

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 4 2025

Year 12 : NZC Level 7 : NCEA Level 2

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Curriculum & School Programmes Digital Technologies Resources

Title and Keywords	Code	Price	Description/Contents
NZCETA DIGITAL TECHNOLOGIES HANDBOOK A teacher's guide for programme design and implementation Aligned to The New Zealand Technology Curriculum Levels 4 & 5 <i>Version 2 – updated</i> <i>from previous version</i> <i>in order to meet the</i> <i>new Digital</i> <i>Technologies</i> <i>Curriculum</i> <i>(December 2017)</i>	DTB 11v2	\$90.00	<i>Published September 2018</i> This NZCETA Digital Technologies Teachers' Guide has been developed to accompany <i>The New Zealand Curriculum</i> (2007) 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 ¹. 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 & 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. 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. 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. 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. 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
Year 11 Curriculum Level 6 NZCETA Digital Technologies Handbook for programme design and implementation appropriate for The New Zealand	DTB12	\$90.00	Revised 2012 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

Technology Curriculum Levels 6 & NCEA Level One			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 & 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
Year 12 Curriculum Level 7 NZCETA Digital Technologies Handbook Version 2 for programme design and implementation appropriate for The New Zealand Technology Curriculum Levels 7 & NCEA Level Two	DTB13	\$90.00	Revised Term 4 2012 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 & 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
Year 13 Curriculum Level 8 NZCETA Digital Technologies Handbook for programme design and implementation appropriate for The New Zealand Technology Curriculum Levels 8 & NCEA Level Three	DTB14	\$90.00	Published Term 4 2012 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 & 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 section indicating the step-ups from NZC Level 7/NCEA Level 2 to NZC Level 8/NCEA Level 3

NZC L6/NCEA L1 Using Relevant Implications to Underpin Digital Technologies Teaching and Learning Programmes	DT 18/4/1	\$60.00	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 describe and address 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. Specific Content At the conclusion of this topic, teachers should be able to provide guidance for students regarding: • How to describe relevant implications that are important to their context for the development of a digital outcome. • How to test their outcomes to determine if they have addressed the relevant implications. • How to use the results of research, testing, and feedback to inform and refine their digital outcomes.
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All Levels

Mixed Resources and Software Related Activities

A beginner's guide to Visual Basic in PowerPoint <i>Basic VB Coding</i> <i>A good starting point</i>	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.
SCRATCHING the surface Creatively <i>Introduction to Programming</i>	DT 09/3/1	\$40.00	SCRATCH is a new programming language that makes it easy for students to create their own interactive stories, animations, games, music, and art, and share their creations on the web. Incorporating SCRATCH into your teaching and learning program will help your students to develop 21st century learning skills. Your students will learn how to become critical thinkers, problem solvers and decision makers and will work in a creative, innovative and collaborative environment. As they create SCRATCH projects, students learn important mathematical and computational ideas, while also gaining a deeper understanding of the process of design. This unit of work includes a series of tutorials plus a Scratch project and assessment template. Please note: The tutorials have been downloaded from a range of websites and are free. The links are supplied.
Spreadsheet Pack <i>Teacher and student notes covering a range of skills and tasks.</i> <i>Skills Development</i> <i>Decision Making</i> <i>Posters</i> <i>Teaching Cards</i>	DT 10/2/1	\$60.00	Revised 2012 This pack contains Spreadsheet tasks to use as part of your teaching. It develops skills and gives students the chance to think for themselves and make decisions about the work they complete. Formatting and Graph Posters with reminders for students Thinking and making decisions about tools to use Formulae – IF, PMT, and a variety of functions Conditional Formatting, Macros, Templates
Bag it <i>Be the latest logotype designer - Translate verbal ideas into visual images</i> <i>Creativity and Imagination</i> <i>Fireworks or MS Word</i> <i>Meeting the needs of a client</i>	DT 09/4/1	\$50.00	This is project is an introduction to graphic design with a focus on the fundamentals of logo design. Students will become familiar with the objectives and needs of a client and given the task to develop a logo design based on these goals. They will be set the task of designing and creating an innovative, aesthetically pleasing, and exciting logo which is appropriate for the purpose and target audience. Students will be given the challenge of personalising their logo so that it makes a personal statement about who they are. This activity pack contains: An "how to guide" for using Adobe Fireworks CS4 (the skills covered in this guide can also be applied to earlier versions of Fireworks) For those who do not have the Adobe software there are links to tutorials for using the draw tools within MSWord to create images Student notes on Logo Design Tips An activity on critical analysis of existing solutions Student templates Plus, an assessment schedule This is an authentic yet challenging project which will enable

