

New Zealand Commerce & Economics Teachers Association Inc

**ceta**

Te Aka Pouhoko, Pouoha Tōpū o Aotearoa

Accounting  
Business Studies  
Digital Technologies  
Economics

# Digital Technologies Resource Catalogue

Educating young people who  
will be significantly different!

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Charities Commission Registration Number CC44286

## Digital Technologies Catalogue Term 2 2024

**Year 13 : NZC Level 8 : NCEA Level 3**

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**Should you have any queries, please do not hesitate to contact NZCETA..**

# Digital Technologies Catalogue – Year 13

**NB Resource Codes: DT = Digital technologies; CC = Connected Curriculum**

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# Curriculum & School Programmes Digital Technologies Resources

| Title and Keywords  | Code     | Price   | Description/Contents   |
|---|----------|---------|--|
| <p>NZCETA</p> <p>DIGITAL TECHNOLOGIES HANDBOOK</p> <p><b>A teacher's guide for programme design and implementation</b></p> <p><b>Aligned to</b></p> <p><b>The New Zealand Technology Curriculum Levels 4 &amp; 5</b></p> <p><i>Version 2 – updated from previous version in order to meet the new Digital Technologies Curriculum (December 2017)</i></p> | DTB 11v2 | \$90.00 | <p><i>Published September 2018</i></p> <p>This NZCETA Digital Technologies Teachers' Guide has been developed to accompany <i>The New Zealand Curriculum (2007)</i> and the new digital technologies curriculum content (December 2017). <i>The New Zealand Curriculum</i> vision includes the aspiration that our young people “will seize the opportunities offered by the new knowledge and technologies to secure a sustainable social, cultural, economic, and environmental future for our country” (MoE.2007, page 8). The curriculum’s future focus principle (page 9) recognises that young New Zealanders need the tools to understand and address a range of issues and concerns of global significance <sup>1</sup>.</p> <p>This guide is intended to assist NZCETA members to unpack the new digital technologies curriculum so that they are better placed to access the content and to develop digital technologies programmes of learning for Years 9 &amp; 10. Whilst this resource will assist teachers to learn more about the new digital technologies content it will also allow teachers the freedom to develop learning activities or experiences to achieve their intended local curricula. For example, activities and experiences which address the diverse learning needs of the students within their school environment and the culture of the school.</p> <p>This resource will support teachers to integrate digital technologies ideas, outcomes, principles and technological thinking into the design and delivery of meaningful, authentic, and relevant learning experiences for the students within their school.</p> <p>This booklet provides suggestions for programme planning at junior level to ensure students are being provided with a robust and comprehensive skill and knowledge base to enable them to follow appropriate pathways into digital technologies at senior level.</p> <p>It gives special emphasis to continuity and progression in delivery, identifies key competencies and values, and addresses a range of teaching strategies, possible assessment activities and evaluation suggestions.</p> <p>Contents: Introduction; What is Technology About; The New Technology Curriculum; What is Digital Technology; Digital Technologies Outcomes; Digital Technology Areas; What is a Digital Technology Program; Progress Outcomes; Recommendations for Consideration by Teachers; Pedagogical Strategies; Key Competencies; Resources; Assessment; Assessment Strategies; Teaching Strategies; Lesson Planning; Schemes of Work; Digital Technologies Scheme Development; Evaluation of the Programme; End of Unit Reflection Log : Teacher/Faculty; Key Competencies Checklist; Computer Science Glossary; Assessment Terminology; Technology Curriculum Strands</p> |
| <p>Year 11 Curriculum Level 6 NZCETA Digital Technologies Handbook</p>  | DTB12    | \$90.00 | <p><i>Revised 2012</i></p> <p>The booklet has been developed to accompany the New Zealand Curriculum and is intended to support the development of a Digital Technologies programme of learning while allowing</p>   |

