

Discussing the Data: Health Attitudes to Being Online and Alcohol Use

## PART B. Attitudes about... being online



# There are seven inquiries in Part B focused on health attitudes to being online.

To support the development of capabilities for inquiry in health and wellbeing contexts, the inquiries this section of the resource are framed using the Action Competence Learning Process (ACLP—see Overview of the Resource Section 3). Links to the statistical inquiry cycle (PPDAC) are included where relevant and appropriate.

To assist teachers with the selection of inquiries, the table below describes the inquiry, identifies the CensusAtSchool data used, and indicates the nature of the data-related tasks—specifically whether students need to download and analyse their own data, collect their own data, and/or if samples of data are provided in tables and graphs ready for interpretation.

PART B. Attitudes about being online	CensusAtSchool VARIABLES used for the inquiry	Data provided for the inquiry; data needs to be downloaded and analysed; and/or own data collection	Suitable for learning mainly in
Inquiry 7. Digital technology use and wellbeing	Best online & Worst online	Students download and analyse a sample of qualitative data	Health Education
Inquiry 8. Benefits and disadvantages of online experiences	Best online & Worst online	Students download and analyse a sample of qualitative data	Health Education
Inquiry 9. Use of digital devices and social media	Technology	Data provided, with the option of downloading own dataset	Health Education & Statistics
Inquiry 10. Challenging assumptions about digital technologies and screen time	Technology yesterday & Screen time	Data provided	Health Education & Statistics
Inquiry 11. Blocking people online	Blocked	Data provided, with the option of downloading own dataset	Health Education & Statistics
Inquiry 12. The impact of manipulated online content — and what to do about it	Health promotion materials	NA	Health Education
Inquiry 13. The impact of disturbing content on wellbeing—and what to do about it	Own data	Own data collection	Health Education

## The inquiries in this section of the resource use the CensusAtSchool being online attitudes questions:

- Best online: In five words or less, what do you think is the best thing about going online for you? If you don't know, type I don't know.
- Worst online. In five words or less, what do you think is the worst thing about going online for you? If you don't know, type I don't know.
- Blocked. Have you blocked anyone online in the past week? Yes, No.
- Technology. Which of the following have you used in the last week? (You may tick more than one.) Own cell phone, YouTube, Instagram, Snapchat, Facebook, Twitter, TikTok, Twitch, Pinterest, BeReal, WhatsApp, Reddit, Discord, none of these.
- Technology yesterday. Which of the following did you use four or more separate times yesterday? (You may tick more than one.) Own cell phone, YouTube, Instagram, Snapchat, Facebook, Twitter, TikTok, Twitch, Pinterest, BeReal, WhatsApp, Reddit, Discord, none of these.

### Along with the Screen time after school question:

• Screen time after school. For your most recent whole school day, how much total screen time did you have after school before going to sleep? Answer to the nearest 15 minutes (answered as hours and minutes). Enter zero if you spent no time on screens.

These survey items are used in conjunction with demographic data such as year level and gender.

## Videos

There are two videos that support the activities in this section. **Specific** activities related to these videos have been included with a selection of the inquiries, although teachers may choose to make use of the videos with other inquiries.

## Video 1. Being online: What young people think—Discussing data from CensusAtSchool (4.27 min)

#### Questions for young people

- A third of Year 9-10 students had blocked someone online in the past week. Why do you think so many young people are using blocking this often? What are some reasons young people might block someone online?
- 2. The most common concern young people had about going online was that they were "wasting time". Why might wasting time online be a problem for young people?
- 3. Why do you think some young people spend a lot of time online?
- 4. Young people said a common benefit of going online is learning new things. What are some positive things you think can be learned from the internet?

## Video 2. Being online: Impacts and what young people can do—Discussing data from CensusAtSchool (4.59 min)

### Questions for subject-matter experts

- 1. A third of Year 9–10 students had blocked someone online in the past week. In your experience, why might a person choose to block someone? If someone is bothering you online, what can you do about it?
- 2. The most common concern young people had about going online was that they were "wasting time". How do the internet and apps attract people to stay online for long periods of time?
- 3. If someone's feeling like they're spending too much time online, but also want to stay connected to their friends, what can they do?
- 4. There has been a lot in the media around fake news and misinformation, but this was not in the top 20 things students mentioned about being online. Why do you think that is?

## Inquiry 7. Digital technology use and wellbeing

## Overview / rationale

This inquiry aims to develop students' understanding of the way social media use can directly or indirectly affect all dimensions of hauora and wellbeing. Using the digital-world **opinion** questions *In five words or less, what do you think is the best thing about going online for you* (**Best online**) and *In five words or less, what do you think is the worst thing about going online for you*? (**Worst online**), students will learn how to:

- code data to summarise the wellbeing themes in a dataset
- apply these themes to Te Whare Tapa Whā model of health (or another selected health model)
- compare and contrast the best and worst things about being online
- draw conclusions about the way social media use impacts wellbeing
- minimise the negative impacts of being online.

This inquiry helps develop students' understanding of the Health and Physical education concept of hauora as a holistic understanding of health and wellbeing. It is expected that students will have prior learning about the concept of hauora and Te Whare Tapa Whā as a model of health to explore the concept. They may have also learned about other Indigenous or cultural models of health. Note that there is a parallel activity in Inquiry 15 using alcohol attitudes data. See Inquiry 8 for ideas that build on the concept of hauora to develop students' understanding of the socio-ecological perspective (another health and physical education concept), in an online context.

## Background

The impact of social media use on youth mental health has been researched extensively the world over for the past decade with most studies, including the growing number of meta-analyses and systematic reviews of the literature, drawing attention to the negative impacts of this technology. These studies are widely reported and many examples can be found online. Accessible examples of New Zealand research can be found on the Netsafe website (see references below).

#### Safety considerations

Research indicates that most young people spend time in the online environment. Some of them spend a lot of time online, which becomes problematic in itself (see Inquiry 4). It is known from research that many students experience cyberbullying in its various forms, or are exposed to disturbing content, such as violence and conflict, people in dangerous situations, pornography, or hate speech against specific groups.

Sometimes the world-in-crisis stories that dominate news feeds can also be a source of disturbing content, such as reporting of climate change and economic hardship. For educational purposes it is helpful to draw attention to these concerns about the impact the online environment has on young people's wellbeing. However, that does not mean giving further undue attention to such materials in the learning programme and sensationalising the content of these sites. If teachers are concerned about the impact of the amount of screen time or the content being viewed online on student wellbeing, it is recommended that school protocols for supporting students are followed, which may include conveying concerns in a discussion with the year-level dean or school counsellor.

## This activity uses the same process as <u>Inquiry 14 on the impacts of alcohol use on</u> <u>hauora in Part C</u>. This activity could link with <u>Inquiry 8 in Part B</u>.

## Contributes to:

## Health Education

Students will learn to:

- explore positive and negative impacts on wellbeing from being online
- understand how online behaviours can impact all dimensions of hauora and wellbeing
- know ways of minimising the negative impacts of being online.

## **Key Competencies**

(Critical) Thinking; Using language, symbols and texts; Participating and contributing,

## Expected timeframe

• 2-3 hours.

## Data for the inquiry

## CensusAtSchool data to download

Digital-world opinion questions

- In five words or less, what do you think is the best thing about going online for you?
- In five words or less, what do you think is the worst thing about going online for you?
- Demographic data is optional. If selected, year level or gender is suggested. If doing Inquiry 8, the same dataset could be used for Inquiries 7 and 8, in which case demographic data should be included, e.g., gender and year levels (such as Years 9 and 10).

Note that students wrote answers in their own words for these items. The maximum download of a sample of 1000 generates a lot of data that needs to be read. For this activity students will only need about 100–200 items. For coverage, it is suggested that students **individually** download a random sample of 100–200 items — with the suggestion that they specifically select responses for their year level (this is optional). Then, **working in groups** to complete the activity, students can share responses to check they have a range of ideas. No other demographic data is needed for this activity unless further inquiry questions are seeking information about a particular group.

The focus for this activity is on what students said in response to the question. Students do not need to quantify responses for this activity, except for noting *"I don't know"* responses.

Optional: Note that students answering this question were given the option *If you don't know, type I don't know.* It is recommended that students note how many students state *"I don't know"* for their sample. There is an optional question asking why they thought this many students answered this way.

## **Resources required**

Resource sheet for Inquiry 7—template for recording positive and negative impacts on hauora and wellbeing.

### Other useful resources and references that could support the inquiry

 Access to information about a health model <u>Te Whare Tapa Whā (or</u> <u>other models such as Fonofale</u>) — note there are many online sources for this information. Other holistic models of health and wellbeing can be used for this task. This version of the activity uses Te Whare Tapa Whā.

## Teaching process to guide the learning inquiry

## Identifying an issue

### Developing knowledge and insight

- Ask students as a class or working in small groups to discuss what they think are the best and worst things about being online.
- Once a list is made, ask them to try to rank the ideas within each of the best and worst lists to identify the very best and very worst things as they see them. Once these are identified, ask them to discuss why they say this.
- Provide opportunity for groups to give feedback about the best and worst things with reasons why.
- Ask students to recall learning about Te Whare Tapa Whā or refer to prior learning about this to remind students about the dimensions and the sorts of ideas that relate to each dimension of wellbeing.
- As a class, make some initial connections between these best and worst ideas and the dimensions of Te Whare Tapa Whā.

#### Developing a vision – Key inquiry questions

- Explain to the students that they are going to be using the CensusAtSchool data that focuses on what other students have said are the best and worst things about being online, and connecting these ideas with Te Whare Tapa Whā (or another selected model of health).
- Working in groups, ask students to develop 2–3 inquiry questions related to the best and worst things about being online, and how these ideas connect with the dimensions of wellbeing. Use the previous discussion as a source of ideas. *E.g.*, *Will most ideas relate to mental and emotional wellbeing? How does being online impact spiritual or physical wellbeing? In what ways does being online impact social wellbeing positively and negatively? Do the ideas about the best and worst things about being online relate in similar amounts for each dimension of hauora, or does one dimension dominate?*

## Understanding – Data

Data can be selected and analysed individually or in pairs.

- Direct students to the CensusAtSchool database and supervise students to locate the Opinions – Best online and Worst online data. Demonstrate to the students how to locate the <u>Random Sampler</u> tool (see Getting data from CensusAtSchool in the Overview of the Resource) and select the **Specific variables** needed for the investigation (locate Best online and Worst online under Opinions), Random sample, and a sample size. Download sample to an Excel spreadsheet.
- How to code qualitative (descriptive) data, noting there are various ways to do this. One way is to use a spreadsheet, e.g., Excel or Google Sheets.
  - In Excel, highlight the first row, click on Sort & Filter, and then click on Filter. This gives each column its own drop-down filtering menu.

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• Click on the drop-down arrow and select Sort A to Z to automatically list the items alphabetically, which also groups all the same first words together in each column of data. Do this one column (variable/survey question) at a time, e.g., do this for the **Best online** variable.