			your students to express who they are in an imaginative and creative way. This 10-12-hour activity pack is overflowing with support material, tips, and tricks. No prior knowledge of design is necessary and can be implemented using a range of software. This resource could easily be modified to suit a context more appropriate to your students, for example, design a logo for a T Shirt.
Respecting Others Innovations and Creations <i>Intellectual Property Copyright</i>	DT 10/1/4	\$45.00	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 <i>Innovations, inquiring & curiosity</i> - Explore and discuss values of others <i>Thinking critically creatively & reflectively</i> - 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 <i>Equity</i>- Fairness and social justice; Reflection on the effects on creators and the possible effects on Research and Development <i>Integrity</i>- Being accountable for own actions and acting ethically <i>Respecting others</i>- Allowing all students to voice opinions and values without challenge Key Competencies <i>Thinking</i> - Developing understanding of concept of copyright and challenging their own values; Reflecting where they started, and where they have finished in terms of attitudes <i>Using of language, symbols, and texts</i> - Use of symbols: copyright, trademark, and patent <i>Relating to others</i> - Listen, recognize different points of view, negotiate values and share ideas Learning Area <i>Technology</i>: Level 5 <i>Strand</i>: 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
MovieMaker <i>Designing a Movie Storyboards Using Digital Cameras</i>	DT 10/1/8	\$45.00	Revised 2012 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. 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. <i>Integrity</i> - Act responsibly when taking and using images of others and their property Respect- Encourage students to accept others and their opinions; Encourage students to take responsibility for equipment Key Competences Managing self; Relating to others; Thinking; Participating and contributing; Using language, symbols, and texts Learning Area Technology: Level 4 - Technological Products
A Beginners Guide to Visual Basic in PowerPoint <i>Create an interactive Quiz</i> <i>Visual Basic</i>	DT 11/3/1	\$60.00	Revised 2012 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. 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. 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.
Getting Animated with Adobe Flash CS5	DT 12/3/2	\$60.00	Achievement Objectives to teach students (and teachers) the essentials of using Adobe Flash CS5 which could be used in conjunction with Level 3 Computing Unit Standard 25661 v6 3 credits design and assemble an interactive media product without scripting Level 3 Computing Unit Standard 5947 v6 3 credits use computer technology to solve a specified problem Level 1 Computing Unit Standard 5946 v6 3 credits use computer technology to create and deliver a presentation from given content Or any NCEA Level 1-3 Digital Technology Achievement Standards Internal assessments) 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 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> 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
Meet the Director - Getting to grips with the Movie Logo	DT 14/2/1	\$60.00	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: Understanding Film Genre and the conventions within Genre Different cinematography techniques such as camera angles and movement, their use and purpose Pre-production procedures and techniques such as understanding narrative and storyboarding Production procedures such as production schedules, permission and the practicalities of shooting Post-production procedures The resource includes: Introductory terminology, activity sheets, word finds, and planning templates are included with this resource. This resource is suitable for students at Levels 6, 7 & 8 of the curriculum and can be used to support the teaching and learning within Digital Technologies/Media, Generic Technology and Media Studies. Please note: The procedures, skills and techniques to edit and create a video using video editing software IS NOT covered
What is Your Aura - Creating augmented reality using Aurasma	DT 14/2/2	\$60.00	Achievement Objective: Implement procedures to produce a digital media outcome In the form of an augmented reality image integrating video and static image. 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> This resource package covers the skills needed to create an augmented reality or 'aura' using the free app, Aurasma. 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". 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. Curriculum Links - This resource links to the Technology Curriculum, Achievement Objective: Level 5 – Students will: Analyse their own and others' outcomes to inform the development of ideas for feasible outcomes. Undertake ongoing functional modelling and evaluation that takes account of key stakeholder feedback and trialling in the physical and social environments. Use the information gained to select and develop the outcome that best addresses the specifications. Evaluate the final outcome's fitness for purpose against the

