why the student understands and misunderstands, and what directions the student must take to improve.*
>
> *John Hattie,* **Influences on Student Learning**

Feedback is critical to improving learning as it both influences students' motivation to learn and their ability to do so.

What does quality feedback look like?

Feedback includes telling students what they have done well and what they need to do to improve. It also includes reminding students of what they were aiming to achieve (the learning intentions). Finally, high quality feedback is always given against explicit and agreed criteria for success.

Feed Forward with Feed Back

Effective feedback

- ✔ Focused on the quality of the student work
- ✔ Related to agreed success criteria
- ✔ Identifies success and achievement
- ✔ Indicates suggestions for improvement
- ✔ Prompts student thinking
- ✔ Allows time for improvement to take place

Activity 1: Formative feedback

What does good feedback look like?

01. Form groups of three.

02. Pass out Activity Sheet 1: 'Feedback statements'.

03. Each group reads through the sample feedback statements and then decides as a group which are effective and which are not.

04. Record your decisions on the sheet by placing an *'E'* in each box containing an effective feedback statement. Alternatively, you could use the sorting sheet (page 8) to categorise the feedback statements.

05. Allow 10 minutes for groups to discuss and make their choices.

06. Now that you are all finished, which statements did you agree provided effective, quality feedback? Which were not? Why?

07. Allow time for discussion and explanations for their choices.

Facilitator's notes

Statements 2, 5, 6, 13, 15, 16 and 17 are positive and give praise for a student's work, but they do not highlight exactly what the student did well or provide any guidance for improvement.

Statements 8 and 12 do not give sufficient direction to the student on how to improve their work.

Statements 1, 3, 4, 7, 9, 11, 14, 18, 19 and 20 are examples of quality, formative feedback, as the student is receiving guidance on how to improve their work.

Statement 10 is very negative and insulting to a student.

Activity 1

Feedback statements

Consider each of these and then tick those that you consider to be examples of good formative feedback

01 Tell us more. What do they look like? How do they move? ☐

02 Gold star ☐

03 Explain why you think this ☐

04 How do you think he felt?

Angry that people did not trust him?

Annoyed with himself for lying in the past? ☐

05 Beautiful, neat work ☐

06 Well done!! ☐

07 You have clearly stated one way an archaeologist may find a site. Are there any others? ☐

08 Develop these ideas further ☐

09 Describe the expression on his face ☐

10 Good, but not as good as your brother's! ☐

11 How do you know...? ☐

12 You must try harder ☐

13 First place in the class ☐

14 Try one of these or one of your own instead of bad - ferocious, terrifying, evil ☐

15 Lovely diagram ☐

16 You're the best ☐

17 10/10 ☐

18 He showed he was a good friend when... (finish this sentence) ☐

19 You gave a very realistic description on the damage caused by an earthquake. To improve your work, you need to include all the key terms. Look back and check the list to see which ones you have left out. ☐

20 What signs of coastal erosion did you see on your field trip? E.g. rock erosion, falling cliffs, structural damage to walls, etc. ☐

Activity 1

The sorting sheet

Yes

No

Activity 2: Types of prompts

When it comes to closing the gap between where a student is and where we want them to be in their learning, there are three types of prompts that can be used with formative feedback to promote improvement.

- A **reminder prompt** is most suitable for able students

  'Say more about how the actions of this leader influenced future events'.

- A **scaffold prompt** scaffolds the learning for students who need more support than a simple reminder

  'Describe something that happened when the molten lava met the river'.

- An **example prompt** can be extremely successful with all students, but especially with less able students

  'Choose one of these or your own: ''He is a good friend because he never says unkind things'', ''He is a friend because he never tells lies.''

Having completed Activity 1, return to your small groups and review each statement, deciding which statements are examples of reminder, scaffold or example prompts. If you wish, you can use the classification worksheet to group the different examples.

