Changing technology

This learning sequence comprises two short inquiries.

## Topic – The past in the present

5 weeks – 90 minutes per week

### Key inquiry questions

* How have changes in technology shaped our daily life?

### Overview

This learning sequence consists of two short inquiries – the changing technology in the home and community and the impacts of changing technology. In the first, students investigate how technology has changed in their home and community. They discuss the similarities and differences of technology from the past and sequence them over time. In the second, students explore the way technology has changed the way we communicate. They use a range of communication forms to explain the impact of changing technology on people’s lives.

### Outcomes

A student:

* HT1-3 describes the effects of changing technology on people's lives over time
* HT1-4 demonstrates skills of historical inquiry and communication

### Content

The impact of changing technology on people's lives (ACHHK046)

Students:

* identify examples of changing technologies in their home or community
* discuss the similarities and differences of technology from the past through a range of sources and sequence them over time
* use a range of communication forms to explain how one example of changing technology affected people's lives

### Historical inquiry skills

Comprehension: chronology, terms and concepts

* discuss and recount stories of family and local history
* sequence familiar objects and events (ACHHS031, ACHHS047)
* distinguish between the past, present and future (ACHHS032, ACHHS048)

Use of sources

* explore and use a range of sources about the past (ACHHS034, ACHHS050)
* identify and compare features of objects from the past and present (ACHHS035, ACHHS051)

Perspectives

* explore a point of view within an historical context (ACHHS036, ACHHS052)

Empathetic understanding

* recognise that people in the local community may have lived differently in the past

Research

* pose questions about the past using sources provided (ACHHS033, ACHHS049)

Explanation and communication

* develop a narrative about the past (ACHHS037, ACHHS053)
* use a range of communication forms (oral, graphic, written, role play) and digital technologies. (ACHHS038, ACHHS054)

### Selected historical concepts

Cause and effect – events, decisions or developments in the past that produce later actions, results or effects, for example, how everyday life has changed over time; how changing technologies affected peoples' lives over time.

Continuity and change – some things change over time and others remain the same, for example, changes and similarities in family life over time; aspects in the local community that have changed or remained the same.

Syllabus extracts are quoted from [History K-10 Syllabus](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/hsie/history-k-10) © 2012 NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales.

### Assessment

All activities require students to demonstrate their learning. All are assessment for learning activities.

### Vocabulary

Ask, listen, observe, explore, examine, identify, record, describe, sequence, compare, recall, explain, discuss, recount, illustrate, write, present, role play, reflect

Time, past, present, similar, different

Story, photograph, object, book, collection, video, museum, source, timeline

Technology, change, impact, cause, effect

## Teaching and learning activities

This learning sequence comprises two inquiries.

### Inquiry 1 – family structures past and present

Students use sources to identify examples of changing technologies in their home and community. They discuss the similarities and differences of technology from the past and sequence them over time.

#### Stimulus

**Museum**

Prepare a ‘museum’ collection containing a variety of old and new objects and photographs, that show changes in communication technology over time. Students walk through the museum exploring the different objects. The objects and photographs could include an old phone, mobile phone, television, radio, computers old and new, a letter, mailbox, noticeboard, internet or examples of a mail delivery service by horse, car, van or bike.

As a class examine and identify each object and decide if it is from the past or the present. Discuss the similarities and differences between the different types of communication technology and sequence them from oldest to newest.

#### Historical inquiry step 1 – question

After exploring the museum, and guided by the syllabus dot points, generate a class set of inquiry questions, for example:

* What is technology?
* How has it changed?
* What are the similarities and differences of technology from the past to present?

Note ­– inquiry questions may need to be redesigned through the historical inquiry process.

#### Historical inquiry steps 2 and 3 – research and analyse

**Changes in technology over time**

Complete a think-pair-share with students in response to the question: What is technology? Ask students to think and write or draw their answers to the question. Students then discuss their thoughts in a pair and then share their combined ideas with the class to create a class mind map. Revisit the mind map during the inquiry and add new facts that students have learnt.

Read Source 1 – Window by Jeannie Baker, Walker Books, 2002. Complete a shared reading of the book and focus on the changes in technology from the past to the present. The shared reading is used to model the skill of posing questions about the past using the book as a source. Ask students what they can see in each window and how it changes over time. Create a timeline that shows the changes in technology in each window scene.

Ask students to talk to their parents or grandparents to find out how technology has changed since they were children. Students provide a recount of the information to the class. Create a display that captures the information with the focus being – How has technology changed over time?

**Similar and different**

Reread the book Window. Change the focus of the shared reading to look at the similarities and differences between the technology of the past and the present. Concentrate on one form of technology to record the similarities and differences from the past to the present. Record using illustrations and words.

Explore the classroom museum. Choose a piece of communication technology, for example, the phone and discuss with students the type of phone communication they have at their house and then share your own experience with phones in your household growing up explaining how the phone has changed. Brainstorm what a phone can be used for in the present compared to the past e.g. text messaging, internet, music.

Discuss the similarities and differences between a phone of the past and a mobile phone today. Ask students: What do the phones look like? How are they used? What are the differences and similarities in their function? How has the use of the phone advanced? What form of communication did people use before phones were invented?

In pairs students choose a different piece of communication technology from the museum which represents the past and the present. Students complete a Venn diagram to record similarities and differences in the technology. Students share their ideas with the class.

#### Historical inquiry step 4 – evaluate

Ask the students to recall some of the sources used to collect information about technology of the past. Discuss the reliability of the sources. Whose view is presented? What might be missing or forgotten?

