

# National Qualifications Framework Levels 1–3, 2007

# **Graphics**

# **National Moderator's Report**

## NATIONAL MODERATOR'S REPORT

### **General Guidance for Assessors**

The purpose of external moderation is to provide reassurance that assessor judgments are at the national standard and are made on the basis of assessment materials that are fair and valid. All assessment materials are expected to:

- give the learner the opportunity to meet the requirements of the standard
- have an assessment schedule that gives evidence of appropriate learner responses and clear judgments at all levels.

The Ministry of Education contracted subject experts to write assessment resources for achievement standards. These are not pre-moderated. The intention is that they are modified to suit teaching programmes and learner needs. They do not provide "rules" but suggest different ways of assessing to the nationally registered standard.

### **General Overall Comment**

There are a significant number of assessors who are now preparing quality learning experiences for learners in Graphics. These assessors have shown that carefully constructed assessment tasks that allow for individual design solutions, prompt learners to produce evidence that meets the demands of the assessment criteria and explanatory notes. Challenging tasks that allow for creative thinking, follow design practice and clearly articulate the assessment requirements will allow for the generation of appropriate evidence for most achievement standards.

The issues which continue to impact on learner success in Graphics are:

- 1. Assessors must take care when writing assessment material to ensure learners are not disadvantaged by:
- an inappropriate level of design challenges set and
- an lack of appropriate information in assessment tasks, in terms of clearly articulating the assessment requirements.

Assessors are encouraged to source authentic tasks so learners can engage in real design challenges. The nature of the graphics achievement standards can allow for creative investigation of design challenges.

- 2. As in previous years generic assessment schedules continued to cause a problem for assessors who have difficulty describing a clear level of achievement required for achieved, merit and excellence.
- 3. Assessors who create a specific assessment schedule for each assessment task provided a more accurate and definable standard of quality for judging learner evidence.

- 4. When assessing against unit standards assessors must ensure the assessment task assesses all the performance criteria, including range statements. The assessment schedule must include examples of appropriate learner evidence and judgement statements. The performance criteria alone do not constitute appropriate judgement statements. In some cases assessment tasks have assessed the pragmatic demands of skills but the design elements inherent in some performance criteria have not been included. The intention of the design and communications unit standards, is to undertake the development of evidence for these standards within a contextual design brief and not in isolation as a skill assessment task.
- 5. There is a step up in degree of difficulty and depth of engagement at levels 2 and 3 in terms of the quality of sketching, instrumental drawing and the representation of design ideas. Assessors must review assessment activities to ascertain if learners have the opportunity to demonstrate the necessary skills and knowledge expected at levels 2 and 3. At these levels learners must be given design tasks that encourage deeper thinking and include opportunities to submit more detailed evidence. When learners are expected to meet such requirements as; "demonstrate an ability to critically evaluate the quality of their results, to identify the major problems, and to make progressive and positive improvements; demonstrate an appreciation of the need for high standards of work and a willingness and commitment to achieving high-quality personal results; analyse the nature of the problem and generate new solutions or produce alternatives to existing designs or ongoing analysis and reflection and examination of the implications of the alternatives ", clear support and advice on the nature of these processes, is essential.
- 6. Assessors must ensure the assessment activity is assessing to the latest version of the achievement standard. Assessors should check during programme development that all aspects of the achievement standard are assessed and correct assessment information is provided so learners have the opportunity to reach the standard. Assessment schedules require evidence and judgment statements that reflect the latest version of the achievement standard.

It is a requirement of the moderation system that the assessment schedules contain specific examples of the required evidence (answers) along with the details of how this evidence will be judged when deciding on the grade to be awarded. Evidence statements are required to exemplify valid student answers including the depth and detail required. Assessors may use annotated photocopies of previous or current learners work as examples of what is expected for achieved, merit and excellent levels. The annotations and their position on the script(s) must be clearly indicated to the moderator.

Assessors are responsible for ensuring assessment activities, regardless of the source, meet the requirements of the current registered standard.

Some activities developed for earlier versions of the achievement standards may need to be modified. Similarly, buying a commercial activity does not automatically guarantee its validity. Activities still need to face the school's internal moderation system before being submitted for moderation.

#### Level 1

# AS 90041: Produce a mock-up and model

## Mock-ups

There still appears to be some difficulty achieving success in this part of the achievement standard.

Key indicators for consideration:

- evidence must be presented that demonstrates how the mock-up has been used to test or explore alternative design ideas
- evidence must be presented that shows how the mock-up has informed the design development process (normally poorly represented in submitted material) and show the evolving nature of a idea. This evidence can be shown as annotated photographs, further drawings or written description
- more than two photographs should be submitted that clearly show the design's features in 3D form and are supported with evidence of how these mock-ups have been instrumental in progressing the designs aesthetic or function
- mock-ups are <u>not</u> identical versions of the model. They are made of different materials and represent a quickly constructed conceptual idea to ascertain 3D form or the rough working nature of an idea.