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| <p>for programme design and implementation appropriate for The New Zealand Technology Curriculum Levels 6 &amp; NCEA Level One</p>  | <p>for freedom to address the diverse learning requirements of students and the culture of the school. It provides suggestions for programme planning to ensure students are being provided with a robust and comprehensive skill and knowledge base to enable them to follow an appropriate Digital Technology pathway at senior level. Also included are suggested strategies for embedding the key competencies and values within a programme of teaching and learning; a range of teaching strategies; possible teaching activities; software and suggested resources. Contents include: What is Technology; What is Digital Technologies; What is a Digital Technology Programme – it's structure &amp; Aims; Learning Objectives; An Approach to Planning; Schemes of Work – scheme development, programme planner, Planning a Technology Unit, Developing a Successful Programme; Planning Checklist; Key Competencies; Content Development; Resources; Assessment Mutually Exclusive Standards</p> |   |
| <p>Year 12 Curriculum Level 7 NZCETA Digital Technologies Handbook Version 2</p> <p>for programme design and implementation appropriate for The New Zealand Technology Curriculum Levels 7 &amp; NCEA Level Two</p> | <p>DTB13 \$90.00 <i>Revised Term 4 2012</i></p>  | <p>The booklet has been developed to accompany the New Zealand Curriculum and is intended to support the development of a Digital Technologies programme of learning while allowing for freedom to address the diverse learning requirements of students and the culture of the school. It provides suggestions for programme planning to ensure students are being provided with a robust and comprehensive skill and knowledge base to enable them to follow an appropriate Digital Technology pathway at senior level. Also included are suggested strategies for embedding the key competencies and values within a programme of teaching and learning; a range of teaching strategies; possible teaching activities; software and suggested resources. Contents include: What is Technology; What is Digital Technologies; What is a Digital Technology Programme – it's structure &amp; Aims; Learning Objectives; An Approach to Planning; Schemes of Work – scheme development, programme planner, Planning a Technology Unit, Developing a Successful Programme; Planning Checklist; Key Competencies; Content Development; Resources; Assessment Mutually Exclusive Standards. The Version 2 edition of this resource includes a comprehensive and detailed section indicating the step-ups from NZC Level 6/NCEA Level 1 to NZC Level 7/NCEA Level 2</p> |
| <p>Year 13 Curriculum Level 8 NZCETA Digital Technologies Handbook</p> <p>for programme design and implementation appropriate for The New Zealand Technology Curriculum Levels 8 &amp; NCEA Level Three</p>         | <p>DTB14 \$90.00 <i>Published Term 4 2012</i></p>  | <p>The booklet has been developed to accompany the New Zealand Curriculum and is intended to support the development of a Digital Technologies programme of learning while allowing for freedom to address the diverse learning requirements of students and the culture of the school. It provides suggestions for programme planning to ensure students are being provided with a robust and comprehensive skill and knowledge base to enable them to follow an appropriate Digital Technology pathway at senior level. Also included are suggested strategies for embedding the key competencies and values within a programme of teaching and learning; a range of teaching strategies; possible teaching activities; software and suggested resources. Contents include: What is Technology; What is Digital Technologies; What is a Digital Technology Programme – it's structure &amp; Aims; Learning Objectives; An Approach to Planning; Schemes of Work – scheme development, programme planner, Planning a Technology Unit, Developing a Successful Programme; Planning Checklist; Key Competencies; Content Development; Resources; Assessment Mutually Exclusive Standards, as well as including a comprehensive and detailed</p>  |

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| <p>NZC L6/NCEA L1<br/>Using Relevant Implications to Underpin Digital Technologies Teaching and Learning Programmes</p> | <p>DT 18/4/1</p> | <p>\$60.00</p> | <p>section indicating the step-ups from NZC Level 7/NCEA Level 2 to NZC Level 8/NCEA Level 3</p> <p>This resource is designed to provide teacher guidance on the relevant implications that are part of all the updated NCEA Digital Technologies Internal Achievement Standards. Suggested activities that be can be integrated into a programme of teaching and learning are included. These activities should provide scaffolding to support students on how to both <b>describe</b> and <b>address</b> the relevant implications in their outcomes. Relevant implications link to iterative improvement, testing, and development of a high-quality outcome. The resource links with the New Zealand Curriculum and in particular embodies the Principals of High Expectations and Future Focus. High expectations are addressed as a student learns how to appropriately test and improve the quality of digital outcomes with regard to the relevant implications. The focus is on producing an outcome that is of a high standard that meets end-user requirements. Future focus is addressed through the relevant implications as students are learning to develop outcomes that are socially and ethically acceptable as well as sustainable and future proofed. It provides support for students to meet <i>Designing and Developing Digital Outcomes Progress Outcome 4</i>: In authentic contexts, students investigate and consider possible solutions for a given context or issue. With support, they use an iterative process to design, develop, store and test digital outcomes, identifying and evaluating relevant social, ethical and end-user considerations. They use information from testing and apply appropriate tools, techniques, procedures, and protocols to improve the quality of the outcomes and to ensure they are fit-for-purpose and meet end-user requirements</p> <p><b>Specific Content</b></p> <p>At the conclusion of this topic, teachers should be able to provide guidance for students regarding:</p> <ul style="list-style-type: none"> <li>• How to describe relevant implications that are important to their context for the development of a digital outcome.</li> <li>• How to test their outcomes to determine if they have addressed the relevant implications.</li> <li>• How to use the results of research, testing, and feedback to inform and refine their digital outcomes.</li> </ul> |
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## All Levels

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### Mixed Resources and Software Related Activities

**A beginner's guide to Visual Basic in PowerPoint** DT 11/3/1 \$60.00 This easy to follow, 25-page user friendly teaching resource will guide you through a step by step tutorial teaching you how to create simple, fun and funky interactive quiz slides within Microsoft PowerPoint. You will quickly learn how to link PowerPoint with Visual Basic Editor tools to design pop-up message boxes, feedback statements and easy navigation structures within your slideshows. The resource includes a quick revision test and examples of cross curricular, student designed learning activities. Students can work through these tasks individually and also choose to extend themselves and try different challenges along the way.

