

Internal Assessment Resource

Entertainment and Event Technology Level 2

This resource supports assessment against Unit Standard 27703 version 5

Standard title: Demonstrate and apply knowledge of sound design for an entertainment and event context

Credits: 4

This resource:

- Clarifies the requirements of the standard
- Supports good assessment practice
- Should be subjected to the school's usual assessment quality assurance process
- Should be modified to make the context relevant to students in their school environment and ensure that submitted evidence is authentic

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Teacher guidelines

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

Teachers need to be very familiar with the outcome(s) being assessed by the unit standard. The achievement criteria and the guidance information contain information, definitions, and requirements that are crucial when interpreting the standard and assessing students against it.

Context/setting

This activity requires students to demonstrate and apply knowledge of sound design for an entertainment and event context.

Entertainment and event contexts could include dance, kapa haka, scripted drama, music performance, moving image production, physical theatre, devised work, performance art, cultural event, recording studio work.

Possible venues could be, for example, marae, stadia, theatres, event and convention centres, studios, parks and sports grounds, outdoor spaces, museums and galleries, places of worship, cultural places, specialist classrooms.

Conditions

It is suggested that the assessment activity take place over 7 - 8 weeks of in- and out-of-class time.

Students could work in groups of two or three but will be assessed individually.

Resource requirements

Students should have access to:

- Internet, for research and communication.
- Either virtual or hardware sound-gear including: equalisers (parametric and graphic); compressor-limiter, delay; reverb, mixing desk with inserts on channels and an auxiliary bus(es).
- A system to monitor audio.
- Suitable safety equipment (e.g. fire extinguisher).

The following resources should also be available but are not necessary for assessment purposes:

- Sufficient number and variety of microphones and stands suitable for the performance context.
- A stereo power amplifier and mixing desk or mixer/amplifier.
- Passive speakers - e.g. 15inch plus horn combo.
- Cables of sufficient length to allow set up that meets the requirement of the context.

Consideration should be given to ensuring that equipment is compatible e.g. if a microphone requires phantom power, the mixer has this feature.

Additional information

Students must be given access to sound equipment that has been certified as safe in order to complete assessment against this unit standard. The teacher/tutor must ensure that the power supply used in practical activities has sufficient capacity and circuit protection for the connected equipment.

Equipment must be checked and verified by the teacher/tutor as being connected correctly prior to power up.

The teacher/tutor should specify or agree the specific entertainment and event context that the student will be assessed in.

Students must be supplied with the design requirements prior to assessment.

It is vital that students follow safe working practices for this assessment. A useful reference for safe working practice is the Entertainment Technology New Zealand publication *A Guide for Safe Working Practices in the New Zealand Theatre and Entertainment Industry*, version 14 or subsequent amendments, which can be accessed at <http://www.etnz.org>.

All learning and assessment must be carried out in accordance with:

- Health and Safety at Work Act 2015
- Copyright Act 1994
and subsequent amendments

Recommended pre-requisite: Unit 26687, *Demonstrate and apply knowledge of sound for an entertainment and event context*.

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Student Instructions

Introduction

For this assessment you are required to set up for and mix down a recording adding equalisation, compression, delay and reverb.

You must set up and operate the equipment according to a set of supplied guidelines.

You are going to be assessed on:

- Your description of sound design in terms of the technical requirements and purpose of sound for the specific entertainment and event context.
- Describe sound control and enhancement processes in terms of the equipment used, its features, their function, and specifications.
- Your ability to set up and operate sound equipment according to the requirements of the design and safe working practices.
- Your ability to apply sound control and enhancement processes on cue and in accordance with the design.

All learning and assessment for this unit standard must be carried out in accordance with:

- the Health and Safety at Work Act 2015 and the Copyright Act 1994, and subsequent amendments
- safe working practices. See *A Guide for Safe Working Practices in the New Zealand Theatre and Entertainment Industry*, version 14 or subsequent amendments, which can be accessed at <http://www.etnz.org>

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

Teacher note: Modify these instructions as necessary to meet the needs and interests of your students.

Task

You will be required to present information about sound design, describe the control and enhancement processes, and set up and operate sound to meet the design requirements of an entertainment and event context.

You may work individually or in a group, but you will be individually assessed.

You have 8 weeks to complete and submit your assessment.

Task One: Present information about sound design for a recorded context.

For this task you must describe sound design in terms of the technical requirements and purpose of sound for the entertainment and event context.

