

SHFGS Assessment Criteria: Year 9 Graphic design

Year 9 grade	Below SHFGS standard	Working towards SHFGS standard	Expected SHFGS standard	Above SHFGS standard	Outstanding standard.
Explore Research, investigate & design requirements	<ul style="list-style-type: none"> Is able to gather suitable information on primary user needs, aesthetics, construction and function through investigation of existing products. Is able to communicate information. Adequately utilises exploratory work to specify some needs, requirements, opportunities 	<ul style="list-style-type: none"> Gathers some valuable information on both primary user and stakeholder requirements, through investigation of existing products. Can appropriately record primary and secondary sources obtained. Competently specifies needs, requirements, and opportunities. 	<ul style="list-style-type: none"> Gathers valuable information on both primary user and stakeholder requirements, through thorough investigation of existing products. Confident in investigating, obtaining, generating, and managing relevant research. Develops detailed needs, requirements, opportunities and constraints that positively guide and influence their design iterations. 	<ul style="list-style-type: none"> Gathers valuable broad based information and stimulus, which considers environmental, cost, safety and maintenance issues. Explores where human values may conflict and compromise has to be achieved. Competently specifies a range of comprehensive needs, requirements, opportunities and constraints, which offer scope to support the design process 	<ul style="list-style-type: none"> Gathers full and objective information and sources of inspiration which considers a wide range of needs and requirements. Manages compromise, resolving criteria clashes whilst retaining focus. Effectively specifies needs, requirements, opportunities and constraints, which subsequently fully influence design iterations.
Create Design thinking & communication.	<ul style="list-style-type: none"> Informal graphical and modelling skills are just adequate in communicating initial thinking. Develops adequately annotated ideas and designs experimenting with a range of 2D & 3D sketching, technical/ CAD drawing and physical modelling, to explore and reasonably advance solutions. Iterative developments are generally progressive. With some instructions and support, is able to demonstrate a level of thinking and problem solving. Little evidence of innovation. Formal presentation of the final design solution(s) is sufficient and provides some understanding to a third party 	<ul style="list-style-type: none"> Informal graphical and modelling skills are sufficient, but are not consistent in appropriately communicating initial thinking. Able to combine ideas to develop a number of different, annotated designs via a range of 2D & 3D sketching, technical/ CAD drawing and physical modelling to explore and successfully advance solutions. Iterative developments are generally progressive. Shows sound thinking and problem solving techniques. Some evidence of innovation. Formal presentation of the final design solution(s) is sufficient and provides some understanding to a third party. 	<ul style="list-style-type: none"> Informal graphical and modelling skills are good and are consistent in appropriately communicating initial thinking. Uses a variety of approaches, including CAD and some CAM to develop creative ideas and mostly avoids design fixation. Iterative developments are progressive. Demonstrates good thinking and problem solving techniques. Clear evidence of innovation. Formal presentation of the final design solution(s) is good and provides appropriate understanding to a third party. 	<ul style="list-style-type: none"> Informal graphical and modelling skills are very good and are consistent in appropriately communicating initial thinking. Uses a variety of approaches, including CAD/CAM to develop creative, innovative, functional and appealing products which respond to a variety of situations and avoids design fixation. Iterative developments are progressive. Takes creative risks when making design decisions and decides which design criteria clash and determine, which should take priority. Clear evidence of innovation. Formal presentation of the final design solution(s) is very good and provides appropriate understanding to a third party. 	<ul style="list-style-type: none"> Informal graphical and modelling skills are excellent and are consistently effective in appropriately communicating initial thinking. Uses CAD and related software packages to validate their designs in advance of manufacture and mathematical modelling to indicate likely performance. Iterative developments are comprehensive and progressive. Takes creative risks and decides which design criteria clash and which should take priority. Clear and systematic evidence of innovation. Formal presentation of the final design solution(s) is excellent and provides appropriate understanding to a third party.