*Basic VB Coding  
A good starting point*

**Respecting Others Innovations and Creations** DT 10/1/4 \$45.00

*Intellectual Property  
Copyright*

Intellectual Property covering copyright, plagiarism, piracy, and the dangers of Peer to Peer networking. Class discussion is used to raise the awareness of the issues involved. Students research the Internet using supplied websites to gather information. Students then create a presentation in a format of choice for use as an explanation of the issues involved for the teaching staff of your school. The teaching notes cover terminology and definitions, suggested starter questions, some suggested responses to the issues and attitudes. The Prior Knowledge and Reflections student worksheet allows the teacher to assess any changes in attitudes over the unit. This unit will take approximately 3-4 hours.

New Zealand Curriculum Values *Innovations, inquiring & curiosity* - Explore and discuss values of others

*Thinking critically creatively & reflectively* - Thinking about their own practices and attitudes in relation to the Copyright Law and effects on the creators of works; Reflecting on what has been learnt and how this has changed their attitudes

*Equity*- Fairness and social justice; Reflection on the effects on creators and the possible effects on Research and Development

*Integrity*- Being accountable for own actions and acting ethically

*Respecting others*- Allowing all students to voice opinions and values without challenge

Key Competencies *Thinking* - Developing understanding of concept of copyright and challenging their own values; Reflecting where they started, and where they have finished in terms of attitudes

*Using of language, symbols, and texts* - Use of symbols: copyright, trademark, and patent

*Relating to others* - Listen, recognize different points of view, negotiate values and share ideas

Learning Area *Technology*: Level 5 *Strand*: Nature of Technology; Characteristics of Technology – understand how people's perceptions and acceptance of technology impact on technological development

Understand how the illegal copying of others work impacts on those people

*Digital Technologies Context, Knowledge and Skills Strand*  
Digital Information

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| MovieMaker  | DT 10/1/8 | \$45.00 | Revised 2012   |
| <p><i>Designing a Movie</i><br/> <i>Storyboards</i><br/> <i>Using Digital Cameras</i></p> |           |         | <p>Within this resource students will use a digital camera and MovieMaker (or Photostory). Designing a movie incorporating storyboards, digital camera use, movie creation, movie formats and respecting the rights of others when taking photos. The students have the opportunity to discover how to use these resources independently. This can be completed with a limited number of cameras and computers if necessary. Approximately 8 hours in length.</p> <p>New Zealand Curriculum Values <i>Innovation, inquiry and curiosity</i> - Encourage students to think independently; Encourage students to gather resources to assist their learning; Encourage students to be creative <i>Equity</i> - Encourage students to work with others and resources fairly.</p> <p><i>Integrity</i> - Act responsibly when taking and using images of others and their property.</p> <p>Respect- Encourage students to accept others and their opinions; Encourage students to take responsibility for equipment.</p> <p>Key Competences Managing self; Relating to others; Thinking; Participating and contributing; Using language, symbols, and texts.</p> <p>Learning Area Technology: Level 4 - Technological Products</p> |
| A Beginners Guide to Visual Basic in PowerPoint   | DT 11/3/1 | \$60.00 | Revised 2012   |
| <p><i>Create an interactive Quiz</i><br/> <i>Visual Basic</i></p>                         |           |         | <p>This easy to follow, comprehensive user-friendly teaching resource will guide you through a step by step tutorial teaching you how to create simple, fun and funky interactive quiz slides within Microsoft PowerPoint.</p> <p>You will quickly learn how to link PowerPoint with Visual Basic Editor tools to design pop-up message boxes, feedback statements and easy navigation structures within your slideshows.</p> <p>The resource includes a quick revision test and examples of cross curricular, student designed learning activities.</p> <p>Students can work through these tasks individually, and also choose to extend themselves and try different challenges along the way.</p> <p><i>Contents: Using VBA; Creative Techniques; Glossary of Terms; Creating a Quiz; Task 1 – 5 steps on How To with screen shot assistance; Task 2 extra project with new tricks – 8 steps on How To with screen shot assistance; Review Activity; PowerPoint Review Quiz with Answers.</i></p>   |



