AUSTRALIAN HISTORY: CREATING A DIGITAL TIMELINE
Levels 3-4

This unit of work was created in collaboration with teachers from St Francis of Assisi Primary School, Mill Park, Victoria.

Unit Overview

These series of lessons incorporated into a term unit that focusses on Australia's history. The concept of these lessons is for students to collaboratively build a timeline that displays information they have learnt about Australian's history. This unit does not provide information that is needed for the timeline, but rather an opportunity to display the information. Teachers will need to complete their own planning of the information prior to delivering these lessons.

The collaborative timeline will allow students to explore the following Digital Technologies Curriculum topics:

- Collaboration and working with peers in an online environment.
- Design thinking to create a unified format that all student will use and be able to think about what is needed for the digital solution.
- Computational thinking to articulate how each slide will interact with each other and the whole slide show presentation.

Other Curriculum Targeted Areas

The digital technology is central to this unit of work. Areas of interest may include:

- Personal Capabilities
- History

Further investigation into these areas is required to ensure they align with the following activities. Activities may need be modified to ensure Content Descriptions and Achievement Standards are met.

Australian Curriculum Alignment

The following sessions have been created using the Australian Curriculum: Digital Technologies Curriculum. Activities may need to be modified to ensure state Digital Technologies Curriculum Standards/Syllabus are met. ACS has support and documents to help align this unit to other Digital Technology Curricular.

Session

'Session' has been used to define the order of tasks to complete the unit. It does not define a set time required to complete the task. Time allocated to complete a session is the teacher's discretion. This allows for flexibility for to drive the duration of the task and make modifications if necessary. Sessions can be merged into one allocated class period or may run over multiple periods.

Key Preparation

For these lessons a slide show is the chosen platform to create the timeline. The device used will depend on the school's resources and the teachers' use of digital technology.

ACS Resources

Resources have been created to help teachers and students unpack and understand topics found within the Digital Technologies Curriculum. These give brief explanations of the topic and the expectations to teach the topic at the curriculum year level. It is intended the information is presented in a way that will set the foundation for further research.

ACS has resources to support the teaching of the Digital Technologies Curriculum from Foundation to Year 10. Access the ICT Educators resources via:

https://www.acs.org.au/ict-educators.html

Flow charts

Flow charts are a way to organise and present algorithms in English. The flow charts can either be generated by hand writing the commands, this will suffice the curriculum requirements.

Key Understandings	Key Questions
Students will: - Understand the importance of having protocols when working in an online space with their peers. - Use design thinking to create their slide shows to demonstrate their learning of Australian history. - Use computational thinking to articulate how the slide show will operate using explicit written sentences (algorithms). - Transfer the explicit written sentences (algorithms) into a flow chart. - Create a slide show from their design.	- What protocols (rules) do we need to put in place so we can all work collaboratively? - How can you create a slide show presentation that is interactive for the user? - What are the instructions to use your slide show presentation? What options are available for the user? - What digital skills do you need to develop to have a slide show that is driven by the user?

Key Vocabulary

Collaboration, social protocols, ethical protocols, design thinking, computational thinking, algorithms, branching, user input, digital solutions

Session Number	Session Topic Focus	Learning Intention and Success Criteria	Introduction/Teacher Instruction	Whole Class Activity
1.	Collaboratively working online	**Learning Intention** Create and follow a set of protocols when completing the timeline online with their class. **Success Criteria** Create a set of protocols and abide by these protocols when I am working online with my class.	Commence a discussion on the type of behaviours that are important when working in groups. Transfer that knowledge and behaviours to working in online spaces. Discuss with the students if the behaviours are different or the same.	Students break into small groups and identify the top five (5) protocols (rules) that they consider to be the most important. They group the protocols as either social or ethical. Each group presents their top 5 protocols. Together as a class decide on a what the top 5 protocols and consequences are when working in the online space. Students write out the rules and sign the agreement.
Session Resources	**Student Resources** • ACS Student Resource: Online Collaboration		**Teacher Resources** • ACS Teacher Resource: Online Collaboration	
2.	Design Thinking	**Learning Intention** Students will incorporate design thinking when they are mapping out and designing how their slides will be part of a large slide show. **Success Criteria** I can create a design that shows the placement of titles, buttons, images and texts to make up the slides for the class timeline.	Discussion will lead into the importance of design because it will look like one large project. A discussion needs to occur that focuses on the importance of keeping things unified and the same. Further discussing what happens if each slide had a completely different layout? Consider the user in this involvement.	Students use A3 paper that contains 4 rectangles, each representing a slide for the slide show. Students will design the layout of the slides and will contain information on layout and placement, consistency of the buttons (to move to other slides), ways to move between all slides. The movement to allow the user of the slide show to change the direction of the slides moves into user input by allowing the user to make decisions on which slide to see next rather than the normal sequence of a slide show.
Session Resources	**Student Resources** • A3 paper to design first 4 slides		**Teacher Resources**	

