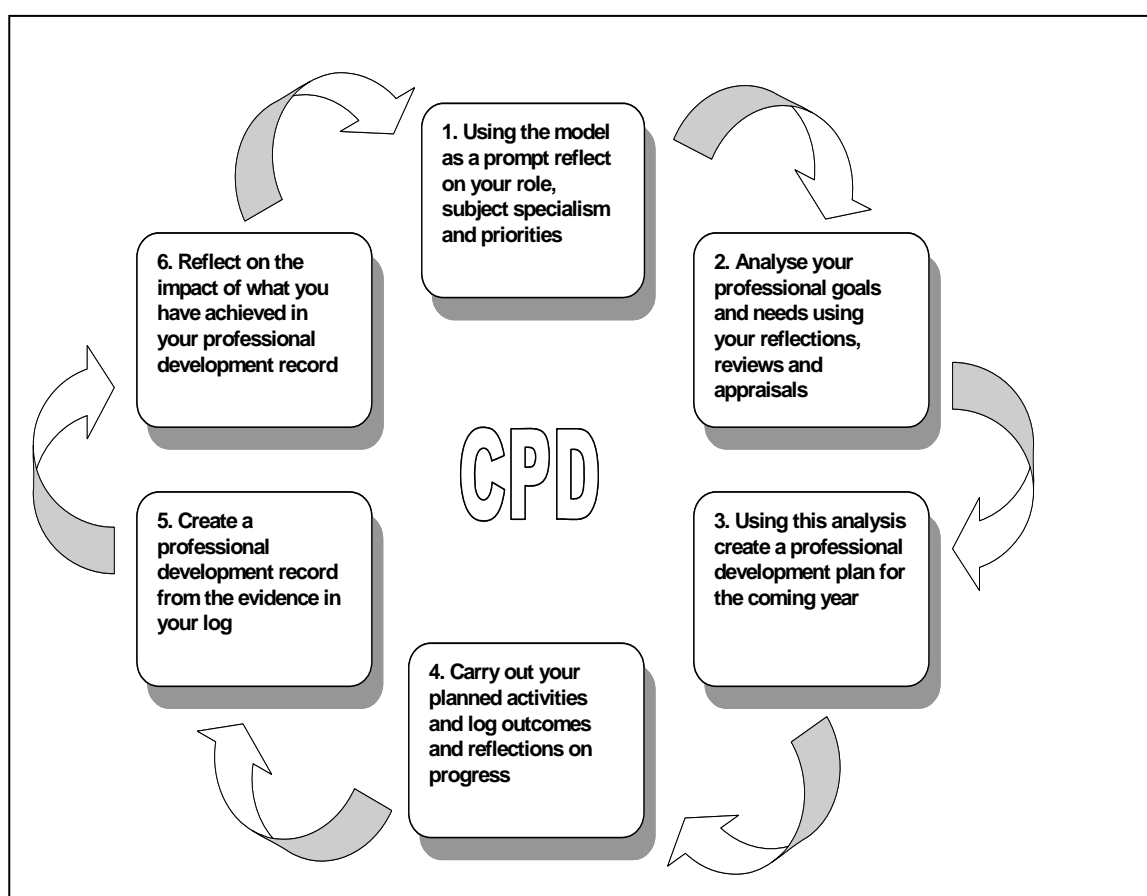


Supported experiments

Tower Hamlets College

Trying out new approaches or strategies in our teaching is invaluable in helping us to grow and improve as teachers. However, this process is enhanced by spending time reflecting on the whole process and documenting our thoughts and reflections. This not only helps us to clarify thoughts but it can contribute to your own personal reflective diary and form part of your continuing professional development (CPD). It is of course even more powerful if you can work collaboratively with others in working through this process.

Institute for Learning CPD cycle



Using Mathematics sessions as a starting point for CPD

- Select a group you will be teaching in the near future and think about the Mathematics content of a forthcoming topic.
- Discuss your ideas with a colleague who has specialist Mathematics knowledge.
- Explore together “Improving Learning in Mathematics” and “Thinking Through Mathematics” to identify a resource that you can adapt.
- Plan a session that uses the adapted activity to teach the vocational topic but check with your colleague that the Mathematics content remains intact.
- Record your thoughts on the process as part of your CPD record.

Title: QIA joint maths and media lesson
<p>In this section you should describe what is being planned, who you are working with and what you, your learners and your organisation or college hope to gain from the process. It will also be helpful to give an idea of timescale, and an explanation of why you have chosen this particular strategy or strategies.</p> <p>It is particularly important that you also give some thought to how you can measure how successful the strategy is – this will particularly help when it comes to the review process.</p>
<p>What will you try out? We will attempt to teach a joint maths lesson with emphasis on a media issue – representation of statistics. It will be led by myself, media studies teacher, with the lion's share of teaching led by the maths teacher.</p> <p>What specifically are you hoping to achieve? In line with the project, we hope to do two things. Firstly, demonstrate how maths can be used to reinterpret a newspaper article in a way that satisfies a media task, ie to apply critical analysis to a media text and formulate a different interpretation of the statistics from that in the original article.</p> <p>Secondly, to demonstrate to media students – by their own cognisance – how maths can be embedded in their main subject area, for instance, Media studies</p> <p>Which group of learners will you try it out with? Vocational students following a BTEC First Diploma Media studies course.</p> <p>Who can you work with on this project and what can they do to support you? I will be working mainly with a maths teacher with support from our project co-ordinator. The maths teacher will develop the maths content of the lesson. The co-ordinator will provide the parameters of the lesson.</p> <p>How will you evaluate your 'experiment' (for example, feedback from learners, self-assessment, peer review and evaluation)? Our experiment will be tested in the field; it will be a live lesson. Feedback from the learners will be provided by their participation and success in achieving the lesson's learning outcomes. Their learning, or the value of the 'experiment', will be evident from the work achieved in the maths lesson.</p> <p>After the lesson, the co-ordinator will canvass peer evaluation from the class to determine if we have been able to combine media and maths in a way that teaches them something new about the media while simultaneously stimulating an interest in maths that goes beyond seeing the subject as just a necessary evil which they are forced to take by the college.</p>

