This assessment report is based on assessments for 2023. It may not reflect achievement standards that have been updated.



2023 NCEA Assessment Report

Subject: Design and Visual Communication (RAS)

Level: Level 1

Achievement standard(s): 92002, 92003

Report on individual achievement standards

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

Assessment

Candidates are expected to digitally submit a portfolio of work based on a product or spatial design brief. Submitted work should show a balance of generating ideas and then refining towards a solution using a variety of visual communication techniques.

Commentary

This standard allows schools to use a range of contexts and visual techniques. Both product design and spatial design contexts can be used successfully. Work submitted should show a balance of generating ideas and then refining towards a solution. The extent to which a submission shows progression and refinement is of key importance for this standard.

Candidates demonstrated a variety of visual communication techniques and design approaches to produce evidence for this standard. Most candidates demonstrated an ability to use visual communication techniques to generate ideas that related to a context and people. Brief notes that explained decisions and related ideas to a context and user were helpful.

During development of a chosen idea, it is helpful for candidates to consider how and where their design would be used. Thinking about the experience of the user including comfort, useful functionality and ease of use helped candidates to think about how to improve their design. Consideration of the context or place where the design is used also helps candidates to think about improving the experience of people as users of the design.

Some candidates used suitable visual techniques to develop and refine the details of their design ideas. Awareness of suitable visual techniques for showing detailed aspects of developing ideas is helpful. Integrating consideration of form, function and the user experience was evident in submissions which attained the higher grades. Successful candidates used a range of visuals to show the design from various viewpoints, described details, and showed refinement of both interior and exterior aspects of the design outcome.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- showed different ideas
- used notes or visuals to make links between the ideas and people or users
- made choices about which idea to carry forward
- used suitable visual communication techniques to show an outcome
- visually communicated the main features of the form and some functional information
- · made choices but did not show a sequence of working on the idea further
- may have shown ideas that were connected to people but did not show thinking about making decisions or improvements for people.

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

- showed ideas that were connected to people, either through notes or by showing people engaging with the ideas
- used visuals to show a sequence of changes to the design that related to people
- used visuals to show design thinking that connected to people as users of the design
- used suitable visual techniques to show thinking about the aesthetic and functional aspects of the design
- used suitable visual techniques to show how the place or context for use influenced decisions about their design
- showed an outcome that included some functional detail
- showed a sequence of visuals but the quality of the design was not improved
- made changes to the design but these did not improve the user experience for people
- did not integrate the exterior form with the interior spaces for spatial design contexts, or may have considered layout in 2D but did not think about the 3D nature of the spaces
- communicated an outcome but did not show how details were integrated into the design as a whole.

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

- · focused on the experience of people using the design and sought to improve this
- understood who and where they were designing for and showed thinking that improved the quality of the design for the user
- visually showed changes that improved the design for the user
- explained the benefit of changes for people
- used suitable visual techniques to show how the design is used as well as showing features in detail
- focused details in a way that made the whole design better
- · integrated internal and external features of the design
- demonstrated refinement of detail rather than adding more features
- integrated the internal and external aspects of the design.

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

- did not use suitable visual communication techniques to show ideas
- did not connect their ideas to people
- did not make decisions that led to a design outcome
- presented work more suited to Achievement Standard 92000, which has a focus on divergent thinking rather than showing development and convergent thinking.

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

Assessment

Candidates are required to submit a portfolio which communicates their own design outcome using both 2D and 3D instrumental drawing techniques.

Commentary

This standard required candidates to communicate their own design outcome using both 2D and 3D instrumental drawing techniques. Firstly, candidates need to have prepared their own design outcome to communicate. It is useful for candidates to work out some internal features and construction or assembly details of the outcome to be communicated. Then, candidates need to be aware of types of instrumental drawings that could be used and how to construct them. Candidates are able to use manual instruments or CAD systems to produce drawings for this standard, with either method allowing students to achieve the full range of grades.

This standard allows presentation of design outcomes generated within a range of contexts. Both product design and spatial design contexts can be used successfully. However, it is helpful if the design outcome encompasses a number of parts so that candidates can convey enough detail. Conversely, it is important that the nature of the design outcome is not too complex for candidates to understand in detail.

Paraline drawing techniques were generally used well by candidates. Many submissions showed very complex use of exploded and cutaway views. Most candidates submitted orthographic drawings containing two or three views; however, these views tended to only show surface features. Very few candidates showed hidden detail correctly and even fewer presented section views. Candidates needed to select and produce orthographic views and paraline views that showed useful information about their design.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- showed 2D orthographic views and 3D paraline drawings that communicated features of their 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 exploded views 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
- 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 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 detail views to clarify aspects of the design
- used accurate linework that clearly articulated the design.

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

- produced only 2D views or 3D drawings, but not both
- 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
- showed drawings that did not communicate what the design outcome was in any way
- screen captured images of a final design within a CAD program rather than using CAD to produce a formal 2D or paraline drawing.