# NATIONAL CURRICULUM STATEMENT GRADES 10-12 (GENERAL)

# LEARNING PROGRAMME GUIDELINES

# DESIGN

# JANUARY 2008

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# SECTION 1

# INTRODUCTION

## 1.1 INTRODUCING THE NATIONAL CURRICULUM STATEMENT

### 1.1.1 BACKGROUND

In 1995 the South African government began the process of developing a new curriculum for the school system. There were two imperatives for this. First, the scale of change in the world, the growth and development of knowledge and technology and the demands of the 21st Century required learners to be exposed to different and higher level skills and knowledge than those required by the existing South African curricula. Second, South Africa had changed. The curricula for schools therefore required revision to reflect new values and principles, especially those of the Constitution of South Africa.

The first version of the new curriculum for the General Education Band, known as Curriculum 2005, was introduced into the Foundation Phase in 1997. While there was much to commend the curriculum, the concerns of teachers led to a review of the Curriculum in 1999. The review of Curriculum 2005 provides the basis for the development of the Revised National Curriculum Statement for General Education and Training (Grades R – 9) and the National Curriculum Statement for Grades 10–12.

### 1.1.2 THE NATIONAL CURRICULUM STATEMENT

The National Curriculum Statement consists of 29 subjects. Subject specialists developed the Subject Statements which make up the National Curriculum Statement. The draft versions of the Subject Statements were published for comment in 2001 and then re-worked to take account of the comments received. In 2002 24 subject statements and an overview document were declared policy through Government Gazette. In 2004 five subjects were added to the National Curriculum Statement. The National Curriculum Statement now consists of the Subject Statements for the following subjects:

- Languages – 11 official languages (each counted as three subjects to cater for the three levels Home Language, First Additional Language and Second Additional Language); 13 non-official languages

- Mathematics; Mathematical Literacy; Physical Sciences; Life Sciences; Computer Applications Technology; Information Technology

- Accounting; Business Studies; Economics

- Geography; History; Life Orientation; Religion Studies

- Consumer Studies; Hospitality Studies; Tourism

- Dramatic Arts; Dance Studies; Design; Music; Visual Arts

- Agricultural Sciences, Agricultural Management Practices, Agricultural Technology

- Civil Technology; Mechanical Technology; Electrical Technology; Engineering Graphics and Design

### 1.1.3 NATIONAL SENIOR CERTIFICATE

The *National Senior Certificate: A Qualification on Level 4 of the National Qualifications Framework (NQF)* provides the requirements for promotion at the end of Grades 10 and 11 and the awarding of the National Senior Certificate at the end of Grade 12. This document replaces two of the original National Curriculum Statement documents: the *Overview* and the *Qualifications and Assessment Policy Framework*.

### 1.1.4 SUBJECT ASSESSMENT GUIDELINES

The Subject Assessment Guidelines set out the internal or school-based assessment requirements for each subject and the external assessment requirements. In addition, the *National Protocol for Recording and Reporting (Grades R-12)* (an addendum to the policy, *The National Senior Certificate*) has been developed to standardise the recording and reporting procedures for Grades R to 12. This protocol came into effect on 1 January 2007.

## 1.2 INTRODUCING THE LEARNING PROGRAMME GUIDELINES

### 1.2.1 PURPOSE AND CONTENT OF THE LEARNING PROGRAMME GUIDELINES

The Learning Programme Guidelines aim to assist teachers and schools in their planning for the introduction of the National Curriculum Statement. The Learning Programme Guidelines should be read in conjunction with the National Senior Certificate policy and the National Curriculum Statement Subject Statements.

Section 2 of the Learning Programme Guidelines suggests how teaching the particular subject may be informed by the principles which underpin the National Curriculum Statement.

Section 3 suggests how schools and teachers might plan for the introduction of the National Curriculum Statement. The Department of Education encourages careful planning to ensure that the high skills, high knowledge goals of the National Curriculum Statement are attained.

The Learning Programme Guidelines do not include sections on assessment. The assessment requirements for each subject are provided in the Subject Assessment Guidelines which come into effect on 1 January 2008.

### 1.2.2 WHAT IS A LEARNING PROGRAMME

**INTRODUCTION**

A Learning Programme assists teachers to plan for sequenced learning, teaching and assessment in Grades 10 to 12 so that all Learning Outcomes in a subject are achieved in a progressive manner. The following three phases of planning are recommended:

Phase 1 – develop a Subject Framework for grades 10 to 12

Phase 2 – develop a Work Schedule for each grade

Phase 3 – develop Lesson Plans to cover each classroom contact session

It is recommended that the teachers of a subject at a school or cluster of schools first put together a broad subject outline (Subject Framework) for the three grades to arrive at an understanding of the content of the subject and the progression which needs to take place across the grades (see Section 3.3.1). This will assist with the demarcation of content for each grade. Thereafter, teachers of the subject teaching the same grade need to work together to develop a year long Work Schedule. The Work Schedule should indicate the sequence in which the content and context will be presented for the subject in that particular grade (see Section 3.3.2). Finally, individual teachers should design Lesson Plans using the grade-specific Work Schedule as the starting point. The Lesson Plans should include learning, teaching and assessment activities that reflect the Learning Outcomes and Assessment Standards set out in the Subject Statements (see Section 3.3.3). Learning Programmes should accommodate diversity in schools and classrooms but reflect the core content of a national curriculum.

An outline of the process involved in the design of a Learning Programme is provided on page 6.

## DESIGNING A LEARNING PROGRAMME

A detailed description of the process involved in the design of a Learning Programme is provided in Sections 3.3.1 – 3.3.3 of the Learning Programme Guidelines. The first stage, the development of a Subject Framework does not require a written document but teachers are strongly advised to spend time with subject experts in developing a deep understanding of the skills, knowledge and values set out in the Subject Statements. The quality and rigour of this engagement will determine the quality of teaching and learning in the classroom.

Once the Subject Framework has been completed, teachers should develop Work Schedules and Lesson Plans. Examples of Work Schedules and Lesson Plans are provided in the Learning Programme Guidelines. Teachers are encouraged to critically engage with these formats and develop their own.

### Developing a Subject Framework (Grades 10-12)

Planning for the teaching of subjects in Grades 10 to 12 should begin with a detailed examination of the scope of the subject as set out in the Subject Statement. No particular format or template is recommended for this first phase of planning but the steps recommended should be used as a checklist.

Although no prescribed document is required for this stage of planning, school-wide planning (timetables, requisitioning, teacher development, classroom allocation) as well as the development of grade-specific work schedules would benefit from short documents which spell out:
- The scope of the subject – the knowledge, skills and values; the content; the contexts or themes; electives etc. to be covered in the three grades for each subject
- A three-year assessment plan for the subject
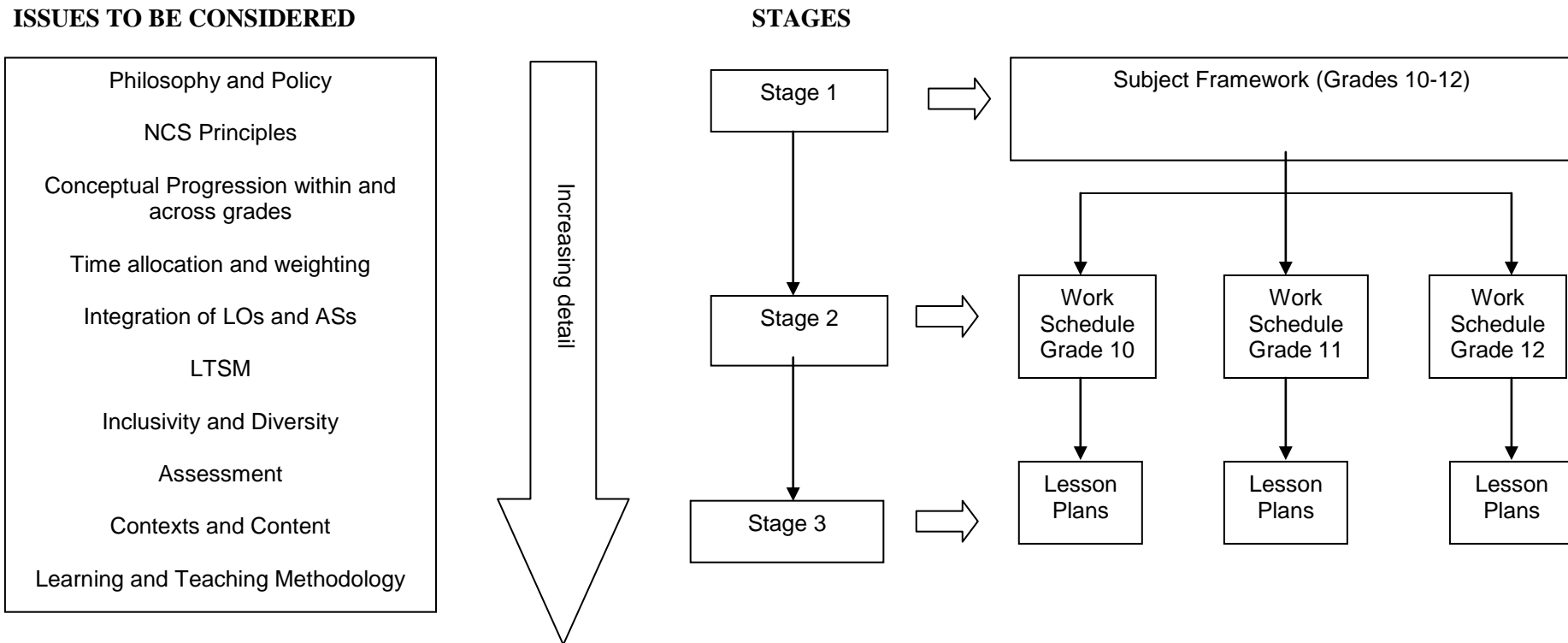- The list of LTSM required for the subject

