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>
</thead>
<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>
</tr>
<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>
</tr>
<tr>
<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>
</tr>
<tr>
<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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</tbody>
</table>

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

### Process

<table>
<thead>
<tr>
<th>Steps</th>
<th>Description</th>
<th>Resource tools – a way in</th>
<th>Food for thought</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop your own understanding of ‘non-googleable questions’.</td>
<td>1</td>
<td>Non-googleable questions Infographic&lt;br&gt;Create your own list of what a non-googleable question is and is not</td>
</tr>
<tr>
<td>2</td>
<td>Work with colleagues to brainstorm non-googleable questions in a learning area and keep these for sharing later with students.</td>
<td>2</td>
<td>Non-googleable questions learning area examples</td>
</tr>
<tr>
<td>3</td>
<td>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.</td>
<td>3</td>
<td>Non-googleable questions introduction ideas</td>
</tr>
<tr>
<td>4</td>
<td>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.</td>
<td>4</td>
<td>Nudging questions</td>
</tr>
</tbody>
</table>

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

**Non-googleable questions introduction ideas**

**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?