



National Certificate of Educational Achievement
TAUMATA MĀTAURANGA Ā-MOTU KUA TAEA

Exemplar for Internal Achievement Standard

Digital Technologies Level 3

This exemplar supports assessment against:

Achievement Standard 91900

Conduct a critical inquiry to propose a digital technologies outcome

An annotated exemplar is an extract of student evidence, with a commentary, to explain key aspects of the standard. It assists teachers to make assessment judgements at the grade boundaries.

New Zealand Qualifications Authority

To support internal assessment

	Grade: Excellence
1.	<p>For Excellence, the student needs to conduct a comprehensive critical inquiry to propose a digital technologies outcome.</p> <p>This involves:</p> <ul style="list-style-type: none"> • critiquing any sources used and evaluating their potential for bias and inaccuracies • considering possible issues relating to the proposed outcome and suggesting areas for improvement, extension, and/or follow-up • critiquing the accuracy, relevance, reliability, and/or significance of the findings. <p>Full samples of student evidence are available in our online Learning Management System, Pūtake.</p> <p>The student has critiqued any sources used and evaluated their potential for bias and inaccuracies. For example, the student critiqued their sources to confirm they were relevant, and what perspectives they were developed for, e.g. <i>"I used a resource for my inquiry from a commercial app development company. While it had relevant points for the use of software in education, there may be bias toward promoting use of their own software. Their information needs to be backed up by research from a not-for-profit software company."</i></p> <p>The student has considered possible issues relating to the proposed outcome and suggested areas for improvement, extension, and/or follow-up. For example, they:</p> <ul style="list-style-type: none"> • considered how best to manage translation of their resource into different languages, so that it was both accurate and easy to maintain • suggested that having software-based translation was more efficient than manual translation, but would additionally need human checking for accuracy • considered scalability of options for storage of the resource. <p>The student has critiqued the accuracy, relevance, reliability, and/or significance of the findings. For example, they have compared a range of sources with differing opinions and evaluated the accuracy or reliability of evidence from differing viewpoints.</p>

	Grade: Merit
2.	<p>For Merit, the student needs to conduct an in-depth critical inquiry to propose a digital technologies outcome.</p> <p>This involves:</p> <ul style="list-style-type: none"> • comparing and contrasting different perspectives that relate to the inquiry focus • discussing possible future opportunities relating to the inquiry focus and explaining the possible impacts of these opportunities • effectively managing milestones and inquiry progression • evaluating the strengths and weaknesses of the proposed digital technologies outcome. <p>Full samples of student evidence are available in our online Learning Management System, Pūtake.</p> <p>The student has compared and contrasted different perspectives that relate to the inquiry focus. For example, they have they looked at several perspectives and provided evidence of this in their investigation stages. They compared and contrasted research on how students learn using traditional means versus using digital tools.</p> <p>Possible future opportunities relating to the inquiry focus have been discussed, and the student has explained the possible impacts of these opportunities. For example, they have taken their findings and explored future opportunities, and they have considered their impacts. They discussed the possibility of translating their resource into other languages (such as Te Reo Māori) for a wider audience.</p> <p>The student has effectively managed milestones and inquiry progression. For example, they showed evidence of an ongoing inquiry that includes reflection, documented using an online tool (e.g. Trello). The student set effective goals and the inquiry progressed in a planned and organised way.</p> <p>The student has evaluated the strengths and weaknesses of the proposed digital technologies inquiry outcome. For example, they have identified the deeper strengths and weaknesses of their proposal rather than simplistic surface comments. They discussed how the tutorials could date quickly and would need constant updating, and how they have built in the ability to update content.</p>

	Grade: Achieved
3.	<p>For Achieved, the student needs to conduct a critical inquiry to propose a digital technologies outcome.</p> <p>This involves:</p> <ul style="list-style-type: none"> • deciding on an inquiry focus and developing specific inquiry question(s) • undertaking research to gather background information and ideas • analysing gathered information • establishing a refined inquiry focus • proposing a digital technologies outcome to the inquiry • explaining relevant risks and ways to mitigate these risks • reporting on the findings of the research in relation to the inquiry question(s) and proposed digital technologies outcome. <p>Full samples of student evidence are available in our online Learning Management System, Pūtake.</p> <p>The student has decided on an inquiry focus and developed specific inquiry question(s) linked to digital technologies. The focus and inquiry questions are broad enough to enable student choice from a range of possible digital technologies outcomes, and do not limit the type of outcome proposed.</p> <p>The student has undertaken research to gather information. For example, they researched:</p> <ul style="list-style-type: none"> • what aspects of digital technologies do students need to learn more about (e.g. 3D printing) • how existing/emerging technologies support and enhance learning • the topic to be taught • the needs of the end users (age group, school level, etc.) • existing systems, information, what works best in good practice. <p>It is not expected that all gathered information would be presented. The research was relevant and used to inform and explain how digital technologies provide a solution to the inquiry question(s).</p> <p>The student has presented a concise summary and analysis of their findings to explain and interpret how the research relates to the outcome. A refined inquiry focus has also been established. For example, after researching background information, the portfolio shows how the inquiry focus has been refined from the initial stages to a specific focus.</p> <p>The student has proposed a digital technologies outcome to the inquiry. The proposal contains enough information to guide the student in developing an outcome. This could include purpose, end-users, scope, requirements and specifications, and the resources needed to create the digital technologies outcome.</p>

	<p>The student has explained the relevant risks associated with the proposed outcome and how they were mitigated. For example, they have identified there may be an issue with device compatibility, they have investigated what devices are used in the environment and finalised their outcome's requirements so that it will function as intended.</p> <p>The student has reported on the findings of the research in relation to the inquiry question(s) and proposed digital technologies outcome. For example, they have reflected on their inquiry question and their research and linked this to their proposed outcome. They have provided evidence of how digital tools can be used to enhance and enrich the learning and have proposed using short video tutorials to teach a particular skill.</p>
--	---