**NZQA**

**Approved**

Achievement standard: 91355 Version 3

Standard title: Select and use planning tools to manage the development of an outcome

Level: 2

Credits: 4

Resource title: Commercial crop harvesting video

Resource reference: Generic Technology VP-2.2 v2

Vocational pathway: Primary Industries

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| Quality assurance status | These materials have been quality assured by NZQA.  NZQA Approved number A-A-02-2015-91355-02-8248 |
| Authenticity of evidence | Assessors/educators must manage authenticity for any assessment from a public source, because learners may have access to the assessment schedule or exemplar material.  Using this assessment resource without modification may mean that learners’ work is not authentic. Assessors/ educators may need to change figures, measurements or data sources or set a different context or topic to be investigated or a different text to read or perform. |

Vocational Pathway Assessment Resource

Achievement standard: 91355

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Learner instructions

# Introduction

This assessment activity requires you to select and use planning tools to manage the development of a commercial crop harvesting video for seasonal workers from an assessor/educator approved brief.

You are going to be assessed on how efficiently you manage the development of the video, optimising time and materials to ensure its completion.

The following instructions provide you with a way to structure your work to demonstrate what you have learnt and achieve success in this standard.

Assessor/educator note: It is expected that the assessor/educator will read the learner instructions, and modify them if necessary to suit their learners.

# Task

You are to use planning tools to manage the design and development of the commercial crop harvesting video for seasonal workers, and present evidence demonstrating how efficiently you have developed and managed this process.

You require an assessor/educator approved brief that contains a conceptual statement, which describes what is to be done and why, and measurable specifications. The outcome can be a conceptual design for an outcome and/or the technological outcome itself (prototype).

## Selecting planning tools

Explore existing planning tools and how they are used by horticulture mentors, and/or members of the commercial crop industry.

Research other planning tools. These might include brainstorms, Gantt charts, PMI (plus, minus, interesting) charts, reflective diaries and/or journals, plans of action, mind-maps, flow diagrams, graphic organisers, wire frames, test plans, spreadsheets, and databases.

Analyse how they may help you manage the development of your crop harvesting video by recording the following information:

* identify each planning tool used
* at what stage of the project would this planning tool be relevant?
* how does it help you:
  + plan the actions required?
  + effectively prioritise and manage resources?
  + make key planning decisions that will ensure the completion of the outcome (conceptual and/or prototype).

Select the best planning tools to use from the information you have collected, and explain how they are best suited to help you manage the development of your commercial crop harvesting video for seasonal workers.

## Using planning tools

Use your planning tools to:

* set achievable goals
* establish required resources (time, materials, tools and equipment)
* research information such as community and work-based specialist knowledge and skills (horticulture, viticulture, crop farmers, forestry)
* determine critical review points at key stages of your practice (i.e. those that ensure that the crop harvesting video will be completed), such as:
  + on the completion of research, and/or
  + having gained feedback on your conceptual designs, etc.

Provide evidence of how you are reviewing your progress and any revisions you are making to your planning to ensure you will complete the outcome.

## Reviewing planning tools

During the development of your crop harvesting video, you will need to ensure that you:

* revise and/or confirm your goals and the resources and planning tools you are using
* optimise your use of time and materials.

## Submitting your evidence

You will need to provide evidence showing how effectively and efficiently you have managed your development process to ensure the completion of the commercial crop harvesting video (for example, you could organise and present this evidence through a blog or a video diary).

You will need to submit evidence of:

* your completed crop harvesting video (conceptual and/or prototype)
* your selection and use of planning tools used in the development process (i.e. how you arrived at the final outcome.

# Resources

In selecting planning tools you may:

* find examples of planning tools on the web and in books

<http://www.mindtools.com/index.html>

<http://softwareforlearning.tki.org.nz>

* look at other technology projects you or other learners may have completed
* study learner projects published by [http://technology.tki.org.nz](http://technology.tki.org.nz/) (Learner Showcase and Classroom Practice Case Studies.