Activity 2

Feedback statements

01 Tell us more. What do they look like? How do they move?

Scaffold prompt

02 Gold star

03 Explain why you think this

Reminder prompt

04 How do you think he felt? Angry that people did not trust him? Annoyed with himself for lying in the past?

Example prompt

05 Beautiful, neat work

06 Well done!!

07 You have clearly stated one way an archaeologist may find a site. Are there any others?

Reminder prompt

08 Develop these ideas further

09 Describe the expression on his face

Scaffold prompt

10 Good, but not as good as your brother's!

11 How do you know….
Science e.g.

Scaffold prompt

12 You must try harder

13 First place in the class

14 Try one of these or one of your own instead of bad – ferocious, terrifying, evil

Example prompt

15 Lovely diagram

16 You're the best

17 10/10

18 He showed me he was a good friend when… (finish this sentence)

Scaffold prompt

19 You gave a very realistic description on the damage caused by an earthquake. To improve your work, you need to include all the key terms. Look back and check the list to see which ones you have left out.

Reminder prompt

20 What signs of coastal erosion did you see on your field trip? E.g. rock erosion, falling cliffs, structural damage to walls, etc.

Example prompt

Activity 2

Classification worksheet

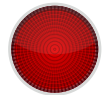| Reminder prompt	Scaffold prompt	Example prompt

Activity 3

Feedback... How are we doing?

Work either individually or with a partner and then discuss how well you have developed your classroom practice in providing formative feedback.

Traffic light your responses to the questions below using this code:

	Always	Sometimes	Never
I think about the kind of verbal feedback that I give my students.	○	○	○
I give feedback that relates to the learning intention and criteria for success agreed with the students.	○	○	○
Feedback focuses on a small number of targets at a time.	○	○	○
Feedback specifies what students have achieved and what they need to do to improve.	○	○	○
Students are encouraged to give feedback to each other.	○	○	○
Assessment techniques are used throughout the lesson to facilitate students in giving me feedback on how they are learning.	○	○	○
I allow time for students to consider feedback that they receive from me and their peers.	○	○	○
Students are given a chance to make improvements to their work based on feedback.	○	○	○
My written feedback to students can be read and understood.	○	○	○

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Activity 4: Formative Feedback

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Circulate the chart on the next page which summarises the psychological impact of different kinds of feedback on students. In small groups, study this and then

01. Discuss, and give examples of both types of feedback

02. What are the practical things you can say and do as a teacher to ensure that students receive feedback (including non-verbal feedback) that promotes positive self-esteem and motivation to learn.

Activity 4

What kinds of feedback?

Judgemental Feedback
'Here is my measurement'

Formative Feedback
'These are your goals, this is what you do well, and this is how to get better'

Judgemental Feedback	Formative Feedback
Characteristics of this feedback This feedback compares students with each other and encourages them to compete. The teacher gives grades, marks and comments that make conscious or unconscious comparisons with others.	**Characteristics of this feedback** There are clear assessment criteria and goals. Feedback consists of information about the extent to which these have been met. There are: **Medals**: for what they have done well **Missions:** showing how to improve
Effect on self-esteem Judgment makes students nervous and protective of their self-esteem. So students avoid risks and challenges. The self-esteem of high achieving students rises.	**Effect on self-esteem** The student feels accepted, and that their efforts are being recognised and valued. Self-esteem and commitment tends to rise and there is increased emotional involvement in tasks.
Consequent learning strategies Surface learning is likely. Their eye is on the grade, not understanding, learning or the task. The student memorises, seeks short cuts and copies. Student engaged in 'right answer' syndrome.	**Consequent learning strategies** Deep learning is more likely aimed at understanding and improvement. Their eyes are on the goals, assessment criteria, tasks and their missions. As esteem comes from effort, not comparative attainment, students are prepared to take risks and accept challenges.
Students' learning theory Maladaptive and blaming learning theory 'Mistakes are shameful' 'Ability is the key and is inborn' 'It's only worth working if you get something out of it.'	**Students' learning theory** Adaptive and blame free learning theory. 'Effort is the key and it's up to me'. 'Mistakes are useful as they help me learn'. 'Learning is an end in itself.'
Effect on low achievers There is reduced effort, interest, persistence, self-esteem and self-belief. In some cases – 'Learned helplessness'. 'No matter what I do I'm bound to fail' The student withdraws and retires hurt, rejecting the teachers and school Learning is seen as something for others.	**Effect on low achievers** There is increased interest, effort, persistence, self-esteem and self-belief. In time: Learned resourcefulness. 'There must be a way around my difficulties and if I find it I will succeed'. Learning depends on time, effort, corrected practice and using right strategies.