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- Add in a new column to the right of the **Best online** variable.
  - Look down the column of responses for **Best online** for words that have obvious connections with each dimension of wellbeing.
  - Ordering the words A-Z reduces how many words need to be read.
    - Scanning the ordered responses will start to identify additional filtering that can be done. For example, in **Best online**, responses could include: *Calling my friends*, *Talking to my friends*, *Connecting with my friends*. Using Text Filters can help to find similar statements about friends.
    - Click on the drop-down arrow, select Text Filters, select Contains.

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• In the new window, type **friend** (or friends) in the cell beside contains and then click OK.

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 Into the new column, add a number or a code or the name of the dimension that each item relates to. For example, doing things with friends most likely relates to the taha whānau (TWH) dimension. • Clear the filter, click on the drop-down arrow, select Clear Filter From "Best online".

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- Students may include more than one dimension for an item.
- Repeat until most items have a number or code next to them.
- Repeat for **Worst online** responses.
- Provide opportunity for students to share some of their ideas with their group to ensure a range of examples has been identified.
- Note the more popular responses and the more commonly reported dimensions.
- Other digital processing and coding methods may be used where expertise and resources are available to support this. Ensure the method enables students to see the point of sorting and coding.
- Optional: Count the number of "I don't know" responses.
- Presenting findings: Instruct students to select some of the survey ideas to complete a wellbeing grid (see resource sheet 7). Encourage the students to redesign this, but make sure they include the four dimensions and distinct positive (best) and negative (worst) effects of being online. They can add visual imagery if they wish.

Using data to answer the inquiry questions:

- Once the data is analysed and understood, support students to answer their inquiry questions. Practice writing (or digitally recording) the answers to the inquiry questions, supported by examples of data that they are using as evidence to justify their claims.
- As a class (or in small groups) compare and contrast the best and worst things about being online look for major trends, but also tensions and contradictions (e.g., ideas that appear as both best and worst reasons and ask why they think this is the case).
- If any dimension is absent from the data analysed, ask students to contribute their own ideas to the summary. If a dimension appears to be missing from the analysed data, ask why they think this may be the case (the likely answer being that if students were only allowed five words to answer the question, then they would tend to go for the more obvious and familiar answers associated with an issue or situation).

- Optional: If students noted how many responded "I don't know" to this question, ask why they thought students answering the survey said this. Do they think it is a concern that this many students said "I don't know"? Why or why not?
- Reach an overall conclusion about the way being online impacts hauora and wellbeing. Add this summary to the answer(s) to the inquiry question(s).

## Planning

## Acting

- Ask students working in small groups to brainstorm all the ways they think people their age could be safe(r) online. Get them to think about a range of ways they could keep themselves safer, how friends and parents could help children be safe online, and how the school supports students to be safe online. Make use of online sites such as Netsafe if students need more ideas. E.g., limiting screen time, using security settings on their devices and applications, using passwords and not giving these out, only allowing known friends to access your social media page, reporting cyberbullying, talking with someone if they see or hear something upsetting online, etc.
- As a class, collect these ideas together, grouping them into actions a teenager could take responsibility for themselves, actions they need support with from another person, and actions that need some sort of systems support (like a school or an agency that monitors digital safety, such as Netsafe). Record an image of the class summary of ideas. Note that these ideas about online safety are explored across all the digitalworld inquiries.
- Promoting e-whanaungatanga. Recall prior learning about whanaungatanga and whakawhanaungatanga.

### Whanaungatanga

The development and maintenance of relationships through communication, shared experience and working together.

#### Whakawhanaungatanga

The process of establishing relationships, relating well to others.

You may also use other local definitions and understandings of the concept of whanaungatanga.

- Ask the class to brainstorm what they think 'e-whanaungatanga' could include (that is, whanaungatanga in the online environment).
- Make links between actions already suggested for being supportive of others online and add any other ideas about the things people could do as a way to promote whanaungatanga online.

## Evidence of student learning/learning artefacts

Students will document:

- their inquiry questions, the summary chart of the way wellbeing is impacted positively and negatively, and their overall conclusions
- a summary of the ways the worst things about being online can be managed (and the best things supported), so that being online can be safer.

## **Teacher reflection**

- How readily were students able to develop basic inquiry questions based on their own knowledge of the online environment? How much, if any, additional information was needed to help develop these questions?
- How readily were students able to grasp the idea of coding qualitative data to help summarise it? I.e., reorganising the data, deciding which dimension of Te Whare Tapa Whā responses related to, then 'coding' those items so lots of ideas could be included in the summary without having to read each one individually. In what other learning contexts could this approach to data analysis be useful?
- How readily could students link ideas about the best and worst things about being online with the dimensions of hauora.
- What are the implications of the above when considering future learning in different wellbeing contexts?

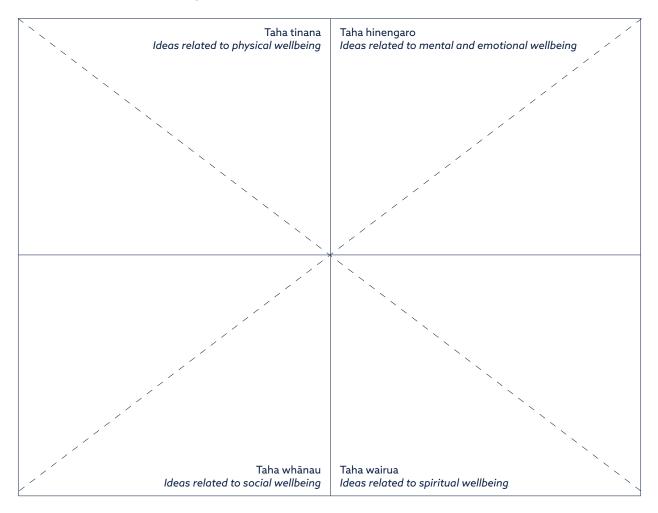
## References

There are many online accessible research articles about teens and social media use. These are some New Zealand sources considered for this inquiry:

- Netsafe. (2029). Ngā taiohi matihiko o Aotearoa New Zealand kids online. <u>https://</u> netsafe.org.nz/children-technology-access-use-skills-opportunities-2019/
- See also the summary in Pacheco, E., & Melhuish, N. (2018). New Zealand teens' digital profile: A factsheet. Netsafe. https://netsafe.org.nz/wp-content/uploads/2018/02/NZ-teens-digital-profile\_factsheet\_Feb-2018.pdf
   Scott, M. (2021, August 5). Teens looking in the cracked mirror of social media. Newsroom. https://www.newsroom.co.nz/teens-looking-in-the-cracked-mirror-of-social-media
- Cullen, J., Muntz, A., Marsh, S., Simmonds, L., Mayes, J., O'Neill, K., & Duncan, S. (2024). Impact of digital technologies on health and wellbeing of children and adolescents: A narrative review. New Zealand Journal of Physiotherapy, 52(1), 62–77. <u>https://nzjp.org.nz/</u> nzjp/article/view/364/332

## **Resource sheet 7**

## The best and worst things about being online and the positive and negative effects on hauora and wellbeing



## Inquiry summary

My main inquiry question related to being online.	
My conclusion(s) based on the CensusAtSchool data.	
Use examples of survey responses from your analysis to support your conclusion.	
How many students in your sample said "I don't know"? xx students/total sample size – convert this to a %.	
Do you think this is a concern? Why or why not?	

## Inquiry 8. Benefits and disadvantages of online experiences

## **Overview**

This inquiry aims to develop students' understanding of the benefits and disadvantages of online experiences. Using the digital-world opinion questions What do you think is the best thing about going online for you? and What do you think is the worst thing about going online for you? students will learn how to:

- · code data to summarise the benefits and disadvantages of being online
- interpret data about the benefits and disadvantages of being online in relation to the socio-ecological perspective (personal, interpersonal and societal factors).

#### Background

The large volume of research that has been carried out over the past decade about young people's online experiences and the impacts of these on mental health paints a mixed picture of the benefits and disadvantages of being online. For some time now, the concerns about the negative impacts have outweighed the positive aspects of engaging with the digital world. (See also the background and references listed with Inquiry 7.)

To understand these benefits and disadvantages it is useful to recognise how an interconnected combination of personal, interpersonal and societal factors (the socio-ecological perspective) contributes to teenage experiences of the digital world.

- **Personal factors** (things individuals have some control over) include: attitudes, values, beliefs, and behaviours or personal habits; personal (mental health) status; tastes—likes and dislikes; personal experiences and opportunities; personal knowledge and skills for managing online behaviours, etc.
- **Interpersonal factors** (any influences that are the result of interactions with others) include: family norms, values, behaviours; peer pressure and friends' behaviours, etc.
- Societal (or community) factors include: the nature and the effectiveness of digital-world legislation and policies; social and cultural norms, or dominant views perpetuated through social media, etc.

#### Safety considerations

See Inquiry 7.

This activity could link with <u>Inquiry 7 in Part B</u> and uses a similar process to <u>Inquiry</u> <u>15 in Part C</u>.

## **Contributes to:**

Health Education

- Students will learn how to:
  - analyse data to understand factors related to the benefits and disadvantages of being online.

Key Competencies

(Critical) Thinking; Using language, symbols and texts; Participating and contributing

## **Expected timeframe**

• 1-2 hours (if using the same dataset as Activity 7, less time will be needed).

## Data for the inquiry

• See instructions for Inquiry 7. Note that this inquiry can use the same data download for Inquiry 7 unless the inquiry requires the selection of additional demographic data.

## CensusAtSchool data to download

• Digital-world opinion questions What do you think is the best thing about going online for you? and What do you think is the worst thing about going online for you?

Note that students wrote answers in their own words for these items. The maximum download of a sample of 1000 generates a lot of data that needs to be read. For this activity students will only need about 100–200 items. For coverage, it is suggested that students **individually** download a random sample of 100–200 items. Then, **working in groups** to complete the activity, students can share responses to check they have a range of ideas.

Depending on the nature of the inquiry questions, **demographic data may also be specifically selected** (this is optional), e.g., gender, year levels (such as Years 9 and 10).

This activity only needs to develop an understanding about the range of personal, interpersonal and societal responses. Students do not need to quantify the responses.

Optional: Note that students answering this question were given the option of typing *"I don't know"*. It is recommended that students note how many students stated *"I don't know"* for their sample. There is an optional question asking why they thought this many students answered this way.

## **Resources required**

- Access to a digital device and the internet.
- Resource sheet for Inquiry 8—template for recording benefits and disadvantages of being online and actions to promote wellbeing online. Note there are two versions of this. Either select one or leave students to choose.
- Video—Being online: What young people think—Discussing data from CensusAtSchool (4.27 min).

## Teaching process to guide the learning inquiry

## Identifying an issue

## Developing knowledge and insight

• Ask students to provide some initial responses to the question: What do you think are the benefits (the best things) and the disadvantages (the worst things) about being online? This may be informed by their findings in Inquiry 7.

- Ask the class if they think these benefits and disadvantages might differ between males and females or across different year levels, and give reasons why/why not.
- Ask students to recall what they understand personal, interpersonal and societal factors are. If needed, include some deliberate teaching about these distinctions—see background section above.