You will need to:

- Describe the purpose of sound for the context. Some questions you could consider:
 - What needs to be amplified?
 - What is the purpose of using equalisation, compression, delay and reverb in a mix down?
 - What are the key areas of focus?
 - What themes, time, instruments are being communicated?
 - What mood or texture is being created?
 - Which creative elements need to be emphasised?

- Describe how technical requirements are considered within the sound design. This must at least include the following technical requirements:
 - physical aspects of the venue
 - separation of source signals
 - fidelity
 - placement and connection of equipment in a mix
 - correction
 - special effects created
 - budget.

- Describe sound control and enhancement processes in terms of the equipment used, its features, their function, and specifications. You need to give **three (3)** features for **three (3)** pieces of equipment. Types of equipment could be:
 - Microphones
 - Mixer
 - Amplifier(s)
 - Speakers
 - Recording device.

Specifications mean things like frequency, equalisation, dynamic range, phase, signal to noise ratio; reverb time, decay time, compression ratio, attack time, release time.

- Use technical language to make and justify links between the technical requirements and purpose of sound for the specified context.

Your supporting research may involve interviews with people in the entertainment and event industry, teachers from the subject areas, internet and/or library research, equipment handbooks or brochures.

The information may be presented in written, visual or oral methods such as a video diary, block diagram, or written description.

Task Two: Set up and operate sound to meet the design requirements of the entertainment and event context.

Your teacher will give you sound design requirements that include **three (3)** different sound processes. You will need to follow the design requirements to create the **three (3)** sound processes in sequence.

You must be provided with a set of guidelines specifying how equipment must be rigged, labelled and operated. You may refer to these during the assessment.

You will need to:

- Safely select and rig the sound equipment according to the sound requirements of the design.
- Apply sound control and process on cue and in accordance with the design.
- Make and justify links between the design requirements and your selection and operation of equipment.

This task will be assessed via your teacher observing you and asking you questions as you set up, plot and operate the sound.

	<i>E.g. "I am using equalisation during the mix down of the recording to correct the vocal track on the recording so it has a balanced tone. The equaliser has a knob you can turn to cut or boost the frequency you have selected. The amount you cut and boost is measured in decibels."</i>	<i>E.g. "Equalisation during mix down of a recording can be used for different purposes. In this case I am using it to ensure the vocal track on the recording has a balanced tone."</i>	<i>E.g. "Applying equalisation during mix down of a recording can be used for different purposes. It can be used for corrective purposes or for effects. In this case I am using it for corrective purposes - to ensure the vocal track on the recording has a balanced tone."</i>
<p>Two</p> <p>P.C 2.1</p> <p>P.C 2.2</p>	<p>The student has:</p> <ul style="list-style-type: none"> • Set up and operated sound equipment according to the requirements of the design and safe working practices. • Applied at least three (3) sound control and enhancement processes on cue and in accordance with the design. <p><i>The examples above relate to only part of what is required, and are just indicative.</i></p>	<p>The student has:</p> <ul style="list-style-type: none"> • Set up and operated sound equipment according to the requirements of the design and safe working practices. • Applied at least three (3) sound control and enhancement processes on cue and in accordance with the design. • Explained their selection and operation of equipment in terms of meeting the design requirements. (MERIT criteria) <p><i>E.g. The equaliser I am using is a parametric equaliser it has a fixed high and low frequency band and a variable mid frequency which allows you to adjust the level of the frequency you want to select. This gives me more control over the correction I want to achieve on the vocals."</i></p> <p><i>The examples above relate to only part of what is required, and are just indicative.</i></p>	<p>The student has:</p> <ul style="list-style-type: none"> • Set up and operated sound equipment according to the requirements of the design and safe working practices. • Applied at least three (3) sound control and enhancement processes on cue and in accordance with the design. • Justified their selection and operation of equipment in terms of meeting the design requirements. (EXCELLENCE criteria) <p><i>E.g. "The equaliser on the mixing desk I am using is a parametric equaliser it has a fixed high and low frequency at 12 kilohertz and 80 Hertz. It has a swept mid frequency which allows you to sweep between 150 Hertz and 3.5k. You can cut or boost the frequency you have selected by 15 decibels."</i></p> <p><i>The examples above relate to only part of what is required, and are just indicative.</i></p>

Final grades will be decided using professional judgement based on a holistic examination of the evidence provided against the criteria in the unit standard.