Learning Mathematics in context

Date:06/12/07

2. The activity

Briefly describe the activity

To reinterpret an article from the London Evening standard which puts the hypothesis that white students are now the minority in London schools.

An account of what happened

I introduced the lesson by showing a clip from a documentary that used statistics as symbols. Figures are jettisoned from the belly of a B25 Super Fortress, their connotation being ordnance used to firebomb a Japanese city. This is an attempt to show the students how maths can stick its nose into a creative project and be used in an imaginative and thought-provoking way.

Next, I introduced the main part of the lesson. Here we examined a newspaper article and showed that a re-reading of the main body of the text contradicted the headline to the article.

To prove our assertion, the maths teacher then took over, guiding the students to explore the data and produce a series of pie charts that showed that the headline was incorrect.

See lesson evaluation from maths teacher.

Who else was involved and what was their role?

Maths teacher and students.

Date: 06/12/07

You might like to attach a copy of any artefacts used in the session or activity

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3. Review

In this section you should describe any significant events focussing in particular on what went well or not so well, why you think this happened and how you came to these conclusions. You should also reflect on any issue that arose including ethical issues. Include thoughts on what you might do differently next time. You should also focus on what you as a teacher have learned from the process, referring back to your original aims in section 1. How well did the planning process work, and how do you plan to build on this. How do you intend to share these experiences with colleagues?

Feedback and evaluation (based on evidence)

From the media POV the students learnt to examine a newspaper article and not accept it at face value. Most, when asked at the end of the lesson 'Do you trust the press (a) always (b) sometimes (c) never', said they trusted the press 'sometimes'. No student said 'always' and only two said 'never'.

For other evidence see Maths teacher + consultant's student feedback

What went well? Why do you think it went well and how do you know that it went well? Are there any particular learner responses you want to highlight? (for example, learners who are normally lacking confidence, bored or disruptive now responding well, or more able learners progressing to higher levels of understanding or skill. If possible keep a representative sample of the range of responses.)

The introduction to the lesson (use of statistics as textual symbols) slightly puzzled the students. This is a media issue – perhaps more teaching on the use of symbolism in media texts would be appropriate.

The main lesson content went very well and, from my vantage point, the students seemed to be engaged in the lesson (helped by an excellent maths teacher).

However, our data was soft on the claims of the newspaper. We produced data from major conurbations in which ethnic minorities are well represented. If we had used figures from a broader cross-section of the country, the newspaper's claims would have been refuted in a much clearer way. This did not really affect the outcome which was positive. My media students have not moaned once since the lesson took place about doing maths (interestingly I have two students from the same cohort doing A level maths and 50% of them are always asking if they can 'drop' maths).

What have you learned?

As a media teacher, maths can be used to reinforce learning about the subject in an original way and discover new things. Such an approach can help the media student to see the relevance of maths to their course and how it can be a friend rather than an enemy.

This was media in a maths lesson. I have already used maths in a media

Learning Mathematics in context

lesson. The students produced pie charts to evaluate TV ratings from BARB and to show the British obsession with soaps. I am not afraid to use maths in the lesson anymore and thus a whole new area for creative thinking about my subject has opened up. Another aspect is the use of maths as part of the creative process, as in the documentary clip.

Next steps

Once upon a time there was a world where there was time to develop this excellent joint approach and the different departments were all merged into a single department called a 'college of further education'. We all shared one budget; it was called 'the learning budget'. In that world I could co-ordinate lessons with my maths comrades and we would dovetail our lesson topics together. The maths hand knew what the media hand was doing and vice versa. However, in this world I now regularly talk to the maths teacher and can stroll into the maths department and feel, well, at home. I will develop this new relationship and hopefully plan more activities which can span both subject areas. A synchronised set of subject specifications would help.

What will you do next to extend and develop this work?

As stated above I will continue to introduce maths into my lessons (but not teach it, I promise) in two ways: first, as a method of analysis and second, as a creative tool. I can use maths beyond its own boundaries.

I might set a task like this: the First World War killed one million British and Empire soldiers. I would ask the students to express this as a percentage of the total population of the time or ask them to produce a projection about how this would alter the size of the population today had these men lived.

Then I might ask them to produce a short film which uses these numbers as symbols to teach others about the human cost of generalised warfare. How the students illustrate these figures in their films would, of course, be up to their imaginations.

Date: 06/12/07

You might like to attach a copy of any artefacts used in the lesson or activity