# GOAL – Getting the students doing the thinking in Geography

## Transforming tasks strategy: From tell to ask

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<td><strong>Socratic questioning</strong>&lt;br&gt;Ask questions that help students dig deeper.</td>
<td>Water is not equally distributed across the continents of the world.&lt;br&gt;1. Using this map colour the natural water sources blue.&lt;br&gt;2. Use the table of data to find out about the water resources of Australia.&lt;br&gt;3. Compare with one Asian and one African country.</td>
<td>Look carefully at the image.&lt;br&gt;1. What do you notice?&lt;br&gt;2. What might be the purpose of the big grey tank?&lt;br&gt;3. Who could these people be? Where have they come from? Where do you think they might live? Where might this place be?&lt;br&gt;4. What are these people doing? Why might they do this? What makes you think that?&lt;br&gt;5. How do we do this (get water) in Australia?&lt;br&gt;6. How is this the same, or different, in Africa and in Asia?&lt;br&gt;7. What assumptions have you made?</td>
<td><strong>WHY</strong> would you… ask students to interpret a photograph by posing questions?&lt;br&gt;So students notice the details of the photograph, what it might mean and what questions it might raise for them. It positions them to question what might be happening and to start hypothesising about these questions.</td>
<td><strong>HOW</strong> does this develop powerful/expert learners?&lt;br&gt;Students learn to really notice information, think deeply about it, make comparisons with what they already know and make multiple suggestions about what it might be telling us. They also justify their ideas when questioned in a socratic way.</td>
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<td><strong>Explore before explain</strong>&lt;br&gt;Ask students to try their ideas first.</td>
<td>Make a map of the school&lt;br&gt;Make a map of your school for students who are new to the school to use.&lt;br&gt;You will need:&lt;br&gt;1. A map of your school&lt;br&gt;2. Images of features of the school.&lt;br&gt;Place the images of the features of your school in the appropriate locations on the map.</td>
<td>1. Explore your school and decide on the important features of it.&lt;br&gt;2. Photograph those features.&lt;br&gt;3. Arrange the features relative to each other, in order to make a map for new students to use.&lt;br&gt;<strong>Think about:</strong>&lt;br&gt;• What photos should you take?&lt;br&gt;• What important features of the school do new students need the most?&lt;br&gt;• What would you need to put on your map?&lt;br&gt;• Could someone new to the school use it without help?&lt;br&gt;• What might be needed to improve the efficiency and accuracy of the map?&lt;br&gt;• Can you think of a way to test out and refine your map?</td>
<td><strong>WHY</strong> would you… ask students to decide what information is important, and how to show it on a map of the school?&lt;br&gt;To develop skills of observing features of things they notice in the field, analysing the probable needs of students using the map, and explaining the decisions they make.</td>
<td><strong>HOW</strong> does this develop powerful/expert learners?&lt;br&gt;Students learn to try their own ideas on what they might need to know and how they could approach this task before being told how it is usually done. They learn to really notice their surroundings, comparing and identifying the most important information.</td>
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<td><strong>Use dialogue</strong>&lt;br&gt;Ask students to interact and build meaning through learning conversations.</td>
<td>‘Only leave your footprints behind,’ is offered as guidance for those tourists visiting an ecologically, or culturally sensitive site. With this in mind, investigate the physical and human geography of Uluru. Write a report for the tourist bureau of the Northern Territory to consider some ways tourists might impact on this area.</td>
<td>‘Only leave your footprints behind,’ is offered as guidance for those tourists visiting an ecologically, or culturally sensitive site. <strong>Discuss</strong>&lt;br&gt;Think, pair, share … followed by a Community of Inquiry re: Should I climb Uluru (Ayers Rock)? (Pros and cons)&lt;br&gt;Or&lt;br&gt;Survey those who have, and haven’t, climbed the rock to find out why they did/didn’t climb it.&lt;br&gt; <strong>What do you think?</strong>&lt;br&gt;Consider the different points of view, and decide whether you would choose to climb Uluru. Explain your reasoning.</td>
<td><strong>WHY</strong> would you … ask students to interact and build meaning through learning conversations about the ethics and considerations of using a culturally sensitive site?&lt;br&gt;To develop skills of clarifying, synthesising and refining ideas of a variety of perspectives, through conversations with others.</td>
<td><strong>HOW</strong> does this develop powerful/expert learners?&lt;br&gt;Students learn to appreciate and explore different ideas, and work with their peers to grapple with challenging questions. Students learn to consider alternatives through discussions, clarify their thinking and to develop reasons for their choices.</td>
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<td><strong>Student voice</strong>&lt;br&gt;Ask students to decide how they might do this best.</td>
<td>Students are given a map of the local shopping centre and asked to do an audit on this location in terms of access for disabled people.</td>
<td><strong>What do you think?</strong>&lt;br&gt;How might you go about assessing a place nearby for how well it caters to disabled people?&lt;br&gt;What might you need to find out? How can you be sure of your ideas?&lt;br&gt;How might you share this with others, or demonstrate your learning?&lt;br&gt;What improvements might you suggest?&lt;br&gt;Convince me that they are improvements.</td>
<td><strong>WHY</strong> would you … ask students how they might assess a place’s ability to cater for the disabled?&lt;br&gt;To develop skills of observation, critical thinking, decision making and refining the process of an investigation.</td>
<td><strong>HOW</strong> does this develop powerful/expert learners?&lt;br&gt;Students learn to make choices about their learning and to define the criteria they might use. They make critical judgements based on stated standards and justify their conclusions. Suggesting improvements involves students learning to think creatively.</td>
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### Technique | Before | After | Reflection: Why and how?
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**Socratic questioning**  
Ask questions that help students dig deeper.  
- Increase in average weekly expenditure on goods and services, 2003-04 to 2009-10.  
  Answer the questions using information from the graph:  
  1. What has increased the most? What has increased the least?  
  2. Suggest 2 possible reasons why this might have occurred.  
- Increase in average weekly expenditure on goods and services, 2003-04 to 2009-10.  
  Answer the questions using information from the graph:  
  1. What do you notice about this graph?  
  2. What story is this graph telling us?  
  3. What might have caused this to happen?  
  4. What other information might be of use to help answer these questions?  
  5. What information would change your mind?  
**WHY would you …** Ask students to develop their ideas first about whether there are sufficient play spaces, and what information they might need?  
**HOW does this develop powerful/expert learners?**  
Students learn to question how and why and begin to hypothesise about the reasons.  
**Examples of Socratic questions can be found online:**  
([For example:](http://courses.cs.vt.edu/cs2104/Summer2014/Notes/SocraticQ.pdf)

