**NZQA**

**Approved**

Achievement standard: 91044 Version 3

Standard title: Undertake brief development to address a need or opportunity

Level: 1

Credits: 4

Resource title: Zapped!

Resource reference: Generic Technology VP-1.1 v2

Vocational pathway: Manufacturing and Technology

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| Quality assurance status | These materials have been quality assured by NZQA.  NZQA Approved number A-A-02-2015-91044-02-7350 |
| 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: 91044

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Learner instructions

# Introduction

This assessment activity requires you to develop a brief for a safety video for an electrical workplace.

You are going to be assessed on how comprehensively you undertake brief development to address a need or opportunity. You need to show that you can justify why a particular outcome should be developed, and why the identified physical and functional attributes are needed for the outcome.

The following instructions provide you with a way to structure your work so you can 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

Undertake research to explore the context and issue of safety in an electrical workplace. This may involve interviewing the key stakeholder, for example the line manager, and establishing concerns regarding an electrical workplace environment.

Explain a potential need or opportunity that is derived from the issue of electrical workplace safety:

* a need is something the key stakeholder requires
* an opportunity is a possibility for a person, group, or environment (i.e. something that to date has not been identified as needed).

For example, new employees and apprentices need to be aware of workplace hazards before they commence electrical repairs.

## Research and Development

Undertake ongoing research by considering:

* the social environment; for example the people who want to prevent accidents, ACC (Accident Compensation Corporation), electrical workplace managers, and those who will use or need the outcome (gender, age, role etc.)
* the physical environment where the outcome will be developed and used, for example workshops and factories
* the resources available, for example camera, lighting, means of showing the video (television, telephone, computer)
* the opinions of all the stakeholders connected to the outcome, for example the line manager, ACC, employees
* any constraints, for example resources, time, and equipment.

## Conceptual Statement

Use the results of your research and development to describe the video and its purpose, and justify why it should be developed.

Write a conceptual statement. This should include the purpose of the video, the groups of people using the video (the presenter and the target audience), what the outcome will be (conceptual design or prototype) and where the video will be used.

## Specifications

Develop a clear set of specifications for your outcome by:

* considering the information you have gathered that relates to your stakeholder needs, and the social and physical environment
* using research of existing solutions, for example safety videos, ACC pamphlets, warning systems.
* explaining as a result of this research, the desired:
  + physical attributes, for example appearance, colours, presentation
  + functional attributes, for example easy to view and/or read, communicates a message
* justifying as a result of functional modelling (sketching, screen shots, photographs etc.), regular stakeholder consultation and consideration of the environment, why the outcome must have particular physical requirements (such as colours, graphics, style) and functional requirements (good sound quality, communicates safety in the workplace etc.) in order to meet the needs of the stakeholders.

## Final brief

Present your final brief by including your fully developed conceptual statement and specifications.

Your conceptual statement should be clearly communicating what is to be done and why. It should:

* describe the purpose of the outcome
* describe the social and physical environment, for example where the outcome will be used, and who will use it
* justify why the outcome should be developed.

Ensure that your set of specifications:

* clearly define the requirements of the outcome in terms of its physical nature (i.e. what it is), and its functional nature (i.e. what it will show)
* enable you to judge whether the outcome defined by your brief has the potential to be fit for purpose.

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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 toundertake comprehensive brief development, within the context and issue of electrical workplace safety.

Learners are not required to create the technological outcome as part of this assessment activity.

# Conditions

This is an individual activity. Evidence is expected to be gathered from activities completed over a specified period of time.

Decide on the format of the final brief.

# Resource requirements

Assessors/educators will provide learners with opportunities to develop their evidence.

Learners will require access to the internet for research.

# Additional information

The [technology online explanatory paper on brief development](http://www.techlink.org.nz/curriculum-support/papers/practice/brief-dev/index.htm) provides a definition of a brief, and how a brief is developed as part of technological practice: <http://technology.tki.org.nz/Curriculum-Support/Explanatory-Papers/Technological-Practice/Brief-Development>.

Useful websites include:

* Accident Compensation Corporation: construction: <http://www.acc.co.nz/search-results/index.htm?ssUserText=construction>
* Department of Labour - Occupational Safety and Health catalogue: <http://www.osh.govt.nz/order/catalogue/index.shtml#co>
* Accident summaries: <http://www.med.govt.nz/energysafety/about/publications/accident-summaries>.

