Design & Visual Communication

Level 1 NCEA
Achievement Standards

Waiopehu College

Achievement Standard

Subject Reference	Design and Visual Communication 1.30				
Title	Produce freehand sketches that communicate design ideas				
Level	1	**Credits**	3	**Assessment**	External
Subfield	Technology				
Domain	Design and Visual Communication				
Status	Registered	**Status date**		17 November 2011	
Planned review date	31 December 2018	**Date version published**		20 November 2014	

This achievement standard involves the production of freehand sketches to communicate design ideas.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Produce freehand sketches that communicate design ideas.	• Produce freehand sketches that clearly communicate design ideas.	• Produce freehand sketches that effectively communicate design ideas.

Explanatory Notes

1 This achievement standard is derived from Level 6 of the Technology learning area in *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007; and is related to the material in the *Teaching and Learning Guide for Technology*, Ministry of Education at http://seniorsecondary.tki.org.nz.

Further information can be found at http://www.technology.tki.org.nz/.

Appropriate reference information is available in *Safety and Technology Education: A Guidance Manual for New Zealand Schools,* Ministry of Education at http://technology.tki.org.nz/Curriculum-support/Safety-and-Technology-Education, and the Health and Safety in Employment Act 1992.

2 *Produce freehand sketches that communicate design ideas* involves:
- using freehand sketches to describe design features. Describing includes but is not limited to showing form, shape and function.

Produce freehand sketches that clearly communicate design ideas involves:

- creating freehand sketches that describe design features in proportion
- showing detailed information about design features. Detailed information typically includes but is not limited to details of construction, structure, function and aesthetics.

Produce freehand sketches that effectively communicate design ideas involves:

- showing in-depth information about the intent of the design features. In-depth information refers to a body of related sketches that include but are not limited to exploded, sectional and sequential views that explain design features.

3 *Freehand sketches* are used to explore and communicate ideas and must be created/produced unassisted by the use of instruments or any electronic technologies.

Both two-dimensional and three-dimensional (eg isometric, perspective, oblique and planometric) freehand sketching techniques must be used. Examples of sketching techniques could include quick rendering, crating, and use of line hierarchy.

4 *Design ideas* refer to student-generated responses to a design brief.

5 Assessment Specifications for this achievement standard can be accessed through the Technology Resources page found at http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/.

Replacement Information
This achievement standard replaced unit standard 7499.

Quality Assurance

1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.

2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233

Achievement Standard

Subject Reference	Design and Visual Communication 1.31				
Title	Produce instrumental, multi-view orthographic drawings that communicate technical features of design ideas				
Level	1	**Credits**	3	**Assessment**	External
Subfield	Technology				
Domain	Design and Visual Communication				
Status	Registered	**Status date**	17 November 2011		
Planned review date	31 December 2018	**Date version published**	20 November 2014		

This achievement standard involves the production of instrumental, multi-view orthographic drawings that communicate technical features of design ideas.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Produce instrumental, multi-view orthographic drawings that communicate technical features of design ideas.	• Produce instrumental, multi-view orthographic drawings that clearly communicate technical features of design ideas.	• Produce instrumental, multi-view orthographic drawings that effectively communicate technical features of design ideas.

Explanatory Notes

1 This achievement standard is derived from Level 6 of the Technology learning area in *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007; and is related to the material in the *Teaching and Learning Guide for Technology*, Ministry of Education at http://seniorsecondary.tki.org.nz.

Further information can be found at http://www.technology.tki.org.nz/.

Appropriate reference information is available in *Safety and Technology Education: A Guidance Manual for New Zealand Schools,* Ministry of Education at http://technology.tki.org.nz/Curriculum-support/Safety-and-Technology-Education, and the Health and Safety in Employment Act 1992.

2 *Produce instrumental, multi-view orthographic drawings that communicate technical features of design ideas* involves:

- using instrumental drawing techniques and conventions to produce 2D drawings that describe the technical features of a design. Describing technical features

includes but is not limited to showing visible surface features, dimensions, and materials.

