

Assessment for Learning

SESSION OBJECTIVES:

1. Be able to explain the difference between assessment *for* learning (AfL) and assessment *of* learning
2. Know a variety of good AfL techniques to use in the classroom
3. Understand the key features of four important, interrelated types of AfL: success criteria, targeted questioning, self- and peer-assessment, and comment-based marking

WHAT IS AFL?

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

Assessment Reform Group (2002)

Assessment for learning is the process of ongoing assessment of students’ progress toward the goals of a course – specified in terms of knowledge, understanding and/or skills that students will ideally have at the end of the course – which is used by teachers and learners to plan what to do in order to “close the gap” between students’ current situation and the teacher’s vision for them as specified in the course goals.

EXAMPLES OF GOOD IN-CLASS AFL ACTIVITIES

- Non-graded quizzes with comprehension questions (True/False, Odd One Out, What is X’s view on Y?, etc.)
- “Warm calling” (*not* cold calling!): pose a question, give students 2 minutes to think and individually jot down an answer, pick 3 or 4 students at random to read and compare answers.
- “Muddiest points” 1: give each student 2 post-it notes, ask them to identify their “muddiest points” from the past n classes. Consult them after class to see where students are struggling.
- “Muddiest points” 2: same as Muddiest points 1, but put the post-its in a bag and ask students to take turns pulling them out and leading discussion to clarify each other’s muddy points!
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EXCERPT FROM PAUL BLACK AND DYLAN WILIAM (1998), “INSIDE THE BLACK BOX”

In terms of systems engineering, present policy seems to treat the classroom as a **black box**. Certain *inputs* from the outside are fed in or make demands—pupils, teachers, other resources, management rules and requirements, parental anxieties, tests with pressures to score highly, and so on. Some *outputs* follow, hopefully pupils who are more knowledgeable and competent, better test results, teachers who are more or less satisfied, and more or less exhausted. But what is happening inside? How can anyone be sure that a particular set of new inputs will produce better outputs if we don't at least study what happens inside?

...

Our own review has selected at least 20 [studies that produce quantitative evidence of learning gains]—the number depends on how rigorous a set of selection criteria are applied. All of these studies show that innovations which include strengthening the practice of formative assessment produce significant, and often substantial, learning gains. These studies range over ages (from 5-year olds to university undergraduates), across several school subjects, and over several countries... Some of these studies exhibit another important feature. Many of them show that improved formative assessment helps the (so-called) low attainers more than the rest, and so reduces the spread of attainment whilst also raising it overall.

...

The self-esteem of pupils

“... a number of pupils ... are content to ‘get by’... Every teacher who wants to practice formative assessment must reconstruct the teaching contracts so as to counteract the habits acquired by his pupils”

(Perrenoud, 1991 talking of pupils in Switzerland)

The ultimate user of assessment information which is elicited in order to improve learning is the pupil. Here there are two aspects—one negative, one positive. The negative is illustrated by the above quotation. Where the classroom culture focuses on [marks], then pupils look for the ways to obtain the best marks rather than at the needs of their learning which these marks ought to reflect. One reported consequence is that where they have any choice, pupils avoid difficult tasks. They also spend time and energy looking for clues to the ‘right answer’. Many are reluctant to ask questions out of fear of failure. Pupils who encounter difficulties and poor results are led to believe that they lack ability, and this belief leads them to attribute their difficulties to a defect in themselves about which they cannot do a great deal. So they ‘retire hurt’, avoid investing effort in learning which could only lead to disappointment, and try to build up their self-esteem in other ways. Whilst the high-achievers can do well in such a culture, the overall result is to enhance the frequency and the extent of under-achievement.

The positive aspect is that such outcomes are not inevitable. What is needed is a culture of success, backed by a belief that all can achieve. Formative assessment can be a powerful weapon here if it is communicated in the right way. Whilst it can help all pupils, it gives particularly good results with low achievers where it concentrates on specific problems with their work, and gives them both a clear understanding of what is wrong and achievable targets for putting it right. Pupils can accept and work with such messages, provided that they are not clouded by overtones about ability, competition and comparison with others. In summary, the message can be stated as follows:

- Feedback to any pupil 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 pupils.