**Designing Work Schedules**

This is the second phase in the design of a Learning Programme. In this phase teachers develop Work Schedules for each grade. The Work Schedules are informed by the planning undertaken for the Subject Framework. The Work Schedules should be carefully prepared documents that reflect what teaching and assessment will take place in the 40 weeks of the school year.

**Designing Lesson Plans**

Each grade-specific Work Schedule must be divided into units of deliverable learning experiences, that is, Lesson Plans. Lesson Plans are not equivalent to periods in the school timetable. Each Lesson Plan should contain a coherent series of teaching, learning and assessment activities. A Lesson Plan adds to the level of detail for each issue addressed in the Work Schedule. It also indicates other relevant issues to be considered when teaching and assessing a subject.

**FIGURE 1:**    **RELATIONSHIP BETWEEN THE 3 STAGES OF PLANNING WHEN DEVELOPING A LEARNING PROGRAMME**

**ISSUES TO BE CONSIDERED**                              **STAGES**



Philosophy and Policy

NCS Principles

Conceptual Progression within and across grades

Time allocation and weighting

Integration of LOs and ASs

LTSM

Inclusivity and Diversity

Assessment

Contexts and Content

Learning and Teaching Methodology

Increasing detail

Stage 1 → Subject Framework (Grades 10-12)

Stage 2 → Work Schedule Grade 10 | Work Schedule Grade 11 | Work Schedule Grade 12

Stage 3 → Lesson Plans | Lesson Plans | Lesson Plans

# SECTION 2

# INTRODUCING DESIGN

"The submarine (1776): the escalator (1894): the aeroplane (1905): the ballpoint pen (1943) … all came about (at least in part) because the designers in each case refused to be constrained by the conventions of current product reality. They exercised their imagination to reformulate the world and speculate about hitherto unimagined possibilities."

Kimbell, R. (2003) *Journal of Design and Technology Education*, Vol.7 No. 3 p.176

## 2.1    WHAT IS DESIGN?

Design affects every aspect of our lives – the clothes we wear, the cars we drive, the buildings we live and work in. It is concerned with issues of purpose, function and aesthetics in shaping the social, cultural and physical environment. Advertising and Communication Design have transformed our cities and the way we communicate with one another. Many people think that design is about "style" only but the Grade 10-12 Design Subject Statement seeks to go further and impress upon learners that design can also function as a powerful social tool. Design is often misunderstood as frivolous activity or, conversely, as an entirely pragmatic and purposeful process that excludes the playfulness and risk-taking elements that are the very stuff of creativity and innovation. In fact, Design is credited as the single national, strategic initiative that restored the British economy after World War II. In more recent years, Design has been instrumental in building the Japanese, Singaporean, Malaysian, Taiwanese and South Korean economies.

So, what *is* Design? Design is an intellectual tool, **a way of thinking** that can equally well develop the human potential of an individual *and* revive a nation's economy. It is an approach to life: an attitude that can make a community self-sufficient. Correctly used, it builds self-confidence. It can turn workers into entrepreneurs. It makes businesses more competitive locally and on the international market.

Design is what makes the world around us function. It has produced the consumer products that we buy. It is responsible for the services that we use. Everything from fashion items to heavy industrial manufacturing processes owes their existence to Design. Design is used to find a better solution to a problem and to improve the quality of people's lives, whether it is a jug that pours without spilling, or the magic of the tiny telecommunication device that we call a cell phone, devices used to carry out microscopic surgery or pump water to rural villages over kilometres without electricity. Good design ensures that the things that we manufacture work better, are more easily maintained, last longer and are good value for money.

Design also brings us elegance and beauty. Design can be used to make functional items aesthetically pleasing such as motor cars, furniture and household goods, clothing; or easily understood such as traffic signs, layouts for official forms and documents etc.

No particular equipment or materials are needed. Whatever is available can be productively employed by an innovative mind. Design is a creative, intellectual, problem-solving process involving problem identification, planning, research, innovation, conceptualisation, prototyping and critical reflection. This process typically results in environments, systems, services and products that may be either unique, intended for mass production, hand crafted or produced by mechanical and/or electronic means.

Design teachers will be familiar with the basic <u>practical</u> design skills, knowledge and values. These are clearly defined in the core syllabus for the *Report 550* Art and Design subjects.

Design <u>theory</u> incorporates *relevant* modules from the *Report 550* History of Art core syllabus but approaches content knowledge from a Design Literacy and Visual Culture framework. Design in a business context is a new module which enables learners to understand – at a basic level – how Design is used to generate an income e.g. economic empowerment through indigenous knowledge systems; for the learners themselves; for their school play, concert or fashion show; for a community need e.g. a fund raiser for a local charity etc.

What is the relationship between the NCS subjects Design and Visual Arts? The decision to keep the two disciplines separate was based on the increasing demand by learners for *Report 550* art options that had a strong design focus. Therefore these subjects are now offered in Grades 10-12 as distinct, stand-alone subjects. Both Visual Arts and Design are also inherent in Craft, so Craft is common to both subjects. The major difference between Design and Visual Arts is one of intention and purpose. Design is aimed at providing learners with a learning pathway for the multi-facetted design industry and allied fields in engineering and architecture, as well as providing all learners with specialised design skills, knowledge, values and attitudes to create critical and discerning "consumers of design" for the 21st century.

The NCS structure makes it possible for learners to take both Design and Visual Art. This gives learners who enjoy creative practical work exposure to different possibilities and approaches, while providing them with the opportunity to focus on developing essential skills and knowledge for a learning pathway to one of the many design-related careers and the world of work. The choice of subjects will depend largely on the availability of specialised teachers, community and learner needs and the school context.


## 2.2    WHAT IS THE PURPOSE OF DESIGN?

"Design is the way in which we try to shape our environment, both in its whole and in its parts. Anybody setting out to design anything - an object, a room, a garden, a process or an event - will be trying to mould the materials, space, time and other resources which are available to meet a need which she or he has identified."

Garrard, R. (1991) Catalogue: Drumcroon Education Art Centre

The Design Subject Statement aims to equip learners with the knowledge, skills, values and attitudes that will enable them to adapt, participate and succeed in an economically complex society. The subject also aims to promote productivity, social justice and environmental sustainability. Therefore, these learners will be provided with the opportunity to:

- understand the social contribution of design with regard to economic growth, entrepreneurship and sustainability
- understand that design may be a tool for social change by improving the quality of life and by providing solutions that are responsive to individual and community needs
- affirm the cultural heritage of South Africa through a focus on indigenous knowledge and craft production in ways that are accessible to learners in all communities
- develop an awareness of career opportunities in the design industry thereby creating a credible route to higher education and the world of work
- develop the creative potential of the learner

- appreciate design as a research and development-based process which requires the learner to investigate primary and secondary sources
- reinforce concepts of design methodology and problem solving as a lifelong learning skill
- relate design skills and knowledge to real situations by ensuring a balance between theory and practice
- emphasise the collaborative nature of the design process which often involves various stakeholders in a manner that encourages all participants to work as effective members of a team
- reflect critically on and be sensitive to the role of aesthetics and cultural practices in design
- develop an awareness of the need for materials to be responsibly and safely used or recycled through the design process
- select appropriate media, materials and technology and to add value through the design process
- develop as a responsible citizen who is a critical consumer, culturally sensitive and well informed on ethical issues and empathetic to social needs
- appreciate how images, artefacts, systems and products relate to economic, environmental, social and political, historical and cultural contexts
- engender a sense of self discipline by emphasising the need for effective time management in the meeting of deadlines which is an essential part of professional practice
- develop appropriate presentation and communication skills in order to convey design concepts effectively
- enable the learner to practice design as an enjoyable and fulfilling life experience.

