Assessment Report

On this page

Level 2 Design and Visual Communication 2020

Standards 91337 91338 91339

91337: Use visual communication techniques to generate design ideas

Candidates who were awarded **Achievement** commonly:

- used visual communication techniques (generating ideas from observational sketches, photographic sources or other images, using sketching, 3D modelling etc) to generate design possibilities
- showed a range of different designs that were generic and predictable in design
- showed basic functionality. Some examples were: measurement, ergonomics, bubble diagrams, and simple floor plans
- explored and explained design ideas in relation to a context
- used ideation from research images, often creating predictable designs but did not follow through to new or different ideas

- showed basic aesthetic and functional qualities – mainly sketched – with a few CAD print outs.

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

- produced a single idea with no alternatives
- focused on aesthetic or functional qualities, not both
- used a single angle to communicate their idea
- produced design ideas that had no recognisable functional or aesthetic features, making it unclear what the design was
- used very basic pencil sketching of single views, with little colour or tonal variation to convey design ideas
- presented their ideas using poorly executed visual communication techniques, e.g. sketches that were out of proportion or lacked identifiable design qualities
- produced design ideas for completely unrelated projects, e.g. a single chair, a single watch, a single lamp and then chose one to present as their final with no real modification
- failed to produce enough evidence to show how their design operated, or how it was constructed
- explored sculptural forms without context, use or function
- presented research, site information or images of inspiration with insufficient design ideas of their own.

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

- explored the construction of the building and showed close up detailing, sections or framing (spatial design)
- showed sectioning and in-depth ergonomics and anthropometrics design information (product design)
- presented their ideas using a range of skilfully applied visual communication techniques that conveyed their ideas in a clear way that was easy to follow.
- used visual communication techniques, including well-proportioned 2-D and 3-D drawings, sectional drawings and exploded drawings as appropriate, 3-D modelling (physical and / or digital)

- communicated functional qualities with clarity, showing how the design was intended to work using structural systems or variations of interior space in spatial projects, or by making the intended use or construction clear through appropriate details
- used a variety of angles and views to fully express the qualities of the design
- showed divergent thinking through a range of unusual and interesting design ideas using different generative strategies (for example, mock-ups, paper modelling, creative experiments with shape and form)
- used visual communication techniques that clearly identified aesthetic and functional design qualities
- produced diverse ideas that showed identifiable design qualities – primarily aesthetic.

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

- explored design ideas through an initial idea into different or unusual idea(s)
- selected and applied refined visual communication techniques that were appropriate, easy to follow and understand
- used Visual Communication techniques appropriately to communicate their ideas
- presented work that was easily understood with clear communication of detail and function, often using exploded drawings, assembly, interior exploration with material alternatives
- showed a range of alternatives that regenerated and manipulated earlier ideas, often combining features in new directions but still with the end goal in site
- clarified the functional and aesthetic details of the design, demonstrating a comprehensive understanding of the design and communicating this clearly to the viewer
- thought through the construction and operation of the design outcome exploring any limitations, constraints or further opportunities.
- presented design ideas that were varied, and continually explored showing effective design thinking and a revealing creative response to the brief from initial idea through to solution.

Standard specific comments

Design ideas must be candidate generated responses to design briefs. Candidates need to provide evidence of a range of design ideas, not just the exploration of form through extensive ideas that may be divergent, but lack the purpose and context to become a design idea.

The brief needs to allow the candidate the latitude to explore and effectively communicate an innovative and creative solution.

Candidates need to understand their design well in order to clearly communicate their design ideas to the viewer. The three-dimensional nature of the idea needs to be clear and both function and aesthetics need to be described visually in a way that makes the ideas clear without the need for annotation.

Candidates who achieved at the higher levels understood the need to select the most appropriate visual communication techniques to communicate the design ideas effectively to others.

Design qualities are viewed holistically and should consider both functional and aesthetic qualities. Showing the design from a variety of angles assists in the understanding of the viewer. In spatial products, this may include how space is organised through floor plans and a connection to the site and the users of the space. Product projects should deal with the user interface and ergonomics. Showing the product at different stages of operation also helps viewers to understand the design.

Candidates who reflected on their design thinking were able to show how their design ideas could be further refined. This might be evident in how the design has evolved from the use of initiating sources, showing a range of variations within ideas, or by introducing new ideas into their design to help them further explore the possibilities of the design idea.

Candidates are advised not to submit multiple pages of research and design influences that contribute nothing to evidence for the standard.

Candidates are advised to present their work to assessors in an orderly fashion and arranged in such a way that the progression of ideas is clear.