### Developing a vision – Key inquiry questions

- Explain to the students that they are going to be using the CensusAtSchool data that focuses on what other students have said are the main benefits (the best things) and disadvantages (the worst things) about being online, and connecting these ideas with personal, interpersonal and societal ideas.
- Working in groups, ask students to develop an inquiry question related to the main benefits (the best things) and disadvantages (the worst things) about being online. Use the previous discussion as a source of ideas. E.g., Do most teenagers think the best thing about being online is to communicate with their friends; Do most teenagers think the worst thing about being online is cyberbullying, etc. These inquiry questions may be informed by their findings in Inquiry 7.

### Understanding – Data

Data can be selected and analysed individually or in pairs.

- Direct students to the CensusAtSchool database and supervise students to locate the **Opinions Best online** and **Worst online** data.
- Demonstrate to the students how to locate the <u>Random Sampler</u> tool (see Section 2 in Overview of the Resource) and select the <u>Specific</u> variable needed for the investigation (locate <u>Best online</u> and <u>Worst</u> online under opinions), <u>Random sample</u>, and a <u>sample size</u>. Selecting for <u>specific demographic data</u> (e.g., gender or year level) needs to be added if relevant to the inquiry. Download the sample to an Excel spreadsheet.
- How to code qualitative (descriptive) data, noting there are various ways to do this. See also Inquiry 7, e.g.:
  - In Excel, use the Editing—Sort & Filter—Sort A to Z function to automatically list the items alphabetically, which also groups all the same words together in each column of data. See Inquiry 7 for further details.
  - Head a new column. If using the same spreadsheet as Inquiry 7, make sure the new column has a heading that helps students to understand what they are coding for. Look down the column of responses and decide which are personal (P) factors (things they have personal control over and are of their own choosing), which are interpersonal (IP) factors (things related to communicating with friends and people they know), and which are societal (S) factors (things that happen online that come from sources they don't know or they have no control over). It may require some additional teaching to help make these links.
  - Encourage students to discuss their ideas with a partner as they work through their list.
  - Into the new column add a P, IP or S code for each item. For the purpose of the activity select one main code.
  - Repeat until most items have a code next to them.
  - Provide opportunity for students to share some of their ideas with their group to ensure a range of examples have been identified.
  - Count the number of P, IP and S responses. Convert these to a % of the sample size. Alternatively, students could copy and paste the data into a CODAP document and get summary displays and percentages.

- Optional: Count the number of *"I don't know"* responses. Convert these to a % of the sample size.
- Optional: If the inquiry is to look in more depth at the different types of P, IP and S responses, either do a count of these (e.g., use an Excel [Insert] PivotTable). See the guidance provided in the Overview of the Resource, Section 4.
- Other digital processing and coding methods may be used where expertise and resources are available to support this. Ensure the method enables students to see the point of sorting and coding.
- Presenting findings: Instruct students to record their summary using one of the resource sheets (there are two options for this—see resource sheets A and B).

Using data to answer the inquiry questions:

- Once the data is analysed and understood, support students to answer their inquiry questions. Practice writing (or digitally recording) the answers to the inquiry questions, supported by examples of data that they are using as evidence to justify their claims.
- Where possible (based on inquiries), ask the class to compare and contrast the year level and gender data—look for major similarities and differences. If the data is in CODAP, students can add the variable **Year level** or **Gender** to the display to see the comparisons.
- If any of the personal, interpersonal or societal levels are missing from the sample of data analysed, ask students to contribute their own ideas to the summary. If a P-IP-S level appears to be missing from the analysed data, ask why they think this may be the case (the likely answer being that if students were only allowed five words to answer the question, then they would tend to go for the more obvious and familiar answers associated with an issue or situation).
- Reach an overall conclusion about the benefits and disadvantages of being online. Add this summary to the answer(s) to the inquiry question(s) (resource sheet C).

**Screen the video** Being online: What young people think — Discussing data from CensusAtSchool. Focus on the questions:

- The most common concern young people had about going online was that they were "wasting time". Why might wasting time online be a problem for young people? If they think time is being wasted, what could they be doing instead? (1.54 min)
- Why do you think some young people spend a lot of time online? (2.53 min)
- Young people said a common benefit of going online is learning new things. What are some positive things you think can be learned from the internet? (3.22 min)

Repeat the screening if required. As a class, summarise the main points the young people made in response to each question.

Optional: Allocate these same questions to small groups. Appoint one person to be the interviewer (or rotate the interviewer role for each question) and allow time for each student to respond as part of a 'panel' (as in the video).

Class or group discussion questions:

- In what ways were Eden's, Kaitlyn's and Donovan's responses similar to or different from your data summaries about the best and worst things about being online?
- What other ideas or comments do you have about the amount of time young people spend (waste) online and/or the positive things about being online?
- Other than for school work, identify some useful things you have learned from an online source that you have been able to use in your life.

## Planning

### Acting

If students have completed the Planning/Acting section of Inquiry 7, the first two instructions may not need to be repeated.

- Ask students working in small groups to brainstorm all the ways they think people their age could enhance positive online experiences and minimise negative online experiences. Get them to think about a range of ways they could keep themselves safer, ways friends and whānau could help, and how the school or wider community supports students to be safe online. Search online for cybersafety ideas for young people, e.g., <u>Netsafe</u>.
- As a class, collect these ideas together, grouping them into actions a teenager could take responsibility for themselves, actions they need support with from another person, and actions that need some sort of systems support (such as a school or an agency that promotes safety online). Record some of these ideas with resource sheet 8A or 8B.

Note that these ideas about online safety are explored across all the onlineattitudes inquiries. Depending on the inquiries selected, support students to keep adding to these ideas with each successive inquiry to reinforce this learning.

• Support students to make links between these actions and some of the benefits and disadvantages of being online. Note, for example, that a personal influence does not necessarily require a personal action. In some cases, it might require an interpersonal or a societal action to address a personal influence. *E.g., an action might be to provide better cybersafety education (a societal action) to support individual teenagers to learn knowledge and skills to be safer online.* Add these ideas to the data summary in the resource sheet.

## Evidence of student learning / learning artefacts

Students will:

• file their completed data summary and inquiry (resource sheets 8B and 8C) in their learning journal.

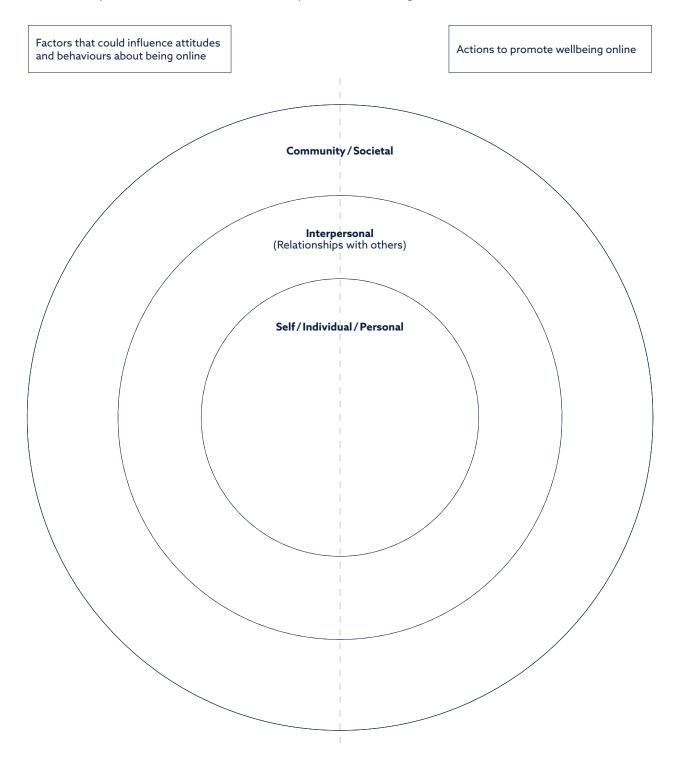
## **Teacher reflection**

- How readily were students able to interpret survey responses as personal, interpersonal and societal ideas? What further learning is needed to develop this, and which future learning contexts will provide opportunity for this?
- How readily were students able to work though the steps of coding and summarising qualitative data, and then to summarise it as percentages? In what other contexts might this approach be useful for analysing data?

## Resource sheet 8A

## **Option 1**

On a piece of paper draw a model like this (note that once complete, photograph the image and file it in your learning journal). Or you can create this digitally if you have access to a suitable application. In the left-hand side of each circle write examples of personal, interpersonal and societal factors that influence teenage online attitudes and behaviours (and therefore their wellbeing) using ideas from the CensusAtSchool survey questions *What do you think is the best thing about going online for you?* and *What do you think is the worst thing about going online for you?* On the right-hand side write in some examples of P-IP-S actions that could promote wellbeing online.



## **Resource sheet 8B**

## **Option 2**

Use the table below to record examples of personal, interpersonal and societal factors that influence teenage online attitudes and behaviours (and therefore their wellbeing) using ideas from the CensusAtSchool survey question *What do you think is the best thing about going online for you?* and *What do you think is the worst thing about going online for you?* 

In the right-hand side of the table write examples of fair, inclusive and respectful P-IP-S actions that could promote wellbeing online.

Influences on wellbeing	Fair, inclusive and respectful actions to promote wellbeing
	Link these to the influences in the left-hand column. Note that a personal influence does not necessarily require a personal action. In some cases, it might require an interpersonal or a societal action to address a personal influence, etc.
Personal influences on teenage online attitudes and behavi	ours
Interpersonal influences on teenage online attitudes and be	haviours
Societal influences on teenage online attitudes and behavio	burs

## **Resource sheet 8C**

## Inquiry summary

My main inquiry question related to teenage online behaviours.

My conclusion(s) based on the CensusAtSchool data.

Use examples of survey responses from your analysis. Where possible use % to further justify your conclusion.

How many students in your sample said "I don't know"? xx students/total sample size – convert this to a %.

Do you think this is a concern? Why or why not?

## Inquiry 9. Use of digital devices and social media

## **Overview**

This inquiry aims to develop students' understanding of the different ways a dataset can be used to show aspects of teenage technology use. Using the digital-world opinion question *Which of the following have you used in the last week?* students will learn how to:

• use data to describe different features of teenage technology use and the possible implications of this for wellbeing.

#### Background

Young people use a range of different digital platforms and applications. Some are reported to have greater potential impact on wellbeing than others. Studies vary as to which application is the most 'toxic' and these results appear to change in response to age-related demographics and over time as the popularity of different platforms or applications increase and decrease.

The data for question 23a, Which of the following have you used in the last week? allowed students to tick more than one option across Own cell phone, YouTube, Instagram, Snapchat, Facebook, Twitter, TikTok, Twitch, Pinterest, BeReal, WhatsApp, Reddit, Discord or None of these. The data download records these responses as 'yes' or 'no'. The focus for the data analysis in this inquiry is how to manage data presented this way, to draw conclusions about the most popular forms of technology used by teenagers.

### Safety considerations

- See Inquiry 7.
- Please review the information about using gender data in Section 5 of Overview of the Resource.

This activity could link with <u>Inquiry 1, using the CensusAtSchool database;</u> Inquiry 3, formatting and presenting data in Part A; <u>Inquiry 10 in Part B</u>.

## **Contributes to:**

Health Education

Students will learn how to:

 use data to determine the most popular technologies used by teenagers and identify the possible implications of this, given what is known about the impact of some technologies on wellbeing.

