

Creating a Climate of Challenge

Aspects to consider	More information on each aspect
1. Who does most of the talking in whole-class parts of the lesson?	Generally, in a strong problem-solving environment the teacher needs to be doing around 30% of the talking and the students 70%. What do you notice about the balance in your classroom? What type of things are you saying when you are talking? Explaining how to do something? Asking questions?
2. What questions do I ask?	Do you ask closed questions such as, 'can you see how the system works?' or open questions such as, 'what system can you see emerging in this problem?'.
3. Who answers the questions?	Is it the mostly the same students? Is it the more articulate ones? Is it more often boys or girls?
4. How well do I listen to the students' answers and seek to understand what they are saying?	Do I respond by telling the whole class what I think a particular student said without checking with them? Do I slightly adjust what they said to make better sense or fit a 'better/right answer'? Do I ask the student a 'clarification' question, such as 'can I just check what I think you said was ...'?
5. What do I do with the students' answers?	Do I praise them for a fabulous answer? Do I simply evaluate their answers with comments such as 'Good', 'Well done', 'Right', 'OK', 'No', 'Think again'? Do I carry on with the next thing I was going to say? Do I ask other students to comment on what was said? Do I ask another follow-up question such as 'are you sure?' or 'how do you know that?'?
6. How do I facilitate the learning?	Do I explain how it needs to be done and make sure they understand it as fully as possible before working on their own? Do I give them key pointers/hints/clues to help them? Do I pull out the learning from the students' thinking and use that to develop the journey of the lesson?
7. How confident are the students to take a risk, to try out ideas, to make mistakes?	What evidence is there of the students taking a risk in what they offer to the discussion or ideas that they try out? What evidence is there that the students are trying out their ideas rather than replicating mine? When is it helpful for them to replicate mine? What do I do when a student makes a mistake or follows a 'dead end' line of thought?
8. What does my body language communicate?	Do I communicate interest/acceptance/frustration/disapproval ...? How does my body language change through the lesson?