LIVE

91338: Produce working drawings to communicate technical details of a design

Candidates who were awarded **Achievement** commonly:

- produced a set of interconnected 2-D instrumental working drawings to show technical details showing complex visual communication; most commonly this involved a plan, elevations and clearly related cross section
- presented related pages using page titles and / or page numbering
- showed the use of recognised drawing conventions appropriate to the drawings being produced. For example, labelling, scale, basic line types – construction lines, outlines, section lines
- produced drawings that communicated both functional and aesthetic qualities of their design, e.g. room purpose in their plans and / or materiality in their elevations for spatial. Shape and componentry of a product design.

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

- produced a set of interconnected drawings, but did not show enough technical details about the design; the most common example was a working drawing of a product that contained a plan or top view, end elevation and a sectional view that lacked any technical details of distinct parts, and their assembly or spatial designs that showed no functionality in the plans as well as no materiality in the elevations
- produced drawings that were not interconnected, lacking information that connected one drawing to the next. For example, poor use of the title block, page sequence or linking the north symbol to elevations
- submitted drawings that were only 3-D
- used a parts list for a product design submission where the items were labelled in a 3-D view, not the 2-D working drawings, so the items then didn’t form part of the related set of drawings
- produced several pages of drawings of all the components of their design but no 2-D drawing of the assembled design to give the marker any indication what the components were for.

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

- produced a set of interconnected 2D instrumental working drawings that clearly communicated technical details of the design. Drawings clearly showed construction information or complex detailing that related to the design
- used and applied accurate and appropriate tools to link the pages, e.g. using cutting planes to link to sectional views, NSEW symbols to link plans to elevations, and effective project descriptions and page sequence numbering in the title blocks
- produced drawings that were skilfully and accurately drawn
- applied drawing conventions appropriately to the drawing being presented.

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

- produced a set of high-quality drawings that communicated the technical details of their design effectively using appropriate conventions for the type of working drawing being presented
- produced drawings that were accurately drawn and included information and details so the design could be clearly understood. These drawing often included sectional views, with enlarged details, which allowed the design to be effectively communicated
- presented details accurately, clearly related to the design, and consistent with information communicated in the other linked drawings. These details were added to the set of working drawings to effectively inform the design and support the coherency of the communication.

Standard specific comments

The working drawings submitted for this standard must be in 2D. This includes the complex and detail information drawings.

Digital submissions work well for CAD-based evidence. However, the use of appropriate scale still needs to be applied.

Students who had a very good working knowledge of the CAD program they were using, as well as good knowledge of communicating complex visual information, generally did very well. However, some candidates who used CAD seemed too reliant on the software and did not show an understanding the fundamentals of working drawings.

Some candidates did not label section planes or resulting sections correctly. The section view was often opposite to what was shown on the section plane, and many times the section view was too small to show detail. Many showed very little detail of cladding materials

Construction details were often referenced incorrectly, the material of the detail was incorrect or the place where the detail was referenced from was incorrect (not from a section or plan).

Product projects must have sufficient design complexity to allow candidates to produce drawings with the required depth and detail.

Cross hatching of sections and dimensioning must be accurate. Many CAD submissions had clearly used ‘auto dimension’ that ‘over dimensioned’ the drawing. A significant number of architectural submissions did not have any dimensioning on elevations. Scales were generally used and appropriate. NSEW symbols were often left out and / or not referenced correctly on the elevations.

The conventions for linking pages (making the drawings “related”) were not always well applied. For example, some candidate used NSEW symbols in their plans, but did not apply them correctly when labelling their elevations. For example, labelling a north-east elevation a north elevation. Some elevations were labelled as back, front, or side.

If candidates are using a cutting plane to reference or relate to a cross section, the cross-section view must be orientated and labelled correctly.

The title block must also be used correctly to name and link the set of related drawings. The project is not “working drawings 91338”, it is a description of the specific design, e.g. holiday home.

Many CAD submissions used details from a library that did not or could not be related to the design. For example, drawings that include details of a specific cladding, but this detail is not reflected in the elevations.

Elevation views, especially for spatial design work, should have heights indicated with referencing back to the floor level or vertical dimensions.

Increasing use of CAD for spatial design, e.g. the education version of ArchiCAD, means candidates need to know how to use the software effectively. Poor application of conventions, use of the title block and applying linked details prevented many candidates from achieving the middle and upper grades.

91339: Produce instrumental perspective projection drawings to communicate design ideas

Candidates who were awarded **Achievement** commonly:

- produced an instrumental perspective drawing that applied the principles of perspective projection correctly; showing the correct setting out and use of the picture plane, eye level line, ground line, vanishing points and station point
- used perspective projection techniques to reveal design features; these showed some detailing / complexity in terms of the form and features of the object.

