





ELEMENT Domain 4 - Personalise and Connect Mathematics Learning

4.2 Element 4.2 - Connect learning to learners' lives and aspirations

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

**Strategy****From Procedural to Problem Based****Technique****Students identify the problem to solve:** Give additional information that is not required to do the task.

Level	Before	After
Primary	<p>This giant model koala is so big that it has a shop built inside of it. How many times taller is the koala than the little girl?</p> 	<p>Look at this photograph. What questions do you have? Sort your questions into mathematical and non-mathematical questions.</p> <p>Which mathematical question would you like to solve? The teacher can, of course, identify the question or when appropriate provide opportunities for different groups of students to work on different questions.</p> 
Secondary	<p>My four-wheel drive car is 240 cms wide. My city car is 165 cms wide. Express the ratio of the width of the four-wheel drive to the city car.</p> 	<p>Look at this photograph. What questions come to mind?</p> <p>Sort your questions into mathematical and non-mathematical questions.</p> <p>Which mathematical question would you like to solve? The teacher can, of course, identify the question or when appropriate provide opportunities for different groups of students to work on different questions.</p> 

How do you think the technique **Students identify the problem to solve might support *Element 4.2 - Connect learning to learners' lives and aspirations*?**

There are many ways to articulate this relationship. One response to this question has been provided on the next page.



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How does the technique **Students identify the problem to solve** support *Element 4.2 - Connect learning to learners' lives and aspirations*?

Using stimuli of local, national or international issues that relate to students' interests and supporting them to formulate their own questions can facilitate personal connections to their mathematics learning. Alternatively, stimulating curiosity with a photograph, short film or a story can engage students in asking questions for which mathematics can be applied to provide a solution or solutions. A large supply of images and films for use with mathematics topics can be found at: <http://blog.mrmeyer.com>. Look for '101 questions' for still images and 'Three-Act Math' for video stimulus.

Facilitating students engaging in the creation of the problem to solve supports them to 'take the learning personally'. When learners 'take the learning personally' it connects more readily to their immediate aspirations.