a

**Internal Assessment Resource**

**Digital Technologies & Hangarau Matihiko Level 3**

This resource supports assessment against achievement standard 91907[[1]](#footnote-1)

**Standard title:** Use complex processes to develop a digital technologies outcome

**Credits:** 6

**Resource title:** Interactive community

**Resource reference:** Digital Technologies & Hangarau Matihiko 3.8B

|  |
| --- |
| This resource:   * Clarifies the requirements of the achievement standard * Supports good assessment practice * Should be subjected to the school’s usual assessment quality assurance process * Should be modified to make the context relevant to students in their school/kura environment and ensure that submitted evidence is authentic |

|  |  |
| --- | --- |
| Date version published by Ministry of Education | December 2018 Version 1  To support internal assessment from 2019 |
| Authenticity of evidence | Teachers/kaiako must manage authenticity for any assessment from a public source, because students may have access to the assessment schedule or student/ākonga exemplar material.  Using this assessment resource without modification may mean that students’ work is not authentic. The teacher may need to change figures, measurements or data sources or set a different context or topic to be investigated or a different text to read or perform. |

**Internal Assessment Resource**

**Achievement standard:** 91907

**Standard title:**  Use complex processes to develop a digital technologies outcome

**Credits:** 6

**Resource title:** Interactive community

**Resource reference:** Digital Technologies & Hangarau Matihiko 3.8B

**Teacher/Kaiako guidelines**

The following guidelines are supplied to enable teachers/kaiako to carry out valid and consistent assessment using this internal assessment resource.

Teachers/kaiako need to be very familiar with the outcome being assessed by the achievement standard. The achievement criteria and the explanatory notes contain information, definitions, and requirements that are crucial when interpreting the standard and assessing students/ākonga against it.

**Context/Te Horopaki**

This activity requires students to plan and manage the development of a digital media outcome.

Using complex processes will support the students to develop a digital media outcome that has been refined through effective testing and trialling. Students should be supported to synthesise information gained from the planning, testing and trialling of components in order to develop a high-quality outcome.

Students need to discuss how the synthesis of the information gained assisted in the development of a high-quality outcome.

Teachers could combine this assessment with AS91903 *Use complex techniques to develop a digital media outcome*.

If using this achievement standard in combination with AS91903 students may use any suitable application(s), provided it supports a range of complex techniques.

Teachers are encouraged to edit this default task to make it suitable for their student community.

Note: Allow students to either complete the task below or ‘pitch’ an alternate idea. Provided their idea allows them to use complex techniques to plan and develop a complex digital media outcome, they should be encouraged to develop their custom solution.

It is recommended that students should have at least two identified checkpoints with their teacher as they work through this assessment activity to ensure they have an opportunity to ask questions and gather feedback.

The format of the final outcome is a digital media outcome.

Students will need to supply evidence of using recognised and appropriate project management tools and techniques to plan and manage the development of the media outcome. This will include trialling and testing the components of the media outcome (see student task for more details).

**Resource requirements/Ngā Rauemi**

Students will need access to software that will allow them to document their development process. This could be in the form of a document, presentation, online portfolio, series of screen casts, etc.

They will also need access to project management tools (which may include a mixture of on- and off-line resources).

**Internal Assessment Resource**

**Achievement standard:** 91907

**Standard title:**  Use complex processes to develop a digital technologies outcome

**Credits:** 6

**Resource title:** Interactive community

**Resource reference:** Digital Technologies & Hangarau Matihiko 3.8B

**Student/Ākonga instructions**

**Introduction/Kupu Arataki**

This assessment activity requires you to plan, develop and create a complex digital media outcome.

You will be assessed on

* how effectively you use project management tools and techniques to plan and manage the development of a digital outcome
* how effectively you decompose the problem into smaller components, and test and refine your media outcome so that it is a high-quality response to the task
* how well you have addressed relevant implications
* how well you synthesise information from the planning, testing and trialling of components to develop a high-quality outcome and discuss how this information assisted in the development of a high-quality outcome.

Teacher note: Insert due dates and timeframes

**Task/Hei Mahi**

Use complex processes to develop an interactive ePub for an identified need within your school or community. Note: You may choose an alternative digital media outcome such as a website, video, or animation instead of an interactive ePub, upon consultation with your teacher.

The publication should include a cover page, a contents page and at least four additional pages. Some form of interactivity is required. This could be in the form of navigation or the use of layers within an image processing package.

The outcome needs to be published in a format that is readable on multiple types of device.

Use complex processes to develop a refined digital outcome involves synthesising information from the planning, testing and trialling of components to develop a high-quality outcome and discussing how this synthesis assisted in the development of a high-quality outcome. An outline of the process can be found below.

