

Introducing assessor-trainers to numeracy as part of their initial teacher training

A PTLLS with numeracy at Kiara Training College

The special focus on numeracy has *“made us better teachers in our vocational areas.”*

Course participant, July 2010

Kiara Training College

Kiara Training College, in Mitcham, Surrey was originally founded in June 2006 as a specialist community college in health and social care training. It has now established itself as a provider of community education and training programmes in a variety of occupational areas including customer services, hospitality, business and administration, and marketing. The college also offers a range of continuing professional development (CPD) courses for staff, including Preparing to Teach in the Lifelong Learning Sector (PTLLS).

Why run a PTLLS with numeracy?

Kiara Training College is committed to training and developing its assessors-trainers. Having run a successful generic PTLLS in 2009, Director Dr Jonathan Fletcher decided to contextualise the programme scheduled for March 2010 for numeracy.

“In future functional maths will be part of everyone’s work. We want to build a team of assessor-trainers who are confident and comfortable with the maths that comes into their vocational programmes”

Dr Jonathan Fletcher, July 2010

His trainees agreed:

“We want to help our learners to enjoy the numeracy in their courses and to see the maths in everything they do. First of all we had to go through that process ourselves.”

“We want to cure the ‘maths phobia’.”

“We want our learners to leave their courses with basic numeracy skills. We want them to go on and take the national numeracy test. Next year we want them to take and pass functional maths qualifications.”

Course participants, July 2010

In the long term Kiara wants to see better retention rates, better pass rates and higher quality provision. They want to integrate maths into all their vocational programmes with their vocational trainers equipped to teach maths.

What was the numeracy PTLLS like?

Jonathan Fletcher, an experienced numeracy specialist and teacher trainer, led the programme with his co-trainer, Pierce Tsiko, a language (ESOL) specialist. They ran the numeracy PTLLS for one day a week over a six week period. A whole day was set aside for training and tasks, and preparations for assignments.

There were eight trainees from four different vocational areas (health and social care, business administration, marketing and hospitality), all assessor-trainers with Kiara.

Maths was part of every element of the programme. The course began with maths diagnostic activities for the trainees. Every taught session began with maths starter activities.

There were two peer teaching sessions where each trainee taught their peers a short lesson with maths in it, for example:

- Music and maths – rhythm and timing
- Healthcare and maths – calculating allocation of medication
- Equality and diversity and maths – using data to support
- Marketing and maths – understanding sales patterns
- Health Service – working with user intake charts

“Every vocational area has got some maths in it. Once the group had identified what this was we explored it in more depth. We found that percentages, ratio and proportion come up in virtually every vocational area. So this is an area of maths we focused on with the whole group.”

Jonathan Fletcher, July 2010

The course approached pedagogy by looking at several numeracy teaching and learning approaches:

- the questioning techniques used by numeracy teachers – how to ask learners questions about maths; how to help learners explain the maths they are using
- talking about maths to clarify concepts and processes
- encouraging learners to use a range of methods to reach solutions
- exploring assumptions, errors and misconceptions.

“Early on we did an activity where we all had to measure something, convert our calculations into metric and then compare with each other. We all had slightly different results. It was a really good way to help us see that there isn’t always only one exact answer to things.”

Course participant, July 2010

Another key element of the PTLLS focused on learners and their experience of maths – the social and personal factors that hinder and help people to learn maths. Here the trainees were able to think about themselves and their own experience of maths. They also considered how and where vocational trainers would refer learners to more specialist numeracy provision.

There was maths in every PTLLS assignment. Two focused in particular on maths. The practical teaching involved teaching some of the maths in the trainees' subjects. One of the written assignments asked trainees to describe the functional maths in their subject areas.

What did KIARA and the trainees get from the programme?

The trainees have nothing but praise for the programme and their teacher trainers. They also report a real change in the way they feel about maths and numeracy. They are no longer afraid to tackle the maths on their courses.

"I am using maths all the time on my childcare programme. One activity is setting up a room so that it is safe for working with children. There is a lot of maths in this task – estimating, measuring, describing the space, considering the ratio of children to the space available. I have the confidence to help the learners see and use the maths in what they are doing. I know how to ask them the right questions and then get them to show me how they reached their answers."

Course participant, July 2010

Running a care home is full of opportunities to use maths. *"We do all the calculations for residents' meals and preparing the meals, planning and doing the shopping."*

The PTLLS also helped the trainees to improve their own maths – both on the course and afterwards. Several trainees went on to take and pass the Level 2 National numeracy test. Everyone will go on to complete their teacher training for the associate or the full teacher role.

One of the trainees, Shamin, is going a step further with numeracy. She is planning to train as a numeracy teacher and seeking a place on a specialist numeracy DTLLS.

Future plans

Kiara will run the numeracy PTLLS programme again. This time they will invite trainees from neighbouring providers in Surrey and South London.

Top tips for a PTLLS contextualised for Numeracy

- Set aside quality time and the budget for staff development and training
- Invite a specialist numeracy teacher trainer to lead the programme
- Include maths throughout the PTLLS as part of every taught session
- Make sure the assessed practical teaching task relates to numeracy
- Keep the maths simple and relevant to the trainees' vocational areas and their daily lives
- Model the methodology you want the trainees to use with their learners
- Include group tasks which involve talking about maths
- Develop the questioning skills of the trainees

Kiara Training College, July 2010