Self-assessment by pupils

However, there is a further dimension. Many of the successful innovations have developed self- and peer-assessment by pupils as ways of enhancing formative assessment, and such work has achieved some success with pupils from age five upwards. This link of formative assessment to self-assessment is not an accident—it is indeed inevitable.

To explain this, it should first be noted that the main problem that those developing self-assessment encounter is not the problem of reliability and trustworthiness: it is found that pupils are generally honest and reliable in assessing both themselves and one another, and can be too hard on themselves as often as they are too kind. The main problem is different—it is that pupils can only assess themselves when they have a sufficiently clear picture of the targets that their learning is meant to attain. Surprisingly, and sadly, many pupils do not have such a picture, and appear to have become accustomed to receiving classroom teaching as an arbitrary sequence of exercises with no overarching rationale. It requires hard and sustained work to overcome this pattern of passive reception. When pupils do acquire such overview, they then become more committed and more effective as learners: their own assessments become an object of discussion with their teachers and with one another, and this promotes even further that reflection on one's own ideas that is essential to good learning.

What this amounts to is that self-assessment by pupils, far from being a luxury, is in fact an essential component of formative assessment. Where anyone is trying to learn, feedback about their efforts has three elements—the desired goal, the evidence about their present position, and some understanding of a way to close the gap between the two (Sadler, 1989). All three must to a degree be understood by anyone before they can take action to improve their learning. [...]

- For formative assessment to be productive, pupils should be trained in self-assessment so that they can understand the main purposes of their learning and thereby grasp what they need to do to achieve.

The Evolution of Effective Teaching

The research studies referred to in the first part of this paper show very clearly that effective programmes of formative assessment involve far more than the addition of a few observations and tests to an existing programme. They require careful scrutiny of all of the main components of a teaching plan. As the argument develops it becomes clear that instruction and formative assessment are indivisible. To begin at the beginning, the choice of tasks for class and home work is important. Tasks have to be justified in terms of the learning aims that they serve, and they can only work well if opportunities for pupils to communicate their evolving understanding are built into the planning. Discussion, observation of activities, marking of written work, can all be used to provide the opportunities, but it is then important to look at, or listen carefully to, the talk, the writing, the actions through which pupils develop and display the state of their understanding.

- Opportunities for pupils to express their understanding should be designed into any piece of teaching, for this will initiate the interaction whereby formative assessment aids learning.

Discussions, in which pupils are led to talk about their understanding in their own ways, are important aids to improved knowledge and understanding. Dialogue with the teacher provides the opportunity for the teacher to respond to and re-orient the pupil's thinking. However, there are clearly-recorded examples of such discussions where teachers have, quite unconsciously, responded in ways that would inhibit the future learning of a pupil. What the examples have in common is that the teacher is looking for a particular response and lacks the flexibility or the confidence to deal with the unexpected. So the teacher tries to direct the pupil towards giving the expected answer. In manoeuvring the conversation in this way, the teacher seals off any unusual, often thoughtful but

unorthodox, attempts by the pupils to work out their own answers. Over time the pupils get the message—they are not required to think out their own answers. The object of the exercise is to work out, or guess, what answer the teacher expects to see or hear, and then express it so that the teaching can proceed.

A particular feature of the talk between teacher and pupils is the asking of questions by the teacher. This natural and direct way of checking on learning is often un-productive. One common problem is that teachers do not allow enough quiet time so that pupils can think out and offer an answer. Where, as often happens, a teacher answers her or his own question after only two or three seconds, and where a minute (say) of silent thought is not tolerable, there is no possibility that a pupil can think out what to say... It is also common that only a few pupils in a class answer teachers' questions. The rest then leave it to these few, knowing that they cannot respond as quickly and being unwilling to risk making mistakes in public. So the teacher, by lowering the level of questions and by accepting answers from a few, can keep the lesson going but is actually out of touch with the understanding of most of the class—the question-answer dialogue becomes a ritual, one in which all connive and thoughtful involvement suffers.

