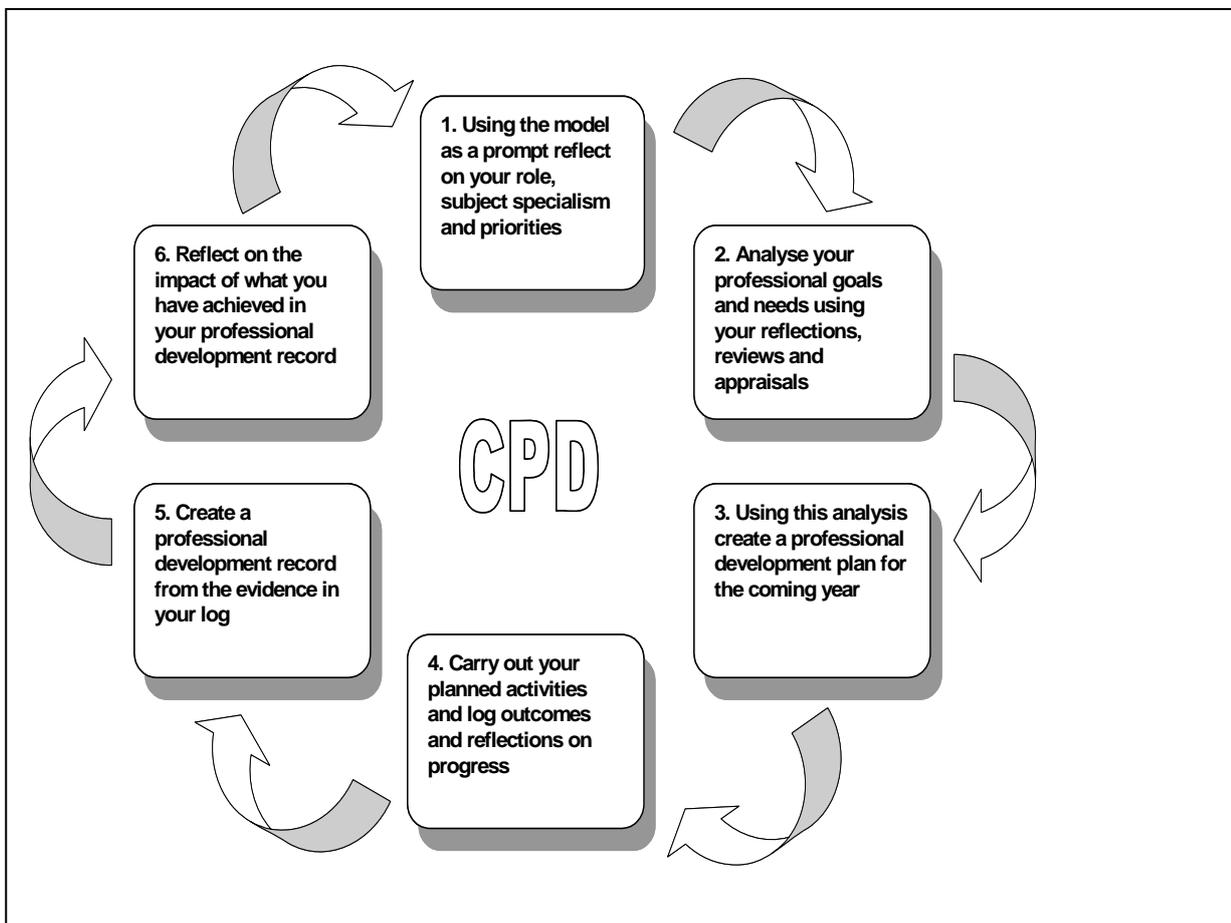


Colchester Institute

Supported experiments

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. It is of course even more powerful if you can work collaboratively with others in working through this process.



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.

1. Planning the activity

<p>Title:</p>
<p>In this section you should describe what is being planned, who you are working with and what you, your learners and your organisation/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?</p> <p>Using a digital image to encourage learners to identify the Mathematics that is present in a relevant workplace.</p> <p>What specifically are you hoping to achieve?</p> <p>Learners' realisation that Mathematics is relevant to their chosen vocational area.</p> <p>Which group of learners will you try it out with?</p> <p>Level 2 Induction group.</p> <p>Who can you work with on this project and what can they do to support you?</p> <p>[Other teacher] to team-teach with me and make time available to trial the activity. We will both help learners to identify the Mathematics needed for a vocational programme and give guidance on the level of achievement in Mathematics to achieve the qualification.</p> <p>How will you evaluate your 'experiment' (e.g. feedback from learners, self-assessment, peer review and evaluation)?</p> <p>Get written and verbal feedback from learners.</p>
<p>Date: 23 /08/07</p>

2. The activity

Briefly describe the activity

The students are asked to identify relevant Mathematics activities from a photograph. The photograph depicts a workplace that is relevant to their vocational area. We will provide a list of topics taken from a Key Skills Level 1 document, to help the students if they get stuck or do not know the correct terminology. The aim is to reveal the Mathematics that is present in the workplace.

An account of what happened (Significant events)

The students were given a photograph of a workplace from the vocational area, or they were asked to select a suitable image from the internet. They were then asked to annotate the picture with the mathematical skills that they thought they would need to use if they were the person in the picture or a person who worked in this situation.

If the students could not think of any topics or they ran out of ideas then they referred to the list of topics from the Level 1 Key Skills sheet.

The students were asked to complete a feedback sheet to report what they had learned and liked about the session as well as what did not work for them.

Who else was involved and what was their role?

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

3. Review

In this section you should describe any significant events focussing in particular on what went well/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)

The tutors liked the activity:

- “all the activities seemed to be useful”
- “learners could see that they knew more about their career area than they thought, as well as identifying maths”

The majority of students thought that they had learned a lot about the maths they were going to need.

(see attached annotated photographs)

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 students enjoyed selecting their own images to illustrate where maths occurred.

Students welcomed the opportunity to list the maths that they felt confident with and were honest about what they could not do.

What have you learned?

The use of digital images is a powerful teaching tool and engages the students. They can use the photographs to put their maths into a realistic context.

Learning Mathematics in context

Next steps

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

Use the same activity with other groups in the college.
Look for other ways to use digital photographs.

Date: 20/09/07

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

Example of annotated photograph