Produce instrumental, multi-view orthographic drawings that clearly communicate technical features of design ideas involves:

- producing 2D drawings that detail the technical features of a design. Detailing technical features typically includes but is not limited to communicating technical features not visible in the main outline or those associated with communicating complex shape and/or form.

Produce instrumental, multi-view orthographic drawings that effectively communicate technical features of design ideas involves:

- producing accurately measured and precisely executed 2D drawings that show in-depth information about technical features of a design. In-depth information typically includes but is not limited to sectional views that explain technical features.

3 *Multi-view orthographic drawings* refer to instrumental drawings that contain two or more projected views. Where possible these views should be organised in third-angle orthographic projection.

Multi-view orthographic drawings should comply with standards convention NZS/AS 1100.101:1992, *Technical Drawing – General Principles*.

4 *Instrumental, multi-view orthographic drawings* include the use of key line types (eg construction lines and outlines), projection, and appropriate drawing and text layout. Examples of instrumental, multi-view orthographic drawing conventions include, as appropriate, those associated with orthographic drawing planes and reference lines, labelling, scale, dimensioning, sectioning, geometric construction and surface development.

Instrumental drawings can be constructed using either traditional drawing equipment or computer applications.

5 *Design ideas* are student-generated responses to a design brief.

6 *Technical features* refer to information related to the dimensions, component shapes, and construction methods necessary to produce the design.

7 Assessment Specifications for this achievement standard can be accessed through the Technology Resources page found at http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/.

Replacement Information
This achievement standard replaced unit standard 7502.

Quality Assurance

1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.

2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233

Achievement Standard

Subject Reference	Digital Technologies 1.43				
Title	Implement basic procedures to produce a specified digital media outcome				
Level	1	**Credits**	4	**Assessment**	Internal
Subfield	Technology				
Domain	Digital Technologies				
Status	Registered	**Status date**		20 January 2011	
Planned review date	31 December 2014	**Date version published**		20 January 2011	

This achievement standard involves implementing basic procedures to produce a specified digital media outcome.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Implement basic procedures to produce a specified digital media outcome.	• Skilfully implement basic procedures to produce a specified digital media outcome.	• Efficiently implement basic procedures to produce a specified digital media outcome.

Explanatory Notes

1 This achievement standard is derived from the Level 6 achievement objectives from the Technology learning area in *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, and is related to the material in the *Teaching and Learning Guide for Technology*, Ministry of Education, 2010 at http://seniorsecondary.tki.org.nz.

Further information can be found at http://www.techlink.org.nz.

For resources relating to legal, ethical and moral responsibilities, refer to the Techlink website at http://www.techlink.org.nz/IP/links.htm.

2 *Implement basic procedures to produce a specified digital media outcome* involves:
- applying a set of techniques to create an outcome that meets specifications
- using the appropriate features of digital media software to edit and integrate digital media types to create an outcome
- applying formatting techniques and design elements as appropriate to the media type and requirement of the outcome

- applying data integrity and testing procedures to ensure the outcome meets the specifications
- following legal, ethical and moral responsibilities as appropriate to the outcome.

Skilfully implement basic procedures to produce a specified digital media outcome involves:

- showing accuracy in the application of techniques and testing procedures
- showing independence with regard to decision making in the application of techniques and testing procedures.

Efficiently implement basic procedures to produce a specified digital media outcome involves:

- undertaking techniques and testing procedures in a manner that economises the use of resources in the outcomes production and its use eg timely fashion, optimisation of tool selection and use.

3 *Specified digital media outcome* refers to a digital media outcome that integrates media types and incorporates original content. The specifications must be of sufficient rigour to allow the student to meet the standard. The specifications, software and techniques to be used need to be determined prior to the outcome being made. They may be teacher-given or developed in negotiation with the student.

4 *Basic procedures* are those that require the student to perform a set of techniques, as instructed, to produce a digital media outcome.