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| Getting Animated with Adobe Flash CS5                                | DT 12/3/2 | \$60.00 | <p><i>Achievement Objectives to teach students (and teachers) the essentials of using Adobe Flash CS5 which could be used in conjunction with</i></p> <p>Level 3 Computing Unit Standard 25661 v6 3 credits <i>design and assemble an interactive media product without scripting</i></p> <p>Level 3 Computing Unit Standard 5947 v6 3 credits <i>use computer technology to solve a specified problem</i></p> <p>Level 1 Computing Unit Standard 5946 v6 3 credits <i>use computer technology to create and deliver a presentation from given content</i></p> <p>Or any NCEA Level 1-3 Digital Technology Achievement Standards Internal assessments)</p> <p>The purpose of this resource is to provide a 38page student resource with a step by step guide on how to use the basic elements of Adobe Flash CS5 including a student checklist. Also included is a 38 slide PowerPoint on How to Use Adobe Flash CS5. Any resources needed for the tutorial are provided. Students will learn how to produce an animated, interactive Flash application that can be either inserted into a web page or published as a standalone application on a CD or DVD</p> <p>This resource could be also be used across the curriculum to assist in creating interactive, exciting teaching resources. <i>This resource replaces DT 08/2/1 which is now out-of-date</i></p> <p><i>Contents: Teacher Notes; Beginners Task Folder; Bouncing Balls v1 Folder; Movie Clip Folder Text Folder; Sound Folder containing 3 x sound file resources to go with the tutorial; how to beginning guide; a PowerPoint presentation on the skills used in Adobe Flash CS5</i></p> |
| Meet the Director<br><br><i>Getting to grips with the Movie Logo</i> | DT 14/2/1 | \$60.00 | <p>Knowing the terminology used on a movie or video production set helps everyone involved understand the production and Director's needs. This resource introduces students to the skills and knowledge required to write a movie proposal, create a storyboard, and plan a video production. This teaching and learning guide will help students and teachers gain a better understanding of what is required to produce a fit for purpose, captivating, high quality video outcome. Topics covered are:</p> <p>Understanding Film Genre and the conventions within Genre</p> <p>Different cinematography techniques such as camera angles and movement, their use and purpose</p> <p>Pre-production procedures and techniques such understanding narrative and storyboarding</p> <p>Production procedures such as production schedules, permission, and the practicalities of shooting</p> <p>Post-production procedures</p> <p>The resource includes: Introductory terminology, activity sheets, word-find and planning templates are included with this resource.</p> <p>This resource is suitable for students at Levels 6, 7 &amp; 8 of the curriculum and can be used to support the teaching and learning within Digital Technologies/Media, Generic Technology and Media Studies.</p> <p>Please note: The procedures, skills, and techniques to edit and create a video using video editing software IS NOT covered</p>  |

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| What is Your Aura                        | DT 14/2/2 | \$60.00 | <p><i>Achievement Objective: Implement procedures to produce a digital media outcome</i></p> <p><i>In the form of an augmented reality image integrating video and static image.</i></p> <p>A resource designed to be used to teach Digital Media and could be used in year 11 to 13 – NZC Level 6, 7, 8/ NCEA Level 1, 2, 3 depending on the complexity of skills used to develop the outcome. It does link with internal Achievement Standard 91073 (1.43) <i>Implement basic procedures to produce a specified digital media outcome</i></p> <p>This resource package covers the skills needed to create an augmented reality or ‘aura’ using the free app, Aurasma.</p> <p>With Aurasma, every image, object and even place can have its own Aura. Auras can be as simple as a video and a link to a web page or as complex as a lifelike 3D animation. Use the Aurasma app to unlock Auras and share the experience with friends. This resource uses Aurasma to integrate two different types of media products, static image and video, to create an augmented reality “aura”.</p> <p>The resource covers the skills required to create Auras using online tools provided by Aurasma. It does not however cover the skills required to create a static or moving image.</p> <p>Curriculum Links - This resource links to the Technology Curriculum, Achievement Objective: Level 5 – Students will:</p> <p><i>Analyse their own and others’ outcomes to inform the development of ideas for feasible outcomes.</i></p> <p><i>Undertake ongoing functional modelling and evaluation that takes account of key stakeholder feedback and trialling in the physical and social environments.</i></p> <p><i>Use the information gained to select and develop the outcome that best addresses the specifications.</i></p> <p><i>Evaluate the final outcome’s fitness for purpose against the brief.</i></p> |
| Creating augmented reality using Aurasma |           |         |   |
| What’s your Rapper Name?                 | DT 15/1/3 | \$60.00 | <p>Designed to be suitable for Year 9 &amp; 10 students but could be used as an introductory exercise at NCEA Level 1 or Level 2 for students who have never written code before. Students will be introduced to JavaScript variables, collecting basic input from an html form, performing simple string methods (such as extracting the first letter of a name), conditional statements (if and if/else). The resource contains an activity to introduce JavaScript to students with no prior coding experience. Students will be introduced to JavaScript variables, collecting basic input from an html form, performing simple string methods (such as extracting the first letter of a name), conditional statements (if and if/else). Assessment ideas are included.</p> <p>It links with the NZC and in particular embodies the values of <i>innovation, inquiry, and curiosity, by thinking critically, creatively, and reflectively</i>, and the principles of High Expectations and Learning to Learn. It supports working towards TCKS objectives for Programming and Computer Science given in the DTG (Digital Technologies Guidelines). Students may study this topic further at Level 6 or Level 7. For NCEA Level 1 assessments, students would need to progress to an activity which includes iterative loops and different types of variables. For NCEA Level 2, students would need to progress further to activities which include parameters and</p>  |
| An introduction to JavaScript            |           |         |   |

scope.