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

- did not apply the principles of projection correctly. The most common fault was not projecting the VP's correctly from the station point and picture plane set up, i.e. not projecting parallel to the plan view from the SP when setting up an angular perspective projection
- incorrectly projected the relationship between the station point, picture plane and vanishing points
- did not have an elevation or label features on a height line to project the objects height from
- produced an instrumental perspective drawing that was too simple in shape and form, and lacked the communication of complex information showing detail of the design features
- presented a drawing 'task' rather than the candidate's own design ideas
- submitted a freehand perspective sketch or a computer-generated perspective image with no projection, e.g. a *SketchUp* model

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

- produced an instrumental perspective drawing that applied the principles of perspective projection accurately to show detail of the design feature, i.e. used the correct setting out and use of the picture plane, eye line, ground line, vanishing points and correctly used a height line, or elevation, to project the heights on the drawing. **Note**: If a height line is being used the different

height marks should be labelled. This helps the marker to verify features are projected correctly

- showed some skill in being able to project clearly the detail of the design features, such as window frames, door frames and railings showing thickness and depth, allowing the communication of construction or the materials
- produced an instrumental perspective drawing that was skilfully drawn in terms of clear and effective linework
- produced a drawing of sufficient scale / size so detail could be viewed
- plotted points that allowed for more complex shapes and / or curves to be drawn.

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

- selected a viewpoint that enabled the perspective projection to effectively communicate visual information and detail about the design. The perspective drawing was highly informative and visually realistic, including the overall form and structure of the building or object
- used the picture plane and viewpoint effectively to produce an enlarged image of the object / building of sufficient scale / size so detail could be clearly seen, and the key details enhanced. This was done through projection techniques, not digital manipulation
- produced a perspective outcome that was accurately projected. Design features, such as weatherboards, gaps in fittings, handles, guttering, flooring and decking, were skilfully and accurately plotted
- used a high level of drawing skill to communicate this design information; techniques such as exploded views or showing additional interior information through the windows, or some exterior cladding removed to show wall framing was effective.

Standard specific comments

Perspective principles

Candidates who attempted this standard generally understood how to produce an instrumental perspective drawing and achieved success. Those who were able to project detail of the design features accurately were able to access higher achievement levels. Most candidates produced architectural perspective drawings, using the angular perspective projection method.

Common issues preventing candidates achieving at the higher levels were related to not using the height line correctly. The height line was often projected correctly but the heights were not then projected around the object correctly to plot the required points.

In some cases, the perspective drawing was too small to enable the candidate to show design features with any detail, restricting them to an achieved grade.

The incorrect use of height line was also common, and in many cases the student confused the PP and ELL. Placement of the PP at the front of the plan often resulted in a very small perspective and made it difficult for students to communicate details clearly.

To achieve with excellence candidates needed to select a viewpoint that effectively communicated their design. It was pleasing to see some candidates had spent time selecting a viewpoint and thinking carefully about the relationship between the station point, picture plane, eye line and vanishing points before starting. This enabled them to present a drawing that did not distort their design, allowing the drawing to be a size that enabled the design features to be shown clearly and in detail.

Working on A2 size paper is helpful, but it is useful for candidates to do a draft or practice layout. That way they can check if their projection is going to be effective, and that it is correct.

If extension tabs or wings are used on the sheet to project vanishing points, these must be left attached to the sheet to verify the use of projection principles.

CAD perspectives:

A few candidates presented their perspective projections generated with a CAD application, printed and submitted via the portfolio envelope. This is perfectly fine if the perspective projection principles and set-up are followed.

Those who achieved success often presented two pages – one showing the construction lines overlaying the perspective turned on; the other showing the actual perspective without the construction lines to show the features more clearly. If using this method, it is important to check the line-weights of the final perspective drawing as thickness of lines can be a factor in showing the clarity of detail.

Note: Use of scale used and the final projected image. A tiny image cannot be copied onto another page by itself and enlarged to show features; this is not

classified as a projected view. Digital enhancement of the perspective image is not part of this standard.

Guidance:

It is important to attach the plan and elevation to the perspective to justify projection points or indicate stated measurements on a height line, e.g. cupboard, window etc. A number of candidates had removed these and the markers had trouble verifying heights.

If using a CAD generated plan and elevation, ensure that these are securely attached to the drawing sheet when they were used for the projection, so they don't move.

An indication of the assessment task that the perspective projection came from, or copied design drawings, should be included in the submission.

There is a need to show construction clearly, especially circles and curved features. These were often just drawn in. To have success at the higher levels these points need to be plotted accurately.

Accuracy and quality drawing skills are expected from Level 2 candidates. This includes keeping drawing sheets and instruments clean and tidy and using an appropriate grade of pencil lead for the construction and set-up of the projection.

Design and Visual Communication subject page

Previous years' reports

- 2019 (PDF, 129KB)
- 2018 (PDF, 119KB)
- 2017 (PDF, 60KB)
- 2016 (PDF, 233KB)