

Learning Activity: Reflecting on Thinking

Learning Behaviours: *List a few*

Teacher: *BKD* **DATE:** *01/8/05*

Class: *9D Maths - graphs*

Discussion Tool: Discussion

Sequence of three lessons:

1. Students were doing families of graphs on computers using Graphmatica and were then required to generalise into $y = mx$ and $y = x + c$ and comment on the effects of m and c . Only 4 students were able to complete the whole activity, another group of about 14 students worked well but found the generalising part difficult and about 5 students stopped trying on the generalising part. *The next lesson I described the three approaches I had observed then asked them to identify the good & bad learning behaviours each type had exhibited (see student journal summary). I used the opportunity to discuss "rote" learning and its shortcomings.*
2. After my explanation of sketching using y intercept / gradient method (written steps and example) the ensuing lesson was question after question from kids to me - on reflection two types of questions were common (about the process or the correctness of answers). *The next lesson students were instructed to check answers in the back of the book and that I would only answer questions about the meaning of the written steps (and not particular questions).*

This week I intend assisting kids to think more about the questions they are asking me (or each other). *I will ask them to tell me what they know before they ask about what they don't know.*

Student Comments

None recorded from discussions.

Teacher Journal

What is my intention? What do I want to achieve?

I wanted to more effectively react to ongoing observations of learning behaviours in my maths class studying linear graphs. Most of my other attempts at discussing learning behaviours were organised in advance.

What was my role?

Observe, reflect on how to get students to discuss the observations, tailor my future responses to reinforce the GLBs.

What feelings and senses surround the event?

Kids seemed interested, "which type was I?", discussions were very much in context.

What do I think the students got out of the events?

Rote learners seemed to relate to learning behaviour concerns raised.

Lessons 2 & 3 led to more targeted questioning by students. Students worked more independently and solved more without my assistance.

What might I change next time around?

In lesson 1 I would focus discussions on one group, the rote learners, rather all three groups - idea to keep the discussion to be a short one.

I learned that short discussions resulting from ongoing reflections of GLBs are effective (different to pre-organised discussions on the expected GLBs).