

# NZQA

New Zealand Qualifications Authority  
Mana Tohu Matauranga O Aotearoa

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## Assessment Report

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### Level 3 Design and Visual Communication 2019

Standards [91627](#) [91631](#)

## Part B: Report on standards

### 91627: Initiate design ideas through exploration

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Candidates who were awarded **Achievement** commonly:

- used visual communication techniques (e.g. observational sketches, sketching from photographic sources and other existing images, 3-D modelling) to explore shapes, forms, and other aesthetic elements (textures, line, negative space, etc) to visually analyse a starting experience. The starting experiences were varied

- used visual communication strategies (explanatory note 4) to interrogate and regenerate new shapes and forms. Some candidates unnecessarily used all the possible visual communication strategies, when a limited range (two or three) would have been more suitable
- selected promising foundation points from their explorations to regenerate into design ideas with some aesthetic and some functional qualities. Demonstrating some links to a potential design idea is a requirement of the standard
- did not constrain their idea initiation to a brief – experimenting with and explored potential shapes and forms without a pre-determined design idea
- demonstrated a train of thought but did not use it to inform the design ideas or context
- did not provide evidence of further analysis and re-interpretation in context beyond initial regeneration.

Candidates whose work was assessed as **Not Achieved** commonly:

- did not use a starting experience, just began to generate design ideas, e.g. a house, a bike
- did not use the starting experience alternatives and variations to explore and regenerate into design ideas
- did not link idea initiation to their own design ideas. Instead it was used to explore shape in an independent manner and was treated as a separate assignment exercise with no connection to anything
- submitted only teacher driven 'ideation' exercises on shape and form
- derived shapes from a source and repeated these shapes to generate surface patterns of the same shapes. This was common in a Fashion context, where patterns were used as an appliqué or print, but were not then regenerated or used to inform ideas in structural design lines or the silhouette
- did not generate any original ideas, only copies of pre-existing ideas from well-known designers

- used starting experiences and forms too literally. For example, a crystal was a crystal lampshade, or a seashell was a seashell house and had no visual interrogation
- submitted only design refinement and research - not preceded by idea generation
- submitted evidence for a different standard
- did not produce evidence of Level 3 visual communication skills
- included extensive research pages that were unnecessary and had little or no starting experience explored, with little or no regenerated design ideas connected to the earlier explorations
- included parts of multiple projects that had no connections or regeneration of design ideas
- presented design ideas that had no recognisable functional or aesthetic features making it unclear what the design was
- used Logo Design in a Visual Art Design manner, which is not suitable evidence for this standard.

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

- communicated ideas that had been explored and regenerated and showed further analysis and reinterpretation with context that was meaningful and purposeful
- reworked design ideas with a train of thought that connected to context and viewpoint that had intention in a functional, aesthetic or thematic way
- used thoughtful and carefully chosen visual communication strategies to extend and grow ideas to communicate the design thinking
- showed elements of risk taking by allowing their ideas to be continually adapted through further interrogation and purposeful exploration that informed development
- provided evidence that purposeful research and knowledge was undertaken and applied, through in-depth visual communication of design drawing

details. Although the research was not included it was evident that it had occurred

- regenerated their ideas by using analytical visual thinking. This included iteration, reworking design elements, depth of thinking through experimentation and level of creative play
- showed introduction of new and extra elements to their ideation, with secondary exploration to take the design idea to a new, stronger and more considered outcome.

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

- communicated their thinking very clearly with a well organised, strong narrative
- used sophisticated and varied visual communication techniques and strategies
- showed extensive exploration to challenge thinking through extended and transformed alternatives by continually exploring and investigating alternatives of their design idea
- questioned or stimulated new thought, by engagement with discovery and understanding in relation to the context of their design
- showed an ability to extend and transform both aesthetic and functional elements of the design idea. This extension and transformation were usually symbiotic and complementary, i.e. aesthetic elements informed functional elements and vice versa
- reinterpreted and combined dissimilar ideas and identified connections between them that challenged predictable outcomes. This led to enhanced solutions and ideas that had unexpected non-predictable and newly evolved outcomes
- continued to redevelop and reflect on their design ideas after substantial development. This meant that candidates would seemingly "complete" or resolve their project, but then show they had reflected further on aspects, and then re-ideated in a perceptive or improved way to continue to push a

previous idea into a new form or level of resolution

- went back to the intended context and re-thought and used further ideation strategies to refine the product further
- considered the thought of human and environment interaction with spatial design ideas
- considered the thought of human use, environment use, and how the design idea could conceivably work in reality with product design.