Session Number	Session Topic Focus	Learning Intention and Success Criteria	Introduction/Teacher Instruction	Whole Class Activity
3.	Algorithms	**Learning Intention** Students will write out instructions on how a user will navigate through their slides. They will include user input and branching. **Success Criteria** I can write out algorithms (explicit instructions) to describes how my slides will interact with the rest of the timeline. In instructions I can include the words user input and branching.	After the design is finished, students break off into small groups. In the groups they verbalise the design to their peers. They explain how each slide operates.	Taking the designs of the slides, students articulate the operations of the slide show. They write out in English sentences, incorporating sentences like: If the user clicks 'next' on slide 1 then they will be taken to Slide 4. When the user clicks 'home' they will be taken back to the first slide. The focus is building in option for the user to move around the slides and making decisions on which slide to go to next (user input).
Session Resources	**Student Resources** • ACS Student Resource: Algorithms		**Teacher Resources** • ACS Teacher Resource: Algorithms	
4.	Flowcharts	**Learning Intention** Students will create a flowchart that explains the movement of their slides. They will include branching and user input. **Success Criteria** I can make a flowchart that shows how my slides operate and can include branching and user input.	Students break into groups again, this time working with different peers from the previous session. They read through their commands to each other and ensure the instructions make sense.	Using the written English sentences, they wrote in the previous session, they transfer the written sentences into a flow chart. The focus of the flowchart is to ensure there are multiple options and the options and decided on by the user.
Session Resources	**Student Resources** • ACS Student Resource: Algorithms		**Teacher Resources** • ACS Teacher Resource: Algorithms	

Session Number	Session Topic Focus	Learning Intention and Success Criteria	Introduction/Teacher Instruction	Whole Class Activity
5.	Digital Solution	**Learning Intention** Students will collaborate in an online space to create a digital timeline events describing Australian history. **Success Criteria** I can work collaboratively with my class mates to create a digital timeline of events in Australian history and ensure that the slides complete their functions.	How can we have a consistent timeline? Do we need to agree on anything before we start so it looks like one slide show rather than individual work put together? How can we make the timeline look like one piece of work?	Students take their design of the slides and flowchart and use that to begin creating their slide show. This session will be the final project they present and will take multiple sessions to complete.

Session Resources	Student Resources	Teacher Resources
		• ACS Teacher Resource: Systems to Meet Needs

Assessment – Australian Digital Technologies Curriculum			
Content Description	**Session Number**	**Assessment Piece**	**Assessment Statement**
Identify and explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data (ACTDIK007)	N/A		
Recognise different types of data and explore how the same data can be represented in different ways (ACTDIK008)	N/A		
Collect, access and present different types of data using simple software to create information and solve problems (ACTDIP009)	N/A		
Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010)	2, 3 & 4	Flowchart and design of their slide show	Students created a flowchart of a slide show presentation that demonstrated the functions and sequence of steps to navigate the presentation.
Implement simple digital solutions as visual programs with algorithms involving branching (decisions) and user input (ACTDIP011)	N/A		
Explain how student solutions and existing information systems meet common personal, school or community needs (ACTDIP012)	5	Digital timeline	Students justified and compared their digital timeline a linear timeline. They identified the advantages of making a collaborative digital timeline
Plan, create and communicate ideas and information independently and with others, applying agreed ethical and social protocols (ACTDIP013)	1	Student driven protocols	Students identified a range of ethical and social protocols and rules to abide by when working in online environments.

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Assessment – Victorian Digital Technologies Curriculum			
Content Description	**Session Number**	**Assessment Piece**	**Achievement Statement**
Explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data VCDTDS019)	N/A		
Recognise different types of data and explore how the same data can be represented in different ways (VCDTDI020)	N/A		
Collect, access and present different types of data using simple software to create information and solve problems (VCDTDI021)	N/A		
Individually and with others, plan, create and communicate ideas and information safely, applying agreed ethical and social protocols (VCDTDI022)	1	Student driven protocols	Students identified a range of ethical and social protocols and rules to abide by when working in online environments.
Define simple problems, and describe and follow a sequence of steps and decisions involving branching and user input (algorithms) needed to solve them (VCDTCD023)	2, 3 & 4	Flowchart and design of their slide show	Students created a flowchart of a slide show presentation that demonstrated the functions and sequence of steps to navigate the presentation.
Develop simple solutions as visual programs (VCDTCD024)	N/A		
Explain how student-developed solutions and existing information systems meet common personal, school or community needs (VCDTCD025)	5	Digital timeline	Students justified and compared their digital timeline a linear timeline. They identified the advantages of making a collaborative digital timeline.