### Statistics

Students will learn how to:

- pose investigative questions
- source data from existing databases
- · use representations to analyse and visualise data
- communicate findings using evidence from analysis and provide possible explanations for findings.

#### **Key Competencies**

(Critical) Thinking; Using language, symbols and texts; Participating and contributing

## **Expected timeframe**

• 1-2 hours (longer if students are downloading and analysing their own dataset).

## Data for the inquiry

- Students can either use the summarised data provided in the resource sheets and/or their own sample of downloaded, analysed and formatted data, using the sample as an example of what to do.
- The data used for this inquiry is from question 23a, which is listed in the specific variable just as **Technology** (whereas **Technology yesterday** from question 23b is used in Inquiry 10).

### Note:

The download for this survey presents results as 'yes' or 'no'. To count yes and no responses using Excel or another spreadsheet:

## Option 1.

An easy way to count the data after downloading it to an Excel spreadsheet is to highlight all responses and use the Editing – Find & Select – Replace All function. Replace all 'yes' responses with '1' and all 'no' responses with 0 and then, with the data highlighted, use the AutoSum function to add up how many different technology devices/applications students used that week (which appears in a column to the right of the data) and/or how many students used each type of technology (row across the bottom).

## Option 2.

Use a PivotTable (Insert – PivotTable).

## Option 3.

Teach the use of formulas in Excel to count a specific response.

#### Option 4.

The data can be imported into a CODAP document, and summaries found by graphing each tech type.

## **Resources required**

- Access to a digital device and the internet.
- Resource sheets for Inquiry 9.
- Discussion frame about the use of digital technologies.

## Teaching process to guide the learning inquiry

#### Identifying an issue Developing knowledge and insight PPDAC—PROBLEM: Introduction to the situation

• Provide the class with the list of digital technologies — platforms or applications — named in the CensusAtSchool survey, e.g., cell phone (for sending and receiving texts emails, phone calls and phone messages), YouTube, Instagram, Snapchat, Facebook, Twitter, TikTok, Twitch, Pinterest, BeReal, WhatsApp, Reddit, Discord. Ask if there are others they would add to this list.

- Ask why they think these others are not on the list; e.g., Fortnite, why might that no longer be included? Ask if there are any on the list that they think have been newly added, and why; e.g., BeReal – new platform that is common amongst teenagers.
- Ask students which digital technologies platforms or applications – do they think teenagers their age most commonly use (and why)? Which ones are less popular (and why)? Make a note of these popular and less popular technologies for later reference.
- Ask if they think there is a difference in the platforms and applications used by males and females? If so, what and why? If not, why not?
- What do teenagers use these technologies for? Prompt as needed for ideas like: communicating with others, finding out information, entertainment, boredom (something to do), FOMO/fear of missing out, can't leave it alone, etc.
- Provide students with the resource sheet 9A, How digital platforms and applications can support and harm wellbeing and allow time to discuss the questions. Provide opportunity for feedback to the class covering a range of ideas. If time is limited, allocate 2–3 apps from the list to each group.

### Developing a vision Understanding – Key inquiry questions and data

## Activity 1. Using the summarised data provided

• Provide groups of students with the table and graphs (resource sheets 9B and 9C) showing digital technology use by year level and gender, along with a copy of the discussion sheet. Explain how this inquiry is looking at the inquiry/investigative question *How does digital technology use compare across year levels and between genders?* 

## Activity 2 (optional). Creating own summary of digital technology use based on own inquiry/investigative question (PPDAC – PROBLEM: Pose investigative questions)

- Support students to develop their own inquiry/investigative questions about digital technology use with different populations (e.g., by region to see how digital technology use compares across the country; or looking at younger year levels to see if they can find out when extensive use of digital technologies starts), or technology use with other demographic variables, such as looking at another gender (use the functions in **3. Select variables** for this). Alternatively, a different inquiry could look at how many different platforms or applications teenagers use and whether there are any demographic differences in these data (this can be easily summarised in the same way noted for Option 1 in the 'Data for the inquiry' section above).
- (PPDAC DATA: Source data; ANALYSIS: Create data visualisations and summaries) Once the inquiry/investigative question is developed, support students to download the data they need from CensusAtSchool and to summarise it into a table and graph (see notes in 'Data for the inquiry' above).
- Use the summary (analysis) questions for Activity 1 (resource sheet 9D) as they best apply to students' own inquiry/investigative question.

## Using data to answer the inquiry/investigative questions:

- allow time for the groups to respond to the summary (analysis) questions, providing support where required
- provide opportunity for sharing a selection of responses with the class.

#### Planning Acting

- See Inquiries 7 and 8. If neither of these inquiries were carried out, use the 'Taking action' activity(ies) from these here. If this inquiry was completed, ask the students to revisit their ideas and see what other cybersafety ideas they would add, based on their discussion about specific digital platforms and applications.
- Promoting manaakitanga online. Recall prior learning about manaaki and manaakitanga.

#### Manaaki

Means to support, take care of, give hospitality to, protect, look out for – show respect, generosity and care for others (Te Aka Māori Dictionary).

#### Manaakitanga

The *process\_*of showing respect and care; reciprocity between people, living things and places. This often manifests as tautoko (support) and encouragement, particularly when working with others in collaborative situations.

You may also use other local definitions and understandings of the concept of manaakitanga.

- Ask the class to brainstorm what they think showing manaakitanga could include in the online environment.
- Make links between actions already suggested for being caring and encouraging of others online and add any other ideas about the things people could do as a way to promote manaakitanga online.

## Evidence of student learning / learning artefacts

Students will:

• file all materials developed during the inquiry, including their responses to resource sheet 9D, Summarising technology use by male and female students in Years 9–11.

## **Teacher reflection**

Given the high levels of digital-technology use by teenagers, how engaging was this activity for students? What about those who have low use or no use of digital technologies? How can this learning be made relevant for them? What other learning contexts are there where the topic is highly relevant for a majority of students but not for a few? How can these situations be managed so that there is engagement and valuable learning experiences for all students in the class?

## References

See Inquiry 7 list.

The Netsafe advice for parents also makes useful background reading for teachers, e.g., *Social media advice for parents*, <u>https://netsafe.org.nz/social-media-parents/</u>

## **Resource sheet 9A**

Select at least SIX of the examples from the list below and answer the three questions. Write "Not sure" if you don't have an answer.

## How digital platforms and applications can support and harm wellbeing

	Why might a teenager use this technology, platform or application (app)?	How could this technology support teenagers' wellbeing?	How could this technology harm teenagers' wellbeing (or be 'toxic')?*
<b>Cell phone</b> As used for sending and receiving texts emails, phone calls and phone messages			
YouTube			
Instagram			
Snapchat			
Facebook			
Twitter			
TikTok			
Twitch			
Pinterest			
BeReal			
WhatsApp			
Reddit			
Discord			

\*There is a wide range of easy-to-find online sites that have information about the mental health impacts of digital platforms and applications.

## Resource sheet 9B

## Table 9.

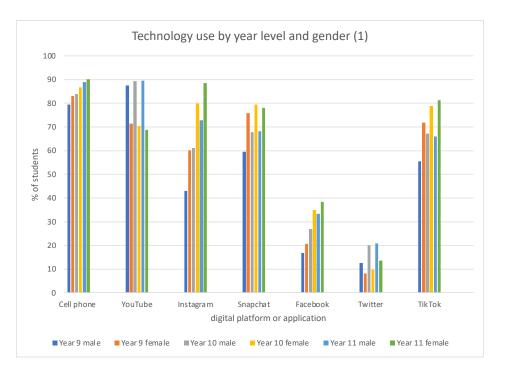
## Digital platform and application use by male and female students in Years 9-11

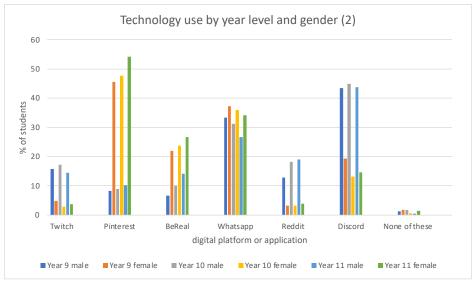
	Year 9 %			ar 10 %	Year 11 %		
Digital technology used	Male	Female	Male	Female	Male	Female	
usea	N = 1000	N = 1000	N = 1000	N = 1000	N = 1000	N = 1000	
Cell phone	79.5	83.1	84.0	86.7	88.9	90.2	
YouTube	87.5	71.5	89.3	70.4	89.6	68.8	
Instagram	43.1	60.2	61.2	79.8	72.9	88.6	
Snapchat	59.6	75.8	67.8	79.5	68.2	78.1	
Facebook	16.8	20.6	26.8	35.0	33.3	38.4	
Twitter	12.5	8.2	20.1	9.7	20.8	13.6	
TikTok	55.6	71.8	67.2	78.8	65.9	81.2	
Twitch	15.8	4.8	17.3	2.9	14.4	3.7	
Pinterest	8.3	45.6	8.9	47.6	10.2	54.1	
BeReal	6.6	21.9	10.1	23.8	14.2	26.6	
WhatsApp	33.4	37.2	31.3	36.0	26.7	34.2	
Reddit	12.8	3.2	18.2	3.3	19.1	3.9	
Discord	43.4	19.3	44.9	13.1	43.7	14.6	
None of these	1.3	1.7	1.7	0.7	0.4	1.4	

**Note:** Each sample of 1000 students is a random sample.

## **Resource sheet 9C**

## Graph 9. Digital platform and application use by male and female students in Years 9-11





## **Resource sheet 9D**

## Summarising technology use by male and female students in Years 9-11

Use the table of data and/or the bar graphs to answer the following questions.	
Which are the most popular digital platforms or applications used by students in Years 9-11?	
Why do you think these are the most popular?	
Which are the least popular digital platforms or applications used by students in Years 9-11?	
Why do you think these are the least popular?	
Can you see any substantial differences across Years 9-11? If so, explain what these differences are and why you think this is the case.	
Can you see any substantial differences between male and female use of digital platforms and applications? If so, explain what these differences are and why you think this is the case.	
What circumstances could account for a very small number of students not using any digital technologies in the previous week (which is what the CensusAtSchool question was specifically asking about)?	
How similar or different are these results to the ideas the class had at the start of the inquiry? Was there anything you found surprising in the results? If so, what was surprising and why?	
Do you think society should be concerned about the <b>amount</b> of digital technology use by teenagers? Why or why not?	
Do you think society should be concerned about the <b>type</b> of digital technology use by teenagers (i.e., which digital platforms and applications they are using)? Why or why not?	
[From previous learning] List FIVE ways teenagers can use digital technologies such as social media more safely when they are online.	
[From previous learning] List FIVE ways teenagers can balance their time between the use of digital technologies and other aspects of their life, and in ways that support their wellbeing.	

## Inquiry 10. Challenging assumptions about digital technologies and screen time

**Overview** 

This inquiry has two aims. First, the activities aim to develop students' understanding of the increased complexities of analysis when data is provided in ways that require further processing before it can be interpreted. The second aim is to consider what it takes to meaningfully show relationships between variables, and how assumptions may hinder the development of a good inquiry/investigative question, or the careful alignment of the data collected with the inquiry/investigative question. Using the digital-world survey questions *Which of the following did you use* four or more separate times yesterday? and For your most recent whole school day how much total screen time did you have after school before going to sleep? students will learn to:

- recognise features of a valid inquiry/investigative question
- challenge assumptions made when carrying out an inquiry, in this case an inquiry that claims to show a relationship between screen time and the number of different technologies (platforms and applications) used.