### **Standard specific comments**

As mentioned in past years reports, 'Ideation' continues to consolidate through teaching and learning in DVC programmes and is increasingly being included in Fashion and Workshop programmes. This is encouraging and offers candidates broader access to pathways to tertiary education, particularly in Design.

Teachers and candidates are advised to refer to the standard Assessment Specifications, which outlines what should be submitted.

It is encouraging that more briefs are being used that are designed to include ideation as an integral stage of the design process. However, the starting experience needs to be considered carefully to ensure it is one that will be able to generate extensive exploration from.

Evidence for Ideation (91627) will be found in the divergent thinking (initial experimentation and initial idea generation) and convergent (development) work of the internal standards. It is important to understand that this standard is intended to be part of the same design practice and evidence is embedded. It is vital to submit one complete project rather than two edited partial projects.

Treating the work required for this standard as a quick 'mini project' in which candidates can generate a range of shapes and forms from an origin or starting idea does not allow candidates the opportunity to re-interpret, analyse, or extend their thinking. This prevents them from achieving higher grades.

Project evidence from Technology standards is unnecessary in the submission. It does not benefit the visual communication of the design idea as large quantities of writing and research do not support the intent of this standard.

An appropriate design brief is a crucial part to candidate's success. The brief can be introduced after design experience and initiation has commenced. Successful submissions had briefs that had a context, allowed for candidate understanding of function, purpose, and aesthetics, and to have a narrative and personal viewpoint within their design exploration. While ideation can happen early, this can be re-introduced after the brief on a secondary level to encourage creative thinking and expansion of the design idea to fully extend and transform and take advantage of the brief context.

The use of transparent and multi-layered drawing paper has benefits when it is used with purpose and is a meaningful visual communication strategy. Non-functional (beautification only) reasoning does not add anything to the submission.

Consideration needs to be given to how work is submitted. Work needs to be in order as this shows the informed train of thought and reinterpretation of design ideas. This is particularly important for Merit and Excellence grades.

The use of CAD programmes is a suitable visual communication method. However, these programs can constrain design ideas and interrupt the exploration process when candidates' knowledge of the programme is limited.

Exemplars, Best Practice Workshops via NZQA and local subject associations are valuable professional learning resources available to all teachers.

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## 91631: Produce working drawings to communicate production details for a complex design

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Candidates who were awarded **Achievement** commonly:

- selected a design of adequate complexity to produce working drawings for
- produced working drawings to communicate production details of the complex design
- included views and modes that would conventionally be used as a set of working drawings including site plans, floor plans, elevations, cross-sectional views, assembly views, detail views, material information
- included exterior and interior detail related to their construction and / or assembly
- showed some proficiency in drawing conventions such as labelling, section planes, details and views, dimensioning, use of appropriate scales, line weights and types
- indicated the relationship of one drawing to another through the use of recognised conventions for cross-referencing of drawings (e.g. north point symbol, elevations, section and detail reference symbols)
- identified materials using appropriate hatching, colouring or symbolic reference of material types or use of labels
- produced elevations that were drawn neatly using conventions, and a sectional view was included to show some detail of either materials that would be used or how it would be assembled.

Candidates whose work was assessed as **Not Achieved** commonly:

- selected a design of inadequate complexity such as; simple furniture, letterboxes, decks
- only produced working drawings of the exterior or interior and not both
- did not communicate construction or assembly of their designs using appropriate detailed drawings
- did not communicate materials or components or parts adequately
- produced only generic design working drawings, generally from a pre-published source

- produced class exercises
- lacked understanding in the use of drawing conventions such as titling, dimensioning, use of appropriate scale, detailed drawings, line quality and accuracy
- produced drawings that were not linked to each other or showed no relationship to each other
- included drawings with contradictory information, e.g. different measurements for the same item
- did not complete a set of working drawings.

