Sample assessment task

Year level	5
Learning area	Technologies
Subject	Digital Technologies
Title of task	Let's vote on it!

Task details

Description of task	For the class to undertake a school-wide survey of what students think they would like to have served in the canteen. They are required to gather data, analyse data and publish the data in a number of forums. They also need to report the results back to the canteen manager for action.
Type of assessment	Formative and summative
Purpose of assessment	Students collaborate to problem solve. They will collate, manage and interpret data.
Assessment strategy	Observations, Fieldwork, Completed project
Evidence to be collected	• Project • Newsletter article • Data • Voting system
Suggested time	3–4 x 1 hour lessons

Content description

Content from the Western Australian Curriculum	*Knowledge and understanding* **Digital systems** Digital systems have components with basic functions that may connect together to form networks which transmit data *Processes and production skills* **Collecting, managing and analysing data** Collect, store and present different types of data for a specific purpose, using software **Digital implementation** Implement and use simple programming environments that include branching (decisions) and iteration (repetition) **Digital implementation** Create and communicate information, including online collaborative projects, using agreed social, ethical and technical protocols (codes of conduct) **Investigating and defining** Define a problem, and set of sequenced steps, with users making a decision to create a solution for a given task **Designing** Develop and communicate alternative solutions, and follow design ideas, using annotated diagrams, storyboards and appropriate technical terms **Evaluating** Develop negotiated criteria to evaluate and justify design processes and solutions **Collaborating and managing** Work independently, or collaboratively when required, to plan, develop and communicate ideas and information for solutions

Task preparation	
Prior learning	Students have been exposed to survey/voting systems such as survey monkey. They are aware of how to use them and gather the resulting data from them.
Assessment differentiation	Teachers should differentiate their teaching and assessment to meet the specific learning needs of their students, based on their level of readiness to learn and their need to be challenged. Where appropriate, teachers may either scaffold or extend the scope of the assessment tasks.
Assessment task	
Assessment conditions	Work in groups of 4 (maximum)
Resources	Computers, tablets, cameras, guest speaker (canteen representative)

Instructions for teacher

Have the canteen manager present the problem to the class. The manager should explain that no one is buying what is on the current menu and he/she is not sure how to overcome the problem. He/she would like assistance in asking the whole school what they want on the menu and then have the menu shared with the whole school population, including parents.

As a whole class, brainstorm ideas about how to solve the problem.

Some solutions may include:

- digital survey/voting for upper classes
- questionnaire/voting for middle classes
- students go to early years and ask them questions/give them choices and record answers.

Possible online survey systems include:

- Survey monkey (free)
- eSurvey creator (free)
- Checkbox (cost)
- KeySurvey (cost).

There are many different survey tools available. Use one that is available to you in your school and with which your students are familiar.

Actual task instructions

- Invite the canteen manager to your class to present the problem to the students.
- Brainstorm ideas for new foods that will attract customer's back.
- Develop a storyboard of the project, including each step you will need to take.
- Discuss software choice and advantages and disadvantages. Students should complete this question before undertaking the task.
- Gather the data:
  - Using a three-pronged approach so all students can engage:
    1. Upper Primary: students complete survey/questionnaire online individually
    2. Middle Primary: students complete survey/questionnaire as a whole class online with teacher support
    3. Early Childhood: students complete survey/questionnaire as a whole class online with teacher guidance and discussion. Survey needs to include pictures so students can make an informed choice
- When students have all the data, interpret it and publish the results both in an individual class produced newsletter to parents OR in the whole-school newsletter as well as an email to all class teachers with the results to share with their classes.
- Ask the canteen manager back to your class and present him/her with the results of the process so he/she can action them.

Any worksheets or scaffolding specific to the task

- Storyboard template
- Software choice and reason for using
- Evaluation sheet
- Teacher checklist – student use of software

Develop a storyboard that highlights each step you will take to come up with a suitable solution.

1. What digital systems did you use?
2. Why did you choose these particular systems over others available?
3. What are the advantages of the chosen systems, in your opinion?

Software used to develop your survey: _____

Choice:_____

_____

Advantages:_____

_____

Software used to construct your newsletter: _____

Choice:_____

_____

Advantages:_____

_____

How you shared your information:_____

Choice:_____

_____

Advantages:_____

_____

Evaluation Sheet:

In your group develop criteria to make judgements about the success of the project.

Two criteria have been provided. In your group, develop another two criteria and make judgements about them.

Criteria	Judgements/evaluation
The software used was appropriate to the task	
We gathered enough data to make a decision	

Sample marking key

Explanation:
- For each question, there is a criterion-referenced marking key which shows the type of response expected in order for students to gain the full range of marks within each question.
- The "Answers could include" section gives a sample of the sort of response that could be expected and how the mark allocation is made.

Description	Marks
System choices and explanations for their choice	
Students can select and apply the most appropriate system to implement the survey with accuracy and detail. They are able to explain they used it correctly, including challenges that arose and/or limitations of its use.	3
Students can explain the system used clearly. They can show the use of the system and may identify particular limitations.	2
Students need assistance in selecting and using the most appropriate system to complete the project.	1
Subtotal	**3**

Description	Marks
Survey and newsletter production and publication	
Survey is constructed to include a range of choices of food. Students analyse the data gathered and develop and publish a newsletter with the survey results in more than one form e.g. email to other classes, school newsletter, parent letter.	3
Students' survey demonstrates several choices in food. Students write an article that can be distributed beyond the class and distribute it to at least one other group, e.g. parents, other classes.	2
Students' surveys are limited in their interactivity. They may write a brief overview of what they did without publishing it beyond the class.	1
Subtotal	**3**

Description	Marks
Solving the problem	
In pairs, students identify, develop and implement a plan (storyboard) that includes all aspects of a complete project.	6
In pairs, students develop and implement a plan that includes most aspects of a project.	5
In pairs, students construct and carry out a plan that includes most aspects of a project.	4
In pairs, students build a plan that many have components missing in order for it to be a complete project.	3
Students (in pairs or individually) attempt to define a plan that many have a number of missing components. They may require some direction to complete the task.	2
Students (in pairs or individually) complete very little of the planning process and therefore are not able to complete the task.	1
Subtotal	**6**

Answer could include, but is not limited to:		
This should be a statement saying what the answer is.		
Example of what the allocation of marks would look like to demonstrate the components that would give a student full marks in a question.		
• Clearly identify the issue • Implement steps to solve the issue • Analyse the data • Evaluate the process, including identifying improvements • Share the outcome widely • Work collaboratively to achieve the outcome.		
	Total	**12**

Teacher checklist for software use and management of data gathered. Did the student collect, store and present the information? **(Met task)**

Collecting and Managing Data

Student Name	Met task		Comments
	YES	**NO**	