**Step 1 – Ideate - Discover** **and Plan**

1. You will begin by researching your local community and talking to community members to decide what potential ideas you will investigate further.
   * 1. You can use any of the following methods to assist you to make this decision: research, mind maps, brainstorming, pros and cons lists alongside class or group discussions.
     2. You could use online tools to help gather, share, analyse and store this data and information.
     3. Once you have made your initial decision regarding the outcome you wish to develop, you will need to draft a plan that will support the ongoing development of your outcome.

This should include how you propose to manage the development and/or workflow environment to store, share and manage data, including user feedback and multiple versions of your work. Your plan should show how you will address relevant implications as you develop the outcome.

1. In a project management tool of your choice, set up milestones/key point indicators.
   1. Within this you need to break down (decompose) your outcome into smaller components and plan the trialling of these components.
   2. Make sure you share this with your teacher so that they can make sure you are meeting your deadlines.
   3. Once the planning phase is completed, and signed off by your teacher, go on to design, develop and test step.

**Step 2 – Design, Develop and Test**

1. Develop your media outcome so that it addresses all the requirements and relevant implications.
2. Using your project management plan, approach the smaller chunks of work (components) and trial and test them to inform your next steps and the refinement of your outcome.
3. You may use your project management tools to record and gather evidence of testing, trialling and feedback. Alternatively, you could take screen captures, recorded in a simple table showing dates, images and a brief statement identifying the stage of your process. You could also capture the process using screencasts. Whatever approach you use, be sure to annotate/discuss the changes you have made and why.

**Step 3 – Reflection and Evaluation**

* Use the evidence you gathered during Steps 1 and 2.
* Synthesise the information from the planning, testing and trialling of components to develop a high-quality outcome.
* Discuss how this information lead to the development of a high-quality outcome.

This should include evidence of how the outcome addresses relevant implications.

**Assessment schedule/Mahere Aromatawai: Digital Technologies & Hangarau Matihiko 91907 – Interactive community**

|  |  |  |
| --- | --- | --- |
| **Evidence/Judgements for Achievement/Paetae** | **Evidence/Judgements for Achievement with Merit/Kaiaka** | **Evidence/Judgements for Achievement with Excellence/Kairangi** |
| Use complex processes to develop a digital technologies outcome.  The student has:   * used recognised and appropriate project management tools and techniques to plan and manage the development of a digital outcome * decomposed the digital technologies outcome into smaller components * trialled components of the outcome   **For example (partial evidence):**  The student has used appropriate project management tools and techniques, such as Agile with a Trello Kanban board, to plan and manage the development of their outcome. The outcome has been broken down into smaller components and these have been trialled and tested. The components have then been combined into a working outcome.   * tested that the digital technologies outcome functions as intended   **For example (partial evidence):**  The student has provided evidence of testing the outcome to ensure that it functions as intended:   * the navigation works correctly * content is readable and legible * styles such as custom styles work correctly * ePub functions correctly on a range of devices. * addressed relevant implications   **For example (partial evidence):**  The student outcome is easy to use, fully functional, aesthetically pleasing and honours copyright legal obligations.  *The examples above are indicative samples only* | Use complex processes to develop an informed digital technologies outcome.  The student has:   * effectively used project management tools and techniques to manage development, feedback and/or collaborative processes   **For example (partial evidence):**  The student provides evidence of versioning the outcome where new versions either have improved functionality or added features.  The student provides evidence of sharing documents/data and managing feedback. For example, they used Google Team Drive to share design ideas and to seek feedback.  The student provides evidence of how they managed their work flow. This could include screen captures of a Trello board or any other valid planning tool.  The student has managed their assets effectively through the use of structured file and folder naming conventions, linking and back-ups.   * effectively trialled multiple components and/or techniques   Evidence can be seen in their project management tool(s) and/or logs that includes annotations of the component(s) and/or techniques trialled with annotations regarding the outcome or next steps.   * effectively used information from testing and trialling to improve the functionality of the digital technologies outcome   **For example (partial evidence):**  The student provides evidence of testing and trialling during development and they have indicated how they improved their outcome using this approach. Evidence can be seen in their project management tool(s) and/or logs that includes annotations of changes made to improve the functionality.  *The examples above are indicative samples only* | Use complex processes to develop a refined digital technologies outcome.  The student has:   * synthesised information from the planning, testing and trialling of components   **For example (partial evidence):**  The student outcome is of high quality as a result of student effectively using project management tools and techniques, to efficiently manage the trialling, testing and refinement process. The student has incorporated user suggestions and feedback to improve the usability, aesthetics, and functionality of the outcome.  The student has:   * discussed how the information led to the development of a high-quality digital technologies outcome   **For example (partial evidence):**  The student has reflected on their use of processes to develop their outcome and provided evidence of how the process helped them to effectively test and trial various components to refine and enhance the design and functionality their outcome.  *The examples above are indicative samples only* |

Final grades will be decided using professional judgement based on a holistic examination of the evidence provided against the criteria in the Achievement Standard.

1. Achievement standard 3.8 is derived from both *The New Zealand Curriculum* and *Te* *Marautanga o Aotearoa.* [↑](#footnote-ref-1)