Design education enables the learner to develop:

- the ability to create, invent, innovate and construct knowledge;
- effective expression, communication and interaction between individuals and groups;
- a healthy sense of self, exploring individual and collective identities;
- an understanding and acknowledgement of our rich and diverse cultures;
- a deeper understanding of the social and physical environment, and our place within that
- environment;
- practical skills and different modes of thinking; and
- career skills and income-generating opportunities that lead to enhanced social, economic and cultural life.

Design opens up an exciting world of creative and personal exploration. Learners are able to develop new ways in which to respond to and interact with their world. Design will enable the learner to communicate ideas effectively using visual and language skills and will develop their perceptual skills and sensory awareness. Learners should be encouraged at all times to investigate and experiment with the creative possibilities of the various materials and tools at their disposal. In the classroom the learners will explore materials, processes and technologies in a safe and responsible manner while developing intellectual and practical skills through participating creatively in a range of design activities.

Learners are encouraged to collect, analyse, organise and critically evaluate relevant resource information and to critically appraise their own work and that of others and make informed personal aesthetic judgements.

An integral part of the subject Design is to develop entrepreneurial skills and professional practice within a design context; to explore a variety of career options to make an economic contribution to self and society; and create an awareness of further learning and career development opportunities.

The Design teacher should continually stimulate the learner's thought processes, imagination and insight to improve their design skills and knowledge. Learners should be treated as if there is no ceiling to their achievements. The achievement of each learner should be valued in relation to his or her own possibilities.

## 2.3 WHAT IS THE RELATIONSHIP BETWEEN DESIGN AND THE NATIONAL CURRICULUM STATEMENT PRINCIPLES?

The Constitution of the Republic of South Africa (Act 108 of 1996) provided a basis for curriculum transformation and development in South Africa. The National Curriculum Statement Grades 10-12 (General) lays a foundation for the achievement of these goals by stipulating Learning Outcomes and Assessment Standards, and by spelling out the key principles and values that underpin the curriculum. The Design curriculum supports the application of the nine NCS principles as follows:

### 2.3.1 Social transformation

The Constitution of South Africa forms a basis for social transformation in a post-apartheid society. Social transformation in education is aimed at ensuring that the educational imbalances of the past are addressed, and that equal educational opportunities are provided for all sections of the population. If social transformation is to be achieved, all South Africans have to be educationally affirmed through the recognition of their potential and the removal of artificial barriers to the attainment of qualifications.

### 2.3.2 Outcomes-Based Education

The Design Subject Statement indicates the Learning Outcomes to be achieved in the subject by the end of Grade 12. This in turn encourages a learner-centred and activity-based approach to the teaching of Design which is in keeping with the practical nature of the NCS subject Design.

### 2.3.3 High knowledge and high skills

The *National Curriculum Statement Grades 10-12 (General)* aims to develop a high level of knowledge and skills for learners. It sets high expectations of what South African learners can achieve.

The NCS specifies the minimum standards of knowledge and skills to be achieved at each grade and sets standards in all subjects.

Design is a valuable subject for learners who wish to develop their creativity. Learners can enrich their studies in other subjects by adopting Design skills, knowledge and values. Learners who are going to study further or who opt to enter the world of work at the end of Grade 12 will be advantaged by the skills acquired in Design.

### 2.3.4 Integration and applied competence

The integrated development of skills, knowledge, understanding and values within and across NCS subjects is an important element of the curriculum and is crucial for achieving applied competence. The learning outcomes in Design are closely allied to skills in the subjects Languages and Life Orientation, thus allowing for substantial integration across subjects. If learners are involved in

doing more than one art form, then teachers should be aware of how similar skills and concepts are developed in those subjects.  Activities could be designed in collaboration with other teachers.

The Learning Outcomes for Design have been developed in such a manner that although the teacher might choose to concentrate on one or two Assessment Standards of a particular Learning Outcome, these Assessment Standards can be integrated with Assessment Standards from the other Learning Outcomes. Learning Outcomes are inter-related and cannot be viewed in isolation e.g. learners cannot **experiment and produce** (LO2) if they have not first **conceptualised** the activity (LO1). They will also have to understand where their activities are placed within the broader context of Design **theory, history** and **business** (LO3).

### 2.3.5    Progression

The subject statement for Design shows progression from one grade to another. Each Learning Outcome is accompanied by Assessment Standards that provide an explicit statement of the level of performance expected per grade. The content and context of the Design Assessment Standards for each grade show progression from simple to complex.

### 2.3.6    Articulation and Portability

The Further Education and Training Band promotes access from the General Education and Training Band to the Higher Education and Training Band. The Learning Outcomes and Assessment Standards of Design link with those in the Arts and Culture Learning Area in the General Education and Training Band. See 2.5.2.for more detail.

### 2.3.7    Human Rights, Inclusivity and Environmental and Social Justice

The subject Design is infused with the principles and practices of social and environmental justice and human rights as defined in the Constitution of the Republic of South Africa. It is sensitive to a wide range of issues arising from diversity such as poverty, inequality, race, gender, language, age, disability and HIV and AIDS. All learners should be able to develop to their full potential provided they receive the necessary support in terms of their intellectual, social, emotional, spiritual and physical needs. This is addressed through the development of appropriate Design learning programmes.

### 2.3.8    Valuing Indigenous Knowledge Systems

The NCS has been developed around the principle that there are many varied perspectives and views from which to understand and make sense of our world. A curriculum based on this view requires that these different perspectives and worldviews should be recognised in the curriculum. In the South African context, the recognition and valuing of indigenous knowledge systems is crucial for affirming a great majority of our people. Indigenous knowledge systems incorporate ways of doing and thinking associated with indigenous local communities in our country, region and continent. Design should draw on indigenous technologies and skills in the creation and production of products such as beadwork.

Indigenous knowledge systems (IKS) should contribute to the content of Design. Indigenous knowledge systems are found globally and are not unique to Africa.  All Learning Outcomes enable learners to explore the rich diversity of design and craft within different cultural groups locally, nationally, in the continent of Africa and globally, past and present. Through this exploration learners become aware of the dynamic nature of the cultural fusion that constantly takes place.

Learners can discover and explore the IKS through the Learning Outcomes and Assessment Standards. Other points to note are:

- IKS is not static. Interaction between peoples of different societies and cultures brings about changes in knowledge, skills and beliefs. People may take on the beliefs of others, or incorporate visual images and design motifs, skills, materials and techniques encountered elsewhere. This adds to the story that an object of cultural expression can tell. e.g. although beads are still used in ceremonies - such as beaded skirts as a marker of marital status - beaded artefacts have also become a major part of the tourist market in Southern Africa, and new patterns, materials and techniques have emerged. Globally, bead patterns, wire work designs and traditional clothing have fed into the contemporary fabric, fashion, industrial and advertising design industries;

- Indigenous knowledge systems are revealed in functional objects made and used for centuries by various peoples of the Southern African region and in other indigenous cultures across the world e.g. architectural features, styles and methods; clay vessels and carved wooden artefacts (e.g. meat plates, headrests, staffs); woven grass baskets and mats, beadwork, etc are found globally - whether in Europe, Africa, Asia, the South Pacific, South America, or Alaska. As people's beliefs impact on how an object is made and used, each object reveals an aspect of the indigenous knowledge system;

- Investigation into how artefacts are manufactured and used can reveal underlying cognitive patterns, beliefs and social structures informing the choice of materials, processes and techniques; and

- Recognition of various indigenous knowledge systems can affirm and develop people, especially with regard to economic empowerment.

### 2.3.9 Credibility, quality and efficiency

The NCS Design curriculum will ensure that learners are equipped to meet internationally acceptable standards and that there will be comparability in the qualifications gained at various learning sites and institutions.

