

# PEDAGOGY OF FACILITATION: HOW DO WE BEST HELP TEACHERS OF MATHEMATICS WITH NEW PRACTICES?

In this approach, the assumption is that the help or guidance is built into the teachers' handbook and their literal knowledge of the materials-based activities. Facilitators often, in respect to material designers, emphasise the materials' attraction for children and the need to follow the handbook sequencing.

That's what we're doing, we're giving teachers a structure without giving them **"You will do page this or that"** ... I'm in favour of resources ... whatever you might be using, [but] it's which bit are you going to choose. (Emma, Facilitator, ANP 2001)

[We need] **more activities/resources** that could be just picked up and used. (Teacher, ANP 2001)

I have changed my style of teaching maths. ... Just trying to bring out more language from them whereas **before it was a lot of bookwork**. (Teacher, ANP 2002)

Practical demonstrations are much easier **to follow than the manual**. (Teacher, ANP 2001)

The emphasis of the **design adherence orientation** is focused on procedural classroom practices. The expected procedures are usually unambiguously stated in the teachers' handbook. In essence, the activity is viewed as paramount.

Characteristic of new practice	Orientation of facilitator's actions A: Facilitation disposed towards <b>design adherence</b>	Orientation of facilitator's actions B: Facilitation disposed towards <b>contextual responsiveness</b>
Teacher's manual or handbook	Emphasis is given to adhering to the programme design and the handbook.	Emphasis is given to using structural elements to interpret the handbook.
Materials (activities)	Emphasis is given to engaging students actively with the materials.	Emphasis is given to teachers' understanding of the mathematical purposes and concepts underlying the materials.
Teaching method	Emphasis is given to the experiential effect of activities.	Emphasis is given to students' representations of their mathematical understandings.
Modelling new practice	Emphasis is given to students' "proper" use of the materials.	Emphasis is given to extending concepts in response to students' actions and explanations.

By contrast, a second approach to facilitation is to emphasise guidance for teachers centering on structural components so that they gain skills needed for flexibility in classroom use.

It's about giving simple, understandable, credible, reasonable structures for teachers to use. (Roger, Facilitator, ANP 2003)

You are able to talk with the teacher ... not just show what the activity is, but talk about underlying concepts because we still have a lot of teachers teaching an activity without any concept. (Emma, Facilitator, ANP 2001)

I now encourage children to share their strategies with the class – the focus in teaching maths has changed to "How did you find out the answer?" not, "What was the answer?" (Teacher, ANP 2001)

I've been watching Emma take lessons ... Like they give her an answer, but she'll always come back and ask them that extra step ... You then start realising what your own kids are capable of ... We were stopping children because I think we were afraid that our own knowledge wouldn't go that far. (Teacher, ANP 2001)

In contrast, the emphasis of the **contextually, responsive orientation** is focused on students' strategies, meaningful activities, and multiple representations. In essence, the students' understanding and thoughtful investigation is paramount.

## Design Adherence compared to Contextual Responsiveness

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