Formative Feedback: Example

Providing feedback on a written piece of work

This shows an example of how the process can be modelled for students. It uses the *highlighting* method of marking, which is sometimes referred to as 'Tickled Pink and Green for Go'. The advantage of this approach is that it is very visual and allows students to easily spot their successes and areas for improvement. Because the feedback is visual, it is also easier for students to recall.

Here is a piece of written work with identified learning intentions and criteria for success. You could use a similar piece of work (perhaps from another or past class) and have the class collectively assess the work.

The first thing the students would need to do is to identify two areas of the work where the student's work successfully met the criteria for success. In this example, the first and third sentences have been highlighted in **green**.

Next, your students would need to identify an aspect of the work that offers scope for improvement. Here, the sentence has been highlighted in **pink**.

The class would then generate a prompt suggesting how the student could improve this part of their work.

Learning Intention:

To use similes to create atmosphere

Success criteria

- Use 'as' or 'like' to create a vivid description of a dull wet day
- Choose appropriate words and images to compare each object
- Use correct spelling

The Grey Day

The day hung over us like a wet blanket.

The cars shot past on the motorway like marbles thrown across a floor.

The leaves hung from the trees like soggy bits of toast.

The leaves shone red and gold like a burning fire.

The clouds overhead hung very low.

The rain tapped the window like a quiet drum.

Can you think of a simile to describe the way clouds were hanging or moving?

Some further ideas

Encourage students to reflect on how they are progressing in their learning

As well as feedback on the task, students can benefit from getting feedback on the processes they have used to complete the task, and on their ability to manage their own learning. All these help students in developing their metacognitive skills and have the capacity to increase achievement.

Go to *Workshop 4: Students Reflecting on Learning* for practical ideas on how to support students in reflecting on their learning. Also see the *Managing Myself Key Skills Toolkit* on www.juniorcycle.ie

Feedback can enhance the student teacher relationship

There is growing body of research which suggests that the quality of relationships with teachers is a crucial influence on children's happiness, wellbeing and self-image[1]. Providing supportive and constructive feedback to students conveys to students that the teacher cares about their learning and believes they can improve. Assessment is not something done to them by the teacher, who wishes to trip them up, but something done with the student. The conversation around the learning puts the student-teacher relationship at the centre of the feedback loop.

Peer feedback

When there is one teacher and thirty students and all the feedback comes from or through the teacher, there is no hope of providing sufficient good quality feedback.

Ian Smith (2004)

Remember that students can provide valuable feedback to each other too. In a given day, it is difficult for a teacher to give personal feedback to each student. So why not try encouraging students to give feedback to each other? (See Discussion Card 3 and sample template, p. 18).

1. *Wellbeing and School Experiences among 9- and 13-Year-Olds: Insights from the Growing Up in Ireland Study,* Dr Emer Smyth, ESRI/NCCA, 2015

Teachers need feedback too

When teachers seek, or at least are open to, feedback from students as to what students know, what they understand, where they make errors, when they have misconceptions, when they are not engaged – then teaching and learning can be synchronized and powerful. Feedback to teachers helps make learning visible.

John Hattie, 2009, p 173.

