

# Participant pack

# **Module 10**

# Approaches to the formative and summative assessment of problem solving for functional skills

## **Handouts**

**HO 1: Aim and outcomes** 

**HO 2: Reflection log** 

**HO 3: Assessment for learning** 

HO 4: Being functional self-assessment recording sheet

# **PowerPoint notes**

#### **HO 1**

## Session aim and outcomes

#### Aim

To explore a range of approaches to assessment for learning that help identify learners' progress in relation to solving complex problems independently.

#### **Outcomes**

By the end of the session participants should be able to:

- 1. Identify a range of approaches for assessing problem solving for both 1:1, online / remote and group working;
- 2. Formatively assess learners' abilities to problem-solve independently using maths, English and ICT;
- 3. Identify approaches that help learners understand how well they can solve everyday and work-related problems using maths, English and ICT; and
- 4. Understand the requirements of functional skills summative assessments in order to make judgements about learners' test readiness.

# **HO 2 Reflection log**

Use this sheet to record any issues and actions that arise during each section.

Use the space on the back to reflect on the session and how you have used the information and ideas to inform your own practice.

Activity	Issues	Actions
Assessing learners' abilities to solve problems independently		
Assessing functionality using problem solving flashcards		
Including assessment of problem solving / functionality in the curriculum		
Using problem solving self-assessment cards		
Recording the development of problem solving skills		
Understanding the requirements of the functional skills summative assessments		
Developing a bank of assessment resources		

Turn over 💢

Reflection							

#### **HO** 3

# Quick start guide: Assessment for learning (AfL)

### **Openers**

Effective openers allow learners to express their own initial ideas about a topic and to reflect on prior knowledge. They are a springboard for inductive learning and also free up the teacher to listen and observe, gathering information about existing knowledge and group dynamics, so that learning can be differentiated accordingly.

#### Peer review

Research has shown that learners at all levels can provide valid and accurate reviews of each other's work, providing that they are given a structure to work to and are well supported by their teacher. Effective peer review helps learners to become familiar with success criteria and gain skills in assessing their own progress. Teachers can tap into the information generated by peer review to help plan future learning.

#### Instant feedback

Effective instant feedback techniques take very little time and effort. They provide the teacher with a quick snapshot of how learners are progressing, how effective they feel the learning is, or simply, whether they have mastered an important piece of knowledge.

Techniques that can provide instant feedback:

- Voting or polling using sticky notes, green-amber-red cars, and so on
- Answers written in mini whiteboards.

#### **Effective questioning**

This underpins AfL. Effective questioning encourages learners to reveal **how** they are learning, as well as **what** they are learning. It can reveal deep learning not just surface learning. Effective questioning is not the sole preserve of the teacher. Learners can learn to formulate their own effective questions, helping them to become expert learners who know where to focus their efforts in order to improve.

#### **Reflection and self-assessment**

This approach to AfL encourages learners to become experts in their own learning and to be evaluative. It can be built into activities and encouraged through learning conversations.

#### **Activities with built-in feedback**

The teacher cannot always be on hand to give every learner feedback at every step. Activities can be designed so that checks on learning can be built in. For instance, a

computer-based learning activity may confirm correct answers, give feedback or offer further practice. Learning activities can be constructed so that learners can see at each stage whether they are on the right track. Activities can build in peer reviews at key points.

## Learning objectives, success criteria

Learners need to know what they are learning, why, and how they can be successful. Devise success criteria with learners by analysing what makes a piece of work 'excellent', 'good' or 'poor'. Create checklists, prompts or marking frameworks to aid self-assessment and 'medal and mission' feedback.

#### **Medals and missions**

'Medals' tell the learner what they have done well. 'Missions' are individual targets that help the learner focus on what they need to do to improve their work. Grades and marks alone do not provide this information. Feedback expressed in terms of medals and missions is more effective. Each new mission is an opportunity for the teacher to adjust the learning to meet the learner's needs.

Taken from Quick Start Guide developed for the LSIS Teaching and Learning Programme.

# HO 4 - Being functional self-assessment recording sheet

Category: Problem solving	Headings			
Enter the statements from the cards into the rows below.  Enter an 'x' in one of the columns to the right to show which heading you placed the card under.	Always	Some- times	Hardly ever	
I can recognise when there is a problem.				
I know when I've solved a problem.				
I check that I understand the problem.				
I can work out what resources (such as time or materials) I need to solve problems.				
I ask other people for advice when I'm stuck on a problem.				
My solutions to problems take safety into account.				
I think about different options before deciding on the best way to solve a problem.				
I can find out about the risks involved in tackling problems.				
I can work out solutions to problems for myself.				
I stay calm when people don't agree with my solution to a problem.				
I can say why I solved a problem in a particular way.				

Category: Problem solving	Headings			
Enter the statements from the cards into the rows below.  Enter an 'x' in one of the columns to the right to show which heading you placed the card under.	Always	Some- times	Hardly ever	
I know my first solution to a problem might not always be the best one.				
I can understand why there is a problem.				
I can see more than one possible solution to a problem.				
People ask my advice about solving problems.				
I suggest ways of solving problems when working in a team.				
I can identify what skills will be needed to solve a problem.				
I listen to other people's suggestions and take note of them.				
I think about how I'll know that a problem has been solved.				
I can work with other people to solve problems.				
I can recognise how well I solved a problem.				
If my solution to a problem doesn't work, I find out why.				
I can select the information I need to solve a problem or complete a task.				

## **PowerPoint slides**



#### Aims



To explore a range of approaches to assessment for learning that help identify learners' progress in relation to solving complex problems independently

#### Outcomes



By the end of the session participants should be able to:

- 1.Identify a range of approaches for assessing problem solving
- 2.Formatively assess learners' abilities to problem solve independently using maths, English and ICT
- Identify approaches that help learners understand how well they can solve everyday and work-related problems using maths, English and ICT
- 4.Understand the requirements of functional skills summative assessments

#### A problem solving process



- 1.Identify and understand the problem / task
- 2.Identify possible solutions
- 3.Plan how to tackle the problem / task
- 4.Carry out the plan
- 5.Monitor and reflect on progress
- 6.Decide whether the problem has been solved
- 7.Review the problem solving process

#### Assessment for learning



"Much of what teachers and learners do... can be described as assessment. That is, tasks and questions prompt learners to demonstrate their knowledge, understanding and skills. What learners say and do is then observed and interpreted, and judgements are made about how learning can be improved. These assessment processes ...involve both teachers and learners in reflection, dialogue and decision making."

(Assessment Reform Group, 2002)



#### Role play activity



#### Instructions:

- 1. Allocate 3 roles:
- Learner
- · Assessor/teacher
- · Observer (s)
- 'Assessor' shows the 'learner' the image on one side of the card and uses the prompt questions on the back to draw out how they would solve the problem.
- 3.'Observer(s)' are prepared to lead a discussion after the role play using the questions on your question slip.



There are plans to build a recycling plant close to your home. You are not sure if you are 'for' or 'against' this...







In the newspaper, you read that your local council will answer written questions about the plans.

#### Sharing assessment approaches



Edmodo functional skills assessment approaches group

www.edmodo.com

Share your resources / approaches to contribute to a collaboratively-designed 'assessment approaches' list