2015 NCEA Assessment Report

Design and Visual Communication   Level 3   91627, 91631

Report on standards

1. Assessment Report for 91627: Initiate design ideas through exploration

Achieved	Candidates who were assessed as Achieved commonly:
	• used visual communication techniques (these varied from observational sketches, tracing of photographs and other existing images, to 3D modelling) to explore shapes, forms, compelling details and other aesthetic elements (such as textures, line, negative space) to visually analyse a starting experience. The starting experiences were varied but often included natural influences and experiences such as plant, shell, animal and bird forms. Other starting experiences included existing product and spatial designs, and occasionally themes from literature, film and music
	• used visual communication strategies such as: abstraction, re-combination, tessellation, exaggeration, rotation, inversion, translation, translocation, deconstruction to interrogate and regenerate new shapes and forms. Some candidates unnecessarily used all of the visual communication strategies, when a limited range would have sufficed
	• selected promising origin ideas from their explorations to regenerate into design ideas showing aesthetic and functional qualities. Demonstrating a link to a potential design idea is a requirement of the standard
	• did not provide evidence of further analysis and re-interpretation beyond initial regeneration to reach Achievement with Merit
	• did not constrain their idea initiation to a brief
	• they experimented with and explored potential shapes and forms without predetermining a design idea.
Not Achieved	Candidates who were assessed as Not Achieved commonly:
	• did not use a starting experience, just began to generate initial ideas
	• used a brief that asked them to begin generating concepts
	• used only research as a precursor to initial experimentation and initial idea generation
	• did not use alternatives and variations to explore and regenerate ideas
	• did not link idea initiation to own design ideas
	• carried out initial exploration but did not regenerate ideas from the shapes and forms explored
	• derived shapes from a source and repeated these shape to generate patterns of the same shapes; this was common in submissions using a Fashion context
	• did not generate any original ideas, only copies of pre-existing ideas
	• used starting experiences too literally; e.g. a bird could be a lamp looking exactly like the original bird
	• only submitted design development not preceded by idea generation
	• submitted evidence for a different standard, i.e.. AS 91630
	• did not produce evidence of L3 visual communication skills.
Achieved with Merit	Candidates who were assessed as Achieved with Merit commonly:
	• showed evidence where they had selected an idea that had been explored and regenerated, and showed further analysis and re-interpretation
	• demonstrated that the idea was subject to further interrogation with an obvious theme (a train of thought) emerging
	• used sophisticated visual communication strategies to foster and grow ideas; e.g. observational drawing techniques that deconstructed elements (not the entire starting experience), tracing / overlays from quick experimental sketch models or SketchUp models to examine ideas and consider alternatives, then reconstructing and recombining
	• showed elements of risk taking by allowing their ideas to be continually adapted through further interrogation and purposeful exploration
	• regenerated their ideas by using analytical visual thinking. This included iteration, reworking design elements, depth of thinking through experimentation and level of

	creative play
	• were prepared to introduce new, extra elements to their ideation.
Achieved with Excellence	Candidates who were assessed as Achieved with Excellence commonly:
	• were well organised and communicated their thinking very clearly through the use of sophisticated and varied visual communication techniques and strategies
	• showed extensive exploration to challenge thinking through divergent and perceptive alternatives in their initiation of design ideas and by continually exploring and investigating alternatives, questioning / stimulating new thought, by engagement with discovery and perceptiveness
	• showed an ability to extend and transform both aesthetic and functional elements of the design idea. This extension and transformation was usually symbiotic and complementary, i.e. aesthetic elements informed functional elements and vice versa
	• were able to reinterpret and combine dissimilar ideas and discern connections between them that challenged predictable outcomes. This led to enhanced solutions and ideas
	• 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 / improved way to continue to push a previous idea into a new form or level of resolution. These candidates often went back to the intended context and re-thought and used further ideation strategies to refine the product further.
Standard specific comments	"Ideation" continues to consolidate through teaching and learning programmes in DVC and is increasingly being included in Fashion and Workshop programmes. This is encouraging and offers candidates broader access to pathways to tertiary education programmes; particularly in Design. However it is still obvious that there is a need for teachers to familiarise themselves with the requirements of the standard; often candidates lack of achievement was a result of a programme that was too restrictive.
	There were still some candidate submissions that included all their work for the year, including research and work for the presentation standard (this is only appropriate if the candidate was also submitting work for Scholarship DVC). Fewer candidates were submitting evidence from outdated briefs which did not expect candidates to spend time initiating design ideas.
	Exemplars provided by NZQA are being accessed and integrated into teaching and learning programmes. However it should still be noted that this standard is separately assessed; apart from the internals Resolve a spatial design through graphics practice and Resolve a product design through graphics practice, it is intended to be part of the same design practice and evidence will be found in the divergent thinking (initial experimentation and initial idea generation) and convergent (development) work of the internal standards. Some teaching and learning programmes continue to treat the work required for this standard as a quick mini-project in which candidates could generate a range of origin or starting ideas but did not allow candidates the opportunity to re-interpret, analyse or extend their thinking any further and therefore gain higher grades.
	While an appropriate design brief is an important part to candidate's success, the timing of its introduction is also important. Introducing the brief early can predispose candidate thinking towards an outcome without the benefit of unhindered creative thinking. The brief can be introduced after design initiation has commenced to allow this thinking. It is also important for teachers to integrate the teaching and learning of the skills for ideation at earlier levels to embed the ideation process into their junior programmes to grow and promote this train of thinking. The standard is assessed at level three, but presumes prior learning, practice and to communicate their design thinking using level three visual communication skills; there are teaching and learning programmes that neglect the continued development of sketching and presentation skills.
	There is still an obvious need for teachers to access Professional Development to improve their understanding and ensure that their candidates were appropriately prepared for this external standard. The following guidance is re-published this year: it is an unpacking of the stages of candidate work required for this standard.