Use reflection sheets to help students reflect on their learning and these can also be adapted to enable students give feedback on your teaching. Team teaching and teacher observation can also provide opportunities for teacher to teacher feedback.

Some tips on giving feedback to parents

Here are some tips to help teachers when giving feedback to parents about a student's progress.

01.   Make comments easy to understand.

The space available for comments is often limited. Including two connected ideas per sentence is a useful way of optimizing the space available.

e.g. 1 *Ben's presentation on 'The Vikings' was very informative (1st idea), supported by many well chosen photographs from a visit to Dublina (2nd idea).*

e.g. 2 *Ben presented excellent information and photographs of his visit to Dublina (1st idea) and worked well with his team to complete the task (2nd idea).*

02.   Avoid unnecessary information.

Ensure that your feedback to parents communicates the achievements and improvements required, related to your subject.

e.g. '*Rachel is a pleasure to teach*' does not help parents to understand how Rachel is progressing in Maths.

03.   Try to avoid using specialist terms.

The language used in a Report Card should be jargon-free. Always remember your audience.

e.g. '*Áine has completed all of the prescribed tasks and demonstrated a clear understanding of the assessed learning outcomes*', could be written as, '*Áine completed all the expected work and has shown a good understanding of the topic.*'

04.   Offer an evaluation of the learning achieved.

Parents want to know about the learning achievements, what improvement is required and next steps.

e.g. '*Bernie has completed all of this term's assignments*'. There is no evaluation of how well she has done or what she needs to do next.

05.   Focus on key messages.

It is impossible to include comments on all areas of a student's learning. Therefore, it may be advisable to identify the aspects that are most important.

06.   Be discreet and avoid insensitive comments.

Peer Feedback

(sample template)

Date: / /

Your name:

Their Name:

Title of work

Success criteria	How did this piece of work achieve the success criteria?

☆	**Two excellent points**
01	
02	

This could be improved by...

Questions to consider in a subject planning meeting

A school may decide to focus on Assessment as its third area for SSE. In particular, it could decide to focus on formative assessment. The following questions would be useful prompts to help gather evidence at subject department level about current practice in relation to formative assessment. The results of the deliberations on such questions could feed into whole staff discussion and ultimately help the school identify its strengths and areas for development in relation to formative assessment, which should then inform the school improvement plan.

What do I/we understand by the term 'formative feedback'?

How can I/we develop formative feedback practices in my/our classroom/subject?

Do we share examples of good practice in this subject area?

How can we develop peer feedback within this subject area?

Do I/we consider different approaches to marking of student work?

See School Self Evaluation Guidelines for Post-Primary Schools, p 44-45.

Planning our Next Steps

This workshop will hopefully have helped you develop your thinking about how to provide good feedback to your students.

You are now asked to identify a couple of areas where you would like to improve your practice in giving feedback.

If you are used to using only marks or grades then you might start the change in practice perhaps with one class at a time. It's important to explain to students why you are moving to provide comments instead of marks – and how it will benefit their learning. You can also reassure them that you will be keeping a record of their marks which you will share with them periodically. Some teachers have also found it helpful to discuss the changes with parents.

Activity

The planning sheet on the next page, sets out how you intend to take forward formative feedback in your classroom over the next 3 months.

Planning Next Steps: Planning Sheet

Timescale/Class	Main area for development	Observations/Reflections

Discussion Cards

The discussion cards can be cut out and used to stimulate small group discussion as part of a whole-staff meeting or subject planning meeting.

Discussion Card 1

Effective formative feedback should:

- Be related to the learning intentions
- Be related to the success criteria
- Give evidence of where students currently are in their learning
- Set a goal for improvement
- Show how and where improvement can take place
- Be action focused

With these points in mind and using the examples of feedback statements provided in Activity 1, develop some feedback statements relevant to your students' work.

Discussion Card 2

Prompts in Feedback

There are three types of prompts to use with formative feedback that promote improvement.