In this inquiry students are presented with a scenario that describes the situation and frames the inquiry/investigative question, along with some graphs from a student inquiry, aspects of which have some possible flaws. Through a guided series of questions, students reach a conclusion about whether this was a 'good' inquiry process and what they would do to improve it.

Note that this is a more advanced activity and substantial prior learning about developing inquiry/investigative questions and challenging assumptions, as well as data analysis and interpretation, is needed.

#### Background

The wellbeing-related concerns about extended lengths of screen time are extensively documented in international research. Additional research highlights how some platforms or applications present added cause for concern because of the nature of the materials engaged with through these technologies (see Inquiry 9).

The way data is recorded in the survey can add more steps to analysis when the raw data needs to be converted or recorded (in this case changing 'yes' and 'no' answers to numerical values so a large sample can be quickly counted), or collapsing a lot of different values into a smaller, more manageable number (in this case grouping quarter-hour results into groups of whole hours).

Showing relationships between variables in a survey or data from other collection methods introduces greater complexity to the analysis and interpretation of data; even when digital tools can be used to display the data, it still needs to be understood for what it is (and is not) showing.

## Safety considerations

See Inquiry 7.

This activity could link with <u>Inquiry 4, interpreting screen-time data</u>, and <u>Inquiry 5, thinking critically about screen time and sleep time data, in Part A</u>, and build on <u>Inquiry 9 in Part B</u>.

## **Contributes to:**

Health Education

Students will learn how to:

• challenge assumptions about the relationship between screen time and the number of different technologies (platforms and applications) used.

### Statistics

Students will learn how to:

• critique the findings and claims of others by interrogating all phases of the statistical inquiry cycle.

#### **Key Competencies**

(Critical) Thinking; Using language, symbols and texts; Participating and contributing

## **Expected timeframe**

• 1 hour (or longer if students decide to extend this activity to develop their own [improved] inquiry).

## Data for the inquiry

- The table of summarised data and a range of different graphs generated from this are provided for this inquiry. Note there are deliberate shortcomings with some of these graphs and the discussion questions aim to elicit these issues.
- Analysing the data for these two survey questions is complex, as screen time is recorded to the nearest 15 minutes and has been collapsed to hour groupings, and technologies used are individually recorded as 'yes' or 'no' – these have been recoded as yes = 1 and no = 0 so that a large sample can be guickly counted in Excel spreadsheet.
- If time and opportunity allow, students may like to download their own dataset and repeat the inquiry with a 'good' inquiry/investigative question.

## **Resources required**

- Access to a digital device for viewing the resource sheets, and internet for taking action ideas.
- Resource sheets for Inquiry 10-scenario, graphs and discussion sheet.

## Teaching process to guide the learning inquiry

## Identifying an issue

## Developing knowledge and insight (PPDAC – PROBLEM: Introduction to the situation)

• Ask students if they think there is a relationship between screen time and how many different technologies (platforms or applications) teenagers use — build on Inquiry 9 if this was completed. If so what and why? If not why not? Prompt as needed, e.g., *if a person spends four hours after school looking at their screen, do you think they are looking at several different technologies or just one or two of their favourites?*  If a person has only one hour of screen time are they looking at just one or two apps, and if someone has six hours of screen time are they looking at a lot of different apps? How do you know this?

- Thinking about wellbeing, do you think looking across lots of different apps impacts wellbeing in a different way than looking a just one or two? Why or why not?
- Are wellbeing concerns around teenager's screen time about how much screen time they have and/or what they are viewing online? Ask for reasons to justify responses.

#### Developing a vision

Understanding – Key inquiry questions; Data; Using data to answer the inquiry questions (PPDAC: Critique findings of others by interrogating all phases of the statistical enquiry cycle)

- Explain to the students they are going to be given a scenario of an inquiry carried out by students (resource sheet 10A), along with some graphs they produced (resource sheets 10B, 10C and 10D).
- Guide the students through the discussion sheet (resource sheet 10E). It is suggested that a degree of teacher-directed learning will be needed to help students see the more nuanced flaws with the scenario and the data provided.
- Note: It is suggested that the line graph and scatter plot provide little useful information. The stacked bar graph may have some use but, overall, for the amount and type of data, the bar graphs in sheet 10B provide the clearest information but even then it takes some effort to understand the information. Students can debate which of the two versions of the graph in 10B is best for showing data reflecting the inquiry question, *Did the use of many different digital apps lead to longer screen time or not*? I.e., should the bars represent the time spent using the apps (10A[ii]) or the number of different apps used by students (10A[ii])? Which of these two graphs shows the answer more clearly and why? Is there overall agreement on this or is the class divided? Do you have any ideas about ways this data could be shown more clearly?

#### Planning

#### Acting

- Use an internet search to find five tips for managing screen time.
- See also Inquiries 7, 8 and/or 9.

## Evidence of student learning / learning artefacts

- Students file any written/digital recordings of their discussion ideas.
- If students use ideas from this inquiry for their own improved version of a similar inquiry, these materials are also filed.

## **Teacher reflection**

- This is quite a sophisticated task and it takes time to develop skills for analysis and interpretation, especially as the complexity of the data increases – such as showing relationships between variables. How readily were students able to pick up some of the assumptions made in the scenario and some of the shortcomings about the way the data was presented? How much guidance was required to help students to understand which representations of the data were the most appropriate for the inquiry question?
- In which other learning contexts might there be opportunity to look at data that might be prone to assumptions or misrepresentation?

## **Resource sheet 10A**

#### Scenario

Two groups of students were debating whether people **who use lots** of different digital platforms and applications (i.e., 'technologies' such as their cell phone [for texting etc.], YouTube, Instagram, Snapchat, Facebook, Twitter, TikTok, Twitch, Pinterest, BeReal, WhatsApp, Reddit and Discord) had **a lot more** screen time.

Some of the students thought that anyone who used lots of these digital apps had to have a lot of screen time, otherwise how would they get to look at them all and watch all the new videos, read their new messages, reply to their friends, and so on.

Other students said 'it depends', and just because someone uses lots of different digital apps doesn't mean they also spend a lot of time looking at their screens. They may just briefly look at something, and if that's not interesting or there's no new messages or notifications they just move on to the next application. And some people might only use one or two apps but spend a lot of time just on those.

Remembering they had answered survey questions about screen time and different digital apps used when their class completed the CensusAtSchool survey, they decided to carry out an inquiry to see who was 'right' – did the use of many different digital apps lead to longer screen time or not?

## Inquiry process the students used

They downloaded a random sample of data for 1000 students selecting the following:

- Year levels 9-11
- Technology yesterday\*
- Screen time\*\*

#### Note:

The CensusAtSchool survey questions for these two digital-world questions read:

\*Which of the following did you use four or more separate times yesterday? (You may tick more than one.) Own cell phone, YouTube, Instagram, Snapchat, Facebook, Twitter, TikTok, Twitch, Pinterest, BeReal, WhatsApp, Reddit, Discord, none of these. **Note that the data downloaded records these responses as 'yes' (used), 'no' (not used).** 

\*\*For your most recent whole school day, how much total screen time did you have after school before going to sleep? Answer to the nearest 15 minutes. Enter zero if you spent no time on screens. **Note that the data downloaded records times to the quarter hour.** 

They saved the download as an Excel file, but they realised the way the data was presented wasn't going to give them an answer to their inquiry/ investigative question straight away. There was a LOT of data on the spreadsheet but they knew they needed to keep a reasonable amount of data to have enough data to answer their inquiry/investigative question. They then had to do the following:

• Recode all the 'yes' and 'no' answers to the technology-use survey questions so that yes = 1 and no = 0.

- Count how many different apps each of the 1000 students had used using the AutoSum function. *This produced a list of total number of apps used for each person*.
- Use a PivotTable to make a table of their newly tallied data. However this still had a lot of information to manage because screen time was recorded in 15-minute time periods covering 0 hours to 8.75 hours 36 time periods in total.
- Copy this table onto another clean Excel page and divide the rows of screen time into hour chunks, which gave them nine time periods, which they thought would be easier to read on a graph.
- Count again (using the AutoSum) to produce the table below. Note they left off the tiny number of students that said they used more than eight forms of technology yesterday because they didn't think it was relevant for their inquiry/investigative question.

## N = 1000 students from Years 9-11

The numbers in the table are the total number of students who said they had # screen time hours and used # digital technologies. **E.g. there were 49** students who said they had between 3.35 and 4 hours of screen time and used four different apps on the previous school day.

Screen time after school yesterday	Number o	of apps use	d yesterday	/					
yesterday	0	1	2	3	4	5	6	7	8
0-1 hours	-	29	21	26	17	4	5	_	_
1.25–2 hours	2	18	27	41	34	21	6	1	_
2.25-3 hours	1	14	21	51	41	32	12	7	1
3.25-4 hours	2	14	28	42	49	34	16	5	1
4.25-5 hours	1	10	12	31	40	31	16	4	2
5.25-6 hours	-	5	7	20	21	21	4	7	2
6.25-7 hours	-	5	6	4	15	19	7	4	1
7.25-8 hours	-	2	2	6	14	5	6	2	2
8.25+ hours	-	_	2	7	5	8	3	1	_

They then created a variety of graphs and charts using the functions to swap around the data to see which graph gave then the information they needed to answer their inquiry question.

However, the groups soon realised that some types of graphs were not that useful. One of the group members thought bar graphs would be useful, but then what sort? Another thought a line graph should be used, and someone else said they thought a scatter plot would be useful for that sort of data.

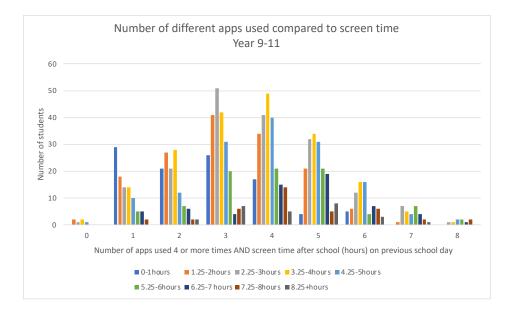
A selection of the graphs the group created are provided (resource sheets 10B, 10C and 10D).

They then debated what they thought the graphs were telling them about technology use and screen time.

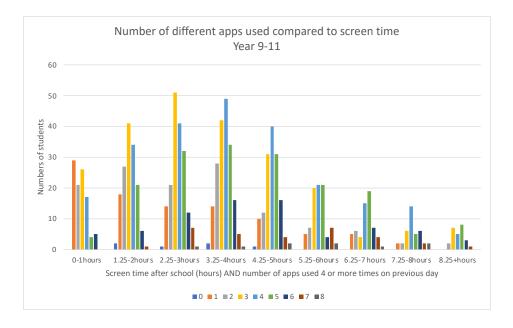
Use the discussion sheet (resource sheet 10E) to guide your interpretation of the graphs, to consider whether this was a worthwhile way to answer the group's original inquiry/investigative question.

