Non-googleable questions

How do we explore the construction of knowledge? Is all knowledge open to question? Does knowledge differ depending on the lens through which one views it?

A non-googleable question is one that cannot be easily answered through a single click in an internet search engine. A non-googleable question creates intellectual challenge and requires interpretation and inquiry.

Why use non-googleable questions?

Non-googleable questions help learners understand that knowledge is constructed – open to question, serving particular purposes and shaped by culture and experience. (TfEL – 3.3 Explore the construction of knowledge)

Non-googleable questions:

• stimulate curiosity, different ways of thinking and problem-solving
• encourage students to critically analyse information
• can be guiding questions for integrating learning areas.

TfEL elements made visible through non-googleable questions

<table>
<thead>
<tr>
<th>Domain 2</th>
<th>Domain 3</th>
<th>Domain 4</th>
</tr>
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<tbody>
<tr>
<td>Create safe conditions for rigorous learning</td>
<td>Develop expert learners</td>
<td>Personalise and connect learning</td>
</tr>
<tr>
<td>2.1 develop democratic relationships</td>
<td>3.1 teach students how to learn</td>
<td>4.1 build on learners’ understandings</td>
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<tr>
<td>2.2 build a community of learners</td>
<td>3.2 foster deep understanding and skilful action</td>
<td>4.2 connect learning to students’ lives and aspirations</td>
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<td>2.3 negotiate learning</td>
<td>3.3 explore the construction of knowledge</td>
<td>4.3 apply and assess learning in authentic contexts</td>
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<td>2.4 challenge students to achieve high standards with appropriate support</td>
<td>3.4 promote dialogue as a means of learning</td>
<td>4.4 communicate learning in multiple modes</td>
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It made me realise how I think when I’m solving a problem. There is no one way to answer the question. I had to think and investigate more rather than answering from the top of my head. Year 7 student, TfEL PILOT host school

This type of teaching and learning is creative and pushes students to higher thinking. Those who usually try to avoid thinking and problem-solving are more inclined to engage. It was difficult at first, as I wanted to jump in and give solutions to rescue them.

Year 9 teacher, Mathematics, TfEL PILOT host school
# Teacher guide: Non-googleable questions

<table>
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<th>Process</th>
<th>Resource tools – a way in</th>
<th>Food for thought</th>
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| Develop your own understanding of 'non-googleable questions'. | 1 | Non-googleable questions Infographic  
Create your own list of what a non-googleable question is and is not | • There may be an argument that all questions are ‘googleable’. What’s a counter argument for this? |
| Work with colleagues to brainstorm non-googleable questions in a learning area and keep these for sharing later with students. | 2 | Non-googleable questions learning area examples  
A starting point for conversation with colleagues | • Compare your questions: What is it about some questions that encourage deeper thinking?  
• When might a non-googleable question not be useful? |
| Introduce and explore the concept of non-googleable questions with students. Have them generate questions and sort into googleable and non-googleable. Invite students to create ‘fun’ non-googleable questions – individually and in pairs. | 3 | Non-googleable questions introduction ideas  
Website references with thought provokers and steps to take with students | • How do you model your own curiosity as a learner?  
• For group and class discussion: How do you ensure a climate of non-judgement, so students can take risks, knowing that every question is valid? |
| Share your own learning area non-googleable questions. Have students pair up and choose one to analyse. Challenge them to develop their own non-googleable question in another learning area. | 4 | Nudging questions  
Prompts to challenge and support students’ thinking for designing non-googleable questions in learning areas and new lines of inquiry | • Can students start with googleable questions and develop further to make them non-googleable and promote deeper thinking?  
• Prompts for students’ reflection: How did I feel? How/when did my thinking change? What was the most challenging thing for me? Why might this be? |

## Reflection

Have students reflect on their learning as a result of exploring non-googleable questions.

## Where to next?

Structure a process for discussion (eg TIEL Framework guide, tan panels: Carousel Brainstorm p34, or Concentric Circles p59). Invite students to generate new ideas for using non-googleable questions:

- How could such questions help when undertaking research?
- How could they be used to increase challenge in achieving learning goals?
- Could non-googleable questions be used across all learning areas? Why and when might they be most useful?
- Could students design an initiative where they use non-googleable questions to influence beyond the classroom?
Resources

1 | Non-googleable questions infographic
Create your own list of what a non-googleable question is and is not

2 | Non-googleable questions learning area examples
A starting point for conversation with colleagues

3 | Non-googleable questions introduction ideas
Website references with thought provokers and steps to take with students

4 | Nudging questions
Prompts to challenge and support students’ thinking for designing non-googleable questions in learning areas and new lines of inquiry

Non-googleable questions
Non-googleable questions

A non-googleable question IS one that:
- requires interpretation and judgement
- challenges your thinking
- can’t be easily answered on an internet search engine

A non-googleable question is NOT answered:
- using ‘copy and paste’
- easily
- through only one source of information
These examples of non-googleable questions for specific learning areas can provide a starting point for conversation with colleagues in developing your own non-googleable questions to explore with students.