			brief.
What's your Rapper Name? - An introduction to JavaScript	DT 15/1/3	\$60.00	Designed to be suitable for Year 9 & 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. 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 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.

Year 12 - Curriculum Level 7 – NCEA Level 2

Title and Keywords	Code	Price	Description/Contents
Club Secretary - An assessment for AS 91368 (2.41)	DT 11/4/2	\$50.00	Revised 2012 This resource covers the documents a club secretary would need to be familiar with and is an assessment for AS91368. The scenario is a new club secretary preparing a presentation to their club's committee to persuade the committee to update their systems for communicating with members. It involves the creation of a data base and the design of queries, reports and forms for that database. The database is linked to two different covering letters depending on the role of the member in the club. Attached to the letters is a newsletter which is designed as a template and has a spreadsheet and graph embedded in it. The minutes are also attached for the committee members.
A New Adventure - Practice Assessment <i>NZC Level 7/NCEA Level 2</i> Assessment Link AS 91370 (2.43) internal	DT 12/2/8	\$45.00	Implement advanced procedures to produce a specified digital information outcome with dynamically linked data This is a practice assessment task using the Digital Technology Achievement Standard 2.43 (91370) with a focus on Print Media. The resource includes suggested freeware that could be used, inspiring websites that can be used for students to think outside the square and trial different techniques during skill development for this standard. The practice assessment is based around the idea of having to sell their own personal belongings to allow them to embark on a new adventure. Contents: Resource Descriptor; Teacher Guidelines; Possible Software; Prior Learning Achievement Standard; Student Instruction Sheet; Possible templates to use for student and teacher; Assessment Schedule Guide; Advanced Techniques Check Sheet
Sussing out Spreadsheets - a touch on advance <i>Teaching & Learning Pack</i> <i>NZC Level 7/NCEA Level 2</i> Assessment Link AS 91368 (2.41) internal	DT 12/1/2	\$50.00	Learning objective: to build students confidence in using some of the advanced tools of Microsoft Excel, giving background knowledge and then an opportunity to use some of these tools This resource gives students the opportunity to read through PowerPoint Notes to become familiar with some of the more advanced features of Excel and then gets them to work through a real-life situation of becoming a student at university and the expenses Involved to put these of the tools to the test. The resource can be used as preparation for Digital Information AS 91368 implement advanced procedures to produce a specified digital information outcome with dynamically linked data. Skills covered include: • What you should already know • Workbooks – naming work sheets, moving • Page Layout • Printing • Sorting • Filtering • Linking Work Sheets • Graphs • Conditional Formatting • Formula – IF, COUNTIF, HLOOKUP, VLOOKUP, PMT All support resources are included with the resource package.