## **Resource sheet 10B**





Graph 10a(ii). Bar graph of screen time and apps used—version 2

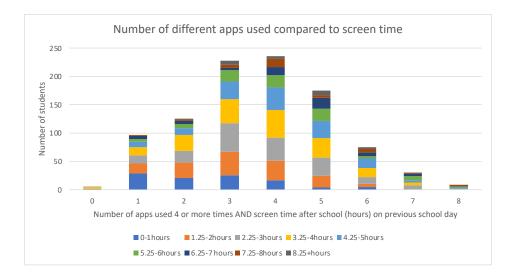


### Note:

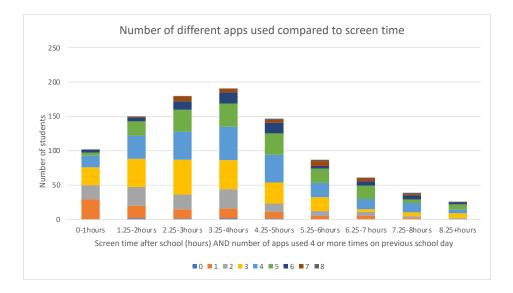
The numbers 0-8 are the total number of digital apps used by the students.

## **Resource sheet 10C**

## Graph 10b(i). Stacked column bar graph of apps used and screen time—version 1



## Graph 10b(ii). Stacked column bar graph of screen time and apps used—version 2

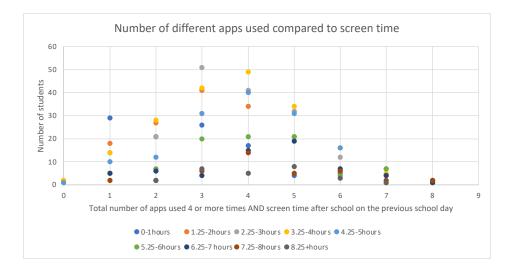


#### Note:

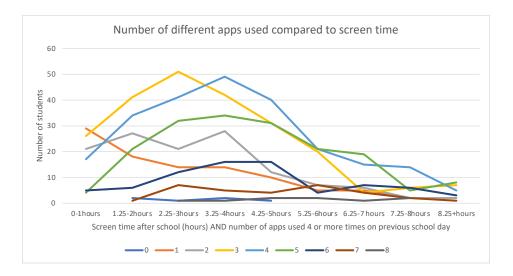
The numbers 0-8 are the total number of digital apps used by the students.

## **Resource sheet 10D**

## Graph 10c. Scatter plot of screen time and apps used



## Graph 10d. Line graph of screen time and apps used



#### Note:

The numbers 0-8 across the bottom of this graph refer to the total number of digital apps used.

## **Resource sheet 10E**

#### Introduction

• Do you think there is a relationship between screen time and how many different digital technologies (platforms or applications) teenagers use? If so what and why? If not why not?

E.g., if a person spends four hours after school looking at their screen do you think they are looking at several different technologies or just one or two of their favourites? If a person has only one hour of screen time are they looking at just one or two apps, and if someone has six hours of screen time are they looking at a lot of different apps? How do you know this?

#### Screen time, technology use and wellbeing

- Thinking about wellbeing, do you think looking across lots of different digital apps impacts wellbeing in a different way to looking a just one or two? Why or why not?
- Are wellbeing concerns around teenager's screen time about how much screen time they have and/or what they are viewing online? Ask for reasons to justify responses.

### SCENARIO – The students debate the inquiry / investigative questions

Did the use of many different apps lead to longer screen time or not?

**Group 1** said people who have longer screen time used a greater number of different apps (platforms and applications). **Group 2** said they didn't think screen time and number of apps used were at all related.

Assumptions	Group 1.	Group 2.
<ul> <li>What <u>assumptions</u> are each group making about the relationship between screen time and number of apps used.</li> <li>Think about things like what counts as 'screen time'? Which apps are considered as screen time? E.g., watching a programme on TV vs watching a programme on YouTube.</li> <li>Look carefully at the wording of the questions – note the day the students had to think of when answering the CensusAtSchool questions.</li> </ul>		

#### Data analysis

- When they analysed their data, why did the students recode the 'technologies used' data so that yes = 1 and no = 0?
- Why did they collapse the screen-time data from quarter-hour to whole-hour ranges?
- Do you think it was OK to leave off the information where a few students said they used 9-13 digital technologies? How could they have summarised and included this data without having to spread the graphs out?

#### Table of data

- Looking at the table of data, can you answer the inquiry/investigative question directly from these numbers in the table?
- What benefits do tables have over graphs?
- What are the benefits of graphs over tables?

#### Usefulness of the graphs - what do they actually show?

- Which of these graphs best provides an answer for the inquiry/investigative question?
  - Bar graph
  - Stacked column bar graph
  - Scatter plot
- Line graph
- Why this/these graphs?
- Do you think there's a better way to graphically show this information? If so, what?

## Responding to the inquiry/investigative question.

- Which group's claim does the evidence support? Why do you say this?
- What can you not tell from these graphs about the relationship between screen time and digital app use?

<ul> <li>The CensusAtSchool survey asked students:</li> <li>For your most recent whole school day, how much total screen time did you have after school before going to sleep? Answer to the nearest 15 minutes. Enter zero if you spent no time on screens. The data was recorded and downloaded to a spreadsheet as hours and minutes.</li> <li>Investigators and survey designers always need to make decisions about what to put in and what to leave out of a survey. What are the advantages AND limitations of this survey question?</li> <li>How else could the survey question be asked for the purpose of the student inquiry?</li> </ul>	Advantages	Limitations	Alternative question(s)
<ul> <li>The CensusAtSchool survey asked students:</li> <li>Which of the following <u>did you use four</u> or more separate times yesterday? (You may tick more than one.) Own cell phone, YouTube, Instagram, Snapchat, Facebook, Twitter, TikTok, Twitch, Pinterest, BeReal, WhatsApp, Reddit, Discord, none of these.</li> <li>Investigators and survey designers always need to make decisions about what to put in and what to leave out of a survey. What are the <u>advantages AND limitations</u> of this survey question?</li> <li>How else could the question be asked for the purpose of the student inquiry?</li> </ul>	Advantages	Limitations	Alternative question(s)
Learning from the inquiry			
• What do you think the students in the scenario learned from the inquiry?			

• What did you learn from what they did well and what they could have done better?

# Inquiry 11. Blocking people online

#### **Overview**

This inquiry aims to develop students' understanding of the practice of 'blocking' someone online and the implications of doing this (or not doing this) for people's wellbeing. Using the being online survey question *Have you blocked anyone online in the past week?* students will learn how to:

• interpret data about teenage online blocking behaviours and inquire into reasons why young people block others online – or not.

#### Background

The main focus for this activity is blocking people on social media platforms, although other forms of blocking can be considered if students are interested. The practice of blocking people on social media or blocking any content popping up on online platforms serves different purposes and has different impacts on wellbeing.

Blocking someone to avoid dealing with challenging personal issues — where respectful and effective communication is needed — is not generally a good thing. Whereas blocking someone who is cyberbullying or harassing another person online is a good thing. Making this distinction requires understanding the difference between a discussion or argument, where any conflict can be and needs to be resolved, and when someone is deliberately malicious and hurtful and where boundaries need to be put in place.

To understand the benefits and disadvantages of blocking people requires understanding of why people do it, the impact it may have on others, when blocking is a good way to support wellbeing, and how to do it using the settings that feature on the various social media (and other online) platforms.

#### Safety considerations

- Some students may have been subject to cyberbullying. Be sensitive to this and avoid questions that require excessive reflection of personal experiences. See Inquiry 7.
- Please review the information about using gender data in Section 5 of Overview of the Resource.

# This activity could link with <u>Inquiry 4</u>, <u>Screen time after school: Interpreting data</u>, <u>in Part A</u>, and <u>Inquiry 6 in Part B</u>.

## **Contributes to:**

#### Health Education

Students will learn how to:

 investigate reasons why some people block others online and situations where blocking (or using safety settings on social media) supports wellbeing.

#### Statistics

Students will learn how to:

• critique the findings and claims of others by interrogating all phases of the statistical enquiry cycle.

Key Competencies (Critical) Thinking; Using language, symbols and texts; Participating and contributing.

## **Expected timeframe**

• 1-2 hours (the longer time is required if students download their own samples of data).

## Data for the inquiry

- A summary of data, presented as tables and a graph, has been provided on the resource page for this activity. These data summaries were generated by specifically selecting for each of Year levels and/ or Gender along with the 'blocking' question responses. Each sample size is 1000, generated using the CensusAtSchool Random Sampler function. That is, for each year level or gender, it is not the same students.
- If required, students can generate their own samples of 1000 by selecting the specific population variables of interest.

### **Resources required**

- A digital device (and internet access if downloading further data and/ or needing to access the Netsafe resource directly from the online source).
- Resource sheet for Inquiry 11 with discussion questions.
- Access to the Netsafe resource <u>A guide to social media settings.</u>
- Video—Being online: What young people think—Discussing data from CensusAtSchool (4.27 min).

## Teaching process to guide the learning inquiry

#### Identifying an issue

#### Developing knowledge and insight

Ask students (as a class or discuss in groups):

- What do you understand it means to 'block' someone online?
- Is blocking on social media different to blocking (for example) pop-ups for advertisements? Why or why not?
- On which platforms do you block more people (or on which platforms do you think more people block others)? Why is this the case?
- Do you think many people block others online? If safe to do so, ask for a show of hands as to who has ever blocked someone online.
- Why do you think some people block others?
- Is blocking a good thing and/or a bad thing? Why?
- What are the wellbeing-related benefits of blocking someone?
- What might be the disadvantages for wellbeing of blocking someone? Think of both the person who did the blocking and the person who was blocked.

### Developing a vision – Key inquiry questions

- Pose the questions:
  - Do you think there could be a difference in the proportion of students who blocked someone online across year levels (9-11)? Why or why not? What sort of difference would you expect if you thought there was one?

• Do you think there could be a difference in the proportion of male and female students who blocked someone online? Why or why not? What sort of difference would you expect if you thought there was one?

## Understanding – Data

- Provide students with a copy of the resource sheet 11A. Instruct them to use the questions (resource sheet 11B) to guide their discussion. Provide support as needed to interpret the table and graph work through the discussion questions.
- Provide opportunity for groups to share a selection of ideas from their discussion and respond to the inquiry questions.

**Screen the video** Being online: What young people think — Discussing data from CensusAtSchool. Focus on the questions:

• A third of Year 9–10 students had blocked someone online in the past week. Why do you think so many young people are using blocking this often? What are some reasons young people might block someone online? (0.47 min)

Repeat the screening if required. As a class, summarise the main points the young people made in response to the blocking questions.

Class or group discussion questions:

- In what ways were Eden's, Kaitlyn's and Donovan's responses similar or different to your ideas about blocking discussed previously?
- What other ideas or comments do you have about blocking someone online as a result of this video?