**Explore before explain**  
Ask students to try their ideas first.  
- Using the local maps provided, identify the location of play equipment and open green areas, playgrounds etc.  
  What proportion of the local area has open spaces?  
  Consider the information and justify your answer to the question:  
  - Are there enough playground and recreation areas available?  
  - What is it like to be a refugee?  
  - How could you find out what it is like to be a refugee?  
  - Considering the information and decide what other information you might need in order to propose an answer to the question.  
- Explore your local neighbourhood area to investigate the question:  
  - Are there enough playground and recreation areas available?  
  - Walk around the area to be investigated, thinking about aspects of the issue and the types of information needed.  
  - Plan to undertake fieldwork including mapping, noting, photographing and data gathering from local residents.  
  - Consider the information and decide what other information you might need in order to propose an answer to the question.  
**WHY would you …** Ask students to develop their ideas first about whether there are sufficient play spaces, and what information they might need?  
**HOW does this develop powerful/expert learners?**  
Students learn to try out their own ideas on how they could approach this task, before being told how it is usually done. They learn to really notice their surroundings, comparing and identifying the most important information.  
**For example:** [http://courses.cs.vt.edu/cs2104/Summer2014/Notes/SocraticQ.pdf](http://courses.cs.vt.edu/cs2104/Summer2014/Notes/SocraticQ.pdf)

**Use dialogue**  
Ask students to interact and build meaning through learning conversations.  
1. Find the meaning for the following terminology:  
   - Infiltration  
   - Surface run off  
   - Groundwater flow  
   - Transpiration  
2. Write the definitions into your book.  
- Use a pair and share process to discuss what you think the words below mean and decide on a group meaning for the following terminology:  
  - Infiltration  
  - Surface run off  
  - Groundwater flow  
  - Transpiration  
- Use the table to keep track of your ideas. How can you check?  
**WHY would you …** Ask students to interact and build the meaning of vocabulary through learning conversations?  
**HOW does this develop powerful/expert learners?**  
Students learn to acknowledge and explore different ideas. To work with their peers to clarify their thinking and to consider multiple viewpoints and confront misconceptions.  
**For example:** [http://courses.cs.vt.edu/cs2104/Summer2014/Notes/SocraticQ.pdf](http://courses.cs.vt.edu/cs2104/Summer2014/Notes/SocraticQ.pdf)

**Student voice**  
Ask students to decide how they might do this best.  
- Use a variety of Internet resources to examine the question, “What is it like to be a refugee?”  
  Consider the issues and concerns facing refugees.  
- ‘What is it like to be a refugee?’  
  How could you find out what it is like to be a refugee?  
  How could you demonstrate what you have learnt?  
  How will you know if you have considered all the issues and concerns facing refugees?  
**WHY would you …** Ask students how they might best learn about refugees?  
**HOW does this develop powerful/expert learners?**  
Students learn to make choices about their learning and to judge the best process to use to gather information. They justify their conclusions and learn that sources should be evaluated for credibility and bias.