**NZQA**

**Approved**

Achievement standard: 91066 Version 3

Standard title: Use rendering techniques to communicate the form of design ideas

**Level:** 1

**Credits:** 3

**Resource title:** Bring the kitchen alive

Resource reference: Design and Visual Communication VP-1.33 v2

Vocational pathway: Construction and Infrastructure

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| Quality assurance status | These materials have been quality assured by NZQA. NZQA Approved number A-A-02-2015-91066-02-7201 |
| 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: 91066

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Learner instructions

# Introduction

This assessment activity requires you to use rendering techniques to communicate the form of design ideas for a kitchen.

You will be assessed on how you use rendering techniques to effectively communicate the form of your kitchen design ideas.

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

Your task is to apply rendering techniques to either freehand sketches or instrumental drawings to communicate their form effectively. Your work is to be presented as part of a portfolio that may cover other assessment activities that you have been given.

Confirm with your assessor/educator the three dimensional design ideas that you will render from your design ideas. You may choose to render one or more of your initial ideas, one or more ideas that you have already further developed, and/or ideas realised in a final design outcome. The rendering will be applied manually, unassisted by the use of any electronic technologies or digital effects.

Photocopy the drawings that you have chosen to render to keep the original drawing intact. You may need to set the photocopier to a light setting to soften the line detail of the drawing.

In completing the task:

* Choose media that you are confident using such as marker pens, colour pencils, acrylic paint or chalk pastels.
* You may present any combination of freehand and instrumental drawing.
* Instrumental pictorial drawings and/or three dimensional freehand sketches may be rendered.
* A computer-generated line drawing may be rendered over.
* There is no need for a separate line drawing.
* Any rendering media may be used except computer-assisted methods.

You are to apply rendering techniques to give the effect of tonal change, texture, finish, and other surface qualities such as highlights, shadows, and reflections. You could render exploded, sectional or cut-away drawings.

Indicate the tonal qualities produced by an identified light source and its three dimensional effects on the kitchen surfaces and spaces. You need to show the effect of light on surface qualities such as horizontal, vertical, angled, irregular and curved forms. Also consider the effect of light on smooth or textured surfaces and the reflection, highlights and shadows produced.

Try to gain a consistent and skilful application of rendering techniques to convincingly communicate the shape and surface qualities of the kitchen, enhancing the realistic representation of these design qualities to an audience.

# Resources

Websites that show or demonstrate rendering techniques:

[www.designertechniques.com](http://www.designertechniques.com)

[www.info.com.au/rendering](http://www.info.com.au/rendering)

Further examples of rendered design ideas can be found on the internet, using search phrases such as ‘rendering tips and tricks’, ‘rendering design ideas’ or ‘presentation of design ideas’.

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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 use rendering techniques to effectively communicate the form of design ideas that they have generated for their kitchen design. It is likely that they will submit their sketches and/or drawings as part of a portfolio of work that engages in graphics practice and covers several assessment activities.

# Conditions

None.

# Resource requirements

Learners need access to rendering media and materials.

# Additional information

None.

# Assessment schedule: Design and Visual Communication 91066 – Bring the kitchen alive

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| Evidence/Judgements for Achievement | Evidence/Judgements for Achievement with Merit | Evidence/Judgements for Achievement with Excellence |
| The learner has communicated the form of the kitchen design ideas they have generated by: * using rendering techniques to indicate the tonal qualities produced by an identified light source and its three-dimensional effects on the kitchen’s shape and surface qualities

For example:The learner applies rendering techniques to the drawing to show tonal change, caused by a light source on the object. The application of the rendering will communicate the object’s form.*The above expected learner responses are indicative only and relate to just part of what is required.* | The learner has clearly communicated the form of the kitchen design ideas they have generated by: * consistently applying rendering techniques to communicate the kitchen’s shape and surface qualities
* showing consistent use of tonal change and the effects of light and shade produced by an identified light source

For example:The learner consistently applies rendering techniques to the drawing to show tonal change, highlights and shadow caused by a light source on the object. The depth of tonal change across the object is consistent with the light source. The application of the rendering communicates the object’s form consistently.The light source is by definition directional (from one direction).Highlights are the white (or lighter tone) areas on the leading edges perpendicular to and facing the light source.The shadows logically are the areas blocked from the light by the object.The shadows can be cast on the object itself or on the surface that the object is sitting on.Shadows can be indicative or geometrically cast.*The above expected learner responses are indicative only and relate to just part of what is required.* | The learner has effectively communicated the form of the kitchen design ideas they have generated by:* skilfully applying rendering techniques to convincingly communicate the kitchen’s shape (form, structure material) and surface qualities, enhancing the realistic representation of the kitchen design qualities to an audience
* showing consistent use of tonal change and the effects of light and shade produced by an identified light source

For example:The learner consistently applies rendering techniques to the drawing to show tonal change, highlights and shadow caused by a light source on the object. The depth of tonal change across the object is consistent with the light source. The application of the rendering communicates the object’s form consistently. The application of the rendering shows the texture and materials used, and enhances the image so that it is realistic in appearance.The light source is by definition directional (from one direction).Highlights are the white (or lighter tone) areas on the leading edges perpendicular to and facing the light source.The shadows logically are the areas blocked from the light by the object.The shadows can be cast on the object itself or on the surface that the object is sitting on.Shadows can be indicative or geometrically cast.If some properties, such as texture, are unable to be rendered - the design is made of plastic or chrome - the attributes of the material are indicated.The rendered drawing looks realistic when viewed by the audience.*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.