

**Internal Assessment Resource**

**Digital Technologies & Hangarau Matihiko Level 1**

This resource supports assessment against Achievement Standard 91880

**Standard title:** Develop a digital media outcome

**Credits:** 4

**Resource title:** Showcase Digital Technologies

**Resource reference:** Digital Technologies & Hangarau Matihiko 1.4B Version 2

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| 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 |

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| Date version published by Ministry of Education | November 2019 Version 2  To support internal assessment from 2020 |
| Authenticity of evidence | Teachers/kaiako must manage authenticity for any assessment from a public source, because students/ākonga may have access to the assessment schedule or student 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. |

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**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 develop a refined digital media outcome that will address the need to provide information for the local community promoting the future of digital technologies in the region.

This outcome will be part of a class contribution to an upcoming exhibition in the local community centre.

Students will develop their outcome through the application of appropriate digital media tools, techniques and design elements.

***Project based learning and collaboration***

This assessment activity may also be carried out collaboratively by a team of students, with each student contributing a unique digital media artefact or outcome that is incorporated into a larger collaborative outcome. For example, if the overall project outcome is a website (to be used in an ‘old school’ information kiosk), one student may create graphical elements for the website, one student may produce a video or animation to be included in the website, and another may code the HTML/CSS structure for the website. In the case of a group project, each student should show evidence of designing, developing and testing their individual contribution to the project. Individual students should also show evidence of planning for and testing the integration of all elements to create the final outcome.

You will need to adapt the student instructions to suit how you are going to approach this work in the classroom.

Assess students on:

* their application of appropriate tools, techniques and design elements in developing their refined digital media outcome
* the extent to which the outcome meets its purpose and needs of the end user
* how effectively they have applied data appropriate integrity and testing procedures
* their application of an iterative development process to refine their digital media outcome
* how they have described the relevant implications as related to this outcome
* the extent to which they have addressed relevant implications in the final digital media outcome
* how effectively they have applied design elements

Students should collect portfolio evidence as they complete the task. This could include annotated photographs, screen dumps, diagrams, short video or audio clips, or code, etc.

You may want to give students guidance on appropriate style and format for their evidence portfolio. This achievement standard does not assess format or style of the evidence.

**Note**: This assessment task may be modified to integrate with other types of digital technology outcomes. Examples of student developed outcomes that could integrate with this assessment are:

* an electronics outcome – wearable technology, robotics
* a computer system outcome – the design of a computer system to meet an end users need
* a programming outcome – a computer program for a specific purpose
* a data outcome – a database to structure, query and present information for a specific purpose
* any combination of the above, e.g. a web app integrating programming, media and data, a robot integrating electronics and programming or a video game integrating media and programming.

**Conditions/Ngā Tikanga**

Where a group approach is used, the teacher needs to ensure that there is opportunity for each student to provide evidence for all aspects of the standard.

The 4 credits for the achievement standard indicates that approximately 40 hours needs to be allocated for teaching, learning (in and out of the classroom) and assessment in a programme of study. Schedule regular progress checks with the students during this activity.

Conditions of Assessment related to this achievement standard can be found at <http://ncea.tki.org.nz/Resources-for-Internally-Assessed-Achievement-Standards>

**Resource requirements/Ngā Rauemi**

Students will need access to hardware and software necessary to produce and test the digital media outcome.

**Additional information/He Kōrero Atu**

***Teacher Support information***

The teaching and learning of the knowledge, concepts and skills required to prepare students for this assessment, plus the assessment itself, would occupy several week’s work.

***Testing***:

Students should provide evidence that they have tested the outcome, and that information from testing has been used to improve the quality and functionality of the outcome.

***Outcome***:

Students may produce an individual digital media outcome that is appropriate for the teaching and learning programme, such as a website, video, static image or images, projected lightshow, animation (2D or 3D), or infographic. Teachers should ensure the rigour of the outcome is appropriate for Level 6 of the NZ Curriculum (e.g. has not been produced through simple modification of pre-designed templates and/or drag and drop WYSIWYG applications, i.e google sites, weebly).

The digital media outcome that the student is being assessed on should be original media, which has been developed by the student. However, they may also incorporate other open-source or royalty-free media that they have not developed, as appropriate to the outcome. For example, if the student is being assessed on a video for their digital media outcome, they may include an open-source or royalty-free sound track that they have not developed but have the permission (or appropriate license type) to include in the outcome. Students will only be assessed on their own work.