5 Original content may include but is not limited to:

- creating own graphics using a graphic manipulation program (eg no clip art or graphics sourced from the internet)
- composing original audio using a sound editing program
- capturing own video or still images
- creating own web pages using web authoring tools or text editors (excluding pre-designed templates)
- creating own desktop-published documents using a desktop publishing program (excluding pre-designed templates).

6 Digital media types may include but are not limited to – audio, video, graphics, animation or still images.

Examples of digital media outcomes include but are not limited to:

- an edited movie
- a multi-page website
- a multi-page desktop published document.

7 Data integrity and testing procedures will include checking the relevance, accuracy, and reliability of the outcome to ensure it functions as intended.

8 Design elements may include but are not limited to – colour, line, shape, texture, clarity, scale, contrast, space, proximity.

9 Conditions of Assessment related to this achievement standard can be found at http://www.tki.org.nz/e/community/ncea/conditions-assessment.php.

Replacement Information
This achievement standard, AS91071, and AS91072 replaced AS90033.

Quality Assurance

1 Providers and Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against achievement standards.

2 Accredited providers and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Accreditation and Moderation Action Plan (AMAP) reference 0233

Achievement Standard

Subject Reference	Design and Visual Communication 1.32				
Title	Produce instrumental paraline drawings to communicate design ideas				
Level	1	**Credits**	3	**Assessment**	External
Subfield	Technology				
Domain	Design and Visual Communication				
Status	Registered	**Status date**		17 November 2011	
Planned review date	31 December 2018	**Date version published**		20 November 2014	

This achievement standard involves the production of instrumental paraline drawings to communicate design ideas.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Produce instrumental paraline drawings to communicate design ideas.	• Produce instrumental paraline drawings to clearly communicate design ideas.	• Produce instrumental paraline drawings to effectively communicate design ideas.

Explanatory Notes

1 This achievement standard is derived from Level 6 of the Technology learning area in *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007; and is related to the material in the *Teaching and Learning Guide for Technology*, Ministry of Education at http://seniorsecondary.tki.org.nz.

Further information can be found at http://www.technology.tki.org.nz/.

Appropriate reference information is available in *Safety and Technology Education: A Guidance Manual for New Zealand Schools,* Ministry of Education at http://technology.tki.org.nz/Curriculum-support/Safety-and-Technology-Education, and the Health and Safety in Employment Act 1992.

2 *Produce instrumental paraline drawings to communicate design ideas* involves:
- using instrumental drawing techniques and conventions to produce paraline drawings to describe design features. Describing includes but is not limited to showing visible surface features.

Produce instrumental paraline drawings to clearly communicate design ideas involves:

- producing paraline drawings that detail design features. Detailing design features typically includes but is not limited to communicating technical features not visible in the main outline (eg internal components) or those associated with communicating complex form.

Produce instrumental paraline drawings to effectively communicate design ideas involves:

- producing accurately measured and precisely executed paraline drawings that show in-depth information about technical features of a design. In-depth information refers to a body of related drawings that typically include but are not limited to exploded, sectional or cut away views that explain design features.

3 *Paraline drawings* refer to 3D drawings produced using paraline techniques.

Paraline techniques are parallel line pictorial drawing methods. These are isometric, trimetric, diametric, oblique and planometric.

Paraline drawings can be constructed using either traditional drawing equipment or computer applications.

4 *Design ideas* refer to student generated responses to a design brief.

5 Assessment Specifications for this achievement standard can be accessed through the Technology Resources page found at http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/.

Replacement Information
This achievement standard replaced unit standard 7503.

Quality Assurance

1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.

2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233

Achievement Standard

Subject Reference	Design and Visual Communication 1.34				
Title	Use the work of an influential designer to inform design ideas				
Level	1	**Credits**	3	**Assessment**	Internal
Subfield	Technology				
Domain	Design and Visual Communication				
Status	Registered	**Status date**		17 November 2011	
Planned review date	31 December 2018	**Date version published**		20 November 2014	

This achievement standard involves using the work of an influential designer to inform design ideas.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Use the work of an influential designer to inform design ideas.	• Use the work of an influential designer to clearly inform design ideas.	• Use the work of an influential designer to effectively inform design ideas.