Useful books include:

Stensel, P 2007, *Design & Technology – Design For Life*, Pearson Education South Asia, Singapore

Reith, C 2008, *Technology Made Easy: NCEA Level 1*, Pearson Education, New Zealand

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Assessor/Educator guidelines

# Introduction

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

As with all assessment resources, education providers will need to follow their own quality control processes. Assessors/educators must manage authenticity for any assessment from a public source, because learners may have access to the assessment schedule or exemplar material. Using this assessment resource without modification may mean that learners' work is not authentic. The assessor/educator may need to change figures, measurements or data sources or set a different context or topic. Assessors/educators need to consider the local context in which learning is taking place and its relevance for learners.

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

# Context/setting

This activity requires learners to select and use planning tools to efficiently manage the development of a commercial crop harvesting video for seasonal workers from an assessor/educator approved brief.

Learners will be assessed on how efficiently they manage its development, through ongoing reflection of goals, resources and planning tools to optimise time and material use to ensure the completion of a commercial crop harvesting video. This may be a conceptual design for an outcome and/or the technological outcome itself (prototype).

# Conditions

This is an individual activity.

Provide learners with opportunities to critically evaluate planning tools that they and others have used.

Schedule at least one progress checkpoint during this activity.

# Resource requirements

Assessors/educators will provide learners with:

* internet and library access
* access to a horticulture industry mentor
* access to examples of planning tools.

# Additional information

Visits to a commercial orchard or from a horticulturist may also be helpful.

Provide learners with:

* guidance on how to select effective and relevant planning tools
* instructions on how they may document the development process, including guidance on what constitutes evidence and how to organise and annotate the material they gather.

