

## GENERAL COMMENTS

### FINDINGS

The quality of coursework for NSSC/O 2021 has slightly improved but a big habitual tendency of errors that were still picked up at the centres are:

- A need to make it clear to candidates what is expected for the analysis and the Design brief.
- Clear sequence for the sub-topics in the design folder needs attention from the teachers which is clearly laid out in the coursework assessment criteria form.
- The table of contents should be based on the sequence of the coursework assessment criteria form.
- Teachers should ensure that all candidates submit their folders by the end of the first term of the grade 11 year to be evaluated. Coursework covers 50% of the total mark for the assessment.
- It is not acceptable to see centres with four candidates but where only two could submit their folders and the other two did not and no proof of measures taken to address the situation on time is shared with DNEA e.g.: management should be involved and parents of these two candidates who did not submit their design folders and course work for the year. Such action must be taken way before coursework is submitted for external moderation.
- Centres have not been putting in the much needed efforts from the beginning of the Senior Secondary phase. The Design folder starts in Grade 10 and should be completed in the second term of Grade 11, yet folders submitted show that very little time was spent on them.
- Regional Offices should give Continuous Professional Development (CPD) Programmes for teachers teaching Design and Technology. If possible, networking with DNEA, NIED and other regions with Senior Education Officers as well as relevant stakeholders should be initiated to have teachers capacitated and assisted on a regular basis.
- Basic calculation errors could be observed, hence centres are implored that effective moderation is done by management.
- Marks were awarded lenient or slightly severe which points to the need of teacher training on assessment of coursework.

Once again, Regional Offices, Principals and HOD's are pleaded to take the responsibility to ensure that folders and projects are monitored throughout Grades 10 and 11. Towards the end of the second term of the Grade 11 year, all folders should be internally moderated before the marks are dispatched to DNEA for external moderation. Once again, Regional Offices are implored to make sure that NSSC schools are provided with the necessary materials and tools for candidates to build quality models. DNEA observed that some centres' projects were compromised by the lack of adequate resources.

It is not acceptable for candidates not to submit any folder or coursework. Zero marks were given with explanations why learners are not submitting while there are no evidence or proof shared and efforts done by teacher/HOD/ Principal / Schoolboard / Regional Office ( SEOs). Since folders are supposed to be completed over a period of two years, centres are encouraged NOT to do folders on one week's time as it is the case at some centres.

Candidates who are not submitting photographic evidence has become common practice, yet marks are awarded for the quality of products by the centres. There are a few cases where candidates made wrong problem selections and outcomes and showed little evidence of imaginative interpretation and creativity. The sample of work presented for moderation was suitable in most cases and centres generally applied the assessment criteria appropriately, although, in some cases, this was not at the correct level.

It is expected that all folders must include clear photographic evidence of the artefacts, in addition to an overall view of the final product, showing detail to support the awarding of marks.

## **COMMENTS ON SPECIFIC ASSESSMENT HEADINGS**

### **Identification of a need leading to Design Brief**

The candidates did not clearly state the problem to be addressed and not all gave a concise Design Brief. The degree to which candidates researched the design problem varied enormously. Candidates should be taught to complete adequate and relevant research in order to form a suitable knowledge base before formulating the Brief.

### **Research into brief resulting in Specification**

Often this research consisted simply of information on materials and constructions taken directly from textbooks, magazines, internet and other sources. Most information of this type is totally irrelevant at this stage of a design process and should be considered in the development stage when ideas have been explored.

If a model is made, the model should form the core of the specification. If this is not done properly, meaningful evaluation becomes difficult.

Candidates should do research into similar existing products as mentioned in the Design Brief and evaluate these products regarding cost, material, etc. Only then can the specifications be listed. These specifications must be relatively specific. E.g. "It should not cost more than N\$200". Many candidates stated generic specifications like "it must be safe, must not be expensive, etc."

This research does not refer to materials and its properties. Most candidates included points of specification but of a generic nature which could be applied to any product. This section should give clear and specific requirements for the design outcome and for the awarding of maximum marks.

### **Generation and exploration of ideas**

This is the part where most centres lost valuable marks. Candidates are expected to show evidence of genuine design creativity and not copies from books and other sources. Candidates should include a wide range of different ideas enhanced by clearly annotated sketches. Too often candidates presented a few formal drawings that showed too little design capabilities and tended to follow a single concept. These ideas can be presented most successfully through sketches and candidates should be encouraged to include everything that comes to mind. Annotations should include comments as to how an idea might link to the specification.

### **Development of proposed solution.**

In this section of the folder the candidates should take the chosen idea and make further detailed decisions on shape, materials and construction methods to be used in the final product. Most of the candidates showed different levels of presentation skills regarding layout, diagrams, labeling notes and the use of color/rendering of their work with some folders showing outstanding qualities. These candidates should be congratulated on the quality of their work. There were, however, some instances where it was not possible to follow the design work produced.

Candidates still found it difficult to apply the final ideas and simply choose one of the ideas recorded in the previous section.

### **Planning for Production**

Candidates should be encouraged to use a wide range of appropriate communication and presentation techniques in support of the different stages of the design process.

The working drawings still prove to be a major concern for most candidates. The teachers are therefore encouraged to teach learners to clearly draw a detailed planning showing an effective order for the sequence of operation. Sadly, some centres could not provide sufficient photographic evidence to substantiate the credibility of the folders. Some photographic evidence is just a mere posing activity and no real action is seen.

### **Product realization**

Candidates should be congratulated on the wide range of materials used for their products. Photographic evidence showed that some candidates were able to work on their own and able to work at an acceptable standard of construction and finish to the extent that the end product could be used. It could also be noted from the photographic evidence provided that some centres used materials not fit for producing quality products. These materials were probably provided by learners who could not afford to procure the required materials for their products.

## **Testing and Evaluation**

The candidates included photographic evidence to show the testing of the product, which is commendable. They are, however, encouraged to link the outcome of the original specifications and make objective judgements on the success of their products.

This section should also include suggestions for further modifications or possible future improvements. Therefore centres are urged to ensure that specifications are fully evaluated and tested in this section, which will guarantee maximum marks for the candidates.

## **Fitness for purpose**

Centres generally tended to award full marks in the high band only. It is important that the full range of marks is used in order to mark this section accordingly. Candidates were expected to state the functionality of purpose of the product.