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Assessment – New South Wales Science and Technology Syllabus			
Outcomes and Objectives	**Session Number**	**Assessment Piece**	**Stage Statement**
Describes how digital systems represent and transmit data (ST2-11DI-T)	N/A		
Use a range of methods to represent data, including tables and column graphs	N/A		
Collect, access and present data, using software to present and communicate information and solve problems (ACTDIP009)	N/A		
Defines problems, describes and follows algorithms to develop solutions (ST2-3DP-T)	2, 3 & 4	Flowchart and design of their slide show	Students created a flowchart of a slide show presentation that demonstrated the functions and sequence of steps to navigate the presentation.
Develop a sequence of steps and decisions (algorithms) to solve a problem (ACTDIP010)	2, 3 & 4	Flowchart and design of their slide show	Students created a flowchart of a slide show presentation that demonstrated the functions and sequence of steps to navigate the presentation.
Generate visual programs using algorithms to create simple digital solutions	N/A		
Explain how existing information systems meet personal, school or community needs (ACTDIP012)	5	Digital timeline	Students justified and compared their digital timeline a linear timeline. They identified the advantages of making a collaborative digital timeline.
Participate individually and collaboratively with clear roles and goals	1	Student driven protocols	Students identified a range of ethical and social protocols and rules to abide by when working in online environments.
Organise and perform strategic roles within a group to solve a problem	N/A		

Assessment – Western Australian Digital Technologies Syllabus			
Year 3			
Content Description	Session Number	Assessment Piece	Assessment Statement
Digital systems and peripheral devices are used for different purposes (ACTDIK007)	N/A		
Different types of data can be represented in different ways (ACTDIK008)	N/A		
Collect and present different types of data using simple software to create useful information (ACTDIP009)	N/A		
Use visually represented sequenced steps (algorithms), including steps with decisions made by the user (branching) (ACTDIP011)	N/A		
Create and communicate ideas and information safely (ACTDIP013)	N/A		
Create a sequence of steps to solve a given task (WATPPS16)	2, 3 & 4	Flowchart and design of their slide show	Students created a flowchart of a slide show presentation that demonstrated the functions and sequence of steps to navigate the presentation.
Develop and communicate ideas using labelled drawings and appropriate technical terms (WATPPS17)	2, 3 & 4	Flowchart and design of their slide show	Students created a flowchart of a slide show presentation that demonstrated the functions and sequence of steps to navigate the presentation.
Select, and safely use, appropriate components with given equipment to make a solution (WATPPS18)	5	Digital timeline	Students safely and appropriately used hardware and software to create a digital timeline of major events in history.
Use criteria to evaluate design processes and solutions developed (WATPPS19)	N/A		
Work independently, or collaboratively when required, to plan, create and communicate sequenced steps (WATPPS20)	5	Digital timeline	In groups, students created a digital timeline identifying significant events in history.

Assessment – Western Australian Digital Technologies Syllabus			
Year 4			
Content Description	**Session Number**	**Assessment Piece**	**Assessment Statement**
Digital systems and peripheral devices are used for different purposes and can store and transmit different types of data (ACTDIK007)	N/A		
Data can be represented in different ways (ACTDIK008)	N/A		
Collect and present different types of data for a specific purpose using software (ACTDIP009)	N/A		
Use simple visual programming environments that include a sequence of steps (algorithm) involving decisions made by the user (branching) (ACTDIP011)	N/A		
Create and communicate ideas and information safely, using agreed protocols (netiquette) (ACTDIP013)	1	Student driven protocols	Students identified a range of protocols and rules to abide by when working in online environments.
Define a sequence of steps to design a solution for a given task (WATPPS21)	2, 3 & 4	Flowchart and design of their slide show	Students created a flowchart of a slide show presentation that demonstrated the functions and sequence of steps to navigate the presentation.
Identify and choose the appropriate resources from a given set (WATPPS22)	N/A		
Develop and communicate design ideas and decisions using annotated drawings and appropriate technical terms (WATPPS23)	2, 3 & 4	Flowchart and design of their slide show	Students created a flowchart of a slide show presentation that demonstrated the functions and sequence of steps to navigate the presentation.
Select, and safely use, appropriate components and equipment to make solutions (WATPPS24)	5	Digital timeline	Students safely and appropriately used hardware and software to create a digital timeline of major events in history.
Use criteria to evaluate and justify simple design processes and solutions (WATPPS25)	N/A		

Work independently, or collaboratively when required, to plan, create and communicate ideas and information for solutions (WATPPS26)	1	Evidence of working with online tools to collaborate	Students identified a range of protocols and rules to abide by when working in online environments.