### Model

This part of the achievement standard appears to be completed with a high rate of success. Models are a rich source of realising a design solution in 3 dimensional form and most assessors are producing some fine examples.

# AS 90042: Apply a design process and design principles to identified needs and opportunities

This achievement standard appears to be completed with a high rate of success.

*Key indicators for consideration:* 

- the design development stage is still poorly represented.
- Development is a process in which questions about the concept such as; construction, size, operation, materials, joining details, colour etc, necessary to define the solution are answered
- the way specifications are written could improve learners success. Many submitted assessment activities have too many specifications and tend to be too restrictive. The standard expects that the solution be "evaluated with reference to design

specifications", so the wording of these specifications will impact on the learners ability to be able to meet this assessment criterion. Seek help in writing specifications if necessary as learners are expected to do this in higher levels of graphics

- on-going evaluation of design ideas has improved but there are still some problems relating to the way in which accurate information is relayed to learners regarding the purpose of evaluation (reasoning and justification) at key stages that support and justify the further development of ideas
- the use of annotations can support the visual elements of any design development and are very important for describing functional, aesthetic or emotional attributes. Many submissions still lack appropriate annotations for Merit and Excellence grades where reasons for design decisions are important
- design language supports the justification of design decisions when choices are made about how the main principles of function and aesthetics can be manipulated to improve the design's purpose. Design language is still rarely integrated in an appropriate context. 'Use of design language' refers to the dialogue (annotated or graphical) that is inherent in the design process and clearly identifies the interaction of principles and purpose.

# AS 90044: Present design ideas that show design features and functions

This achievement standard has been completed with a high rate of success, but there are still some issues that require attention.

*Key indicators for consideration:* 

- a wider range of media should be encouraged. It is important that learners have every opportunity to explore multi media capabilities and are <u>not</u> restricted to coloured pencils, markers and pastels
- original work must be sent as evidence for this achievement standard as moderation of black and white photocopies is not acceptable when demonstrating a learners competence with a variety of media
- assessment activities must incorporate valuable information for learners about the appropriate application of media and presentation techniques.

## Level 2

## AS 90322: Produce a mock-up and model to explore design ideas

## Mock-ups

Assessors are reminded to ensure they provide appropriate information to learners about the connection between rough mock-up and design development. Photographs are the favoured way of presenting evidence for this achievement standard and this media appears

to be clearly appropriate now that assessors are taking several shots of the design to explain its functional part in the design development.

*Key indicators for consideration:* 

- more than two photographs should be submitted that clearly show how the mock-up contributes to the design's development. Photographs alone do not provide adequate evidence for this achievement standard
- more information needs to be provided by the learner to show how the mock-up informs design development
- mock-ups are used to quickly explore ideas and help check things such as size, appropriateness for purpose, look and operation. This information supports design decisions by confirming design thinking or changing the way ideas develop. The evidence about how these experiments have helped make design decisions must be communicated in the design concept development stages in the form of annotations or sketched visuals
- justification refers to a clear in-depth explanation of why a particular approach has been used for the purpose of design development.

### Models

As with level one, model submissions are mostly successful pieces of work that represent a well planned and constructed scale version of a design.

It is important that <u>at least two</u> quality photos along with notations/drawings are supplied with students work for clarification of the models scale and to show details from different viewpoints.

AS 90322: Design and present a solution for an architectural or environmental brief

AS 90323: Design and present a solution for a media or technical illustration brief

AS 90324: Design and present a solution for an engineering or technological brief

### Overall Statement

There are many instances where learners are not being extended beyond level one thinking, skills and knowledge.

Assessors must ensure learners are given opportunities to explore ideas in depth and be encouraged to communicate more sophisticated information about design detail and construction of outcomes.

*Key indicators for consideration:* 

 Assessors are encouraged to write interesting and authentic assessment tasks with challenging design problems to enable learners to successfully develop technically detailed solutions to design tasks. Design briefs need to clearly outline the issue to be solved and the specifications written in such a way that they enable the learner to successfully meet the specifications during the design development of a solution

