2024 NCEA Assessment Report

Mana Tohu Mātauranga o Aotearoa
New Zealand Qualifications Authority

Subject: Design and Visual Communication

Level: 1

Achievement standard(s): 92002, 92003

Report on individual achievement standard(s)

Achievement standard 92002: Develop product or spatial design ideas informed by the consideration of people

Assessment

Candidates were required to submit a portfolio of curated evidence to demonstrate their design thinking and their consideration of people within their design ideas.

Commentary

Candidates explored a range of design briefs in both Product and Spatial contexts. Candidates that were most successful clearly had a direct connection to and/or personal experience with their brief and context.

A range of techniques was seen in submissions, including freehand sketches, CAD work and documentation of physical models. Submissions that demonstrated clear visual communication skills and techniques translated well into the digital format.

Many successful projects integrated multiple modes to explore and improve design(s). Images of user experience helped candidates demonstrate understanding of how the features of the product or space could be.

It is important that candidates curate portfolios pages and submit work that is relevant to the standard being assessed. Many pages of written notes and 'collaged' research imagery are not necessary and limit opportunities for candidates to demonstrate their own work within the 15-page limit. Although research can provide context, evidence of development should be communicated visually through the candidate's own work. Candidates that integrated specific research throughout the design process tended to be more successful.

Similarly, spatial design submissions that used a lot of warehouse furniture or stock imagery rarely provided the opportunity for candidates to demonstrate their own ideas. Submissions that demonstrated clear visual communication skills and techniques translated well into the digital format.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- established a series of initial ideas that were related to people and context
- visually communicated what they were designing – usually a spatial or product design
- included reference to a user/human, including a form/silhouette (spatial) or hand (product)
- explored alternatives or variations in designs

- presented a final outcome, though may not have been clear on the progression of ideas
- focused on improving visual communication details rather than improving the idea in response to the needs of people and context
- used visual communication, though this may not have been clear or defined.

Candidates who were awarded **Achievement with Merit** commonly:

- explored a range of design possibilities that were linked to people and context
- developed ideas both aesthetically and functionally
- progressed a chosen design idea(s), and showed decision making with clear consideration of people and context
- presented multiple ideas/concepts towards a chosen outcome, often preventing depth of focus
- used clear visual visual communication, including the quality of drawing, physical and CAD models
- arranged and organised portfolios to show aesthetic and functional progression and decision making
- progressed ideas but may have omitted obvious considerations, for example, spatial designs that did not connect the interior with the exterior
- linked decisions to people and how they might/would use a product/space.

Candidates who were awarded **Achievement with Excellence** commonly:

- had a clear user(s) that informed design decisions throughout the submisison
- connected people and context with a well-defined problem and associated specifications
- referenced specific user(s) to create unique designs that met the needs and improved the experience of their target
- linked to potential users' experience and progressively iterated decisions in response to this
- Included context-specific developments to purposefully extend ideas, for example, storing a mouthguard in a designed bottle for a hockey player, or including religious or culturally appropriate seating designs that directly referenced religious or culturally significant buildings or site
- identified key components of a design and interrogated how these could be improved
- showcased strong visual communication skills.

Candidates who were awarded **Not Achieved** commonly:

- generated some ideas but did not make any design decisions
- did not show aesthetic and functional features
- lacked clarity in their visual communication so the design context was unknown
- did not reference to a user
- produced a single design idea.

Achievement standard 92003: Use instrumental drawing techniques to communicate own product or spatial design outcome

Assessment

Candidates submitted a portfolio of drawings that demonstrated the use of instrumental drawing techniques to communicate their own product or spatial design.

Candidates were required to submit one set of drawings for ONE design outcome. The drawings were required to include both orthographic (2D) and paraline (3D) drawings.

It was recommended that candidates include sketches or design work where the features of the design outcome had been worked out. Sketches clarified the intent of the instrumental drawings, though were not part of the assessed evidence. Perspective drawings were not accepted for this standard.

Commentary

This standard allows for a diverse range of technical drawings. There were various computer CAD programs, hand drawing, and a variety of technical drawing formats presented in 2024.

As this standard is instrumental drawing and not a working drawing standard, the use of imported details in construction drawings are not applicable. Using a CAD program did not automatically gain higher grades as formatting, line work, and candidate choice of viewpoint in the paraline submission often meant the information was not clear or precise. Candidates are encouraged to use traditional presentation methods of title blocks and measurements with the computer-generated designs.

The standard allows a wide variety of presentation formats and contexts. To show a design clearly and precisely there is an expectation of depth of information, that was occasionally limited by the size of the images or the different views that were selected. Similarly, large object designs, such as multi-level buildings or too complex large furniture, limited opportunities for candidates to demonstrate depth of information and detail.

Clear sections and cutaways or exploded views were used by successful candidates to show an understanding of details of the design beyond the main outline. The most successful candidates tended to show an understanding of construction that was precise.

Most candidates understood the requirements of the standard. In some cases where candidates showed their design thinking prior to the technical drawing, these drawings could be used to understand the technical drawings to a greater level.

Candidates are reminded that as a Design and Visual Communication Standard, the quality of the visual evidence submitted for assessment is important. Applying render over linework, poor scanning, or producing very small drawings can reduce the quality of the final submission.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- showed 2D orthographic views and 3D paraline drawings that communicated external features of the same design
- used either CAD or manual instruments to produce the drawings
- included some main dimensions or used a scale correctly to show size
- included view titles
- showed form and surface features of their design
- included some exploded parts or cutaway views but these did not show further information beyond surface detail.

Candidates who were awarded **Achievement with Merit** commonly:

- used 2D orthographic views and 3D paraline drawings to communicate features of their design outcome
- used hidden detail lines, section views, or internal views (cutaway or exploded) to show further information about their design that could not be seen on the surface
- used view labels, a scale, and showed some main dimensions

- included exploded parts or cutaway views but were inconsistent between views or did not give clear information about parts of their design and how they fit together.

Candidates who were awarded **Achievement with Excellence** commonly:

- submitted 2D orthographic views and 3D paraline drawings that clearly communicated information about their design outcome, including interior parts
- clearly showed how different parts fit together or clearly showed internal spatial relationships
- used accurate, clear linework so that details could be easily read
- used view labels, a scale, and showed some main dimensions
- used a scale that clearly communicated the details of the design
- used exploded parts or cutaway sections to explain their outcome and show clear information about the parts of their design and how they fit together
- placed the section plane in a position that revealed useful information about the design where section views were shown
- used detailed views to clarify aspects of the design.

Candidates who were awarded **Not Achieved** commonly:

- showed drawings that did not communicate what the design outcome was in any way
- produced only 2D views or 3D drawings, but not both OR produced two drawings but not of the same object
- showed no scale or measurement within any drawings
- submitted perspective drawings rather than paraline drawings
- submitted orthographic views that did not line up or relate to each other
- used freehand sketches or large amounts of freehand work within an instrumental drawing
- did not use construction methods for manually produced paraline drawings
- screen captured images of a final design within a CAD program, rather than using CAD to produce a formal 2D or paraline drawing.