Students should correctly attribute any media that is not their own.

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**Student/Ākonga instructions**

**Introduction/Kupu Arataki**

This assessment activity requires you to develop a refined digital media outcome that will provide information for the local community. This digital media outcome will promote the future of digital technologies in your region and will be a contribution to an upcoming exhibition at the community centre.

You are going to be assessed on how well you develop your digital media outcome through the application of appropriate digital media tools, techniques and design elements.

You may carry out this task by working collaboratively with a team of students. In this case, you must contribute a unique digital media artefact or outcome that is to be incorporated into the larger team digital media outcome. In the case of a team project, you must show evidence of design, developing and testing your individual contribution to the project. If working as part of a group, you should also show evidence of design for and testing the integration of all elements to create the final outcome.

**Task/Hei Mahi**

You are going to create a unique digital media artefact (i.e. a multi-page website, video, digitally-edited photographic or illustrated series of graphic objects, animation (2D or 3D), or infographic) that meets the requirements below.

As you go about the task, keep a record of the results of all testing (check with your teacher on acceptable forms of evidence). When you have finished, save the final version of your work or site folder, and your portfolio or evidence to an agreed destination accessible to your teacher.

**Context**

Your local community council has asked your class to participate in an upcoming exhibition at your local community centre, promoting the future for digital technologies in your region.

You will need to:

* Consider the exhibition themes for you to work with and incorporate in your outcome. Choose one from:
* Digital technologies in school
* Digital technologies in the community
* Digital technologies in the future
* Research the chosen theme
* Decide on how you or your team can effectively present the information to the local community using digital media. For example, will your final digital media outcome be in the form of a website, video, animation (2D or 3D), or infographic

You should identify the implication, say what it means and what this might mean for your outcome. For example, you could:

* Describe what ethics is. Describe the ethical issues that relate to your outcome. What might you need to include in your outcome to ensure this is addressed?
* Describe what aesthetics is. Describe the aesthetic elements that relate to your outcome. What might you need to include in your outcome to ensure this is addressed?
* Describe what usability and functionality are. What does this mean in relation to your outcome? What might you need to include in your outcome to ensure this is addressed.

You will need to consider addressing these implications during the design, development and testing of your outcome.

Improving the outcome iteratively. This would generally include evidence of improvement through

* trialling and improving font and colour combinations
* trialling and improving various layouts for text and images
* trialling and improving image/video effects
* trial draft prints and calibration of colour
* testing that assets are linked correctly
* testing for consistency of layout and styles
* testing functionality
* repeated cycles of trialling and testing. during the design, development and testing process.

You are going to be assessed on how well:

* you apply appropriate tools, techniques and design elements in developing your refined digital media outcome
* the outcome meets its purpose and the needs of the end users
* you have applied appropriate data integrity and testing procedures
* you apply an iterative development process to refine their digital media outcome
* you have described the relevant implications
* you have addressed relevant implications in the final digital media outcome.
* you have applied design elements

**The specifications:**

**If you are working as a group and the tasks are shared you could consider the examples in option A:**

**Option A (shared)**

* A series of page-specific **illustrated navigation banners** (e.g. .svg) and other **page iconography** (including logo.ico) that helps promote the site content.
* A series of suitably-**edited photographic montage images** demonstrating themed aspects of Digital Technology related clubs in the school.
* An associated playable **video** appropriating codec for web delivery.
* A digital **audio soundtrack** to be included in the video.
* A series of short **animated illustrations** that introduce each section.
* A one-page scrolling **infographic** that links each of the topic areas together with text and graphic elements.

A **multi-page website** used for an information kiosk for the exhibition, or as a standalone outcome:

* A home page explaining what the site is about (e.g. “This site showcases the use of Digital Technologies in our school…”)
* Topic pages, each describing a specific digital technology focus
* A “Further Information” page detailing links for anyone wishing to know more about the topics
* Easy to use navigation (i.e. users can navigate to anywhere in the site, without having to use the ‘back’ button).

Evidence requirements: If you are working as part of a group, you must provide individual evidence of your contribution to the digital media outcome. For example, you are required to show evidence of designing, developing and testing your individual contribution to the project.