There are several ways to break this particular cycle. They involve giving pupils time to respond, asking them to discuss their thinking in pairs or in small groups so that a respondent is speaking on behalf of others, giving pupils a choice between different possible answers and asking them to vote on the options, asking all to write down an answer and then reading out a selected few, and so on. What is essential is that any dialogue should evoke thoughtful reflection in which all pupils can be encouraged to take part, for only then can the formative process start to work.

- The dialogue between pupils and a teacher should be thoughtful, reflective, focused to evoke and explore understanding, and conducted so that all pupils have an opportunity to think and to express their ideas.

Class tests, and tests or other exercises set for homework, are also important means to promote feedback. A good test can be a learning as well as a testing occasion. It is better to have frequent short tests than infrequent and longer ones. Any new learning should first be tested within about a week of first encounter, but tests more frequent than this are counter-productive. The quality of the test items, i.e. their relevance to the main learning aims and their clear communication to the pupil, needs scrutiny. Good questions are hard to generate and teachers should collaborate, and draw—critically—on outside sources, to collect such questions.

Given questions of good quality, it is then essential to ensure the quality of the feedback. Research studies have shown that if pupils are given only marks or grades, they do not benefit from the feedback on their work. The worst scenario is one in which some pupils get low marks this time, they got low marks last time, they expect to get low marks next time, and this is accepted as part of a shared belief between them and their teacher that they are just not clever enough. Feedback has been shown to improve learning where it gives each pupils specific guidance on strengths and weaknesses, preferably without any overall marks. Thus, the way in which test results are reported back to pupils so that they can identify their own strengths and weaknesses is a critical feature. Pupils must be given the means and opportunities to work with evidence of their difficulties. Thus, for formative purposes a test at the end of a block or module of teaching is pointless in that it is too late to work with the results.

- Tests and homework exercises can be an invaluable guide to learning, but the exercises must be clear and relevant to learning aims. The feedback on them should give each pupil guidance on how to improve, and each must be given opportunity and help to work at the improvement.

All these points make clear that there is no one simple way to improve formative assessment. What is common to them is that a teacher's approach should start by being realistic—confronting the question “Do I really know enough about the understanding of my pupils to be able to help each of them?”.

AFL SELF-ASSESSMENT TOOLKIT¹

If you are new to AfL, it will help to ask yourself the following questions:

- **How effective is my use of success criteria?**
 - Providing “learning objectives” tells students what you want them to know, understand, and be able to do. This enables both them and you to assess their progress toward these goals.
 - For lengthier tasks, it is a good idea to provide students with criteria for their work to meet in order to be successful in the task, including descriptions of different levels of performance.

- **How effective is my use of questioning?**
 - It is a good idea to structure in-class questions so that students give detailed answers, revealing exactly what they understand about a subject.
 - Questions should be “open” rather than “closed”: “What might the answer to Q be?” rather than “The answer to Q is P – True or False?”
 - Try waiting for at least five seconds after asking a question to give students time to think.

- **How effective is my use of feedback?**
 - Giving students task-focused feedback instead of ego-focused feedback helps them to stay motivated and to believe that they can improve.
 - Effective feedback is linked to previously-articulated success criteria for the task; it identifies one or two criteria that the student met well, and two or three ways they can improve.
 - If possible, set your learners tasks to do to improve their work, and/or agree on targets for the next piece of work with them, *before* or *instead* of giving them grades.

- **Am I helping my students learn effectively from summative assessments?**
 - If possible, always return marked exams to your students so they can learn from their mistakes. It is also helpful to go through the most troubling questions in class, or, if you are short on time, to distribute a document debunking common misconceptions.
 - It is also a good idea to distribute (anonymized) examples of *good* answers to serve as models.

- **How effective is my use of peer feedback?**
 - Peer feedback works best in an atmosphere of mutual supportiveness. It is helpful to explain to your students why you are using peer feedback and how they will benefit from it.
 - It is a good idea to start with an in-depth discussion of success criteria, and/or to show your students examples of successful work from other classes.