- learners must be encouraged to explore a wider range of design options for the development and evolution of ideas. Many submissions lack the depth of thinking associated with the investigation of alternatives and appropriate detail associated with level two submissions
- evidence provided in many submissions appears to be struggling to complete a full
  design process. Learners at this level must be engaging in explorative investigation of
  alternatives and justifying their reasons for design decisions throughout their design
  practice. This means that all stages of their chosen design process must reflect critical
  thinking through detailed drawings and annotations
- many learners produced an abundance of research and concepts but design development and final solutions were vague. Research is appropriate where it is used to support on-going design decisions that clearly improve the value of the outcome. The amount is dependant on the direction of the design not on the abundance of information available
- learners need to use an evaluation process to analyse their design ideas. The evaluation dialogue involves an analysis of decisions being made. Students who merely provide a commentary of what is happening (description) have not evaluated. Effective design development can be achieved through on going evaluation at each stage so that design decisions can be discussed and justified
- presentation skills are an inherent part of all of the work submitted for achieving a design solution. Learners require more information and classroom support to improve evidence submitted to meet the "high quality presentation skills". Learners should be introduced to a variety of media beyond coloured pencils and graphite and encouraged to use a wide use of modes where applicable. Learners wishing to achieve excellence in any one of these standards must be given the opportunity to **choose** appropriate media and modes for the drawing purpose.

#### Level 3

AS 90736: Develop and communicate a solution to an architectural or environmental design brief

AS 90736: Develop and communicate a solution to an engineering or technological design brief

AS 90736: Develop and communicate a solution to an medial or technical illustration design brief

In general and associated with all level three achievement standards

The quality of level three submissions has improved significantly this year. There are some highly sophisticated design ideas being developed by informed talented young designers. The following statements are made to reinforce the expectations for level three submissions.

## *Key indicators for consideration:*

- the integration of the external negotiated brief as a motivating tool prompted learners to produce stunning results. Negotiating with a client can present several issues that can impact on learner success. Firstly, if the client cannot articulate their needs accurately, learners can find it difficult to develop adequate solutions and will require considerable teacher support to guide and advise on direction. Secondly the learner/designer can find the task of writing appropriate design briefs difficult, especially when they fail to accurately identify clear specifications. Thirdly, the client may be unable to contribute clear direction during evaluation sessions. Assessors should reflect on how many client related briefs are used in a graphics programme
- where assessors are being too prescriptive with *project requirements*, learner freedom is minimalised and tends to constrain the design process
- some Assessors are still using version 1 assessment tasks to assess against version 2 of the achievement standard. The variation between the two versions is significant. Version 2, for merit requires a **refined solution** and excellence requires a **critically analysed** solution. There is a change of focus to communication rather than presentation techniques and skills. More information must be provided to learners about the meaning of these two criteria
- investigation at this level must represent considerable depth and analysis making sure that alternatives are explored with reasons and justifications given for design decisions. A critically analysed solution involves the examination of the implications of the alternatives. During conceptual development learners will be actively exploring different ideas. The focused evaluation of these alternative ideas is reflected in an analysed solution.

This can be demonstrated through extensive drawing, annotation and/or other means of communication

• assessors need to reinforce the specific requirements of explanatory note 2. Develop and communicate may include the use of: design sketches, working drawings, notes, research, models, mock-ups, audio, visual, oral presentation to a group, 3D rendered pictorial sketches or drawings, computer generated images, and photography. The use of the above methods will be dependant on the design task but any level three submissions should contain a substantial amount of these

- learners will require considerable support and direction when creating **their own design briefs**, as quite often there is a problem with how the specifications have been written. Learners' briefs must present a suitable challenge **as the level of design engagement** relies on the complexity of the task
- research is a tool for improving the quality of the outcome, not to become the main objective. Learners must use research to inform the creation of design ideas and must be encouraged to only use the information that will definitely contribute to the refinement of a solution
- the key stages of design are dynamic not linear in form.
- assessment schedules in the case of the student developing their own brief or working with a client to develop a brief will of necessity be somewhat generic but they must still describe the expected evidence for each level of achievement and reflect the explanatory notes of the standards.

At this level many schools are still opting to adapt or use exemplar material supplied by the Ministry of Education. In addition to ensuring the tasks are assessing the latest version of the achievement standard it is recommended that this material is continually reviewed to make sure that it meets the expectations of the local context.

# **Unit Standards**

There are a significant number of Assessors using Unit Standards, some in Graphics and many in Technology. In some cases the assessment material was not at the national standard. Assessors unfamiliar with appropriate assessment practices associated with the development of assessment schedules and tasks for unit standards should seek support.

Unit Standard assessment tasks need to be written to reflect the level of the standard. The assessment activity should cover the design problem, specifications, design requirements and the unit standard requirements, including the special notes, elements and performance criteria.

A full assessment schedule that unpicks the elements and performance criteria and range statements needs to be written. This is generally set up in columns; Performance Criteria, Evidence, Judgement, and Assessment Strategy.

There appears to be a number of assessors offering Graphics standards in Technology. A general observation of these submissions reveals a need to improve the design development and appropriate visual communication of design ideas. Many learners failed to meet the requirements of the unit standard because they did not produce solutions appropriate to the level of the standard. Assessors must ensure the standard of work and the level of difficulty is equitable with achievement standard quality of evidence of the same year level.