



ELEMENT 2.1

Domain 2 - Create Safe Conditions for Rigorous Mathematics Learning

Element 2.1 - Develop democratic relationships

The following suggestions for practice are extracts from the 'Transforming Tasks' module on the Leading Learning resource:



Strategy		From Tell to Ask
Technique		Use dialogue : Ask students to interact and build meaning through learning conversations.
Level	Before	After
Primary	<p>The teacher asks:</p> <ul style="list-style-type: none"> Why do we measure things? What things do we measure? What do we measure with? 	<p>The teacher asks: Do we really need to have a measuring system?</p> <p>Community of Inquiry(COI) /Philosophy for Children(P4C) discussion. Listen to and respond to each other's ideas/ questions/ wonderings</p> <p>Possible prompt questions to initiate discussion:</p> <ul style="list-style-type: none"> What's a measuring system? Is one type of measurement more important than another? What form of measurement could we live without/ did we live without? Why change? Could we estimate measurements in cooking? Would we still need a measuring system to do that? <p>COI process can be found online eg http://museumvictoria.com.au/education/community-of-inquiry/</p>
Secondary	<p>Teacher: "I've noticed that some people are trying to add fractions by adding the numerators, then adding the denominators."</p> $\frac{b}{5} + \frac{5b}{10} = \frac{6b}{15}$ <p>This does not lead to the correct answer. The way to add fractions is: Start by finding the lowest common denominator...</p>	<p>What do you think? Does: $\frac{b}{5} + \frac{5b}{10} = \frac{6b}{15}$</p> <p>Discuss your thinking with a partner. Think about these questions:</p> <ol style="list-style-type: none"> Do you think that $\frac{6b}{15}$ is more or less than $\frac{5b}{10}$? Would you expect that? Could you test this for different values of b? If possible, discuss your ideas with another pair who thinks differently to you. Share your ideas with the class. Has anyone changed their mind about $\frac{6b}{15}$ being the solution? <p>Ask someone who has changed their mind to share their thinking about why they did that.</p> <p>What are other possible solutions? How could we test the accuracy of our ideas?</p>

How do you think the technique **Use dialogue** might support Element 2.1 - Develop Democratic Relationships?

After reflecting on this question, compare your response to the answer on the next page