The assessment standards are comparable in quality, breadth and depth to those of other countries. This provides a basis for recognition of the National Senior Certificate qualification gained at different sites and for transfer within and between sites and countries. Quality is to be assured through national and provincial moderation, among other mechanisms.

Learners who select Design at Grade 10-12 level will be equipped with extensive skills for entry into institutions of higher education. Learners who opt to enter the world of work at the end of Grade 12 will be advantaged by the skills acquired in Design when entering a range of career fields.

## 2.4  PROFILE OF A DESIGN LEARNER

The design process "… requires (at the least) an open-minded willingness to see the world 'otherwise' and (ideally) a mind that deliberately, *playfully*, tries to reconfigure the world differently … 'playfulness', openness', 'delight in uncertainty', 'ambiguity', 'letting go' … are key attributes of creative innovators."

Kimbell, R. (2003). Journal of Design and Technology Education. Vol.7 No.3, p.176.

Gr. 10 Entry
The prospective Grade 10 learners who choose the subject Design will be literate, numerate and culturally aware; they will be visually literate and be able to communicate in a variety of ways; they will be adaptable, curious, open minded individuals who are able to see the world differently. The Design curriculum seeks to develop learners who can use various problem-solving techniques that reflect different ways of thinking and knowing and work effectively with others as well as on their own.  In developing teaching and learning practices, teachers must take into account learners' developmental stage, interests and abilities. Grade 10 learners have a renewed sense of identity and are able to think in an increasingly abstract and complex way. They are also interested in re-examining themselves, their existing values, and those of a larger world. This interest promotes a seriousness of purpose, together with an increased personal investment in art making. The potential for development is immense for instance:

From an intellectual perspective learners:

- gain cognitive competence – increasing ability to think abstractly in more complex structures of thinking, perceiving and hypothesising;
- examine the logic and consistency of existing personal beliefs;
- have the ability to separate issues from self;
- engage in meta-cognition (thinking about thinking) on a wide range of topics; and
- reflect on global issues and what they can do about them.

From a social and emotional perspective learners:

- have a deepened sense of self and a sense of personal power;
- are eager to explore the new world with their new selves;
- participate in large group gatherings and various subcultures and interests in which adult values are expressed and tried out, i.e. sports, teams, bands, clubs, gangs, cliques etc;
- address themes such as love, sex, HIV/Aids, career goals, world peace;
- develop true friendships with one or two best friends of either sex;
- develop intense romances;
- develop a feeling of personal invulnerability and a sense of immortality, leading to taking chances;
- may return to a respect for parents, teachers and adults;
- feel that they are redefining and creating a new and better world; and
- enjoy a strong sense of independence.

Gr. 12 Exit
The learner exiting from the Grade 12 Design learning programme should ideally be a creative and critical thinker, be able to think laterally and be a resourceful and independent individual.  The learner should also be able to communicate effectively through the medium of design; show flexibility to cope with the rapidly changing world; be self-disciplined, visually literate, confident,

creative, multi-skilled, an independent thinker and mindful of environmental, economic, social and cultural issues.

The learner who has successfully completed the Design curriculum should become an informed critical consumer and / or producer of design; will be inspired by the values reflected in the critical and developmental outcomes, and will act in the interest of society based on respect for democracy, equality, human dignity, life and social justice.

By the end of Grade 12, it is envisaged that because of the diverse nature of the subject Design, the successful learner may be expected to display several of the following qualities:
- creative, imaginative and inventive
- observant, analytical, critical and reflective
- intellectually inquisitive
- empathetic
- lateral, independent and divergent thinking
- sensitive to aesthetics
- aware of the role of history and heritage in design
- aware of contemporary design issues
- capable of understanding the business of design
- able to identify the wants and needs of a potential market or audience
- able to meet the needs of a client and work to a brief
- able to use design as a means of expression and communication
- culturally sensitive
- sensitive to environmental issues in design
- visually, culturally and orally literate
- literate in the reading and writing of texts
- ethical and responsible

Design teachers should be prepared and willing to assist without being prescriptive. They should therefore, not enforce personal opinions on learners but should rather be committed to informing, nurturing and developing the learners' prior knowledge and providing a safe teaching environment that will ensure the learners' progression through Grades 10-12.

Design teachers should also be able to fulfil the various roles outlined in the Norms and Standards for teachers. It is expected that all Design teachers continually update themselves on issues related to Design education and educational practice in general.


## 2.5 RELATIONSHIP BETWEEN THE DESIGN LEARNING OUTCOMES AND THE CRITICAL AND DEVELOPMENTAL OUTCOMES

### 2.5.1 Relationship between the Learning Outcomes and Critical and Developmental Outcomes

There are seven cross-curricular Critical Outcomes and five cross-curricular Developmental Outcomes. These outcomes are derived from the Constitution and indicate the desired profile of a learner leaving the schooling system. The Critical and Developmental Outcomes in turn inform the Learning Outcomes that are set for each subject and therefore inform the learning, teaching and assessment process in Design.

The Critical and Developmental Outcomes can be applied in learning, teaching and assessment of Design as follows:

| CRITICAL OUTCOMES | APPLICATION IN DESIGN | DESIGN LOs |
|---|---|---|
| 1. Apply critical and creative thinking in identifying and solving problems | Engage with creative, innovative thinking, problem solving and decision-making when conceptualising and realising a design project. Design projects are usually needs driven, either personal or for a client, and require critical and reflective thinking and practice | **1, 2 and 3** |
| 2. Work effectively with others as members of a team, group or organisation | Design processes often require participants to work together which involves sharing of ideas, developing interviewing skills, democratic practices and ethical responsibilities | **1, 2 and 3** |
| 3. Organise and manage oneself and one's activities responsibly and effectively | Design learners must be self disciplined, be able to plan, organise and manage their work, keep to time schedules, be committed to the task and take responsibility for their actions | **1, 2 and 3** |
| 4. Collect, analyse, organise and critically evaluate information | Learners must be able to observe and record data in a variety of ways so that they are able to analyse, interpret and critically evaluate information in ways that enhance inquiry, innovation and creativity in the Design process | **1, 2 and 3** |
| 5. Communicate by using visual, mathematical, or language skills in the modes of oral and written presentations | Learners need to be visually literate and be able to communicate through the many non-verbal and symbolic language forms that characterise the Design processes | **1, 2 and 3** |
| 6. Use science and technology effectively, showing responsibility towards the environment and the health of others | Design concepts, processes and end products that are created must show effective social, ethical and environmental responsibility in Design | **1, 2 and 3** |
| 7. Demonstrate that problem solving contexts do not exist in isolation | Design processes involve learners in understanding how their own problem solving activities are influenced by, or may impact on, local, national and global contexts | **1, 2 and 3** |
| **DEVELOPMENTAL OUTCOMES** | **APPLICATION IN DESIGN** | **DESIGN LOs** |
| 1. **Reflect** on and **explore** a variety of strategies to learn more effectively | Design combines theory with practice in ongoing action-reflection processes which enable learners continually to explore, experiment and evaluate their work while at the same time supporting and enhancing teaching and learning | **1, 2 and 3** |
| 2. Participate as **responsible citizens** in the life of local, national and global communities | Learners develop responsibility towards their communities, both locally and nationally and understand the contribution of designers towards the development of a vibrant local and national design industry | **1, 2 and 3** |
| 3. Be **culturally and aesthetically sensitive** across a range of social contexts | Design can be culture specific, or can influence or be influenced by other cultures and has the potential to be a powerful agent for change, transformation and affirmation | **1, 2 and 3** |
| 4. **Explore** education and career opportunities | The Design field offers a varied range of professional and vocational opportunities which can enable learners to make a significant economic contribution to self and society through specific training | **1, 2 and 3** |
| 5. Develop **entrepreneurial** opportunities | Through commitment to best practice learners can develop the ability to initiate, market and manage skills, processes and end products | **1, 2 and 3** |

### 2.5.2 Relationship between Grade 10-12 Design Learning Outcomes and Grade R-9 Learning Outcomes

The Grade R-9 Learning Outcomes for Arts and Culture provide space for the development of certain generic art skills that the Grade 10 learner can transfer and apply in Grade 10-12 Design. However, many generalist teachers who are responsible for the implementation of Arts and Culture in Grades R-9 do not yet have any specialist training in art skills and knowledge. Therefore learners coming into Grade 10 Design may possess few art skills and little knowledge. Design teachers will have to take this into account when developing their Work Schedule for Grade 10. Therefore, a **baseline assessment** for all Grade 10 Design learners should be incorporated into the learning programme to establish their entry level of competency.