Contents: Resource Descriptor; Teacher Guidelines; Curriculum Links; Key Competencies; Qualifications Framework; PowerPoint Explanations (25 slides); Student Task Sheet; Suggested Solution

Taking Database Further with Aroha Kano & Kano Kawhe - Teaching & Learning Pack NZC Level 7/NCEA Level 2 Context: Digital Information Assessment Link AS 91368 (2.41) internal	DT 12/2/1	\$60.00	Implement advanced procedures to produce a specified digital information outcome with dynamically linked data Learning Objectives: Learn how to apply a range of advanced procedures with MS Access such as Filters for example in a form, report, query or datasheet Parameters in queries Using the calculation Data Type in a field Creating charts Exporting data (MS Word Mail Merge Excel) The Maori terms used in this resource are defined as: Aroha - “love”, kano - “bean” and kawhe - “coffee”. This is pronounced as kano kawhe (coffee bean). The resource package covers the more advanced skills within Microsoft Access 2010. However, MS Access 2007 could also be used with this resource. It is a <i>Pick-Up And Go</i> learning activity consisting of a step by step “how to guide” covering how to perform some more advanced techniques within MS Access database software, and how to manipulate, extract and analyse data using the database. Skills covered include: Applying filters to display specific records (for example in a form, report, query or datasheet) or to print certain records from a report, table, or query; Applying Parameters to queries; Exporting an Access 2010 database table/query to MS Excel 2010 sheet for applying functions/formulas; Exporting to MS Word 2010 and setting up a Mail Merge Specify Report Size Before Printing - By default, Access 2010 report size is set to Letter, however, before printing the report you can verify the size and adjust it to required size; Creating charts All support resources are included with the resource package including the 42page ‘how to’ booklet • KanoKawhe_2 • KanoKawhe beginning • Promotional Letter • Promotional Letter merged • Promotional Letter v1 • Retail Price query • Skills checklist
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Madge does her bit for Charity - Teaching & Learning Pack including Practice Assessment <i>NZC Level 7/NCEA Level 2</i> Context: Digital Information Assessment Link AS 91368 (2.41) internal	DT 12/2/7	\$60.00	Implement advanced procedures to produce a specified digital information outcome with dynamically linked data Learning Objective: Plan, design and create a relational Database using Microsoft Access 2010. • Consolidate skill development using a range of advanced procedures within MS Access: • Plan and design a relational database • Set Field names and Datatypes • Create Validation Rules • Use Input Masks • Create Forms • Enter data • Test the database • Perform queries using parameters • Perform multiple criteria queries • Perform calculations • Create a Report • Dynamically link data between MS Access and MS Word. • Consolidate skill development using a range of advanced procedures within MS Word: • Showing design elements and formatting features as appropriate to the outcome • Multi-level Bullets • Setting Styles • Creating a Bibliography using the Referencing tool • Section breaks • Perform a Mail Merge • Create an information sheet • Object linking This 32-page resource, with accompanying documents and solutions is to be used as a skill consolidation activity to help students strengthen their skills and knowledge within database design and word processing. Students will demonstrate their ability to perform advanced skills within Microsoft Access 2010 and MS Word. MS Access 2007 could also be used with this resource instead of 2010. This activity requires students to create a database and link this to a word-processed document to create a specified digital information outcome – relational database, a mail merge letter and information sheet to insert with the letter. It is a <i>Pick-Up and Go</i> activity including planning templates and performance tasks. The resource is to be used as a skill consolidation activity to help students strengthen their skills and knowledge within database design and word processing. Students will demonstrate their ability to perform advanced skills within Microsoft Access 2010 and MS Word. In its current form, this practice task is too structured for an assessment activity. The teacher would need to change the way the queries are written to be less guided. Students need to demonstrate independence in decision making; the queries in this activity give too much information and guidance. However, also included in the pack is an unguided assessment activity and suggested solution.
It's All Downhill – Mokau Mountain Bike Club - Practice Assessment <i>NZC Level 7/NCEA Level 2</i>	DT 12/4/2	\$50.00	This assessment resource package covers the introductory skills needed for students to be able to plan, create, and query a flatfile database. The resource includes: The assessment project, a suggested assessment schedule, suggested answers, planning templates, and a student checklist. It is appropriate for the teaching and learning required for assessment using Generic Computing Level Two Unit Standard 2786 <i>Create and use a computer database to solve a</i>