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

- showed precise measurement and dimensioning, accurate line-work and good application of drawing conventions. The use of CAD helped candidates to produce precise drawings but still requires knowledge and application of conventions used in New Zealand
- produced a complete set of linked drawings with the exterior and interior detailing helping to explain the construction and assembly of the design with greater accuracy
- showed that this was the outcome of considered design thinking and represented a solution to a design problem.

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

- showed high level and consistent use of drawing conventions and standards
- included all relevant drawings to clearly communicate detailed construction and assembly information using carefully selected series of plans, elevations, section views, assembly views and enlarged detail views
- included three dimensional drawings, pictorial views and/or CAD models or animations to clearly communicate assembly and construction. The animations offered sequential information that clearly communicated assembly and rotational views that explained 3D design details.

## Standard specific comments

Spatial design has now become the most common type of submission, with only a small number of product designs being entered. Similarly, CAD has now become the most common graphic mode being used. This growing media choice is enabling candidates to produce complex designs that are directly related and accurately executed. However, students must also have an understanding of projection, conventions and standard drawing practices used in New Zealand.

The standard clearly states in explanatory note 6; Conventions associated with drawing define such things as: line types (e.g. construction lines, outlines, and section lines), drawing and text layout, and dimensioning. Conventions include those which are commonly applied within a community of practice e.g. engineering (e.g. SAA/SNZ HB1:1994), or architecture – building and landscaping (e.g. NZS/AS 1100.101:1992 Technical drawing – General principles; NZS/AS 1100.301:1985 Technical drawing – Architectural drawing).

An increasing number of submissions show contradictions to this, i.e. a sectional plane facing the wrong way in relation to the sectional view, cross hatching all running in the same direction and at the same angle for every component. There were also many submissions that used non-recognised scales. There was an increase in the number of candidates using “fit to page”, which then changes the scale of that sheets to an unusable scale, such as 1:1.765, or similar. The CAD submissions also frequently showed details of parts not related to their design. Many details didn't show anything more than the view they came from. There was also an increase in the number of details that used incorrect component symbols.

Candidates must be encouraged to use accepted scales that help show detail or information. For large complex designs it may be necessary to show part sections at a readable scale rather than slicing through an entire building.

CAD software enables greater presentation capabilities which help explain the design. However, this was not used to advantage when showing exterior cladding or textures on elevations by using a blank wall.

It was pleasing to see some schools still producing submissions using

conventional drawing methods and gaining very good results. Once again, scale selection is crucial to showing detail and this standard does not require proof of projection (i.e. plans and elevations can be on different sheets but should still be referenced by labelling or including the north point orientation).

At this level of study students should be gaining an understanding of construction and assembly. This could include materials knowledge and how things fit together. Even though this standard is more about communicating construction and assembly it was clear to see which candidates also understood how it all fitted and worked together.

There was a noticeable reduction in the degree of complexity shown this year. Many candidates failed to do more than just produce many drawings that didn't communicate anything about their design or how it worked.

Even though it is not usually the intention to scale off a printed drawing (because of printing anomalies) it is important to show a range of dimensions on working drawings to make them useable. There were many submissions this year with plans that had no dimensions at all. This made it impossible to check scale and only enabled a visual representation of what had been designed.

Similarly, the purpose of a site plan is to show the position and orientation of a building in relation to boundaries and to a North point. Without at least some dimensions and an indication of North (especially if then used to label elevations) this view becomes useless.

Candidates must understand the importance of referencing drawings especially when detailing. A well-produced detail drawing will not gain higher grades if it is not referenced back to the area it is explaining or relates to.

## [Design and Visual Communication subject page](#)

## Previous years' reports

[2016 \(PDF, 224KB\)](#)

[2017 \(PDF, 66KB\)](#)

[2018 \(PDF, 107KB\)](#)

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