**Notepad++ is available for download FREE** from <http://notepad-plus-plus.org/download/v6.6.9.html>. Make sure this software is downloaded onto your computers before you start. If you are using Chromebooks or Android devices you will need to choose a suitable coding app that runs JavaScript and HTML.

The tutorial teaches the following aspects of HTML

HTML tags, head and body tags, basic text paragraphs

Text box, Radio Button and Button inputs

The tutorial teaches the following aspects of JavaScript

Functions (without parameters)

Variables and introduction to arrays

getElementById to extract information from HTML

Conditionals: if and else if statements

This tutorial does **not** include the following aspects that are needed at Level 1 and 2 - Scopes of variables (local and global) Parameters of functions - Iterative loops

***Specific content in the resource***

At conclusion of this topic students should be able to:

- Follow instructions to create a simple JavaScript program.
- Be familiar with JavaScript functions, variables, and conditionals
- Be familiar with introductory html.

Getting to Grips with  
the Technology  
Terminology – Lesson  
Starters/Do now's

DT 16/3/1

\$30.00

This resource contains a range of Do Now activities to assist in teaching the technology terminology for NZC Levels 4-6, Years 9 and 11

Students will be introduced to the technology terms via a range of letter patterns The activity will be followed by a discussion about the meaning of the technology term with some Big Questions which encourage critical and deep thinking.

Students will be exposed to common assessment terms such as:

- Identify
- Discuss
- Explain
- Justify

Technology education in New Zealand explores how, beginning with a need or opportunity, new products and systems are developed, and how technological developments impact on our world.

Students should be provided with opportunities to develop the technological literacy within a range of technology contexts. This resource is designed to support students to develop their understanding and application of the technological terms used within the three technology strands.

The activities are designed to be very quick starter activities and should take approximately 10 minutes to complete.

Contents: Do Now Student Activities; Deep thinking Questions; Suggested answers; Cryptograms with suggested guidelines as to how to make your own.

NZC Levels 4-6  
Years 9-11

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| <p>Celebrate Success<br/>Assessment<br/>AS 91071 v3 (1.41)</p> | DT 16/3/2 | \$55.00 | <p>This resource is a practice assessment for AS91071 v3.</p> <p>Students use two applications (Microsoft Word and Microsoft Access) and work through the Practice Assessment Task following the Design Brief and List of Specifications to build a Newsletter and merged certificates. They build a table with provided data, and create queries, a report and a form. They use a query to merge the data into certificates</p> <p>This assessment task requires that the student formats the Department of Technology's annual Newsletter for the Head of Department (HoD). The HoD provides all text for the Newsletter. The student is also required to create certificates for the winners of the Digital Technologies Competitions. All data in relation to the competitors is provided. The student is required to build a table in Access using the provided data, create a query that can be used in a mail merge for the winners certificates, create a form for entering competitors' details and a report detailing the winners that can be printed for the HoD to file. All text, data and graphics are provided.</p> <p>A suggested solution for the Database, Newsletter, Certificates, Form and Report are also included.</p> <p>Students are expected to print and submit digitally for this assessment task.</p> <p><b>Specific Content Students should be able to:</b></p> <ul style="list-style-type: none"> <li>• Apply digital information tools to create a digital information outcome</li> <li>• Combine and manipulate data from more than one application</li> <li>• Apply data integrity and testing procedures</li> <li>• Apply appropriate file management procedures</li> <li>• Apply design and formatting techniques such as bullets, font style, size and colour, columns, paragraph, and line spacing, tables, alignment, contrast, proximity, repetition, heading hierarchy</li> <li>• Apply specific features of two software applications such as page break, format painter, copy/paste, table, query, form, report.</li> </ul> <p><b>Contents:</b></p> <p>Practice Assessment Task<br/>Worked solution: Database (Access)<br/>Worked solution: Newsletter<br/>Worked solution: Merged Certificates<br/>Assessment Schedule<br/>Resource A – Newsletter Masthead Template (.dotx)<br/>Resource B – Newsletter Text (.txt)<br/>Resource C – Raw Data for the Database (.xlsx)<br/>Resource D – Folder of Graphics (copyright free)<br/>Resource E – School logo (.png)</p> |
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## Year 13 - Curriculum Level 8 – NCEA Level 3