Assessment Links Generic Computing Level 2 US 2786 AS 91368 (2.41)			<i>problem.</i> The resource could also be used as a scaffolding task for Achievement Standard 91368 (2.41) <i>Implement advanced procedures to produce a specified digital information outcome with dynamically linked data</i> , 6 Credits
E-Ako E-Portfolio - Practice Assessment	DT 13/2/2	\$60.00	Implement advanced procedures to produce a specified digital media outcome Digital Media – Web Design Apply advanced procedures to design and create a functional, multi-paged website. This 37page comprehensive resource includes understanding the principles underpinning HTML5 and CSS3, writing semantically correct code, creating Cascading Style Sheets (CSS). In addition, there is an expectation that students will create and manipulate at least one other digital media file which is not a web page and integrate this into their website. The resource is to be used as a practice assessment task for the Level 2 Digital Technologies, Digital Media Achievement Standard 2.43 (AS91370). The resource includes teacher’s notes, a student practice assessment activity and a suggested assessment schedule. Also included are appropriate and helpful hyperlinks to useful websites. These websites should help guide the teacher and student in the development and testing of the digital media outcome. Likewise, a glossary of terms used within the resource is also included. This glossary should help breakdown some of the terminology and jargon used in the digital media environment. This resource is designed to be used as a practice assessment resource in preparation for the Digital Technologies Achievement Standard 2.43 (91370) and as part of a NCEA Level Two Digital Technologies programme. This practice assessment resource is worth 4 credits which equates to approximately 10 weeks or 40 teaching, learning and assessment hours. Contents: An assessment project; suggested assessment schedule; resources for planning purposes; Glossary of terms
NZC Level 7/NCEA Level 2			
Assessment Links Digital Technologies AS 91370 (2.43) internal			
You’ve got it – HTML5 & CSS3 in a nutshell - Learning Guide	DT 13/4/2	\$80.00	This resource is designed to be used as a Learning Guide in preparation for the Level 1 or 2 Digital Media Achievement standards 1.43 and 2.43 and as part of a NCEA Level One or Two Digital Technologies programme. The resource is to be used as “How to Guide” in preparation for the Level 1-2 Digital Technologies, Digital Media IMPLEMENT Achievement standards. The resource includes teacher and student notes, a PowerPoint presentation, image resources, videocasts and a design brief activity. 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 apply appropriate testing procedures in an online environment. Likewise, the glossary of terms used within the PowerPoint resources will further help clarify the terminology around the various image formats and their purpose. Learning Objectives By the end of this teaching and learning guide <i>Student at Level 6 of the curriculum will demonstrate the ability to:</i> ✓ Use appropriate features of digital media software to edit and integrate digital media types to create a digital media outcome apply formatting techniques, design elements, and data integrity and testing procedures, to ensure the outcome meets
NZC Level 6 & 7/NCEA Level 1 & 2			
Assessment Link NCEA Level 2 Digital Technologies AS 91370 (2.43) internal			

the specifications

- ✓ Follow legal, ethical, and moral responsibilities as appropriate to the outcome
- ✓ Show accuracy and independence in the application of techniques and testing procedures
- ✓ Undertake techniques and testing procedures in a manner that economises the use of resources in a digital media outcome's production and use.

Students at Level 7 of the curriculum will demonstrate the ability to:

- ✓ Select software based on the features of the program(s) that enable media types to be created, edited and integrated
- use advanced tools and techniques to edit and integrate digital media types to create a digital media outcome
- ✓ Apply advanced formatting techniques, design elements, and data integrity and testing procedures, to ensure a digital media outcome meets the specifications
- ✓ Follow legal, ethical, and moral responsibilities as appropriate to a digital media outcome
- ✓ Show accuracy and independence in the application of advanced tools, techniques and testing procedures
- ✓ Apply tools and techniques and testing procedures in a manner that economises the use of resources in a digital media outcome's production and usability

