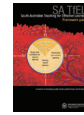




Government of South Australia

Department for Education and Child Development



pilot

activating student voice – accelerating improvement

# 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

Domain 2 Create safe conditions for rigorous learning	Domain 3 Develop expert learners	Domain 4 Personalise and connect learning
2.1 develop democratic relationships	3.1 teach students how to learn	4.1 build on learners' understandings
2.2 build a community of learners	3.2 foster deep understanding and skilful action	4.2 connect learning to students' lives and aspirations
2.3 negotiate learning	<b>3.3 explore the construction of knowledge</b>	4.3 apply and assess learning in authentic contexts
2.4 challenge students to achieve high standards with appropriate support	3.4 promote dialogue as a means of learning	4.4 communicate learning in multiple modes



*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

■ Develop understanding ■ Into practice ■ Reflection ■ Where to next?

Process	Resource tools – a way in	Food for thought
<p><b>1</b> Develop your own understanding of ‘non-googleable questions’.</p>	<p><b>1   Non-googleable questions Infographic</b> Create your own list of what a non-googleable question is and is not</p>	<ul style="list-style-type: none"> <li>• There may be an argument that all questions are ‘googleable’. What’s a counter argument for this?</li> </ul>
<p><b>2</b> Work with colleagues to brainstorm non-googleable questions in a learning area and keep these for sharing later with students.</p>	<p><b>2   Non-googleable questions learning area examples</b> A starting point for conversation with colleagues</p>	<ul style="list-style-type: none"> <li>• Compare your questions: What is it about some questions that encourage deeper thinking?</li> <li>• When might a non-googleable question not be useful?</li> </ul>
<p><b>3</b> 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.</p>	<p><b>3   Non-googleable questions introduction ideas</b> Website references with thought provokers and steps to take with students</p>	<ul style="list-style-type: none"> <li>• How do you model your own curiosity as a learner?</li> <li>• 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?</li> </ul>
<p><b>4</b> 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.</p>	<p><b>4   Nudging questions</b> Prompts to challenge and support students’ thinking for designing non-googleable questions in learning areas and new lines of inquiry</p>	<ul style="list-style-type: none"> <li>• Can students start with googleable questions and develop further to make them non-googleable and promote deeper thinking?</li> </ul>
<p><b>REFLECTION</b> Have students reflect on their learning as a result of exploring non-googleable questions.</p>		<ul style="list-style-type: none"> <li>• 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?</li> </ul>

## Where to next?

Structure a process for discussion (eg *TfEL 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

Reference: Teaching for Effective Learning Bringing it to Life (BiTL) Tool: [http://www.acleadersresource.sa.edu.au/index.php?page=bringing\\_it\\_to\\_life](http://www.acleadersresource.sa.edu.au/index.php?page=bringing_it_to_life)



RESOURCE 1

# 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

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



## RESOURCE 2

# Non-googleable questions learning area examples

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.

Learning area	Non-googleable question examples
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?



RESOURCE 3

# Non-googleable questions introduction ideas

## 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](http://www.youtube.com/user/Vsauce/featured)

### Thought Cafe

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

### Dan Meyer 101 Questions

*What's the first question  
that comes to your mind?*  
[www.101qs.com](http://www.101qs.com)

### TED Talks

*Ideas worth spreading*  
[www.ted.com](http://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.



## RESOURCE 4

# Nudging questions

**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?

Reference: Teaching for Effective Learning Bringing it to Life (BiTL) Tool, [http://www.acleadersresource.sa.edu.au/index.php?page=bringing\\_it\\_to\\_life](http://www.acleadersresource.sa.edu.au/index.php?page=bringing_it_to_life)