Final Prototype	<ul style="list-style-type: none"> With support, is able to communicate adequate technical detail and can sequence work covering most steps. Recognises material properties. With moderate guidance selects and uses equipment, tools and processes to manufacture and apply finishes. Inaccurate and/or basic standards demonstrated. Finishing may not be appropriate and/or the outcome would not present well to a stakeholder. Work may be incomplete. Final prototype(s) adequately reflects stakeholder requirements and reasonable market potential. 	<ul style="list-style-type: none"> With minimal support, is able to communicate technical detail, sequences and schedules. Utilises material properties. Shows sufficient skills when using and selecting manufacturing and finishing techniques, including digital design and manufacture, but lacks consistency. Sufficient standard demonstrated through a generally accurate outcome. Finishing is appropriate but the outcome could be better presented to stakeholders. Final prototype(s) adequately reflects stakeholder requirements and market potential. 	<ul style="list-style-type: none"> Produces design solutions and illustrated technical information with production plans that offer competent communication to a third party. Explains material, equipment and process selection. Shows good skills when using and selecting manufacturing and finishing techniques, including digital design and manufacture. Good standard and levels of accuracy demonstrated. Finishing is appropriate and the outcome will present well to a stakeholder. Final prototype(s) reflects stakeholder requirements and offers reasonable market potential. 	<ul style="list-style-type: none"> Produces detailed, technical/production plans with timeframes that communicate well to a third party. Justifies material, equipment and process selection. Works independently, flexibly, accurately and safely with a broad range of resources. Very good skills are evident. Very good standard and levels of accuracy demonstrated. Finishing is appropriate and the outcome will present very well to a stakeholder. Final prototype(s) meets stakeholder requirements and has market potential. 	<ul style="list-style-type: none"> Thorough technical information is produced, using digital applications where appropriate, offering effective information for a third party. Excellent justification of material, equipment and process selection. Undertakes demanding and complex work incorporating multiple, justified modifications. Effective skills are evident. Excellent standard, demonstrating high levels of accuracy. Finishing is appropriate and the outcome will present well and provide impact to a stakeholder. Final prototype(s) fully responds to stakeholder requirements and has good market potential.
Evaluate	<ul style="list-style-type: none"> A limited analysis and evaluation of investigated sources of information from stakeholders and existing products offering little or no support to inform the design process. Is able to produce limited design evaluation/notes with very little reflection on design requirements. Problems are not identified and thus design progression is limited. When directed, is able to produce a superficial evaluation of strengths and/or weaknesses of their final prototype, with little or no suggestions for modification and/or consideration of possible design improvements. 	<ul style="list-style-type: none"> A sufficient analysis and evaluation of investigated sources of information from stakeholders, existing products and wider issues, offering some support to inform the design process. With guidance, periodically tests and evaluates their designs against some of the design requirements and some feedback. Some aspects of problems are identified and used to help planning the next steps. When encouraged, will produce sufficient critical evaluation of strengths and/or weaknesses of their final prototype with some suggestions for modification and/or consideration of possible design optimisation presented. 	<ul style="list-style-type: none"> A good level of analysis and evaluation of investigated sources of information from stakeholders, existing products and wider issues, offering clear support to inform the design process. Selects appropriate methods to periodically evaluate their designs against design requirements and feedback. Reviews are used to identify problems and plan the next steps for design progression. Can produce good critical evaluation of the strengths and weaknesses of their final prototype, with detailed suggestions for modification and consideration of possible design optimisation for improving performance. 	<ul style="list-style-type: none"> A very good level of analysis and evaluation of investigated sources of information from stakeholders and wider issues, offering clear support to inform the design process. Regularly tests, evaluates and refines their ideas and designs against design requirements and feedback. Ongoing reviews are used to identify problems and consistently plan the next steps for design progression. Can confidently produce a very good critical evaluation of the strengths and weaknesses of their final prototype, with detailed suggestions for modification and consideration of possible design optimisation for improving performance. Life cycle analysis of the final design is considered. 	<ul style="list-style-type: none"> Comprehensive and systematic analysis and evaluation of investigated sources of information from stakeholders, existing products and wider issues, offering clear and focused support to inform the design process. Produces on-going clear and comprehensive, testing, evaluation and refinement against the design requirements and feedback. This is used to consistently support design progression. Can confidently produce a thorough and critical evaluation of the strengths and weaknesses of their final prototype, with detailed suggestions for modification and consideration of possible design optimisation for improving performance. Life cycle analysis of the final design and the use of new and emerging technologies are considered.