#### Historical inquiry step 5 – communicate

**Museum guide**

Students choose one object they have learnt about in the museum. Students create a label for the object that includes some key words or facts which highlight what the object is used for and how it has changed over time.

**Reflection**

Students reflect on the historical inquiry process, reflecting on what they learnt, how they learnt it and what else they would like to find out.

### Inquiry 2 – the impacts of changing technology

Students explore the way technology has changed the way we communicate. They use a range of communication forms to explain the impact of changing technology on people’s lives.

#### Stimulus

Brainstorm the different technology that students use to communicate with their family and each other.

Examine the photographs in sources 1 and 2. Ask students to complete a see-think-wonder about the two sources. What do they see in the photos? What do they think of? What do they wonder about?

Source 1 – Air mail envelope and letter

An envelope with a stamp in the top right corner, an image on an aeroplane on the bottom right corner and the words 'By air mail'.

[Jeric Santiago, Flickr](https://flic.kr/p/5EfQHv). [CC BY 2.0](https://creativecommons.org/licenses/by/2.0/)

Source 2 – Meeting the mailman, circa 1884-1917

A man is on a horse in a field beside a lake. He has a large bag attached ot the saddle. A woman is looking at the man and is holding an envelope in her hand. 



[Powerhouse Museum on Flickr](https://flic.kr/p/8thDQa). No known copyright restrictions

#### Historical inquiry step 1 – question

After observing the photos, and guided by the syllabus dot points, generate a class set of inquiry questions, for example:

* How has technology changed the way we communicate?
* What impacts has technology had on people’s lives?

Note – inquiry questions may need to be redesigned through the historical inquiry process.

#### Historical inquiry steps 2 and 3 – research and analyse

**Technology and communication**

Read source 3 – The fabulous friend machine by Nick Bland, Scholastic Australia, 2016. Share the book with students, emphasising the highlighted words. Ask students: How was Popcorn a friend to the other farm animals? What was the impact of Popcorn’s use of the ‘fabulous friend machine’ on her friends and on herself? How do we know how Popcorn’s friends felt about the mobile phone?

Re-read source 3, to the mobile phone find. Discuss how Popcorn communicated with her friends before discovering the phone. How did people communicate before messaging via smart phones?

Source 4 – [Australia Post – 200 Years of History](https://www.youtube.com/watch?v=lWvzoh6LbFA&feature=youtu.be), Australia Post, YouTube (14:45min). Watch the timeline video in Source 5. Examine the images representing changes in postal and telegraph technologies in Australia over the past 200 years. Brainstorm the changes that students observed when watching the video.

Students write a letter to their family that outlines changes in mail technologies. They address an envelope and insert their letter.

**What are the impacts of changing phone technologies on people’s lives?**

‘...she was so busy sending messages, she didn’t even look up to say hello.’

The fabulous friend machine by Nick Bland, Scholastic Australia, 2016

Re-read Source 4, from the phone discovery. How did Popcorn’s behaviour change when she discovered the phone? What was the impact on each of her friends?

Students use role play to enact the interactions of Popcorn and her friends before and after the phone discovery. Use hot-seating for students to share their feelings.

Scan through the icons on a mobile device, either projected or personally. Identify the features of the device and discuss their benefits, e.g. taking and sending photographs and videos, Internet access, emailing.

Collectively construct a cause and effect table showing the positive and negative impacts of present-day mobile phones and devices.

Table 1 – impacts of phone technologies

| Feature of device | Positive impact | Negative impact |
| --- | --- | --- |
|  |  |  |
|  |  |  |

**How have School of the Air technologies changed? What are the impacts?**

Popcorn and her friends lived on Fiddlesticks Farm in the country. Children growing up on remote farms do their schooling at home through a distance education provider, originally by radio and mail, and now by computer, satellite and broadband technologies. Schools include School of the Air and Aurora College.

Source 5 – A School of the Air primary student in regional Queensland takes class via two way radio, circa 1960



[Queensland State Archives](http://tiny.cc/4j779y). Copyright expired

Source 6 – [Alice Springs School of the Air: History](https://www.assoa.nt.edu.au/visitors-centre/the-centre/history/), Alice Springs School of the Air

Observe source 5 then click on the hyperlink and scroll through the timeline in Source 6, examining the photographs of students and the school. Locate and view additional School of the Air photographs in Google Images and [Trove – Pictures.](https://trove.nla.gov.au/picture) Copy a selection that represent changes in time and save in a folder for digital use or printing.

Students sequence and label the saved School of the Air photographs digitally, or manually, to create a timeline showing the changing technologies used by remote students and their teachers. They verbally explain the changes and the impacts the changes have had on students.

#### Historical inquiry step 4 – evaluate

Discuss the reliability of photographs and stories of how communication technology has changed over time. Do they provide a true representation of the changes in technology and how it has impacted our lives? Do the inquiry questions need to be redesigned as a result of analysing and evaluating sources?

#### Historical inquiry step 5 – communicate

**The most valuable technology to communicate**

Ask students to think about the following questions: What piece of communication technology can you not live without? How has it changed the way you communicate? Students ask a grandparent or a parent to share their own thoughts on the same questions. Students create a short video or animation to share the responses.

**Reflection**

Students reflect on what they learnt, how they found out and what else they would like to know.

#### Resources

**Picture books**

Window by Jeannie Baker, Walker Books, 2002

The fabulous friend machine by Nick Bland, Scholastic Australia, 2016

**Video**

[Australia Post – 200 Years of History](https://www.youtube.com/watch?v=lWvzoh6LbFA&feature=youtu.be), Australia Post, YouTube (14:45min).