# Assessment schedule: Generic Technology 91044 – Zapped!

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| Evidence/Judgements for Achievement | Evidence/Judgements for Achievement with Merit | Evidence/Judgements for Achievement with Excellence |
| The learner undertakes brief development to address a need or opportunity by:   * identifying a need or opportunity as a result of exploring the given context and issue of electrical workplace safety   For example:  The learner’s evidence includes people involved in the workplace, the type of hazards that occur and their causes. In consultation with the stakeholders, the learner may identify a need for some way of alerting workers to workplace accidents.   * reflecting consideration of the social and physical environment   For example:  The learner considers who is using the space, who is responsible for the workplace, the types of accidents, etc.   * reflecting key stakeholder’s opinion   For example:  The learner identifies, as the result of a meeting with the line manager, preferences for a means of communicating the hazards.   * describing the outcome to be developed   For example:  The learner reflects on the information to date to explain the outcome, such as a video that shows the hazards.   * identifying the physical and functional attributes needed for the outcome   For example:  The learner decides that the video must be colourful, represent a multi-cultural society, and have a clear safety message.   * producing a final brief comprised of a conceptual statement and specifications   For example:  The learner confirms the conceptual statement and carries out further research, functional modelling, and stakeholder consultation to establish the specifications. Specifications allow for the safety video to be judged as fit for purpose (e.g. it gives a clear message to all sectors in the workplace, and identifies the hazards). A final brief comprised of a conceptual statement, that says what is to be done and why, and specifications that define the requirements of the outcome in terms of its physical and functional nature, is presented.  *The above expected learner responses are indicative only and relate to just part of what is required.* | The learner undertakes detailed brief development to address a need or opportunity by:   * explaining how the need or opportunity is derived from the issue of electrical workplace safety   For example:  The learner’s evidence includes explanations of the people involved in the workplace, the type of hazards that occur and their causes. In consultation with the stakeholders, the learner may identify a need for some way of alerting workers to workplace accidents, as the line manager wants to run a training programme, and needs to show the hazards and how to avoid them.   * reflecting iterative consideration of the social and physical environment and key stakeholder’s opinion   For example:  The learner undertakes functional modelling, considering throughout the impact of the video on the employees involved and the need to convey the safety message.   * describing the purpose of the outcome within the intended environment   For example:  The learner describes that, as new workers start, it is difficult to give them access to all parts of the factory, and therefore the risks are identified and captured on the video without endangering the workers.   * explaining the physical and functional attributes needed for the outcome   For example:  The learner explains that the video must be colourful to attract the attention of the new employees, represent a multi-cultural society as the workforce represents a range of cultures, and must have a clear safety message for the prevention of accidents which cost the firm a great deal of money.   * producing a final brief comprised of a conceptual statement and specifications   For example:  The learner confirms the conceptual statement and carries out further research, functional modelling, and stakeholder consultation to establish the specifications. Specifications allow for the safety video to be judged as fit for purpose (e.g. it gives a clear message to all sectors in the workplace, and identifies the hazards). A final brief comprised of a conceptual statement, that says what is to be done and why, and specifications that define the requirements of the outcome in terms of its physical and functional nature, is presented.  *The above expected learner responses are indicative only and relate to just part of what is required.* | The learner undertakes comprehensive brief development to address a need or opportunity by:   * justifying why such an outcome should be developed   For example:  The learner establishes, as a result of iterative research and analysis of the social and physical environment, that the line manager is not only responsible for the safety of the workers, but is also accountable for the time lost in production should an accident happen. All new workers take part in a two day induction programme, and the manager stated that a visual aid to communicate the message would be useful.   * reflecting iterative consideration of the social and physical environment and key stakeholder’s opinion   For example:  The learner undertakes functional modelling, considering throughout the impact of the video on the employees involved and the need to convey the safety message.   * describing the purpose of the outcome within the intended environment   For example:  The learner describes that, as new workers start, it is difficult to give them access to all parts of the factory, and therefore the risks are identified and captured on the video without endangering the workers.   * justifying why the identified physical and functional attributes are needed for the outcome   For example:  The learner carries out functional modelling to establish the information that was needed in the video, how best to communicate the hazard, and how to prevent accidents. Such things as graphic displays were tested in the training room, and existing workers were used to test ideas on to see if the video would be fit for purpose.   * producing a final brief comprised of a conceptual statement and specifications   For example:  The learner confirms the conceptual statement and carries out further research, functional modelling, and stakeholder consultation to establish the specifications. Specifications allow for the safety video to be judged as fit for purpose (e.g. it gives a clear message to all sectors in the workplace, and identifies the hazards). A final brief comprised of a conceptual statement, that says what is to be done and why, and specifications that define the requirements of the outcome in terms of its physical and functional nature, is presented.  *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.