

Microsoft
Partners in Learning

Innovative Teachers



21ST CENTURY SKILLS

Assessment



Note on the Authors

This document was developed through an international consultation process with educators and academics lead by Imagine Education (<http://www.imagineeducation.net>).

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Introduction

Formative assessment is seen as one of the most powerful teaching tools – but what is it, and how can teachers develop its use in the classroom?

Finding ways to recognise, value, support and celebrate learning is at the heart of teaching practice. In recent years there has been a lot of debate in research, policy and practice about the relationship between assessment and what is taught in schools. In particular, these debates have been concerned with separating the different functions of assessment: recognising that assessment practices play a number of roles and that assessments reinforce curricular and school aims.

Although research has highlighted many roles of assessment (see links to resources and websites), they largely fall into three categories:

- Formative assessment (where the assessment is used to adapt teaching to meet the learner's needs)
- Summative assessment (summarising what has been learnt at a point in time, often for reporting or certification purposes)
- System review (using assessments to judge institutions, teachers or education systems)

The formative assessment and system review categories are often closely tied in reviewing the accountability of educational practice and systems. These often have clearly defined objectives and as such act as longer term drivers of practice. Yet it is formative assessment, often called Assessment for Learning (AfL), that is the focus of this scenario as it is the role most closely associated with good classroom practice. AfL focuses on looking for evidence that can be





Introduction



used by teachers and learners to decide on future activities and goals. As such it is an integral part of any personalised curriculum.

To implement AfL, teachers should:

- Introduce regular classroom testing and critically use the results to adjust teaching and learning
- Provide detailed and specific feedback to learners (written or oral)
- Actively involve learners in assessment practices, including the setting of goals
- Be mindful of learners' motivation and help in building their self-belief as learners
- Recognise a wide range of achievements (in and out of the classroom) for all learners and look for how they provide evidence towards formative assessments

Learners play an important role in AfL, whether in negotiating assessment tasks and next steps, or being in dialogue with teachers about progress and challenges. Further, by self assessing and peer-assessing, learners can be involved in generating evidence of learning and become aware of a shared understanding of success. Within these processes, learners:

- Are involved in discussions with teachers and pupils about learning, progress and achievement
- Are able to set personal goals and challenges for themselves and their peers
- Develop an understanding of how to learn
- Build a personal commitment to learning goals
- Develop a shared understanding of success criteria
- Develop the skills of reflection and self-management



Role of digital technologies for assessment

Digital technologies play an increasingly important role in all types of assessment.

Technologies can be used to support teachers in the administration and management of assessment data by:

- using spreadsheets to easily record data
- creating links between different types of assessment data, for example where teachers can easily compare year-on-year progress in results, and
- providing ways for teachers to share their assessments with colleagues and parents.

Capturing assessment data can also be enriched through the use of digital technologies.

For example:

- Video and still cameras can be used to capture the process of learning as well as any products that are made during that process,
- Learners can represent their ideas and understanding in a variety of ways, which supports teachers identifying their learning,
- Rapid collection of assessment data can lead to quick formative teaching approaches,
- Evidence of learning can be captured from inside and outside of the classroom, helping learners present a wider range of learning





Scenarios

The following scenarios describe possible learning and teaching activities that focus on assessment practices to move towards more personalized approaches to learning. They are presented to support the developments of new approaches to teaching and learning by considering the implications and benefits of alternative practices. They are not presented as recommendations or predictions, but as the starting point for teachers to consider how formative assessment can be developed as part of their own practice.



01 FORMATIVE INSTRUCTION

Using summative assessment formatively

Mr Patel looks at a previous summative maths task and notices that 6 year old Matthew scored weakly in number work involving fractions. Wanting to use this assessment data formatively, Mr Patel sets Matthew a series of questions relating to fractions of various difficulty: some of the tasks require the use of a simple calculator, some using counters, some to be worked out using pencil and paper only. Looking through the answers, Mr Patel notices that Matthew scored well with the calculator and the counters, but poorly when using pencil and paper. Using this data, Mr Patel recognises that Matthew understands the process of working out fractions, but is weak at dividing numbers. He talks with Matthew to set some homework activities for Matthew to practise division.

KEY WORDS: formative assessment, summative assessment, number, reflection

02 PEER ASSESSMENT (STUDENT TO STUDENT)

Using peer assessment as part of personal learning journeys

Using the review tools to annotate Richard's work, Michelle follows the teacher's guidelines for peer assessing. She first highlights the most interesting part of Richard's story commenting upon how surprising the narrative was, and then, relating to Richard's particular learning objective to use more 'descriptive words', Michelle then circles all of the adjectives and adverbs in Richard's work. Michelle re-reads Richard's story and then begins to draw a picture of his central character. Once she has finished her drawing she shares it with Richard and explains which of his descriptions inspired her drawing. Discussing the parts Richard is most proud of, and which parts most difficult, together they describe some new learning objectives to discuss with the teacher.