#### Screen the video

Being online: Impacts and what young people can do—Discussing data from CensusAtSchool (subject experts). Focus on the questions:

 A third of Year 9-10 students had blocked someone online in the past week. In your experience, why might a person choose to block someone? Follow-up question: If someone is bothering you online, what can you do about it? (0.35 min)

Class or group discussion questions:

- Did the comments made by Sean Lyons (Netsafe) and David Shanks (the former Chief Censor) reflect your ideas, or did they add a new perspective to blocking someone online? Explain.
- · What recommendations or advice did they give about blocking?

Use some of these ideas for the planning and acting activities following.

#### Planning Acting

Pose the question: If we were to practice 'social media hygiene' when it comes to blocking or not blocking people online, how could you 'clean up' so that using social media is safer for all young people? Check that students grasp the idea of 'social media hygiene' and what it means to 'clean up' social media – the analogy being that if something is unclean/ dirty/toxic/unsafe/unhygienic then it can cause harm. Also draw attention to the idea that responding when you see something that isn't safe for you can also help others when they see you taking appropriate action.

- This is a type of expert jigsaw approach.] Locate the Netsafe resource <u>A guide to social media settings</u>. Assign pairs or groups a section of the guide (i.e., the four different named social media platforms plus the 'General online safety tips' and 'Dealing with abuse or bullying' sections six pairs/groups in total).
- Instruct the pairs/groups to familiarise themselves with their allocated section and summarise the material so that they can 'teach' another group about it.
- If needed, especially if working in pairs, double up on the allocation of the sections and have the pairs summarise and feedback to five other groups with different sections.
- Note the information with the final 'Get help' section.

## Evidence of student learning / learning artefacts

#### Students will:

• file a summary of the main discussion points on the resource sheet.

## **Teacher reflection**

How readily are students able to interpret graphs? Do they respond better to data in tables or data in graphs? What is the implication of this for other learning contexts where they will be looking at survey and research data? Which topics will give them further practice reading graphs and tables?

### References

Netsafe. (2020a). A guide to social media settings. <u>https://netsafe.org.nz/advice-to-deter-abusive-behaviour/a-guide-to-social-media-settings/</u>

## **Resource sheet 11A**

## Table 11a. Blocking by each year level and each gender

% who blocked someone	Year 9	Year 10	Year 11	Males	Females
No	66	69	68.5	71.2	64.1
Yes	33	31	31.5	28.8	35.9

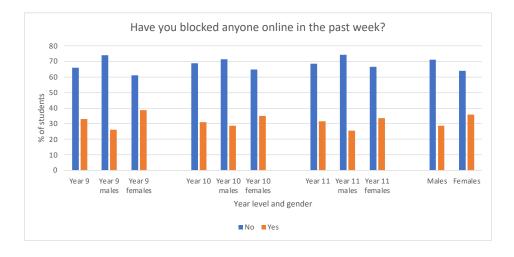
Note: A random sample of 1000 responses was used for *each* of these summaries.

## Table 11b. Blocking by year level and gender

% who blocked someone	Year 9 males	Year 9 females	Year 10 males	Year 10 females	Year 11 males	Year 11 females
No	74	61.2	71.4	64.9	74.3	66.5
Yes	26	38.8	28.6	35.1	25.6	33.5

Note: A random sample of 1000 responses was used for each of these summaries.

## Graph 11. Blocking by year level and gender



## **Resource sheet 11B**

## Interpreting the data

<i>Recall from the class discussion:</i> Do you think there could be a difference in the proportion of students who blocked someone online across year levels (9–11)? Why or why not?	
Based on the tables (11a, 11b) and graph (11) above, is there a difference in the proportion of students who blocked someone online between Years 9-11?	
If so, explain the difference.	
How similar or different is this finding to your earlier thoughts about blocking across year levels? Were you surprised at these results? Why or why not?	
<i>Recall from the class discussion:</i> Do you think there is much of a difference in the proportion of males and females who block someone online? Why or why not?	
Based on the tables (11a, 11b) and graph (11) above, is there a difference in the proportion of male and female students who block?	
Why do you think this is the case?	
How similar or different is this finding to your earlier thoughts about online blocking between males and females? Were you surprised at these results? Why or why not?	

# Inquiry 12. The impact of manipulated online content\_and what to do about it

**Overview** 

This inquiry extends beyond the CensusAtSchool data to ask questions about the use of algorithms in the digital world and the impact they have on the type of content users of digital technologies are directed to. Through this inquiry students will learn to:

• recognise the various ways online content they view is manipulated (through the use of algorithms) and what they can do to minimise exposure to/harms of manipulated content.

#### Background

In mathematics and computer science, an algorithm is a set of step-by-step instructions to accomplish a task or solve a problem. When algorithms are included in a computer program, they provide a set of commands that must be followed for the computer to perform calculations or other problemsolving operations. The internet and social media would not function without algorithms, but this also means that programming can be designed to profile user likes and interests based on sites they visit and what they post. The algorithms can then prioritise and increase and the amount of particular content that appears on social media and in searches, and personalise content to the user.

On social media platforms, algorithms are used to amplify information that sustains people's engagement, meaning they keep people clicking on content and coming back to the platforms. Online marketers and advertisers make extensive use of this technology to ensure their products pop up on social media, or that a search takes the user to their products, or keeping users scrolling in order to show them more advertisements. 'Cookies' are small pieces of data that track users across websites. They are records of actions people take online (such as links clicked on, and webpages visited) that are stored in the browser of a computer or personal device.

One of the more concerning consequences of this content manipulation is the way information is filtered, meaning users are exposed to content that reinforces their existing beliefs and limits exposure to diverse perspectives. This is particularly concerning when applied to the spread of unbalanced and biased political perspectives. Also, sensational or controversial content often gets prioritised because it tends to generate greater engagement, further distorting the information a person accesses, which results in people forming incorrect perceptions of their social world – and perpetuating this misinformation through reposting.

**Safety considerations** See Inquiry 7.

### This activity could link with <u>Inquiry 6 In Part A</u> and <u>Inquiry 13 in Part B</u>.

## **Contributes to:**

#### Health Education

Students will learn how to:

- recognise the various ways online content they view is manipulated (through the use of algorithms)
- what action can be taken to minimise exposure to/harms of manipulated online content.

#### Key Competencies

(Critical) Thinking; Participating and contributing

### **Expected timeframe**

• 1 hour.

## Data for the inquiry

• Nil

### **Resources required**

- Access to a digital device and the internet.
- Resource sheet for Inquiry 12.
- Video—Being online: Impacts and what young people can do—Discussing data from CensusAtSchool.

## Teaching process to guide the learning inquiry

#### Identifying an issue

#### Developing knowledge and insight

- Ask students what they know about algorithms and how algorithms are used in social media or internet advertising. Use the background section for this inquiry as a source of prompts if needed.
- Why do they think the manipulation of online content is a cause for concern in relation to people's wellbeing?

**Screen the video** Being online: Impacts and what young people can do—Discussing data from CensusAtSchool (subject experts). Focus on the questions:

- The most common concern young people had about going online was that they were 'wasting time'. How do the internet and apps attract people to stay online for long periods of time? (2.22 min)
- There has been a lot in the media around fake news and misinformation, but this was not in the top 20 things students listed about being online. Why do you think that is? (3.45 min)

Explain to the class that the question where the issue of fake news and misinformation may have come up in the CensusAtSchool survey was *In five words or less, what do you think is the worst thing about going online for you?*.

• Why do you think issues about fake news where not the thing most students thought of when answering the 'worst online' question?

Discuss as a whole class or in small groups:

- Did the comments made by Sean Lyons (Netsafe) and David Shanks (the former Chief Censor) reflect your understanding about the way social media algorithms manipulate the content that you see online? Or did their answers add a new perspective or new information for you? Explain.
- What recommendations or advice did they give about responding to fake news and misinformation, and what to do if you realise you have passed on misinformation?

Use some of these ideas for the following activities.

- Resource sheet 12 provides a series of questions for groups to investigate as a form of guided inquiry.
- Organise students into groups and either instruct students to work their way through the questions (all of which require an internet search) or allocate a selected number of questions to groups if time is limited.
- Discuss with students what is meant by a reputable source for finding answers to questions, e.g., reputable newspaper and other news media articles, research articles, .govt .gov .org .ac or .edu websites and not social media posts or personal blogs.
- If/where required, facilitate a focused search for any questions that are more problematic to find answers for.
- Provide opportunity for sharing ideas about a selection of questions.

## Planning

Acting

- Complete the **Taking action** section of resource sheet 12 as instructed. It may be useful to direct students to Netsafe and the Classification Office websites for this.
- Provide opportunity for sharing ideas about a selection of questions.
- Optional: Compile a list of all actions to share with the class.

## Evidence of student learning/learning artefacts

Students will:

- file their responses to the inquiry questions (as framed by the resource sheet)
- file a compilation of the class's suggestions for taking action to minimise exposure to/harms from manipulated content.

## **Teacher reflection**

- How efficient were students at finding reputable online content to answer the questions? What are the implications of this for other learning where online searching is a key requirement for sourcing information?
- Did this investigation surface any concerns about students' online behaviours that may warrant additional consideration through the use of the school's approach to digital safety? If so what, and what action can you take as a teacher?

### References

Classification Office. (2021). The edge of the infodemic: Challenging misinformation in Aotearoa. https://www.classificationoffice.govt.nz/media/documents/The Edge of the Infodemic.pdf

*The Conversation* (New Zealand) has a range of short, easy-access articles—go to <u>https://theconversation.com/nz</u> and search 'algorithms'.

Additional video and source material can be found on The Algorithm and Data Literacy Project (supported by UNESCO). See *What is artificial intelligence, algorithm & data literacy?* <a href="https://algorithmliteracy.org/">https://algorithmliteracy.org/</a>

#### Note

'Using statistics across the curriculum' (Overview of the Resource, Section 4) contains a range of references to support teachers' professional learning as well as providing additional resources for students on a range of matters related to the use of reliable data and information.

## **Resource sheet 12**

## How online content is manipulated

Working in a group, find answers to these questions from reputable sources. You only need 1–2 sentences and these can be cut and pasted from the source. Include a copy of the URL you get each answer from.

Inqui	ry question	<b>Your answer</b> (this can be cut and pasted from the source)	URL of the source
1.	What is an algorithm?		
2.	a. When used in the design of social media platforms, what can algorithms do?		
	b. Why might this cause concern for people's wellbeing? Give examples for two different social media platforms.		
3.	a. How do marketers and advertisers make use of algorithms?		
	b. Why might this cause concern for people's wellbeing? Give some specific examples.		
4.	a. When used in the design of other online platforms such as internet search engines, what else can algorithms do?		
	b. Why might this cause concern for people's wellbeing? <i>Give an example.</i>		
5.	a. What is a 'cookie' when the term is applied to the internet?		
	b. On social media, what is an 'emotional contagion'?		
	c. What is meant by 'going down a rabbit hole' when the term is applied to being online?		
6.	a. How do algorithms contribute to the spread of misinformation?		
	b. How are algorithms linked to some people becoming 'radicalised'?		
Takir	ig action		
7.	a. What do young people need to be <b>educated</b> about to reduce exposure to manipulated content online? <i>List</i> <i>five ideas</i> .		
	b. What sorts of personal/self-management skills do people need to develop to help them reduce exposure to manipulated content online or to not be negatively impacted by such content?		
	c. What does an ad-blocker do and how can you install one on your device?		
	d. How can you block content on social media? <i>Give a</i> specific example.		