The following table shows the relationship between the Learning Outcomes for Design in the NCS Grades 10-12 and Learning Outcomes for Arts and Culture in the NCS Grades R-9:

| NCS Grades 10-12 Design Learning Outcomes | NCS Grades R-9 Arts and Culture Learning Outcomes |
| --- | --- |
| **LO1:** **Design Process** | **LO1:** Creating, Interpreting & Presenting **LO2:** Reflecting |
| **LO2:** **Design Product** | **LO1:** Creating, Interpreting & Presenting **LO2:** Reflecting **LO3:** Participating and Collaborating **LO4:** Expressing and Communicating |
| **LO3:** **Design in Context** | **LO1:** Creating, Interpreting & Presenting **LO2:** Reflecting **LO3:** Participating and Collaborating **LO4:** Expressing and Communicating |

## 2.6 WAYS TO ACHIEVE THE DESIGN LEARNING OUTCOMES

### 2.6.1 Approach to the teaching of Design

The approach to studying Design in schools is an emphasis on **doing design,** which entails introducing the designer's craft (how designers work) in the classroom. This approach is common to traditional art and design methodologies. It is learner-centred, integrates high skills with content and is resource based.

It is important to note that the learning outcomes for Design in Grades 10-12 are the same for all grades. The assessment standards show progression in the development of skills, processes, concepts, content knowledge and values from grade to grade. They describe the expected level of performance and range of performance for each learning outcome for each grade. The performance of learners in the learning outcomes is measured against the assessment standards. Each grade builds on the competencies developed in the previous grade.

**Health and Safety Issues**

Awareness and promotion of health and safety issues in the classroom or studio should be standard practice for all teachers and learners. Teachers should be aware that individual learners might be at risk due to allergic reactions related to the use of chemicals and materials. Learners must be concerned about personal safety and the safety of others at all times. In many activities the learners may need to use protective eyewear, clothing, masks or gloves. The working environment should be kept tidy, clean and dry at all times. Litter, sharp, broken or rusty objects must be removed. Cluttered or wet floors can be dangerous. When cleaning equipment and disposing of waste materials, learners should be made aware of the safest ways of eliminating these items to avoid polluting the water, soil or air.

**Listed below are some risks that learners may have to consider when working**:

| Carving/Modelling | Cutting tools, knives, solvents and glues can be dangerous if not used carefully and responsibly. |
|---|---|
| Clay | Kilns that are firing are dangerous because they are extremely hot. When working with dry clay and glazes, avoid clay or glaze dust. Wear masks when spraying ceramic items. |
| Clothing | Some styles of clothing or the fabrics may compromise learners' safety. Teachers should make sure that learners wear appropriate protective clothing where necessary. |
| Computers | Avoid excessive exposure to computer screen and lights from scanners and photocopiers because of UV rays. |
| Fumes | Ensure adequate ventilation when working with chemicals and paints. Do not allow learners to inhale. Some chemicals and paint vapours are toxic and could compromise learners' safety. Teachers should also ensure that learners use appropriate masks where necessary. When using spray paints, inks, dyes, solvents and glues etc. make sure that there is adequate ventilation. |
| Hair | Some hairstyles / hair length / head covering may compromise learners' safety. Teachers should make sure that learners wear appropriate protective clothing where necessary. |
| Machinery and Tools | When using machinery or tools, learners must be made aware of safe practices and should not work unsupervised. |
| Paint | Teachers should be aware that many paints are toxic. Learners should be told not to put brushes into their mouths. |
| Textiles | Learners must be careful when using scissors, pins and sewing machines. Pins should never be placed in learners' mouths. Great care should be taken when using pigments, printing inks or dyes because they can cause chemical and allergic reactions on the skin. Learners should be asked to protect their clothing. |

### 2.6.2   Achieving the Design Learning Outcomes

Some of the challenges in attaining the learning outcomes and their accompanying assessment standards are:

- A range of design activities will have to be adapted for local contexts although the learning outcomes and assessment standards remain the same.
- The availability of teaching and learning support materials such as visual images, design reference books, physical resources and equipment. Teachers, schools, parents, guardians, practising designers, crafters and business people in the local communities should explore innovative ways of acquiring, sharing resources and supporting redress.
- The local context of schools, i.e. their immediate surroundings. The presence of local design and craft cultures, crafters and designers etc. will enable schools to concentrate more time and effort in certain areas of Design knowledge (such as beadwork, mural design, wirework, ceramics, carvings, textile printing etc).
- Continued teacher INSET, professional development and classroom support are of the utmost importance. This could take place though district "clusters" of teachers, short courses at HEIs and provincial education department art centres (where available).

- PRESET: art and design graduates, practising designers and crafters from the formal and informal sectors need to be encouraged to enter the teaching profession and acquire teaching qualifications in Design.

### 2.6.3 Approach to content in Design

There are many aspects of design that can be covered during Grades 10-12, but it is not possible to include everything. Therefore, the **design process**, **production** and **the context of design** are the three key aspects of design education in Grades 10-12. The skills, knowledge and values developed by learners will be of invaluable use to them as aspirant designers and non-designers alike. The design process is, in essence, how to design. And since everything around us is designed, then the ability to master the process, critically reflect on the products and place in context will be invaluable knowledge for all learners, regardless of their career choices or ways of earning a living.

NCS Design acknowledges that content is obviously influenced by local, national and global design and craft trends, but places emphasis on the advancement and promotion of an emerging **South African** and **Pan African** consciousness. Thus, the affirmation of Southern African and African design and craft styles and traditions, past and present, are given prominence but do not exclude specific global and comparative studies in design and craft trends e.g. Western, Eastern, Indian, Asian, Pacific Rim, etc. Learners are expected to understand how designers and crafters function in different societies, local and global, past and present, and apply this knowledge to a given context.

### 2.6.4 Content Framework for Design (See Annexure 1)

The content provides the framework for teachers to implement the subject Design. Teachers should make use of this when developing their Learning Programmes for Design in Grades 10-12.

All content knowledge and practical skills *must be delivered* through the Design Learning Outcomes and Assessment Standards.

| | |
|---|---|
| The **basic skills, knowledge** and **values** that underpin the Design Learning Outcomes and Assessment Standards are: | <ul><li>Conceptual</li><li>Technical</li><li>Perceptual</li><li>Communication</li><li>Critical Reflection</li></ul> |
| The **basic skills, knowledge** and **values** can be evidenced in:<br><br><br><br><br><br>**Progression** takes place when: | <ul><li>Planning</li><li>Process</li><li>Implementation</li><li>Finish</li><li>Assessment</li><li>Reflection</li><li>Refining</li></ul>**Skills, knowledge** and **values** are developed in increasing **depth and breadth** throughout the grade and phase. |

When **selecting practical or theory content** for planning the "big picture" for Grades 10-12, or the more detailed Work Schedules for the Grade (year or term), and for individual Lesson Plans, teachers must ensure that they take into consideration the progressive development of all of the above skills through learning activities in a variety of ways, using different methods, materials, techniques and various methods of assessment.

### 2.6.5   Content for the subject Design

The content for the subject Design will be delivered through the three Design Learning Outcomes and the relevant Assessment Standards for the subject. The **design process, design production** and **the context of design** have been chosen as the three key foci in Design. These are not mutually exclusive but are inter-related and incorporate specific Design practical and theoretical skills, knowledge and values that should be developed in increasing complexity from Grade 10 to Grade 12.

The design process and production is, in essence, *how to design*. And since everything around us is designed, then the ability to master the process, critically reflect on products and place them in context will be invaluable for all learners.

