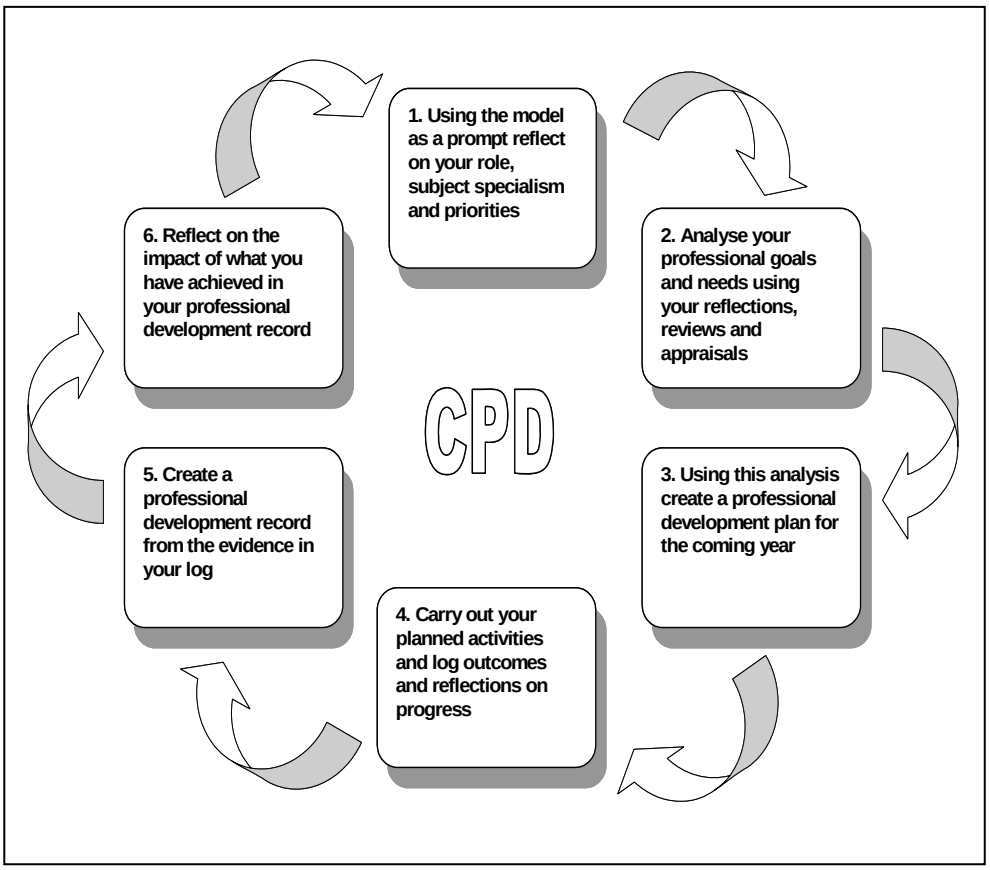
Liverpool Community College

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 (CPD). 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.

Title: Scale drawing

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.

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.

What will you try out?
A card matching exercise using 'Name of area/item' cards and a range of 'Measurements' cards. Learners should be able to adapt actual measurements in a range of units to reflect previous outcomes.

What specifically are you hoping to achieve?
Recap 'actual' measurements of the G2 performance space to convert to a 1:25 scale ground plan.

Which group of learners will you try it out with?
National Award Theatre Technology (Level 3)

Who can you work with on this project and what can they do to support you?
Dorcas Lyndsay (Cassie the Mathematics subject learning coach)

How will you evaluate your 'experiment' (e.g. feedback from learners, self-assessment, peer review and evaluation)?
Verbal feedback from learners.

Date: 9.11.2007

2. The activity

Briefly describe the activity
Students will match names of an area or item with a range of unit measurements. I revised these from the original session. In fact I did one version and then decided to make changes to give a wider range of measurements using different units, whole numbers and decimals. (Actual measurements of the performance space have been made previously).
An account of what happened (Significant events) Learners understood the conversion of mm → cm → ms. They worked in small groups to match 'Names' with 'Measurement' cards – groups had to agree and feedback conclusions to other peer group. Review of what learners think they have gained or learnt from the activity.
Who else was involved and what was their role? Helen Jarvis – observer
Date: 13.11.2007
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 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) Verbal evaluations showed learners had understood and enjoyed the activity, although next time it might be good to challenge them with a slightly harder task. **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.) Generally the whole session went well. Most learners contributed to the session and those who were quieter were engaged in checking measurements with tape measures. Responses were verbal feedback and were generally encouraging. **What have you learned?** Through using these resources, I have re-evaluated the way in which I will introduce scale drawing to my students. **Next steps** **What will you do next to extend and develop this work?** In order to challenge the learners more I think I would, in future, get them to identify the range of measuring units and to choose alternative ways of representing sizes. In other words, get them to complete a measurement template or cards for distribution to the rest of the class to use. This would emphasise the different units of measurements and range of conversion.
Date: 14.11.07
You might like to attach a copy of any artefacts used in the lesson or activity

Items measured

Height of flat	Width of flat	Depth of flat	Length of table
Width of table	Height of table	Length of rostra	Width of rostra
Length of performance space	Width of performance space	Length of seating bank	Width of seating bank
Height of adult	Height of rostrum	Height of rostrum	Height of rostrum
Height to mesh			

Actual measurements (version 1)

2,440 mm	122 cm	5 cm	120 cm
600 mm	70 cm	2 m	1 m
18.74 m	14.5 m	952 cm	6.3 m
1.8 m	15 cm	30 cm	60 cm
575 cm			

Actual measurements (version 2)

2,440 mm	1.22 m	50 mm	120 cm
600 mm	0.7 m	200 cm	1,000 mm
18.74 m	1,455 cm	9.52 m	6.3 m
1.8 m	150 mm	0.3 m	60 cm
5,750 mm			

