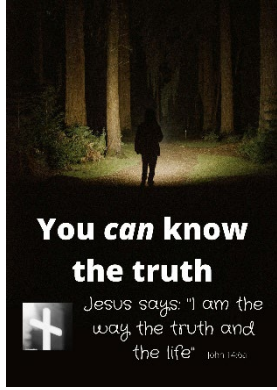# Transformation by design unit outline – What is truth: y8-10

Main idea
Statistics is an important tool for us to analyse and respond to the needs of our communities (local, national, and international). However, we need God's wisdom to evaluate what is truth and what is not!

Biblical perspective (creation, fall, redemption, restoration)

Creation

Jesus is the truth. John 14:6a

Fall

Humans have distorted the truth. There are no absolutes, truth is relative and becomes 'my truth'. The ability to know the truth through human endeavour will always fall short. John 18:38; Romans 1:25

You *can* know the truth
Jesus says: "I am the way, the truth and the life" John 14:6a

Redemption and restoration

> ➢ Absolute truth is knowable in the person of Jesus. John 18:37
> ➢ With God's help we can expose the truth when it has been distorted by others
> ➢ With God's help we can use statistics as a tool to analyse and respond to the needs in our communities (local, national, and international).

A life transformed (Romans 12:1-2)

> ➢ Year 8 will look at sampling techniques and statistical reporting and consider how sampling techniques can be used to represent the truth about a population; or distorted to show another truth.
> ➢ Year 9-10 will look at online statistical reports and media claims and learn the skill to recognise those that strive to present truth compared with those that have been distorted.

Jesus said, "I am the way, the truth, and the life!" John 14:6a

Threads

> ➢ **CHALLENGING DISTORTIONS** Students identify, and critique areas impacted by sin and then discern God's purposes.
> ➢ **GETTING WISDOM** Students can go deeper than understanding and knowledge to seek the insight of God.
> ➢ **SHAPING CULTURE** Students understand their cultural context, discern its errors and its virtues, and seek to 'shake and shape' it for the Kingdom.

Enduring understandings	Essential questions
• The media presents a potentially 'distorted' truth: Publicly held opinions about trends in the world are not always accurate. • It is possible, with God's help to find truth.	• Why are humans tempted to distort data? (e.g., Jeremiah 17:9) • How do we know what truth is?

Australian Curriculum Outcomes	

ACARA 9.0 (with the 'truth' focus)

Year 8. Content descriptors: Statistics

- Analyse and report on the distribution of data from primary and secondary sources using random and non-random sampling techniques to select and study samples AC9M8ST02.

- Compare variations in distributions and proportions obtained from random samples of the same size drawn from a population and recognise the effect of sample size on this variation AC9M8ST03.

- Plan and conduct statistical investigations involving samples of a population; use ethical and fair methods to make inferences about the population and report findings, acknowledging uncertainty AC9M8ST04.

Year 9. Content descriptors: Statistics

- Analyse reports of surveys in digital media and elsewhere for information on how data was obtained to estimate population means and medians AC9M9ST01.

- Analyse how different sampling methods can affect the results of surveys and how choice of representation can be used to support a particular point of view AC9M9ST02.

Year 10. Content descriptors: Statistics

- Analyse claims, inferences and conclusions of statistical reports in the media, including ethical considerations and identification of potential sources of bias AC9M10ST01.

General capabilities: Digital literacy

Seeking truth

- Particularly focus on the element of "investigate".

- Utilise skills from "managing and operating".

Christian perspective: framing activities

Discussion questions:

- **"Everybody is on TikTok" (or any such statement)** How do you know? How could you discover the truth of this statement?

- **How can you ever know what is truth?**

Year 8 activities

- Year 8 outcomes and rubric

- Year 8 assignment: Sampling statistics (including reflection questions and discussion with a parent/carer)

Year 9-10 activities

- Show and discuss "how to spot a misleading graph".

- Find examples online or students create their own examples of misleading graphs.

- Assign a topic to investigate online such as "what is the most popular form of social media for Australian students?"

- Together, formulate criteria for assessing the credibility of a statistical report.

- Hone the criteria by asking ChatGPT or similar (demonstrate how to utilise this platform)

- Conduct the research.

- Students vote on the best report findings (according to the criteria)

- Discuss, analyse, and reflect upon the results.

- Students consider options for wise application e.g.

    - Based on your research, what recommendations would you make to educators and parents regarding social media use among high school students?

    - How can the information in your report be used to inform digital literacy programs or online safety initiatives for high school students?

    - How can schools and parents collaborate to use the information in your report to educate students about responsible social media use?

    - What role does social media play in shaping the mental health and well-being of high school students, and how can your findings inform mental health support services and interventions?

Video clips to support learning

- How to spot a misleading graph: https://www.youtube.com/watch?v=E91bGT9BjYk&t=205s

- Nicholas Carr: What screen is doing to our brains: https://www.youtube.com/watch?v=cKaWJ72x1rI&app=desktop

Resources

- Classroom poster to 'frame' main idea (truth)

- Infographic: digital literacy capability – discussion started

- "hook lesson" PowerPoint slide

- Y.8 student outcomes; self-assessment rubric; front page of workbook; assignment – sampling statistics