| Title and Keywords                                   | Code      | Price   | Description/Contents  |
|--|-----------|---------|---|
| No. 8 Wire Assessment with Teaching & Learning Notes | DT 13/3/3 | \$90.00 | <p>Create a website for a stakeholder using a dedicated web-authoring tool.</p> <p>This involves planning, creating, testing, and evaluating the website.</p> <p>Students are also expected to create at least four linked pages containing media and enhancements. They are also expected to create user documentation.</p> <p>The standard of the outcome must be fit for purpose and suitable for live use.</p> <p>This 46page comprehensive resource plus two PowerPoints is designed to be used as a practice assessment resource in preparation for the Level 3 Generic Computing Unit Standard assessment 25658 and as part of a NCEA Level Three Digital Technologies programme. This practice assessment resource is worth 5 credits which equates to approximately 10-11 weeks or 50 teaching, learning and assessment hours.</p> <p>The resource is to be used as a practice assessment task for the Level 3 Generic Computing Unit Standard 25658. The resource includes teacher’s notes, student notes, a student practice assessment activity and a suggested assessment schedule plus planning templates. Also included are appropriate and helpful hyperlinks to useful websites. These websites should help guide the teacher and students in the development and testing of the websites including how to address copyright issues and how to apply appropriate testing procedures in an online environment. Likewise, the glossary of terms used within the PowerPoint resources will further help clarify the intent of the standard. This glossary should help breakdown some of the terminology and jargon commonly used in a unit standard context.</p> <p><b>Other Possibilities Are:</b></p> <p>Computing Unit Standard: Level 3  6 Credits<br/>Unit Standard 25657</p> <p>Create a website for a stakeholder using a mark-up language. People credited with this unit standard are able to: plan design a website for a stakeholder; create the website using a dedicated web-authoring tool in accordance with the design specifications; test and evaluate the website; and complete end-user documentation.</p> <p>If students are writing their own code then the assessor may consider linking the assessment to:<br/>Achievement Standard 91635 [3.43]</p> <p>Implement complex procedures to produce a specified digital media outcome.</p> <p>This achievement standard involves implementing complex procedures to produce a specified digital media outcome.</p> <p><b>Contents:</b></p> <p>A Teacher Guide in the form of a PowerPoint presentation (48 slides).</p> <p>The presentation includes:</p> <ul style="list-style-type: none"> <li>(a) a breakdown of some of the most commonly used Unit Standard terminology and Unit Standard assessment policies.</li> <li>(b) useful hyperlinks to webpages such as creative commons, W3C schools, free planning and wireframing tools.</li> </ul> <p>A Student Guide in the form of a PowerPoint presentation (35 slides) explaining some of the commonly used Unit Standard terms.</p> |
| NCEA Level 8/NCEA Level 3                            |           |         |   |
| <b>Generic Computing</b>                             |           |         |   |

The presentation includes:

- (a) clear explanations of terms such as brief, planning, sitemap, testing, accessibility.
- (b) hyperlinks to helpful websites.
- (c) examples of planning.

An assessment project,

A suggested assessment schedule,

Resources for planning purposes.

**Database Design –  
Do you dig it?  
Gardening &  
Landscape Tool Hire**

DT  
13/4/3v2

\$60.00

This comprehensive resource package covers the skills needed to design and create a relational database using MS Access 2010. It is a Pick-Up and Go teaching and learning guide that would suit:

a teacher who is new to database planning, designing and building

a teacher who needs a classroom resource for students developing skills in order to meet the requirements of assessment for Achievement Standard 91633 (3.41)

*Teaching & Learning  
Pack, Version 2*

NZC Level 8/NCEA  
Level 3

The aim of the pack is to step students through a process of normalising data, designing a relational database, creating queries, forms, and reports. Also included in this pack are instructions for creating a switchboard which allows users to switch to other forms with ease and a short video to demonstrate how to create a user login with administration rights. Instructions are provided on how to split data in Excel e.g. first names from last names and how to import into Access. The resource contains notes and a worked-through scenario for students to follow with a range of practice tasks to complete. Suggested answers are provided. A complete database plus resource files for the students' scenario are also provided.

**Assessment Link  
AS 91633 (3.41)**

Specific Content: at the conclusion students should be able to:

- Format data in Excel
- Split data in Excel
- Import data into Access from Excel
- Link an Excel worksheet to Access
- Normalise data to remove data redundancy
- Create an Entity relationship Diagram
- Complete a database plan
- Understand the many-to-one and one-to-many relationships
- Perform a lookup
- Create tables
- Set validation rules
- Create queries including an update query
- Create forms
- Create reports
- Create a Switchboard
- Apply design principles to forms and reports
- Create a user Login and an Admin Login using VBA code
- Use VBA code to print a single record from a form
- Use publisher to merge data from Access

*Contents: Teaching & Learning Guide complete with student tasks (91 pages); Suggested Answers to student tasks; Instructions on how to link a spreadsheet; Instructions on how to mail merge to Publisher; A short video to demonstrate how to create a login form; VBA Code to accompany the login form; a completed Relational Database; a complete Excel spreadsheet*

**Prototype like a Pro  
for Print**  
*Teaching & Learning  
Pack*

DT 15/1/1 \$60.00

This resource is designed to be used to teach Year 13 Technology specifically to support the building of a prototype for a print document. It could be used as a support document for students as they complete AS91611 or used in conjunction with AS91635 (3.43) as the process of prototyping sits well as the lead up to the implementation of a digital media outcome for print.