# Assessment schedule: Generic Technology 91355 – Commercial crop harvesting video

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| Evidence/Judgements for Achievement | Evidence/Judgements for Achievement with Merit | Evidence/Judgements for Achievement with Excellence |
| The learner selects and uses planning tools to manage the development of a commercial crop harvesting video by:   * selecting planning tools informed by a review of existing planning tools * using selected planning tools to set achievable goals, establish resources required and determine critical review points * managing the development and reviewing progress as planned to ensure the completion of the crop harvesting video   For example:  The learner has some previous knowledge of planning tools and decides to use a brainstorm to look at information on planning tools laterally. This enabled the learner to consider different ways to organise ideas; examples were researched to select planning tools (affinity diagram, project plan), key stages, dates and resources (equipment) were determined; an affinity diagram organised ideas; a project plan in a visual diary kept track of evidence and ideas; a pre-production check list given by the assessor/educator helps manage production requirements. Critical review points are established at the conceptual and production key stages to allow time for feedback and reflection before doing any further work; this means time is allowed for gaining specialist knowledge on the videos content (from horticulturist mentor) and developing the skills and techniques required to shoot the video (from assessor/educator); time for reshooting if necessary is also factored in. The learneronly has limited access to specialised equipment (such as the video camera and computer time for editing) required to shoot and edit the video, so the project plan that has been created lists the tasks for each week, resources needed (availability of video camera, actors, computer access) and any planned meetings with specialists and/or mentors to gain feedback and specialist knowledge. The learner interviews a horticulturist to gain knowledge of crop harvesting. The project plan is reviewed at the end of each week to ensure that these tasks are completed before the learner moves onto the next key stage. The affinity diagram is used to organise the videos themes into a storyboard (i.e. design ideas) for the horticulturist mentor to review before production ensuring the learner keeps on track so the crop harvesting video is completed on time.  *The above expected learner responses are indicative only and relate to just part of what is required.* | The learner selects and uses planning tools to effectively manage the development of a commercial crop harvesting video by:   * selecting planning tools informed by an analysis of existing planning tools * using selected planning tools to set achievable goals, establish resources required and determine critical review points * reviewing progress at critical review points to revise and/or confirm goals, resources and planning tools to ensure completion of the crop harvesting video   For example:  The learner has some previous knowledge of planning tools and decides to use a brainstorm to look at information on planning tools laterally. Looking at planning practices online and in books influenced the learner’s decision to consider different tools to organise ideas; an affinity diagram organised common themes; a project plan in a visual diary to clarify weekly goals and resources and make use of the time available and keep track of evidence and ideas; a pre-production check list example given by the assessor/educator was used to help manage consultation and production requirements.  The learner creates selected planning tools (affinity diagram, project plan), determines key stages, dates and resources (equipment) required; critical review points are established and the learneruses and reviews planning tools and goals at these pre-determined points to keep on track. The learneronly has limited access to specialised equipment (such as the video camera and computer time for editing) required to shoot and edit the video, so after reviewing progress at a critical review point, the learner adjusts the project plan to reflect the weeks tasks, resources needed (availability of video camera, actors, computer access) and any planned meetings with specialists and/or mentors to gain feedback. The learneruses a questionnaire to get industry feedback on the most important aspects of commercial crop harvesting for seasonal workers; however, they realise that there is not enough time left for meaningful analysis; this means the learner has to adjust goals to ensure the video will be completed on time. The project plan is then reviewed at the end of each week to ensure that these tasks are completed before the learner moves onto the next stage of production. The affinity diagram is used to organise the videos themes into a storyboard (i.e. design ideas) for the horticulturist mentor to review before production; checking the material is suitable and informative.  *The above expected learner responses are indicative only and relate to just part of what is required.* | The learner selects and uses planning tools to efficiently manage the development of a commercial crop harvesting video by:   * selecting planning tools informed by an analysis of existing planning tools * using selected planning tools to set achievable goals, establish resources required and determine critical review points * ongoing reflection of goals, resources and planning tools to optimise time and material use to ensure completion of the crop harvesting video   For example:  The learner has some previous knowledge of planning tools and decides to use a brainstorm to look at information on planning tools laterally. Looking at planning practices online and in books influenced the learner’s decision to consider different tools to organise ideas; an affinity diagram organised common themes; a project plan in a visual diary to clarify weekly goals and resources and make use of the time available and keep track of evidence and ideas; a pre-production check list example given by the assessor/educator was used to help manage consultation and production requirements.  The learner creates selected planning tools (affinity diagram, project plan), determines key stages, dates and resources (equipment) required.  The learner constantlyuses and reviews planning tools, goals and resources at critical review points to keep on track so the crop harvesting video is completed on time. After reviewing progress at a critical review point, the learner project plan is adjusted; listing tasks for each week, resources needed (for example, specialised equipment such as the video camera and computer time for editing), any planned meetings with specialists and/or mentors to gain feedback; the learner realises that the key to a successful video is having suitable footage for the intended user; as there is a wide variety of material available detailing commercial crop harvesting; the learner doesn’t know how to choose the most suitable for seasonal workers so it is suggested by the horticulturist mentor that a questionnaire be sent to a local commercial orchard. This knowledge is then used to brainstorm ideas, from which a decision could then be made, and planning reviewed to ensure the video would be completed on time. The project plan is reviewed at the end of each week to ensure that these tasks are completed before the learner moves onto the next stage of production. The affinity diagram is used to organise the themes from the brainstorm into a storyboard (i.e. design ideas) for the horticulturist mentor to review before production so the finished video is suitable and informative. The project plan also highlights how limited the specialised equipment is (i.e. video camera and editing software) so the use of these has to be organised well in advance. A pre-production check list is used to make any last minute adjustments, such as making sure all resources required are available on the days the video is to be shot, optimising this time.  *The above expected learner responses are indicative only and relate to just part of what is required.* |

Final grades will be decided using professional judgement based on an examination of the evidence provided against the criteria in the Achievement Standard. Judgements should be holistic, rather than based on a checklist approach.