# Inquiry 13. The impact of disturbing content on wellbeing – and what to do about it

**Overview** 

This inquiry aims to develop students' understanding of the impact of disturbing or distressing online content on wellbeing. After generating their own data from a class survey, students will learn how to:

 recognise the impact of disturbing or distressing online content on wellbeing, and explore ways to reduce exposure to disturbing or distressing online content.

#### Background

Many young people have viewed or heard distressing or disturbing content online, whether they were deliberately seeking it out, or they received it by unsolicited means. The disturbing content maybe pornographic or other sexually explicit content; violent, extremist views on political, social or identity-related matters; dangerous behaviours (and challenges to copy these); mis- or disinformation and conspiracy theories.

The focus for this inquiry is the type of distressing online content that, once one item is clicked on and viewed, offers users more of the same, drawing them evermore into viewing large quantities of the same content. These sites offer little to no opportunity to filter, limit or moderate populist or extremist views, mis- or disinformation; nor do they provide critical and informed, evidence-based perspectives.

Viewing distressing content is known to have negative impacts on youth mental health, and the new terms that have been invented to describe these online behaviours are indicative of these impacts — terms such as 'echo chambers', 'clickbait', 'doom scrolling', 'trauma dumping', 'sadfishing', etc., and these are in addition to the many terms used to name other social media behaviours that impact wellbeing.

#### Safety considerations

Many young people will have viewed disturbing or distressing online content, and not necessarily by choice. Be sensitive to this and frame questions around what they may have heard about rather than what they may have personal experience of. Students may choose to share personal experiences, but that is not a requirement for learning.

It will be important to monitor student conversations in order to maintain a focus on the learning purpose of this activity. Direct discussion away from students describing in detail what they have seen and heard online and keep the focus on the impacts on wellbeing and how to reduce exposure to such material.

See also Inquiry 7.

## This activity could link with <u>Inquiry 1 (survey) in Part A</u> and <u>Inquiry 12 in Part B</u>.

## **Contributes to:**

### Health Education

Students will learn how to:

- recognise the impact of disturbing or distressing online content on wellbeing.
- identify ways to reduce exposure to disturbing or distressing online content.

#### Statistics

Students will learn how to:

- plan to collect data for observational studies, including selecting valid and reliable measurements for variables.
- use multiple representations to analyse and visualise data.

#### **Key Competencies**

(Critical) Thinking; Relating to others; Participating and contributing

#### **Expected timeframe**

2-3 hours (includes a class survey; note the need to prepare this in one lesson, then answer it and analyse the data in a subsequent lesson).

## Data for the inquiry

• Student-generated data from a class survey.

## **Resources required**

- Access to a digital device and the internet (survey and analysis).
- Resource sheets for Inquiry 13.
- Survey ideas and information sheet.

#### Teaching process to guide the learning inquiry

#### Identifying an issue

#### Developing knowledge and insight

- Explain to the class they are going to be learning about how to reduce exposure to distressing or disturbing online content.
- Provide groups with internet and social media terminology sheet (resource sheet 13A). Support groups to work through the discussion as needed. Note that the grouping of the words is not that important. The point of the learning is around what some of the terms mean and what this is saying about the way disturbing content on social media or the internet impacts wellbeing.
- Ask the class to contribute answers to the question at the bottom of the page: Thinking about the terms related to viewing disturbing online content, in what ways do these words indicate the possible impact these online behaviours might have on people's wellbeing?
- Provide students with the online behaviours discussion sheet (resource sheet 13B). Allow time for discussion and the formation of ideas for some of the questions. Ask for some of these ideas to be shared with the class.
- Optional: The (re)use of the video Being online: Impacts and what young people can do—Discussing data from CensusAtSchool (subject experts) could also be rescreened here—see Inquiry 12.

#### Developing a vision – Key inquiry questions

• Explain to the students that they are going inquire into the sort of disturbing or distressing content teenagers their age are exposed to online. This inquiry focus can be negotiated but, for safety, it is suggested that the teacher gives clear direction to this inquiry question.

### Understanding – Data

- Discuss the suggested survey questions with the class (see resource sheet 13C). Amend the survey questions as required after discussion.
- Set up an anonymous survey that can be completed in 3–5 minutes by members of the class—either prior to the next class or during the next lesson. Use a survey application that the school has access to. Results need to be accessible during a follow-up lesson either as raw data, or summarised if students are not doing the analysis themselves.
- If students are analysing the data, provide students with the raw data in an Excel spreadsheet or CODAP document and allocate a survey question to each group for summarising — more than one group can work on a survey-question summary. Provide the results for the survey question in a table or graph, or other format suitable for the survey question. See Inquiry 3 on formatting and presenting data. Provide the opportunity for all students to digitally share their data analysis so that each student has a summary of all survey questions.
- OR, if students are not analysing the data, provide groups with a teacher-developed summary of the class results for each survey question—tables, graphs or other format as suitable for the survey questions.

Using data to answer the inquiry questions:

- Working in groups, students review the summaries of each survey question and draw conclusions about the inquiry question based on the data collected from the class.
- Ask the class what surprised them (or what didn't surprise them), and why?
- What other inquiry questions does this raise?

#### Planning

#### Acting

- Distribute resource sheet 13D, *Taking action to reduce exposure to distressing or disturbing content online*. Allow time for groups to respond to the questions.
- Provide opportunity for students to share their responses with the class.

### Evidence of student learning/learning artefacts

#### Students will:

- file any materials they produced from the activities
- include a summary of the actions to take to reduce exposure to distressing or disturbing content, along with links to Netsafe or other resources that support these actions.

## **Teacher reflection**

- How widespread were students' concerns about the amount of distressing or disturbing content online? Are there any aspects worth developing in more detail, e.g., education about pornography.
- Did anything in this activity suggest a need for a whole-school response as part of the school's digital safety education? If so, what and who do you need to discuss this with?

## References

Useful local reading:

Peacock, C. (2022, May 22). Slaves to the algorithm? *RNZ*. <u>https://www.rnz.co.nz/national/</u>programmes/mediawatch/audio/2018842459/slaves-to-the-algorithm

If evidence from the lesson suggests this activity needs to extend to a focused consideration of the impact of pornography on wellbeing, see these sources (links in Support Agencies and Resources at the end of this resource):

- Classification Office reports
- Ministry of Education
- Light Project

Additional video and source material can be found on The Algorithm and Data Literacy Project (supported by UNESCO). See What is artificial intelligence, algorithm & data literacy? https://algorithmliteracy.org/

Note that Section 4 of Overview of the Resource, *Using statistics across the curriculum*, contains a range of references to support teachers' professional learning as well as provide additional resources for students on a range of matters related to the use of reliable data and information.

For managing teaching and learning around disturbing and distressing materials related specifically to pornography, see the teacher PLD module <u>Changing the korero around</u> pornography.

## Resource sheet 13A Internet and social media terminology

## The language of internet behaviours

Online behaviours have created a whole new vocabulary of terms. These lists of terms change over time and new terms are added.

#### Item bank of internet and social media behaviour terms to use

echo chambers, gleefishing, doxing, fabotage, flaming, clickbait, doom scrolling, trauma dumping, sadfishing, filter bubble, phishing, grooming, griefing, catfishing, forcie, sexting, thrillification, FOMO, cookies, fake news, misinformation, disinformation, conspiracy theory, cyberstalking, cyberbullying, ghosting, social bots, trolling, link farms, emotional (or complex) contagion, hate speech, radicalisation, blocking, bash board, cancelled, finsta, hacking, geotagging, photoshopping, revenge porn, shoulder surfing, text bombing, unfriend (or unfollow), webcrastinate, webdrawls ... and many more. Add your own ideas to this list.

# Use the selection of terms in the item bank above, as well as others that you know of, to identify:

1. Terms re online co	lated to viewing disturbing ontent.	
2. Terms re	lated to social media behaviours.	
3. Terms re	lated to scams.	
4. Terms th categorie	at do not appear to fit into one of the es above.	
5. Terms th never he	at you don't know or have ard before.	

## **Discuss:**

Thinking about the terms related to viewing disturbing online content, in what ways do these words indicate the possible impact these online behaviours might have on people's wellbeing?

## Resource sheet 13B

**Online behaviours discussion sheet** 

# Exploring reasons why some people are drawn into viewing more and more disturbing content, and the impact this has on their mental health and wellbeing.

- a. Identify some forms of distressing or disturbing content members of the group know about or have seen online. Avoid being excessively explicit describing these examples.
- b. Thinking about the online places you can see distressing content like this, what happens to the other recommended content you are directed to if you click on an initial link to some of this content. What happens if you then click on some of these newly recommended links (and so on)? How or why do you think this happens?
- c. Why do you think many people keep clicking on the links that appear once one site is visited? What is going on with their thoughts and feelings as they get drawn into linking to more and more of the recommended content?
- d. Why do you think some people find it hard to stop clicking these links, and end up viewing large amounts of distressing content?
- e. What are some of the impacts of viewing large amounts (or even small amounts) of distressing content—how does it affect a person's thoughts and feelings, and their behaviour, as a result?

Provide the class with a summary of your responses.

Source of further information if required: Harmful content online

## Resource sheet 13C

#### Survey of class internet behaviours

Your class is going to carry out a survey about distressing or disturbing online content. In your group, decide if these questions below are the most useful to ask students in your year level about internet behaviours. If you have ideas about ways to change these questions, or other ideas for questions, contribute these to the discussion to help finalise the survey the class will answer.

#### Suggested survey items

Think about the applications or sites you use when you are online – where you view content generated by other people.

- In the past week, have you seen any online content that was distressing to you?
   Yes / No / Not sure
- In the past month, have you seen any online content that was distressing to you?
   Yes / No / Not sure
   [If yes go to Q3, if no/not sure go to Q5]
- 3. **If yes**, what was the nature of this distressing content? (Allow participants to click on all that apply):
  - violence toward others
  - radical or extremist views
  - hate speech
  - extreme behaviours
  - sexually explicit
  - cruelty to animals
  - damage to property
  - other
- 4. How does this content make you feel?
- 5. If no or not sure, how do you avoid seeing distressing online content? (Allow participants to click on all that apply):
  - not clicking on links
  - blocking people or sites that post this content
  - not using applications or going to sites where this content features
  - other

OR

• I don't find any content distressing

## **Resource sheet 13D**

Taking action to reduce exposure to distressing or disturbing online content

#### How to manage, minimise or avoid distressing online content

- What recommendations do you have about minimising (or avoiding if possible) viewing distressing online content?
- What actions can an individual take personal responsibility for, to minimise exposure to or avoid distressing online content? What actions do other people need to take responsibility for?
- If you were aware that a friend or family member was being negatively affected by viewing disturbing online content, how could you (or another person) support them to reduce their viewing and improve their wellbeing?
- How do you think an individual could 'power wash' or 'detox' after viewing disturbing content online?
- Check out the Netsafe recommendations at the following links. What further suggestions can you add to your ideas? <u>What to do if something upsets you</u>, <u>Helping</u> <u>young people exposed to upsetting content</u> and <u>Distressing content</u>. You can also use ideas from other support sites that you know of.

Provide the class with a summary of your responses.