NZC Level 8/NCEA  
Level 3

**Assessment Links**  
**AS91611 (3.4) &**  
**AS91635 (3.43)**

The 44page teaching and learning guide breaks down the process of prototyping. It is a Pick-Up and Go learning pack that can be used by both teachers and students. It contains information about what prototyping is how to build a prototype for a print document and gives visual examples of what trialling can look like. It includes a breakdown of the judgement statements specifically for trialling print documents, focusses on the importance of research including some relevant URL's as starting points and contains a simple brief, questionnaire, results and analysis section. It also includes the 'Don'ts' of Questionnaires with examples to focus students on relevant and meaningful surveying of stakeholders. Examples using visual screenshots are used to demonstrate how the trialling process might look, keeping in mind context – the social and physical environment the prototype will be used in. This is to encourage students to think about the development of their prototype using meaningful components and techniques in context.

At Level 3, students are expected to measure fitness for purpose in the broadest sense. This resource provides a break-down of fitness for purpose of the final prototype considering the social and physical environment, as well as broadest sense considerations relevant to students' practice.

A suggested plan is provided that students could follow as they develop their prototype for print for assessment AS91611 (3.4)

***Specific Content in this resource***

At conclusion of this topic students should be able to:

- Understand the broadest sense and how it pertains to their outcome as well as their practice
- Understand the importance of research to determine what makes a successful outcome including design, colour, typography (legibility, readability, appropriateness), techniques
- Understand the role of stakeholders and their importance in the prototyping process
- Understand the importance of trialling in context by considering the social and physical environment
- Understand the importance of relevant and meaningful questions when surveying stakeholders
- Collect, display, analyse and evaluate data collected from stakeholders
- Make informed choices in the development of their prototype

***Resource Contents***

- A breakdown of judgement statements
- Explanation of the 'broadest sense'
- Stakeholders – who they should be
- Prototyping as a process
- The importance of research (design, typography, colours, techniques)
- Trialling in context
- A questionnaire example including results and analysis

- The 'Don'ts' of questionnaires
- Keeping records
- A proposed plan for the prototyping process

|   |                  |                |   |
|---|------------------|----------------|---|
| <p>Gamer Guru<br/>Assessment Pack</p>   | <p>DT 15/3/1</p> | <p>\$45.00</p> | <p><i>Achievement Objective(s):</i> Implement complex procedures to develop a relational database embedded in a specified digital outcome. Students plan, design and build an Access Database with permissions for users and an administrator. The scenario is a school-based game lending service. Students can borrow any game for 14 days and only if it is age appropriate.</p> <p>This resource is a practice assessment to address the requirements of Achievement Standard 91633 (3.41). The scenario for this practise assessment is a game lending service called Gamer Guru where PS3, PS4, Xbox360 and Wii games can be borrowed from the school library. The owner of Gamer Guru has decided that the best way to record members, games and borrowing history, is by using a database. The owner has two friends who will be helping and to protect their data, access to the database requires a login. As members of Gamer Guru are school age, the owner has decided to lend only age appropriate games. So that the most popular games can be shared around, a game loan is for 14 days.</p> <p>To complete this assessment, your students are required to build the database for Gamer Guru to generate forms, reports and an update query. They will need to link the database to a worksheet of requested games. They will also need to create a user/admin login to keep the database safe as it will be saved on the school network.</p> <p><b>Specific Content</b></p> <p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• Apply digital information tools to create a digital information outcome</li> <li>• Combine and manipulate data from more than one application</li> <li>• Apply data integrity and testing procedures</li> <li>• Apply appropriate file management procedures</li> <li>• Apply design and formatting techniques</li> <li>• Apply data access permissions</li> </ul> <p><i>Contents: an assessment activity, assessment resources (Excel spreadsheet of raw data, a Gamer Guru Logo, Project and Database Planning Templates, Daily Diary Template, completed database, and an assessment schedule).</i></p> <p><b>NOTE: this resource links with the teaching and learning pack Prototype Like a Pro for Print DT 15/1/1 \$60</b></p> |
| <p>Project Management<br/>Learning Guide</p>  | <p>DT 15/4/4</p> | <p>\$80.00</p> | <p><i>Achievement Objective: Project Manage and support a Digital Technology outcome using planning tools</i></p> <p>This is an easy to use resource package which covers introductory skills needed when managing a project. Ideally the student will be working on these skills alongside a project such as creating a website, or a management information system for a client so that the student is able to make the links between the management process as well as the development process.</p> <p>Currently there is a shortage of people in New Zealand with project management skills and consequently there are plenty of jobs on the market for people with these skills, all attracting a high salary. The step through is being done using Microsoft Project.</p> <p>Microsoft Project is usually available for all Microsoft Schools as part of their bundled software. In the event of Microsoft Project not being available this resource can easily be adapted to run on</p>  |
| <p>NZC Level 7 &amp; 8<br/>NCEA Level 2 &amp; 3</p>   |                  |                |   |
| <p><b>Assessment Link</b><br/><b>NCEA Level 2 &amp; Level 3</b><br/><b>Generic Technology</b><br/><b>Achievement Standard</b><br/><b>AS 91355 (2.2) &amp;</b><br/><b>AS 91609 (3.2)</b></p> |                  |                |   |