Design theory is linked to design process and production. It will enable learners to develop visual, design and cultural literacy, contextualise design products and interpret and make use of non-verbal (visual or symbolic) language as a means of communicating new ideas, concepts and understandings.

| Learning Outcome 1 and Assessment Standards describe the **approach** to design and designing |
| --- |
| Learning Outcome 2 and Assessment Standards refers to the **body of work** |
| Learning Outcome 3 and Assessment Standards describes the **content knowledge** that informs practice |

| | |
| --- | --- |
| **Learning Outcome 1:** The learner is able to understand the design process from conceptualisation to realisation in a A3 workbook | *Take a brief, research the subject, generate ideas, develop concepts, implement, critically reflect and evaluate the proposed design solution. Problem solving and lateral thinking skills, creativity and innovation are explored and developed through the systematic investigation of problems posed by a design brief in order to produce a marketable solution. Self-discipline and responsible design ethics as well as an awareness of aesthetics and functionality must be evident throughout the design process* |
| **Learning Outcome 2:** The learner is able to produce and present work in the chosen discipline/s, which shows an understanding of design skills and production processes | *Evidence of knowledge and understanding, exploration and development of the design brief, choice of safe and environmentally friendly materials and a responsible design ethic* |
| **Learning Outcome 3:** The learner is able to demonstrate visual and design literacy and to understand design in cultural, environmental and business contexts, both historically and in contemporary practice | *Understand design in context: its theory and language and its impact on people and the environment.* |

The NCS subject Design includes a variety of **practical disciplines** that range from unique products to mass production applications. Design **Theory** is integral to each discipline. The Design disciplines are clustered under the following headings:

| | |
|---|---|
| **Visual Communication/ Information Design**: includes but not limited to | *Illustration design, Communication Information/ Graphic advertising design, Decorative design.* |
| **Craft Design**: (basically **two**-dimensional design) includes but not limited to | *appliqué, beadwork, carpet/ fibre design, embroidery, design, mosaics, mural design, stained glass, tapestry, textile design, wallpaper/ gift wrap design, weaving, fashion.* |
| **Craft Design**: (basically **three** dimensional design) functional or decorative - includes but not limited to | *basketry, beadwork, carving, ceramic design, constructed textiles, fashion and/or costume design, furniture design, industrial design, jewellery design, paperwork, puppetry design, tableware, weaving, wire work* |
| **Environmental Design and Digital Design**: (NOTE: Specialised work ) includes but not limited to | *architectural design, display and exhibition design, event design, interior design, theatre and set design, animation, digital design, film and video* |
| **Design Theory** is integral to all areas of design practice as is the development of visual and design literacy.<br><br>**NB: This content is linked to the Assessment Standards of LO1, 2 and 3** | **COURSE STRUCTURE FOR GRADE 10 – 12**<br><ul><li>History of Design</li><li>Terminology of Design</li><li>Techniques and mediums of Design</li><li>Elements and principals of Design</li><li>Evaluation of the principals and elements of Design</li><li>Designers in practice</li><li>Universal Principles of Design</li><li>Social issues concerning South African Visual Culture</li><li>Design Business</li></ul> |

The range of specialised practical skills and knowledge required for any of the above categories should be interpreted as broadly as possible, taking into consideration local contexts.
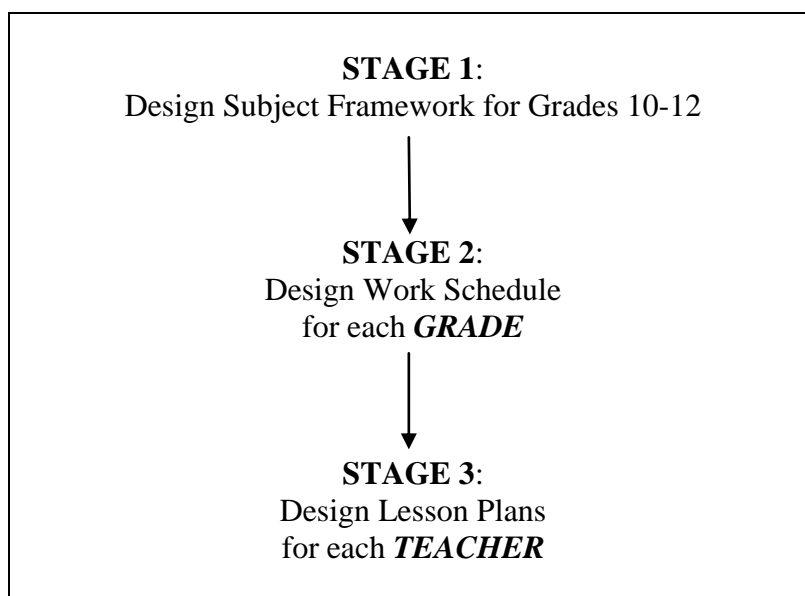
# SECTION 3

# DESIGNING A LEARNING PROGRAMME FOR DESIGN

## 3.1 INTRODUCTION

A Learning Programme is a tool to plan for sequenced learning, teaching and assessment across Grades 10-12 so that all four Learning Outcomes in Design are achieved in a progressive manner. It is recommended that the Design teachers at a school first put together a broad subject outline (i.e. Subject Framework) for Grades 10-12 to arrive at an understanding of the progression which needs to take place across the grades (see Section 3.3.1). This will assist with the demarcation of content for each grade. Thereafter, Design teachers teaching the same grade need to work together and draw from the content and context identified for their grade in the Subject Framework, to develop a Work Schedule in which they indicate the sequence in which the content and context will be presented for Design in that particular grade (see Section 3.3.2). Finally, the individual Design teacher should design Lesson Plans using the grade-specific Work Schedule as the starting point. The Lesson Plans should include learning, teaching and assessment activities (see Section 3.3.3).

An outline of the process involved in the design of a Learning Programme for Design is provided in the diagram below:

> **STAGE 1**:
> Design Subject Framework for Grades 10-12
>
> ↓
>
> **STAGE 2**:
> Design Work Schedule
> for each *GRADE*
>
> ↓
>
> **STAGE 3**:
> Design Lesson Plans
> for each *TEACHER*

The process to be followed in the development of a Learning Programme is not a neatly packaged sequence of numbered steps that follow one another in a particular order. Teachers may find themselves moving back and forth in the process as they plan and critically reflect on decisions taken before moving on to the next decision in the process. The process is therefore not strictly linear and is reflective in nature. For this reason the steps provided in this Section are a guide and should be used as a checklist in the planning process.

## 3.2 ISSUES TO ADDRESS WHEN DESIGNING A LEARNING PROGRAMME

The issues to be addressed in the development of a Design Learning Programme are presented in a tabular format to indicate the implications of each issue at each of the three stages of the development of a Learning Programme:

- Stage 1 – Subject Framework
- Stage 2 – Work Schedule
- Stage 3 – Lesson Plan

### 3.2.1   Policies and Principles

| | |
|---|---|
| **STAGE 1** Subject Framework **STAGE 2** Work Schedule **STAGE 3** Lesson Plan | The various Policies that impact on curriculum implementation should be considered throughout the planning process. *NCS:* <br> • Principles: Refer to Section 2.3 to see how Design supports the application of the nine principles of the NCS <br> • Critical and Developmental Outcomes: Refer to Section 2.5 to see how Design supports the application of the Critical and Developmental Outcomes <br> *Other Policies and Legislation:* <br> • White Paper 6, Language in Education Policy, Religion and Education Policy, HIV/AIDS Policy– all have implications for LTSM and teaching methods in Design <br> • White Paper 7 – gives an indication on the use of computers in the classroom and therefore has implications for LTSM and teaching methods in Design |

### 3.2.2   Content

In the NCS Grades 10-12 content means the combination of knowledge, skills and values.

Where possible, teachers should try to design <u>authentic learning experiences</u> and assessment opportunities (projects, assignments, research opportunities etc). This means ascertaining whether or not an assessment really does assess a learner's knowledge, skills and values.

| | |
|---|---|
| **STAGE 1** Subject Framework | The content is provided by the ASs. These give an indication of the knowledge, skills and values (KSVs) to be covered in each of the three grades. The Subject Framework sets out the content for the three years (i.e. Grades 10, 11 and 12). |
| **STAGE 2** Work Schedule | The Work Schedule sets out the content for one year. Here the focus falls on the grade-specific KSVs required by the NCS. |
| **STAGE 3** Lesson Plan | The Lesson Plans set out the content to be covered in each coherent series of learning, teaching and assessment activities. Each Lesson Plan can be one or more weeks in duration. |

When we speak of the design content in a brief, we are referring to the design "message". Meaningful content is directly related to the experiences, needs and interests of the young designer and the requirements of the brief. Discussions concerning the development of the design brief and the choices of materials etc. will help learners to better understand the design process.

Unfocussed classes where learners create whatever they like without some clearly defined direction are discouraged as learners tend to reproduce - unthinkingly and uncritically - many of the images that they see on television, in magazines, etc. Learners should create their own images based on a wide exploration of Design skills and knowledge, observation, expression and imagination.

