

The transition to Functional Mathematics: experience from a secure environment and the way forward

Louise Marriott

Kensington and Chelsea
College,
HMP Wormwood Scrubs
louise.marriott
@hmps.gsi.gov.uk

Remy Odoeme

Kensington and Chelsea
College,
HMP Wormwood Scrubs
dr.rodome@yahoo.com

Bob Smith

Kensington and Chelsea
College,
HMP Wormwood Scrubs
blackcap.bob@virgin.net

In the workshop we shared some of our experiences as a pilot centre of functional mathematics.

We presented an overview of the standards (giving participants the chance to put these into practise in sample exam papers), presented materials we have produced and looked at the possible impact of these on both learners and teachers. We looked at ways of delivering functional skills in the classroom and workshop situations. Finally we considered some real life scenarios involving problems where maths is needed and invited participants to consider the maths involved and strategies to tackle the problems.

This workshop aimed at sharing our experiences of being a pilot centre for Functional Mathematics with OCR examination board in HMP Wormwood Scrubs.

We have been a pilot centre since June 2008. Basically this means we enter students for Mathematics, English and ICT on a two monthly basis at Levels 1 and levels 2, give student and tutor feedback and attend training sessions with OCR.

The session, attended by twelve delegates, gave a brief overview of Functional Skills and Functional Mathematics which will roll out in 2010. Broadly speaking Functional Mathematics requires learners to acquire the skills and problem solving abilities to operate effectively in a variety of life situations.

After this we looked at the Functional Mathematics standards. We did this by means of a task adapted from a geometry project that we are running in the prison. The project is an AQA Entry level unit on 2D and 3D construction. This is a course of about 10 hours work where students are expected to make drawings and templates of six 2D regular shapes and to make four 3D regular shapes.

Groups were given three graded worksheets on cube construction and were asked to decide what levels: Entry, Level 1 or Level 2 (examples of Level 1 and Level 2 included) these corresponded to. Participants were asked to grade these in terms of complexity, familiarity, technical demand and independence (the level differentials). There was then discussion on how easy it was to follow the standards. Generally the participants found that given the way the task had been set out it was easy to see the gradation from Entry to Level 2. There was then some discussion on how the task might be presented in a Functional Maths context. For example making scale models of buildings, designing a carrying tray for transporting cans. The task took rather longer than expected. We ended the workshop with general discussion on Functional Skills. The main source of concern seems to be from the F.E sector where

Functional Skills is to be part of the Foundation Learning Tier (basically a framework for all qualifications at Level 1 which includes Functional Maths and English, vocational skills and social and personal development as elements) Feed-back from the session was positive but there was concern about implementation of Functional Skills.

Example of Level 1 Task in making a cube

Using the card template and the model of the cube construct your own cube from the card.

(Students would be given a square made of card. They would be expected to deconstruct the cube and from this make their own cube using card, scissors and sticky tape.)

Example of Level 2 Task in making a cube

Use the materials you have make a cube.

(Students would have a cube made of card. They would have card, ruler, pencil, scissors and sticky tape.)

Note: At Entry 3 students would be given a square made of card and the net of a cube.