<table>
<thead>
<tr>
<th>Learning area</th>
<th>Non-googleable question examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>Why do horror movies make us scared?</td>
</tr>
<tr>
<td></td>
<td>What events in the past have made [student’s/character’s name] the way she is now? How does this make her different?</td>
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<tr>
<td>Mathematics</td>
<td>How high is a pile of a million dollars? How big a suitcase would I need to carry it?</td>
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<tr>
<td></td>
<td>What value should be placed on specific methods of statistical analysis when looking at local house prices?</td>
</tr>
<tr>
<td>Technologies</td>
<td>Is it possible to make yourself non-googleable?</td>
</tr>
<tr>
<td></td>
<td>How would you modify your current project to improve it?</td>
</tr>
<tr>
<td>Science</td>
<td>When will Adelaide have its next earthquake?</td>
</tr>
<tr>
<td></td>
<td>What is the ideal, most effectively designed flower?</td>
</tr>
<tr>
<td>The Arts</td>
<td>How many different styles of theatre have different impacts on an audience?</td>
</tr>
<tr>
<td></td>
<td>How has digital image retouching and manipulation influenced the way you perceive your own self-image?</td>
</tr>
<tr>
<td>Languages</td>
<td>Why do you think animals in Japan are usually small?</td>
</tr>
<tr>
<td></td>
<td>What are the similarities and differences in methodologies to teach languages? How do these impact on your learning?</td>
</tr>
<tr>
<td>Humanities &amp; Social Sciences</td>
<td>What do you think the Allies could have done with Germany at the end of World War 1?</td>
</tr>
<tr>
<td></td>
<td>What might the earth look like without landforms?</td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>Is there a need for genetically modified organisms in the world?</td>
</tr>
<tr>
<td></td>
<td>How healthy am I?</td>
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WAYS TO INTRODUCE THE CONCEPT TO STUDENTS

Share a thought provoker for discussion.
Potential resources for discussion starters:

- **VSauce**: Mind blowing facts and the best of the internet
  [www.youtube.com/user/Vsauce/featured](www.youtube.com/user/Vsauce/featured)

- **Thought Cafe**: A motion graphic studio, promoting critical awareness through animated shorts
  [www.youtube.com/user/ThoughtBubbler](www.youtube.com/user/ThoughtBubbler)

- **Dan Meyer 101 Questions**: What’s the first question that comes to your mind?
  [www.101qs.com](www.101qs.com)

- **TED Talks**: Ideas worth spreading
  [www.ted.com](www.ted.com)

Encourage students to write questions about what they have just seen and capture these on post-it notes.

Class discussion: What is a non-googleable question? Students discuss and identify the key characteristics.

Students display and categorise their questions under two headings ‘googleable’ and ‘non-googleable’.

Encourage students to think of more non-googleable questions to add to the list.
These prompts can challenge and support students’ thinking for designing non-googleable questions in learning areas and new lines of inquiry.

- What do you already know about the topic?
- What questions do you have about this topic?
- Why would people want to know about this topic?
- What would different types of people say about this topic?
- What language do you need to use?
- What vocabulary would you need to use to discuss this?
- Are there any new terms or vocabulary you need to understand?
- What are the main ideas you could talk about?
- What information and sources are available about this?
- How could you record that mathematically?
- Can you remember …?
- Does that seem right to you?
- What is the symbol for …?
- What mathematical words would you choose to describe …?
- What processes could you try?
- How might you check your answer?
- Do other people think that too?
- What is the connection between …?
- What if … (change something); is it still …?
- What is happening?
- What equipment/materials/resources do you need?
- What is interesting and/or unexpected?
- What do you notice about this data/information?
- What questions could you ask?
- Is your question investigable?
- What might happen if …?
- What should you consider in planning?
- What could you try?
- How will you record your results/information?
- Who might be interested in this?
- What does this make you wonder?
- What surprises you?
- What confuses you?
- What else do you want to know?
- What else do you need to know?
- What is a better question you could ask?