- **How effective is my use of self-assessment?**
 - Students initially learn self-assessment from their teacher; they follow your lead when you give them feedback about their work. You can model good assessment practices!
 - Like peer assessment, self-assessment works best with clearly-defined success criteria.
 - Self-assessment will be most successful if you encourage your students to practice regularly.

You could give yourself “marks out of 10” in each of these categories! ☺

¹ Adapted, with some additions, from <http://www.cambridge-community.org.uk/professional-development/gswaf/index.html>

MORE EXAMPLES OF GOOD IN-CLASS AFL ACTIVITIES

- Tell your neighbor: tell students what the topic of a new unit is going to be, and then ask them to pair up and tell each other everything that they already know about this topic. Circulate around the room and listen in, and/or then ask groups to take turns to report facts about the new topic. This helps to ensure that you pitch your explanations at the right level for your students.
- Learned/Questions: give each student two post-it notes right before the end of class, and have them write down one thing they learned that day and one question that they still have. Collect learnings and questions on big sheets of A3 paper as students leave the room. Plan the next few classes to address some of the questions that students have raised.
- Rate yo'self: ask students to rate their own progress toward the learning objectives. This could be done using thumbs up/middle/down, or, if you are using computer software (e.g. i-clicker) for in-class quizzes, could be an anonymous quiz question. Spend more or less time on a topic depending on how students have rated themselves.
- Taboo!: write key phrases from the past few classes on post-it notes and put them in a bag. Have students take turns to pull post-its out of the bag and describe the key phrase without using any of the words on the post-it. This is a great way to find out how much students can remember. (Can be made competitive with candy or other prizes!)
- Pictionary: same as Taboo!, except that students have to *draw* the key phrases.
- Just a minute!: this is an old game from a British radio show. Students are given a key concept from the class and have to talk about it for one minute, without pausing, without going off-topic, and without repeating any words. If another student catches a mistake, they get to take over.
- "If this is the answer, what is the question?": another one stolen from a quiz show. Give students a key phrase and ask them to suggest questions to which this is the correct answer. Be prepared to receive some unconventional responses!
- Students write questions: in a class quiz (which could also include "rounds" based on any of the previous 4 activities), ask teams of students to each compose two or three challenging questions based on the class material. This allows them to review and then show off what they know.
- Mr Wrong: in small groups, give students images of one of the characters from Roger Hargreaves' "Mr Men" & "Little Miss" books with a speech bubble attributing a false view to the character. Have students discuss what is mistaken about the view and then report to the class.
- Model answers: when learning a skill (e.g. how to write a good counterargument), give students examples of work that exhibits the skill, and ask them to explain what is good about the examples. Then distribute examples of work that could be improved and ask students to edit it.
- Redrafting: use lesson time to allow students to redraft work. You could also build in time to "workshop" paper ideas in small groups. This is especially helpful if you are asking students to submit multiple drafts of an assignment, or an initial plan followed by a finished version.
- Conveying progress: where possible, find ways to communicate to students that they are making clear progress toward the course goals. This increases motivation and self-esteem. Particularly important for lower-achieving students who may be struggling with "impostor syndrome".

SAMPLE HANDOUT EXPLAINING SUCCESS CRITERIA FOR SUBMISSION OF QUESTIONS ABOUT READINGS

How to think of a good Philosophy question

Phil 181, Summer 2016

There are going to be so many opportunities for you to ask questions in this course – both in class, and in your reading responses. Sometimes it can be hard to know which question to ask! Here's a guide.

1 Clarificatory questions

It's totally fine to ask a clarificatory question, if you've done your best to understand an author's argument, but there's part of it that's just not "clicking". You might, for instance, be unsure how a philosopher is using a particular term, or unsure which of two ways of understanding one of their claims was the one they had in mind.

So you could say something like this:

On p.xx, X says "...". What does she mean by this? One natural reading is to think that But I'm not sure that that's right, because So how should we understand X's claim here?