	• Identify an experience (or a source of inspiration): from natural and / or built landscapes, film clips, music extracts, observational drawing, conceptual modelling, photography, language devices, etc. • Select visual communication techniques: from modelling (real and/or virtual), photography, sketching, collage, tracing, etc. • Select visual communication strategies: from interpretation, abstraction, recombination, tessellation, exaggeration, rotation, inversion, translation, translocation, deconstruction, etc. • Produce ideations from the starting experience using selected techniques and strategies. The emphasis should be on a range of interpretations and observations to meet the requirement of "interrogate". • From the ideations produced in the previous step generate new ideations. This means that the starting ideas are abstracted from the starting experience by two steps of interrogation. They of course may still reference the starting experience but are now new (the candidate's) ideas. • Show the initial ideas that emerge from the ideation, this provides evidence and validates the ideation process as it provides the beginnings of design ideas. • Continue to ideate throughout your initial experimentation and initial idea generation and development phases: it does not have to stop. While these stages describe the activities required for ideation, candidates still need to organise their work so that the ideation story makes sense and can be followed. It can be difficult to follow the thinking of the candidate (for assessment) when there is a range of exploration(s), making this obvious and clear would be helpful to both the candidate and marker. Use of techniques such as cut and pasting thumbnails or photocopies on the candidate's later work linking origin ideas to further regeneration would also be helpful.

2. Assessment Report for 91631: Produce working drawings to communicate production details for a complex design

Achieved	Candidates who were assessed as Achieved commonly: • had selected a design of adequate complexity (multiple components) to produce working drawings for • include views and modes that a set of working drawings would conventionally use including; site plans, floor plans, elevations, cross-sectional views, assembly views, detail views, material information such as wiring details or something that could be read and completed by another person • included exterior and interior detail including their construction and assembly • had proficiency in technical drawing and presentation conventions, such as labelling section planes, details and views, dimensioning, use of appropriate scale, line quality and line types • indicated the relationship of one drawing to another through the use of recognised conventions for the cross-referencing of drawing (e.g. north symbol, elevations, section and detail reference symbols), and numbering systems • adapted and contextualised generic detail to their design • identified materials using appropriate hatching, colouring or symbolic reference of material types or use of labels • produced elevations which were drawn neatly using conventions, and a sectional view was available to show some detail of either materials that would be used or how it would be assembled.
Not Achieved	Candidates who were assessed as Not Achieved commonly: • selected a design of inadequate complexity such as; simple furniture, letterboxes, decks • produced working drawings only of exterior or interior views • did not communicate construction or assembly of their designs using appropriate detailed drawings • did not communicate materials or components / 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 the set of working drawings.
Achieved with Merit	Candidates who were assessed as Achieved with Merit commonly: • showed precise measurement and dimensioning, accurate line-work and good application of drawing conventions. Using a computer programme helped with being more precise but still required knowledge and application of conventions used in New Zealand • produced a complete set of linked drawings with the exterior and interior detail explained the construction and assembly of the design with greater accuracy • produced an outcome of considered design thinking and represented a solution to a design problem.
Achieved with Excellence	Candidates who were assessed as Achieved with Excellence commonly: • showed excellent and consistent use of drawing conventions and standards • included all relevant drawings to clearly communicate detailed construction and assembly information through the use of carefully selected series of plans, elevations, section views, assembly views and enlarged detail views • included three dimensional drawings, 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	If candidates are to progress to tertiary study and a future career utilising this standard, then recognition of the expected effort and application required needs to be reminded: achievement in this standard is rewarded with 6 Credits which using NZQA and MOE guidelines should take approximately 60 hours of teaching and learning including homework and self-reflection time. But the quality, quantity and standard of work submitted by some candidates often did not reflect this expectation. It is recommended that the construction and structural details of spatial design projects should be contextualised to the candidate's ideas; this will require teaching advice and candidate knowledge. Generic details such as footings, foundations, roof cross-sections and lintel beams are not the candidates own design ideas and while the use of these detail is acceptable they have to be correctly applied in the candidates own design work. While there was an reduction in the number of submissions showing simple designs (not "complex") that were unable to access this standard, this report continues to encourage teaching and learning programmes that enable candidates to produce suitably "complex" designs. The standard defines "a complex design" as a "design with multiple components." It goes on to outline "The production details to be communicated about the complex design must be decided by the candidates." Teachers have to encourage their candidates to make design <u>and</u> drawing decisions. The use of simple furniture, letterboxes and decks often did not allow candidates to engage in drawings of adequate complexity. Including evidence of the candidates design work is important to support marker assessment here. The standard was also created to recognise the increasing use of CAD programmes that incorporate 2D (plans, elevations, sectional views), 3D (paraline and perspective constructions) and 4D (animations and other moving views). This allows candidates to design in 3D and generate 2D views and 4D views, and vice versa. Producing working drawings using CAD programmes has the added advantage of controlling line quality and minimising measurement errors. However using CAD still requires the candidates to ensure that the default settings controlling line weight, dimension conventions and orthographic systems are correct and reflect New Zealand Standards. The use of more traditional pencil drawings to access the highest achievement, however continues to be common.