- A **reminder prompt** is most suitable for able students

'Say more about how the actions of this leader influenced future events'.

- A **scaffold prompt** scaffolds the learning for students who need more support than a simple reminder

'Describe something that happened when the molten lava met the river'.

- An **example prompt** can be extremely successful with all students, but especially with less able student

Give an example of how an archaeologist might find a site, such as old maps or stories.

Develop some examples of how you would use these different prompts to give feedback in your subject area.

Discussion Card 3

Peer feedback

These five steps can be shared with students to help them give each other feedback

01. The first time you read through your partner's piece of work hold off giving any comments. You don't want to swamp your partner with suggestions. You want to focus on the main strengths and weaknesses of the work, based on the success criteria agreed with the teacher.

02. If you notice that there are misspellings or mistakes in punctuation, just point out the problem but let the person fix it themselves.

03. Then try to point out

- What has been done well
- What has been less successful
- One or two suggestions on how improvement can be made

04. Make your comments as specific as possible reminding your partner of the success criteria.

05. Be honest with each other and sensitive too! Never say or write something harsh or critical that will hurt another student.

Having read these steps, discuss how you might apply them in your class? Are there other ways you could develop students' skills in giving and receiving feedback to each other? What are the benefits for students of peer feedback?

Discussion Card 4

Feedback to parents

Consider the tips for giving better feedback to parents via Reporting on page 17.

Agree some examples of quality feedback statements that might be used in the context of reporting to parents, relevant to your subject.

Discussion Card 5

Less praise more encouragement through feedback?

Dylan Wiliam says...

What the research shows very clearly is that ego involving feedback is rarely effective and, in fact, can lower achievement. So where they get praise... the effects are usually or often zero and, sometimes, negative. In other words, in many cases rather than giving that kind of praise you would have been better off shutting up and giving no feedback at all! Students given that kind of praise do less well than students given no feedback at all.

But what the research also shows very clearly is the conditions under which feedback is successful. The research shows, for example, that when the feedback focuses on what students need to do to improve, and, in particular, how to go about it... then you get very large impacts on student achievement.

Discuss

'The best teachers praise lower than average' (Dylan Wiliam). Would you agree with this?

What would it mean for your practice if you were to give less praise that focuses on the student herself (such as 'you are a great student') and more encouragement through quality feedback?

Discussion Card 6

Should we avoid competitive assessment?

'*So long as pupils compare themselves with each other, those with high attainment are too little challenged and those with low attainment are demotivated.*'

Paul Black, *Testing: Friend or Foe?*

Discuss

What do you think are the effects of an atmosphere of competitive assessment where students compare themselves with each other?

How can the use of formative feedback help refocus their attention towards their own progress rather than making comparisons with others?

Posters

The following pages contain posters that can be used as part of a workshop to reinforce the activities in this booklet.

Effective
feedback

When the classroom focuses on rewards, 'gold stars' or 'place in the class' ranking, then pupils look for ways to obtain the best marks, rather than become better learners. Or they simply seek to 'get by' and avoid difficult tasks. Or even worse, they simply give up and 'retire hurt'.

Black and Wiliam,
Inside the Black Box

Giving marks, levels and grades lets students know how well they have performed (relative to others in their class). It doesn't tell them anything about the reasons behind that performance or help them to improve.

Ian Smith,
Making Feedback Count, 2007

Feedback to any student should be about the particular qualities of his or her work, with advice on what he or she can do to improve, and should avoid comparisons with other students.

Black & Wiliam,
Inside the Black Box, 1998

The most powerful single moderator that enhances achievement is feedback. The most simple prescription for improving education must be dollops of feedback. This does not mean using many tests and providing over-prescriptive directions. It means providing information how and why the student understands and misunderstands, and what directions the student must take to improve.

John Hattie,
Influences on Student Learning

Effective formative feedback...