2 Objections

You can ask a question that raises a problem or objection for part of the author's argument, or a counterexample to one of their claims. Be sure to keep this brief, though – and be sure to keep it friendly!

You could say something like this:

On p.xx, X says "...". But this seems wrong to me, because How might X respond to this point?

3 Compare and Contrast

We're going to be reading the work of lots of different philosophers, often on related topics. You can ask a question about how two or more of the readings relate to one another, how similar one philosopher's claim is to another's, or how one philosopher would respond to another's argument (even if they're not from the same set of readings – it's great to connect new readings up with something we have already studied!).

So you could say something like this:

On p.xx of YY, X says "...". This reminds me of Z's idea that Are these claims related? Though they use different terms, I think that these philosophers might be making similar points, because

4 A question that is all your own!

You might find that the reading gets you thinking about a certain topic, and that you end up wondering about a question of your own that is inspired by the reading. Go for it!

SAMPLE ASSIGNMENT RUBRIC

Assignment One		Ratings				Pts
<p>Applying general principles to particular cases (Q.1, Q.2)</p>	<p>Excellent -- Principles are accurately summarized, cases are well-understood, and implications of the principles for the cases are clearly elucidated. Any genuine ambiguities or difficulties in applying a principle to a case are accurately identified and succinctly explained, but the student does not over-exaggerate the difficulties.</p>	<p>Good -- Answers exhibit many of the virtues in the "Excellent" category, but fall short in some respect; perhaps a lack of understanding of a central aspect of the principle or the case, or perhaps something unclear in the student's explanation of the application of the principles.</p>	<p>Fair -- Some effort made to accurately recall the principle and comment on its application to the case, but the answer exhibits the flaws in the "Good" category to a degree that seriously inhibits the student's ability to get their point across.</p>	<p>Poor -- Answers are marred by serious unclarity, or serious lack of comprehension of course material.</p>	<p>No submission</p>	<p>20 pts</p>
	<p>20 pts</p>	<p>15 pts</p>	<p>10 pts</p>	<p>5 pts</p>	<p>0 pts</p>	
<p>Comparing and contrasting arguments (Q.3)</p>	<p>Excellent -- Key similarities and differences between arguments are identified and the implications of these similarities and differences are discussed.</p>	<p>OK -- A solid attempt made to identify similarities and differences, but the most important one/s is/are ignored, or some claims are inaccurate, or the discussion is superficial.</p>	<p>OK -- A solid attempt made to identify similarities and differences, but the most important limitations of the argument. The discussion is held back by being under-developed and/or uncharitable to the argument's author's (mis)characterizing their position).</p>	<p>No submission</p>	<p>5 pts</p>	
	<p>5 pts</p>	<p>3 pts</p>	<p>3 pts</p>	<p>0 pts</p>		
<p>Assessing the strength of arguments (Q.3)</p>	<p>Excellent -- An accurate assessment of each argument's persuasiveness, with mention of both some plausible parts of the argument, and some reasons to be doubtful about the argument. Weighs these strengths and limitations reasonably to come to a fair overall conclusion. Excellent answers may include suggestions for ways to develop the argument to respond to potential objections.</p>	<p>Good -- Answers exhibit many of the virtues in the "Excellent" category, but fall short in some respect; perhaps a glaring omission of part of an author's view, perhaps an over-reliance on quotations as opposed to explaining what they mean, perhaps an implausible interpretation of part of the text.</p>	<p>Fair -- Some attempt made to report the author's view, but the answer exhibits the flaws in the "Good" category to a degree that seriously inhibits the extent to which a reader could come to understand the text from this answer.</p>	<p>Poor -- Answers are marred by serious unclarity, or serious lack of comprehension of course material.</p>	<p>No submission</p>	<p>5 pts</p>
	<p>5 pts</p>	<p>15 pts</p>	<p>10 pts</p>	<p>5 pts</p>	<p>0 pts</p>	
<p>Accurately and succinctly summarizing philosophers' writings (Q.4, Q.5)</p>	<p>Excellent -- All key points from the text that are relevant to the question are identified and their significance is explained. Well-chosen quotations (with proper references) are used to support the answer where necessary, and are then clearly and accurately explained in the student's own words.</p>	<p>Good -- Answers exhibit many of the virtues in the "Excellent" category, but fall short in some respect; perhaps a glaring omission of part of an author's view, perhaps an over-reliance on quotations as opposed to explaining what they mean, perhaps an implausible interpretation of part of the text.</p>	<p>Fair -- Some attempt made to report the author's view, but the answer exhibits the flaws in the "Good" category to a degree that seriously inhibits the extent to which a reader could come to understand the text from this answer.</p>	<p>Poor -- Answers are marred by serious unclarity, or serious lack of comprehension of course material.</p>	<p>No submission</p>	<p>20 pts</p>
<p>20 pts</p>	<p>15 pts</p>	<p>10 pts</p>	<p>5 pts</p>	<p>0 pts</p>		
<p>Total Points: 50</p>						