KEY WORDS: peer assessment, annotation, review, reframing, narrative



Scenarios

04 PORTFOLIOS OF PRACTICE

Using e-portfolios to gather evidence in and outside of school

James opens his e-portfolio for a 'reflective meeting' with his teacher to show the collection of digital files that are linked to the objectives that he had set in negotiation with the teacher at the beginning of the term. One of James' targets was to practice

his spoken English through making presentations. James opens a file showing an image of a teacher presenting in school assembly and discusses what he learnt from talking with him about style and pace. The teacher noted that James hadn't made any presentations in school and James pulls up a video of a presentation he gave at a local youth centre about one of his hobbies. The teacher and James agree that this demonstrates James has achieved his goal, and they begin to look at goals to support him developing this area further.

KEY WORDS: reflection, negotiation, e-portfolio, digital media



03 MAKING CHOICES, INFORMING DISCUSSION (GROUP ASSESSMENT)

Mixing teacher assessment of group work (looking at process and product, individual and group contribution)

Dr Mattherson sits down to assess the work of a group of four students in his class that have been working on an Enterprise project. He starts by reviewing the group's Ning site that shows the work in progress and is pleased to see a single description of the project aims that is followed by a list of the group members. He then selects the project timeline tab to look at the different activities planned and who is taking on what roles. Dr Mattherson sees that so far five parts of the project should have been completed with all of the group members acting as researchers, authors and editors within the different activities. Seeing that only four of the activities so far have been completed, Dr Mattherson looks at individual roles, the amount of time spent on the site by each student and what state the late activity is in. Realising that the final editing role hasn't been completed, Dr Mattherson writes a personal note to the editor for that task, whilst writing a more general comment for the whole group about overall progress. He then writes a set of questions for the group to respond to that discuss project management issues, as well as issues about the content of the work.

KEY WORDS: formative assessment, teacher assessment, group work, individual work, process, product



Scenarios

05 ONLINE REPORTING

Using portfolios and publishing tools to report process, product and progress supporting parent involvement in learner's work.

Shakra is developing a history project and her parents are keen to see how she is progressing to see how they can support her at home. They log on to the school's learning platform and sign in using their username and password. They look at the Shakra's work plan and see what her weekly objectives are and that she is currently working on a project about the local area. Shakra has made her blog available for her parents' comments and after looking through her work they leave a comment suggesting the interview Shakra's grandparents as part of the work. Selecting the 'assessment' icon, Shakra's parents then review her latest marks as well as the teacher's formative comments. They see that one area for development is evaluating sources so they decide to find some books about the local area to discuss with Shakra when she's doing her homework.

KEY WORDS: blog, parent-school relationship, history, critical thinking, learning platform, formative assessment



See links to resources and websites



$E=mc^2$

Professional Development Activity Description

Activity 1

AFL PRINCIPLES – DISCUSS ‘WHAT COUNTS’ AS ASSESSMENT

Here are a set of scenario descriptions that outline some possible practices that use digital technologies to support the development of new teaching and learning practices that focus on assessment.

They are not written as predictions nor recommendations, but as a starting point for discussions about how this teaching tool can best be fostered in your teaching practice. Follow the suggested activities that use these scenarios to encourage these conversations.



The intention of this activity is for you to develop a better understanding of Assessment for Learning and to consider how it can be integrated into your teaching practice.

Begin by reading the Qualification and Curriculum Development Agency’s (QCDA’s) 10 principles of Assessment for Learning - see links to resources and websites

1. As a group, annotate the principles using two colour pens. In one colour, add ways in which the principles can easily be integrated into practice, in the other colour write barriers to integrating this approach.
2. Once you have an annotated set of principles, share them with the rest of your staff so that each teacher knows how AfL can be integrated.
3. Last, review the barriers that have been identified and discuss potential solutions or mark these for discussion



as part of the school's development planning.

The 10 principles of Assessment of Learning can also be used as descriptors within a ‘Diamond 9’ activity. For more information about this approach to conversation based professional development, see the further resources section.



$E=mc^2$

Professional Development Activity Description

Activity 2

CROSS SUBJECT ASSESSMENT OF THE 'WHOLE' LEARNER



The aim of this activity is to see how formative and summative assessments can be made across subject areas to understand a broader picture of a learner's progress and achievements.

Share three pieces of work from your own subject with teachers from other departments. What can they say about their own subject in relation to your work (and visa versa)? For example:

- What can an English teacher say about the learner's work produced in Geography?
- Which Mathematics targets are met in work undertaken in science?
- How does work produced in Art help the English teacher?

After discussing the work with cross-departmental colleagues, discuss whether a project could be set up that supports cross subject assessments.



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Further Resources

A range of resources are available to support this teaching tool, including teaching resources, advice and research literature.



<http://www.innovativeteachertoolkit.com/links/assessment.html>