Relates to learning intentions & success criteria

Allows time for students to act on it

Identifies student success

Makes the learning more visible for both the teacher & student

Prompts thinking

Gives advice on how improvement can happen

Praises the work rather than the student

Effective feedback practice

Clarifies good practice

Encourages actionable feedback

Encourages interaction

Facilitates self-assessment

Provides information

Glossary

Learning Outcomes

Learning outcomes are statements in curriculum specifications to describe the understanding, skills and values students should be able to demonstrate after a period of learning.

Learning Intentions

A learning intention for a lesson or series of lessons is a statement, created by the teacher, that describes clearly what the teacher wants the students to know, understand, and be able to do as a result of learning and teaching activities.

Success Criteria

Success criteria are linked to learning intentions. They are developed by the teacher and/or the student and describe what success *looks like*. They help the teacher and student to make judgements about the quality of student learning.

Ongoing Assessment

As part of their classroom work, students engage in assessment activities that can be either formative or summative in nature. Teachers assess as part of their daily practice by observing and listening as students carry out tasks, by looking at what they write and make, and by considering how they respond to, frame and ask questions. Teachers use this assessment information to help students plan the next steps in their learning. Periodically this assessment will be in more structured, formalised settings where teachers will need to obtain a snapshot of the students' progress in order to make decisions on future planning and to report on progress. This may involve the students in doing projects, investigations, case studies and/or tests and may occur at defined points in the school calendar.

Formative Assessment

Assessment is formative when either formal or informal procedures are used to gather evidence of learning during the learning process, and used to adapt teaching to meet student needs. The process permits teachers and students to collect information about student progress, and to suggest adjustments to the teacher's approach to instruction and the student's approach to learning. Assessment for learning covers all of the aspects of formative assessment but has a particular focus on the student having an active role in his/her learning.

Summative Assessment

Assessment is summative when it is used to evaluate student learning at the end of the instructional process or of a period of learning. The purpose is to summarise the students' achievements and to determine whether and to what degree the students have demonstrated understanding of that learning by comparing it against agreed success criteria or features of quality.

Features of Quality

Features of quality are the statements in the subject specifications that are used in making judgements about the quality of student work for the purpose of awarding achievement grades for certification. As success criteria are closely linked to learning intentions and based on the day-to-day processes in the classroom, student learning will gradually come to reflect the requirements set out in the features of quality which are used for certification purposes.

Further Reading

Inside the Black Box: Raising Standards Through Classroom Assessment, Paul Black and Dylan Wiliam, Kings College, London, 1998

Working inside the Black Box, Black, Harrison, Lee, Marshall and William, 2002

Atherton J S (2013) *Learning and Teaching; What works best* [On-line: UK] retrieved 24 July 2014

Hattie J. *Teachers Make a Difference – What is the research evidence?*

Assessment: Feedback to promote student learning, Dorothy Spiller

Assessment for Learning – Putting it into practice, Black, Paul et al, Open University Press, 2003

Embedded Formative Assessment, Dylan Wiliam, Solution Tree, 2011

Formative Assessment in Action, Shirley Clarke, Hodder Murray, 2005

Assessment for Learning: Mark less to achieve more, Ian Smith, Learning Unlimited, 2003

Assessment for Learning: Putting it into practice, Paul Black, Christine Harrison, Clare Lee, Bethan Marshall and Dylan Wiliam, OUP, 2003

Working Inside the Black Box Paul Black, Christine Harrison, Clare Lee, Bethan Marshall and Dylan Wiliam, Kings College, London, 2002

Mathematics Inside the Black Box Jeremy Hodgen and Dylan Wiliam, NferNelson, 2006

English Inside the Black Box Bethan Marshall and Dylan Wiliam, NferNelson, 2006

Science Inside the Black Box NferNelson, 2006

Useful Websites

Assessment Toolkit

Dylan Wiliam's website

Association for Achievement and Improvement through Assessment

Kings College Assessment Group