WORKS CITED & OTHER HELPFUL RESOURCES

“Inside the Black Box” is accessible online at: <http://weaeducation.typepad.co.uk/files/blackbox-1.pdf>

The full article on which this summary is based is:

Black, P. & Wiliam, D. (1998). “Assessment and Classroom Learning”. *Education: Principles, Policy and Practice*, 5 (1), pp 7-74.

The articles that Black and Wiliam cite in the excerpt I’ve given are:

Perrenoud, P. (1991). “Towards a pragmatic approach to formative evaluation”. In: P. Weston (Ed.) *Assessment of Pupils Achievement: Motivation and School Success*, pp. 79-101. Amsterdam: Swets and Zeitlinger.

Sadler, R. (1989). “Formative assessment and the design of instructional systems”. *Instructional Science*, 18, pp. 119-144.

The Assessment Reform Group’s guide from which I quoted at the outset is accessible online at: <https://www.aaia.org.uk/content/uploads/2010/06/Assessment-for-Learning-10-principles.pdf>

Also well worth checking out are these websites:

- <http://www.cambridge-community.org.uk/professional-development/gswafl/index.html>
- <http://www.assessmentforlearning.edu.au/>
- (two excellent websites with more information on AfL basics)
- <http://www.nuffieldfoundation.org/assessment-reform-group>
- (for more information about the work of the Assessment Reform Group in the UK)

... these articles:

- Fuchs, L.S. & Fuchs, D. (1986). “Effects of Systematic Formative Evaluation: a MetaAnalysis”. *Exceptional Children* 53 (3), pp. 199-208.
- Stiggins, R. & Chappuis, J. (2005). “Using Student-Involved Classroom Assessment to Close Achievement Gaps” *Theory Into Practice*, 44 (1), pp 11–18.
- Chappuis, J. (2005). “Helping Students Understand Assessment”, *Educational Leadership*, 63 (3), pp 39-43.
- Stiggins, R. (2007.) “Assessment through the Student’s Eyes”. *Educational Leadership*, 64 (8), pp 22-26.
- Wiliam, D & Black, P. (1996). “Meanings and Consequence : a basis for distinguishing formative and summative functions of assessment.” *British Educational Research Journal*, 22 (5), pp. 537-548.

...and these books:

- Black, P. (2003). *Assessment for Learning: Putting it into Practice*. E-Book, accessible online at: <http://site.ebrary.com.proxy.lib.umich.edu/lib/umich/reader.action?docID=10161348>
- Gardiner, J. (ed) 2006, *Assessment and Learning*, Sage Publications, London, UK.
- Wiggins, G 1998, *Educative Assessment: Designing assessments to inform and improve student performance*, Jossey-Bass, San Francisco, United States.
- Torrence, H & Pryor, J 1998, *Investigating Formative Assessment: Teaching, learning and assessment in the classroom*, Open University Press, Buckingham, United Kingdom.

I hope you enjoy putting this stuff into practice, and thank you for coming! ☺