There is a danger when all the learners work on a single brief or theme, as they may tend to produce very similar designs. Whilst the Learning Outcomes guide learners towards the achievement of the task, the learners must be encouraged to explore their own personal responses and experiences of the brief or theme, and to experiment with alternative ways of interpreting it.

### 3.2.3   Integration

Integration involves the grouping of Assessment Standards according to natural and authentic links.

| STAGE 1 Subject Framework | Integration within the subject should be considered in broad terms during discussions at this stage. All Grade 10-12 teachers should consider integration of ASs within and across the grades. |
|---|---|
| STAGE 2 Work Schedule | The integration and sequencing of the ASs is undertaken in the Work Schedule to ensure that all ASs for a particular grade are covered in the 40-week contact period. |
| STAGE 3 Lesson Plan | The same groupings of LOs and ASs as arrived at in the Work Schedule should be used to develop a coherent series of learning, teaching and assessment activities for each Lesson Plan. |

### 3.2.4   Conceptual Progression

| STAGE 1 Subject Framework | The Subject Framework should indicate the increasing depth of difficulty across Grades 10-12. Progression across the three grades is shown in the ASs per Learning Outcome. |
|---|---|
| STAGE 2 Work Schedule | Progression in a grade is evident in the increasing depth of difficulty in that particular grade. Grade-specific progression is achieved by appropriately sequencing the groupings of integrated LOs and ASs in the Work Schedule. |
| STAGE 3 Lesson Plan | In the individual Design classroom increasing depth of difficulty is shown in the activities and Lesson Plans. Progression is achieved by appropriately sequencing the activities contained within each Lesson Plan and in the series of Lesson Plans. |

### 3.2.5   Time Allocation and Weighting

Design is allocated a minimum of 4 hours per week in the NCS. As with all the Arts subjects, this is not enough contact time to achieve a high level of technical and theoretical expertise. In addition, the time taken by learners to prepare for their lesson, then clear up, clean up and store their work and materials at the end of the lesson erodes contact time in a way that does not happen with theory subjects. Therefore, Design learners require far more contact time with a teacher than 4 hours a week. Schools offering Design will need to ensure that this is made possible. If the school timetable is broken down into 40-minute periods, double or triple periods should be allocated for practical work and placed to lead into a lunch break or the end of the school day so that learners can carry on working after formal school hours. The placement of Design in the school timetable, therefore, needs to be given careful consideration.

| STAGE 1 Subject Framework | 4 hours per week is allocated to Design in the NCS. This is approximately 160 hours per year. The teachers of the subject should plan how this time will be used for the teaching of Design in the three grades. |
|---|---|
| STAGE 2 Work Schedule | The groupings of ASs as arrived at in the integration process should be paced across the 40 weeks of the school year to ensure coverage of the curriculum. |
| STAGE 3 Lesson Plan | The amount of time to be spent on activities should be indicated in the Lesson Plans. |

The Outcomes in the subject Design are all equally important and inter-related. The Learning Outcomes should be developed continuously through the year, although not necessarily at the same time.

During the year, therefore, planning must ensure that the Learning Outcomes are given appropriate time for the development and progression of learners' skills, knowledge, and values. The completion of

projects and the meeting of deadlines are crucial to the design process. Hence teachers should be cognisant of time constraints when planning any task or project and ensure that all tasks and deadlines are realistically attainable by all learners.

When working on any one of the Learning Outcomes, teachers need to be conscious of the possible role of the other LOs and ASs in supporting or enriching the learning process at hand.

When a learner is involved in creating a painting, LO2 is obviously the most dominant learning outcome. However, it is necessary for LO1 to be considered, as the conceptualising and generation of ideas and the planning involved are needed in order to achieve the outcome; at the same time, LO 3 enables learners to contextualise their work in terms of visual culture, critical reflection and evaluation.

### 3.2.6   LTSM

LTSM refers to any materials that facilitate learning and teaching. LTSM need to be chosen judiciously because they have cost implications for the school and the learner.  The NCS provides scope for the use of a variety of resources. All teachers and learners must have a textbook. However, teachers are required to go beyond the textbook.  They do not necessarily need exotic, specialised materials.  Rather common and readily available items can be used.

| **STAGE 1** Subject Framework | Compile a list of general LTSM (text books and other resources) that will be necessary and useful in the teaching, learning and assessment of the content. This assists with the requisition and availability of LTSM at a school. |
| --- | --- |
| **STAGE 2** Work Schedule | List grade-specific LTSM (resources) required in the learning, teaching and assessment process for the grade. |
| **STAGE 3** Lesson Plan | Identify specific resources related to the individual activities contained within a Lesson Plan. |

The Design Subject Statement requires that the teacher become the mediator, mentor and facilitator in the learning process.  More specifically, teachers should be committed to ensuring learners' access to a wide range of learning support materials so that resource-based learning can take place effectively.

For resource-based learning to take place successfully, it is essential that a wide range of learning support materials related to the work covered in the different grades be available to the learner. It is through access to a wide range of suitable learning support materials that a learner can become mentally active, literate, independent, confident and critical.  Having access to a range of learning support materials makes it possible for the learner to become aware of divergent viewpoints.

In Design, it is important to note that it while it is the teacher who determines the quality of the subject, her or his choice of Learning and Teaching Support Materials is crucial in supporting the setting of standards.  In Design, LTSM do not only comprise of written texts.  For example, Design knowledge, whether local, national, pan African or global, is part of **visual culture** and **daily life**. These are unlimited resources for teaching and learning. In a similar way, oracy (e.g. verbal expression of knowledge) also contributes to Design knowledge, therefore human resources should also be considered as LTSM. People, such as design and craft practitioners in specific fields or colleagues, parents, local community members and the learners themselves, can provide a resource, for example, by explaining the meaning, history and function of artworks and artefacts, past and present.

Publications of all sorts, including textbooks, newspapers, magazines etc., as well as the Internet and multi-media resources - if available - can be successfully used.  Furthermore, places such as artists' studios, workshops for local crafters (formal and informal sectors), galleries, museums, local libraries, community centres, archives and cultural villages can all serve as valuable resources for learning.

Examples of design encountered in daily life are paintings, sculptures, photographs, artist's prints, environmental artworks, ceramics, advertisements, woven articles, jewellery, household articles, clothing, memorials, monuments, heritage sites, architecture and the built environment etc. Teachers should determine whether they wish to use the resources in their original form or whether they wish to adapt these resources or ask learners to use them in innovative ways.

The Design teacher should consider planning with other teachers rather than plan in isolation. In addition, local artists and crafters should be contacted, as well as education officials at local museums, galleries and heritage sites so that they can be involved in planning visits with the aims of enriching design education e.g. interventions such as an "artists in residence" programme in the schools is a valuable "hands on" teaching and learning resource.

### 3.2.7   Assessment

All Grade 10, 11 and 12 learners are expected to complete seven internal tasks including a Practical Assessment Task for Design. Of the seven tasks, two must be tests, two must be examinations and the remaining three tasks should be integrated practical tasks which incorporate both theory and practical work. The three integrated practical tasks undertaken during the year make up the Practical Assessment Task for Design. In addition, Grade 12 learners are required to complete an external examination.

| **STAGE 1** Subject Framework | Develop a three-year assessment plan using the Subject Assessment Guidelines for Design. This should ensure the use of a variety of assessment forms relevant to the subject and progression across the three grades. |
|---|---|
| **STAGE 2** Work Schedule | Use the Subject Assessment Guidelines for Design to develop a grade-specific assessment plan. The forms of assessment listed must facilitate the achievement of the particular LOs and ASs in each grouping. |
| **STAGE 3** Lesson Plan | Indicate more classroom-specific assessment strategies, by mentioning the methods, forms and tools that will be used to assess learner performance in each activity. HINT: Not all activities need to be assessed – some may just be introductory in nature or for enrichment. The choice of an assessment strategy is determined by the LOs and ASs that have been grouped together for a particular Lesson Plan. The assessment strategy chosen must facilitate the achievement of these particular LOs and ASs in the classroom. |

Assessment in Design should cover a range of possibilities which provide clear evidence of the learner's progress, commitment and personal development throughout the phase.

Assessment in Design should:
- be an integral part of planning
- build on previous learner achievement
- be constructive, supportive and developmental
- develop practical (motor), cognitive (intellectual) and affective (emotional) skills
- develop and apply content knowledge
- motivate and encourage expression of individual ideas, imagination and exploration
- cover a range of different types of evidence
- enable reflection on process and products

Part of planning also involves developing practical and reliable assessment tools (checklists, rubrics, etc) to assess learners' progress. Assessment schedules that are used to record their progress will also need to be developed.