Explanatory Notes

1 This achievement standard is derived from Level 6 of the Technology learning area in *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007; and is related to the material in the *Teaching and Learning Guide for Technology*, Ministry of Education at http://seniorsecondary.tki.org.nz.

Further information can be found at http://www.technology.tki.org.nz/.

Appropriate reference information is available in *Safety and Technology Education: A Guidance Manual for New Zealand Schools,* Ministry of Education at http://technology.tki.org.nz/Curriculum-support/Safety-and-Technology-Education, and the Health and Safety in Employment Act 1992.

2 *Use the work of an influential designer to inform design ideas* involves:
- recognising the aesthetic and/or functional characteristics that are typical of an influential designer's work
- using aesthetic and/or functional characteristics of an influential designer's work in design ideas.

Use the work of an influential designer to clearly inform design ideas involves:

- integrating aesthetic and functional characteristics of an influential designer's work in design ideas.

Use the work of an influential designer to effectively inform design ideas involves:

- integrating aesthetic and functional characteristics of an influential designer's work in design ideas in ways that are meaningful to the design context.

3 *Influential designers* are those recognised in the context of their work as leading practitioners.

4 *The work* of a designer could be an individual product or spatial design, or a body of work. A designer could include a group design practice.

5 Evidence may be presented using traditional media approaches or computer applications.

6 *Design ideas* are student-generated responses to a design brief.

7 Conditions of Assessment related to this achievement standard can be found at http://ncea.tki.org.nz/Resources-for-Internally-Assessed-Achievement-Standards.

Quality Assurance

1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.

2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233

Achievement Standard

Subject Reference	Design and Visual Communication 1.36				
Title	Promote an organised body of design work to an audience using visual communication techniques				
Level	1	**Credits**	4	**Assessment**	Internal
Subfield	Technology				
Domain	Design and Visual Communication				
Status	Registered	**Status date**		17 November 2011	
Planned review date	31 December 2018	**Date version published**		20 November 2014	

This achievement standard involves promoting an organised body of design work to an audience using visual communication techniques.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Promote an organised body of design work to an audience using visual communication techniques.	• Clearly promote an organised body of design work to an audience using visual communication techniques.	• Effectively promote an organised body of design work to an audience using visual communication techniques.

Explanatory Notes

1 This achievement standard is derived from Level 6 of the Technology learning area in *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007; and is related to the material in the *Teaching and Learning Guide for Technology*, Ministry of Education at http://seniorsecondary.tki.org.nz.

Further information can be found at http://www.technology.tki.org.nz/.

Appropriate reference information is available in *Safety and Technology Education: A Guidance Manual for New Zealand Schools,* Ministry of Education at http://technology.tki.org.nz/Curriculum-support/Safety-and-Technology-Education, and the Health and Safety in Employment Act 1992.

2 *Promote an organised body of design work to an audience using visual communication techniques* involves:
- selecting and presenting the features of an organised body of work to an audience.

Clearly promote an organised body of design work to an audience using visual communication techniques involves:
- purposefully selecting and applying techniques to ensure layout, composition and visual impact are appropriate to the context of the brief and audience.

Effectively promote an organised body of design work to an audience using visual communication techniques involves:
- communicating a high quality presentation that is convincing, shows accuracy of layout, visual impact, and precise execution of techniques.

3 *Visual communication techniques* used to promote a body of work include those aligned with traditional media and/or computer applications.

4 The organised body of work being promoted must be student-generated in response to a design brief and may also include design work sourced through research.

5 Conditions of Assessment related to this achievement standard can be found at http://ncea.tki.org.nz/Resources-for-Internally-Assessed-Achievement-Standards.

Replacement Information
This achievement standard replaced AS90042.

Quality Assurance

1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.

2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233