spreadsheet or word processing software.

#### Teacher Guidelines

This 55page resource is designed to be used to teach the theory and practical application of project management in preparation for AS 2.2 and 3.2 (level 2 and 3).

It should be noted that this resource does not have to be used for digital technology in isolation. It could easily be transferred to a project undertaken in any Technology subject area as well as in Business Studies (for example project manage a marketing event to launch a new product).

The theory of Agile methodology will be discussed in this resource as the best fit for a digital technology (IT) outcome. However, theory of other models of project management are covered here as well. It is recommended that project management is integrated in an outcome that a student is working towards so that the student is able to make the links between managing as well as developing an outcome. This support the framework for future focused learning and individualised learning programmes.

The resource could be used cross curricular for example a business studies student project managing an outcome for a group of technology students.

Specific Content: At conclusion of this topic students should be able to:

- Understand different models of project management
- Use software such as Microsoft Project, a spreadsheet or word processor to
  - project tasks
  - identify tasks
  - enter tasks
  - create and understand milestones
  - create and understand task dependencies
  - create and understand lag time and lead time
  - learn how to work within constraints
  - understand resources and resource availability
  - costs
  - assigning resources to tasks
  - view costs
  - balance workload
  - report
  - critical path
  - planning
  - tracking methods
  - status dates
  - revising the project plan
  - getting the project back on track
  - monitoring the project to completion

|                   |           |         |   |
|-------------------|-----------|---------|---|
| What's the Issue? | DT 21/1/1 | \$60.00 | <i>Achievement Objective: Project Manage and support a Digital Technology outcome using planning tools</i><br><b>Theme: Conduct a Critical Inquiry</b><br><b>Assessment Link(s):</b> Achievement Standards 3.1 (AS 91900) 6 Credits<br><b>Contents:</b> Resource Descriptor including NZQA's recent Clarification document; Student Assessment Resource Timeline Checklist; Inquiry Guide; Research Templates; Student Self Check Template; Student Self-Reflection Template Teacher Assessment Coversheet; Achievement Standard 91900<br><br>This comprehensive resource package will support students to conduct a critical inquiry to propose a digital technologies outcome |
|-------------------|-----------|---------|---|

NZC Level 8  
NCEA Level 8 3

**Assessment Link**  
**NCEA Level 3**  
**AS 91900 (3.1)**  
**6 credits**

to solve an issue. This materials within the resource will prepare the students for the Level 3 Digital Technologies Achievement Standard – 91900.

It is a Pick-Up and Go assessment activity that can be given to students to work through and will help them meet the assessment criteria for the NCEA Level 3 Achievement Standard (91900) focused on conducting a critical inquiry to propose a digital technologies outcome (6 Credits).

There is the potential to use the material covered in this resource as the springboard for Achievement Standards and 91907 3.8 - *Use complex processes to develop a digital technologies outcome* - 6 Credits [Digital Technologies and Hangarau Matihiko] and 91611 *Develop a prototype considering fitness for purpose in the broadest sense* – 6 Credits [Generic Technology].

### **Specific Content**

At the conclusion of this assessment resource, students should be able to:

- Use time management tools to plan and manage time and to meet key milestones and deadlines.
- pose an initial inquiry question.
- undertake research to gather background information and ideas from reliable, expert sources.
- compare and contrast different perspectives.
- critique the accuracy, relevance, reliability, and/or significance of the findings.
- refine the inquiry question based on research findings.
- propose a digital technologies solution to the refined inquiry question.
- detect and explain potential risks of the proposed solution and how to mitigate these.
- identify and discuss possible future opportunities relating to the inquiry focus and explain the possible impacts of these opportunities.
- consider possible issues relating to the inquiry focus and suggest areas for improvement, extension, and/or follow-up.
- evaluate the strengths and weaknesses of the proposed digital technologies outcome.