Specific Content

At conclusion of this teaching and learning guide, students should be able to demonstrate the ability to carry out the following techniques in Web Design and image manipulation:

Apply appropriate procedures to design and create a multi-page website

Follow appropriate designing procedures to ensure the website pages are fit for purpose. This could include wireframes, mockups, and sitemaps

Set up appropriate folder structures and apply appropriate file management procedures as applicable to web design

Understand and apply HTML5 and CSS3 for laying out pages

Apply appropriate procedures to integrate images types into a webpage

Hyperlink pages internally and externally

Validate code using either:

[wc3 validator](#) accessibility testing tool

[Dirtymarkup](#) for cleaning up your messy code

[Clean CSS](#) for formatting and optimizing your CSS

[WAVE](#) accessibility testing tool

Cross browser checking (for example: Chrome, Safari, IE and Firefox)

[Adobe BrowserLab](#) is a free cross-browser compatibility tool

[Browsershots](#) is probably the most comprehensive free testing tool available

Other cross browser tools may be found here:

<http://www.smashingmagazine.com/2011/08/07/a-dozen-cross-browser-testing-tools/>

Project Management - Learning Guide <i>NZC Level 7 & 8 NCEA Level 2 & 3</i> Assessment Link NCEA Level 2 & Level 3 Generic Technology Achievement Standard AS 91355 (2.2) & AS 91609 (3.2)	DT 15/4/4	\$80.00	Achievement Objective: Project Manage and support a Digital Technology outcome using planning tools 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. 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. 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 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
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- monitoring the project to completion

Understanding Digital Media – Oh What to include!

Teaching & Learning Guide

NZC Level 7/NCEA Level 2

Assessment Link
NCEA Level 2
Digital Technologies
AS 91369 (2.42) internal

DT
14/4/1

\$60.00

This resource covers all the elements that students need to consider when creating media outcomes. There are 31 pages covering the common Media types, advanced tools, standards and conventions, asset and file management, legal, ethical and moral responsibilities and data integrity and testing with activities for the students to complete and links to other resources. It could be used in an online learning environment, printed out booklet for students, or teacher directed lessons. There is also a teachers' guide with suggested solutions where relevant. It links to the requirements for Achievement Standard 91369 (2.42) Demonstrate understanding of advanced concepts of digital media. It is anticipated that this standard will be addressed in conjunction with Achievement Standard 91370 (2.43) Implement advanced procedures to produce a specified digital media outcome.

Specific Content

At the conclusion of this topic students should be able to:

- discuss why advanced tools and techniques have been used to create, edit and integrate digital media outcomes and how their use has enhanced the outcome.
- explain the digital media standards and conventions used to produce digital media outcomes, and discuss the positive and negative implications of adhering to these standards and conventions when developing digital media outcomes
- explain how asset management and file management are applied in the development of digital media outcomes, and discuss the importance of effective and appropriate asset management and file management in the development of digital media outcomes
- explain legal, ethical and moral considerations in relation to the requirements of digital media outcomes in the wider community.
- explain the data integrity and testing procedures used to ensure a digital media outcome meets the specifications, and how they were applied
- discuss the importance of appropriate data integrity and testing procedures in the development of digital media outcomes
- evaluate how the application of advanced tools, techniques, standards and conventions affect the quality of digital media outcomes.
- discuss the relationship between standards and conventions, and legal, ethical and moral considerations in relation to the requirements of digital media outcomes.

Contents: Teacher Guidelines, Student Resources with Images for one activity

Human Factors in Design - Learning Guide

Assessment Link
NCEA Level 1
Technology Generic
AS 91054 (1.11) internal
Digital Technologies

DT
16/1/1

\$60.00

A 34page resource with two PowerPoints it is a resource which includes an introduction, theory, tasks and assessment ideas. This is an easy to use resource package which covers introductory theory needed when considering basic human factors in the design of a digital interface alongside the inextricable link between advancement in technology and the demands from users as part of this development. It will be a useful resource for teachers who are planning on preparing students for the NCEA Level 1 and Level 2 Digital Technology

AS 91074 (1.44) part
external

Also, part Level 2
AS 91371 (2.44)
external

external standards as this content covers approximately one third of each of the externals. The resource can be used for teachers planning to assess the NCEA Level 1, Generic Technology internal assessment where students are expected to demonstrate understanding of basic human factors in design.