**If you are working on your own you may wish to consider the examples in option B:**

**Option B (individual)**

* A short series of **illustrated print banners** promoting the three exhibition foci.
* A series of suitably-**edited photographic montage images** demonstrating themed aspects of Digital Technology related clubs in the school.
* A digital **video** or **animation** (2D or 3D) to be presented during the exhibition.
* A digital **soundtrack** discussing or illustrating key aspects of the exhibition.
* A projected **lightshow** to be presented outside the exhibition each evening.
* A one-page printed poster-sized **infographic** that links each of the topic areas together with text and graphic elements.
* Any other suitable digital media outcome, negotiated with your teacher, and deemed suitable to meet the requirements of this assessment.

A **multi-page website** used for an information kiosk for the exhibition, or as a standalone outcome:

* A home page explaining what the site is about (e.g. “This site showcases the use of Digital Technologies in our school…”)
* Topic pages, each describing a specific digital technology focus
* A “Further Information” page detailing links for anyone wishing to know more about the topics
* Easy to use Navigation (i.e. users can navigate to anywhere in the site, without having to use the ‘back’ button).

**Final Submission**:

* Portfolio evidence gathered as you have completed the task that provides evidence of planning and testing your outcome. This could include text, sketches, annotated photographs, screen dumps, diagrams, short video clips, or code, or other evidence agreed prior with your teacher. Agree the number of pages in your portfolio with your teacher.
* The final digital product.

**Assessment schedule/Mahere Aromatawai: Digital Technologies & Hangarau Matihiko** **91880 – Showcase Digital Technologies**

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| **Evidence/Judgements for Achievement/Paetae** | **Evidence/Judgements for Achievement with Merit/Kaiaka** | **Evidence/Judgements for Achievement with Excellence/Kairangi** |
| Develop a digital media outcome.  The student:   * uses appropriate tools, techniques and design elements for the purpose and end users of the outcome   **For example (partial evidence):**  *The student looked at various website design tools and chose the one most appropriate for the project. They have used HTML coding and CSS styling to develop their website. They have added both text and graphical elements.*   * applies appropriate data integrity and testing procedures in the development of the outcome   **For example (partial evidence):**  *The student proofread all text and ensured it all displayed on the web page. They have tested the website to ensure that all the links work and that the graphics display correctly on the school’s computers or on their own device.*   * describes implications that are relevant to the outcome   **For example (partial evidence):**  *The student described what copyright is The Copyright Act covers such works such as the written word, images, audio, songs and music, and video.*  *They have described what usability is - Usability is about how easily the end user can accomplish tasks.*  *The examples above are indicative samples only* | Develop an informed digital media outcome.  The student:   * uses information from testing procedures to improve the quality and functionality of the outcome   **For example (partial evidence):**  *The student tested readability and legibility of the text on the web pages with various font and colour pairings and made a selection based upon feedback and testing with a range of users. The student tested the website on a range of browsers and found that it did not display properly in one of the browsers, so they researched a solution and updated their CSS.*   * addresses relevant implications in the outcome   **For example (partial evidence):**  *They have addressed cultural implications by ensuring all local references are spelled correctly. They have addressed privacy by ensuring that their images have appropriate sign-offs as required. They have addressed copyright by not infringing anyone else’s intellectual property.*  *They have addressed functionality implications of the showcase, such as the fact that users may be viewing the website on different browsers and/or devices and ensuring functionality across browsers, devices.*  *The examples above are indicative samples only* | Develop a refined digital media outcome.  The student:   * has shown iterative improvement throughout the development and testing process   **For example (partial evidence):**  *The student has iteratively improved their planned navigation menu after testing with users and across a range of devices. They tested and improved their HTML code using the W3.org Validation tool, and appropriately commented their code. They improved elements of the layout and information after final testing and feedback from their school community. They kept comprehensive portfolio evidence of multiple increasingly refined versions of their outcome.*   * applies design elements effectively   **For example (partial evidence):**  *The student has carefully designed their outcome, carefully considering design elements. Evidence provided through iterative testing of photographic composition in their portfolios (i.e. line, form, texture, pattern, and colour balance and harmony) in the creation of their series of photographic montages, to ensure the images clearly display their ideas.*  *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.