The resource includes theory alongside some tasks for students to work through as they develop their understanding in this topic. It also resource includes two MS PowerPoint presentations – Design (32 slides) and Layout (16 slides).

The resource supports the delivery of the **Technology Curriculum:**

Technological Practice, outcome, development, and evaluation as well as the Nature of Technology characteristics and technological outcomes. The aim of technology education is for students to develop “a broad technological literacy” – to gain skills, knowledge, and understanding that will enable them to thoughtfully live with, critique, and contribute to the technological developments that shape our lives.

Technologically literate young people:

have a broad understanding of how and why things work
understand how technological products and technological systems are developed

can critically evaluate technological developments and trends

can design and evaluate their own solutions in response to needs and opportunities.

Like any other literacy, technological literacy is developed by exposure to a wide range of relevant experiences over time.

The three strands of the technology curriculum – technological practice, technological knowledge, and the nature of technology – are designed to facilitate this.

Prior Learning

It is not necessary for students to have any prior learning in Digital Technology to be able to undertake this/these achievement standards however an understanding of the basic principles of design would be useful.

Specific Content

At conclusion of this topic students should be able to:

- Understand the basic design principles
- Evaluate and comment upon several different user interfaces
- Understand the different needs for human factors in design for hardware versus software (interface design)
- List, describe, analyse the 7 Neilson HCI points in relation to a commonly used digital product.

**Database Design using
FileMaker Pro Advanced
- How to Guide**

DT
17/1/1

\$55.00

NZC L6 & 7 - Years 11 & 12

Achievement Objectives: Setting up a FileMaker database system for a business; Creating tables; Creating forms, buttons and control tabs; Setting fields with correct field types (e.g. number, text, Auto-number(serial number), calculations & drop-down lists, calendar drop-downs); Creating layouts that function appropriately on a range of devices (e.g. iPad or iPhone); Create relationships between tables

This resource would be suitable for Year 11 or 12 students

who are undertaking a Level 1 or Level 2 Digital Technologies programme of study. Students will be guided through the steps to set up a Filemaker database system for a business. They will learn how to:

- Create tables
- Create a form
- Add buttons
- Use tooltips
- Create tabs in a form
- Set fields with correct field types (e.g. Number, text, autonumber (serial number), calculations, drop-down lists, calendar drop-downs); and
- Create layouts that function appropriately on a range of devices (e.g. iPad or iPhone).
- Create relationships between tables
- Find data, export data
- Create a mail merge

Students will be exposed to common database terms such as:

- Database
- Table
- Field
- Data type
- Record
- Calculation
- Find
- Edit
- Form
- Merge

On the completion of the How to Guides student will be given a *Practice Assessment* as an approach to consolidate and test their learning.

Apply digital information management tools to create a digital information outcome requires students to create a digital information outcome that involves manipulating and combining data from more than one application. The specifications for the digital information outcome, software and techniques to be used need to be determined prior to the outcome being made. When creating digital information outcomes students will use appropriate techniques and data integrity and testing procedures. Students will apply appropriate file management procedures, design elements, and formatting techniques. Students will consider their legal, ethical, and moral responsibilities when developing digital information outcomes.

This resource is designed to guide students and teachers to through the process of applying digital information management tools to create a digital information outcome in the form of a database system for a business. **Content:** How to Guide – Database Design; How to Guide – Mail Merge; Completed Database & Mail merge Letter; Template Files; Image Files; Practice Assessment; Suggested Answer; Assessment Schedule