Teachers should design the assessment programme when they begin planning their learning programmes. Key questions that teachers should ask themselves include:

- What do we expect learners to know and be able to do on completion of this unit?
- How will I determine what they know and can do?
- When will I assess their knowledge and skills?
- How will I determine how well they know and can do it? (In other words, how will I know that learning has taken place?)
- How will I provide meaningful feedback to my learners?
- How will I determine which of the designated assessment tasks best suit my learners and teaching programme.

When the Grade Work Schedule for Teaching, Learning and Assessment is ready, the teacher can begin to design and develop the individual tasks and decide on the following:

- What the teacher and learners will do at each stage throughout the task
- What teaching, learning and assessment strategies, tools and resources will be used
- What additional expanded opportunities may be included. These may be options for learners who work more quickly or more slowly than their peers, or tasks that learners can choose to do in different ways.

Where possible, teachers should try to introduce authentic learning experiences and assessment opportunities (projects, assignments, research opportunities, etc.). This means ascertaining whether or not an assessment really assesses a learner's knowledge, skills and values. These opportunities should also be as close to real life contexts as possible. Where appropriate, learners should be able to submit evidence and learning from 'real life' contexts to demonstrate their competence.

Design uses the following assessment techniques and strategies:

- Practical Projects;
- Sourcebook;
- Discussion, questioning, reflection and critical thinking;
- Exploring and experimenting i.e. *playing*;
- Researching;
- Individual, pair and group work;
- Interviews;
- Field trips, worksheets and documentation; and
- *Visiting artists programme* – learning from local art practitioners.

The **Workbook/Sourcebook A3 size** is a key assessment tool in Design. Learners should put all their conceptual ideas, planning, "playing around" and exploratory work etc in their Design Sourcebook. There should be a Workbook/Sourcebook for each grade. The Workbook/Sourcebook should be presented for assessment at the end of the Grade as part of the internal performance assessment. The Grades 11 and 12 Workbook/Sourcebooks should be presented at the end of Grade 12 for the National Senior Certificate External Moderation process in Design.

The Workbook/Sourcebook is used to provide evidence of the initial baseline assessment and must be started at the beginning of Grade 10. Thereafter the Workbook/Sourcebook shows ongoing development and progress throughout the grade and phase.

See Annexure 2.

### 3.2.8  Inclusivity and Diversity

The following steps can be taken to effectively address diversity in the classroom when planning Design teaching activities:
- consider individual past experiences, learning styles and preferences;
- develop questions and activities that are aimed at different levels of ability;
- provide opportunity for a variety of participation levels such as individual, pairs and small group activities;
- consider the value of individual methods ; and
- assess learners based on individual progress.

| **STAGE 1** Subject Framework **STAGE 2** Work Schedule | Teachers should be sensitive to inclusivity and diversity when identifying content, teaching styles and methods, forms of assessment and LTSM (Resources). Diversity should be accommodated in the following areas: <ul><li>Learning styles: provide optional activities / different ways of doing same activity</li><li>Pace of learning: provide for both slower and faster learners by providing optional extra activities, reading or research, as well as multiple assessment opportunities</li><li>Differences in levels of achievement: provide optional extra activities, challenges and materials that cater for these differences between learners.</li><li>Gender diversity: ensure that teachers do not inadvertently allow or contribute towards discrimination against boys or girls in the classroom on the basis of gender.</li><li>Cultural diversity: recognise, celebrate and be sensitive when choosing content, assessment tasks and LTSM.</li></ul> |
|---|---|
| **STAGE 3** Lesson Plan | This is catered for as EXPANDED OPPORTUNITIES in the Lesson Plan. Enrichment is provided for high achievers and remediation or other relevant opportunities for learners requiring additional support. It is not necessary to develop an activity to cater for each type of diversity which arises in the classroom. |

Design emphasises diversity as well as inclusivity and encourages learners from different languages, social, cultural and ethnic backgrounds as well as those experiencing any barriers to learning. Therefore teachers must ensure that their classroom practice caters for such diversity in learners. For example, when developing work schedules and class projects, teachers must provide a suitable range of alternatives to ensure that all learners feel comfortable with the subject matter. All teaching materials should be free from discrimination and stereotyping in any form. Varied teaching methodologies and appropriate forms of assessment should be used which allow for different learning styles and ensure that learners are given equal opportunities to demonstrate their competence.

Learners have a rich diversity of backgrounds in terms of class, race, culture, gender, as well as, needs, preferences and challenges. Effective management of this diversity is a critical element of teaching because this helps to make the diversity an asset and resource for learning. Learners are not all the same and they do not have the same needs. Teachers have to be aware of the existing policies that recognise and guide how they cope with diversity between learners.

Teachers need to be aware of some of the barriers might be located within the learner but could also be located in the institution or environment, how it is arranged and managed. Teachers need to be aware of contexts and the situation within which learners find themselves. Regular consultations with relevant parties to assess the extent to which particular barriers of a personal and institutional nature have been dealt with, is encouraged.

Some of the aspects that teachers have to plan for in the teaching of Design include:

- *Diversity in learning styles*
- *Managing the pace of learning*
- *Managing Content*
- *Difference in levels of achievement and development*

Learners are often at different levels of physical and cognitive development. They are therefore capable of different levels of challenge. Teachers have to respond by sometimes providing optional extra activities, challenges and materials that cater for these differences between learners. In dealing with especially physical and recreational activities, teachers must be aware of and be sensitive to the differences in mobility of learners.

There are many cultures in classrooms and consequently teachers should recognise, celebrate and be sensitive to cultural diversity. Aspects that should be considered include religious holidays, attitudes towards certain content such as religion education and sexuality education. Teachers need to become increasingly aware of indigenous knowledge systems and the ways in which learners learn in different cultural systems.

### 3.2.9 Learning and Teaching Methodology

| | |
|---|---|
| **STAGE 1**<br>Subject<br>Framework | It is not necessary to record Teaching Methods for either of these stages. |
| **STAGE 2**<br>Work<br>Schedule | |
| **STAGE 3**<br>Lesson Plan | This is catered for as TEACHING METHOD in the Lesson Plan. It provides an indication of how teaching and learning will take place, that is, how each activity will be presented in the classroom. |

Design uses the following learning environments:
- The classroom or school grounds;
- The local community;
- Field study;
- ICTs (websites, GIS, etc.); and
- Home.

### 3.3 DESIGNING A LEARNING PROGRAMME

A Learning Programme enables teachers to ensure that the Design Learning Outcomes are effectively and comprehensively attended to across grade and phase. It enables learners to achieve the Learning Outcomes as prescribed by the Assessment Standards for a particular grade through Grades 10-12. It also provides guidance on how to plan for inclusion of different contexts and realities, like the needs of the community, school and learners.

Design teachers are responsible for the manner in which the subject is presented to their learners. Design is a creative subject and while careful planning is essential for the development and progression, in depth and breadth, of specific skills, knowledge and values, teachers should ensure that planning is flexible and open enough to "expect the unexpected" and provides the necessary teaching and learning "space" for learners to experiment, create and innovate.

A detailed description of the process involved in the design of a Learning Programme for Design is provided in this section (see Sections 3.3.1 – 3.3.3). The process presented here is a suggestion of how to go about designing a Learning Programme.

### 3.3.1  Subject Framework (Grades 10-12) for Design

Planning for the teaching of Design in Grades 10 to 12 should begin with a detailed examination of the scope of the subject as set out in the Subject Statement. No particular format or template is recommended for this first phase of planning but the five steps below should be used as a checklist.

Although no prescribed document is required for this stage of planning, school-wide planning (timetables, ordering, teacher development, classroom allocation) as well as the development of grade-specific work schedules would benefit from short documents which spell out:
- The scope of the subject – the knowledge, skills and values; the content; the contexts or themes; electives etc. to be covered in the three grades
- A three-year assessment plan
- The list of LTSM required

❶ **Clarify the Learning Outcomes and Assessment Standards.**

The essential question for Design is: What Learning Outcomes do learners have to master by the end of Grade 12 and what Assessment Standards should they achieve to show that they are on their way to mastering these outcomes?

All learning, teaching and assessment opportunities must be designed down from what learners should know, do and produce by the end of Grade 12. The Learning Outcomes and Assessment Standards that learners should master by the end of Grade 12 are specified in the Design Subject Statement.

❷ **Study the conceptual progression across the three grades.**

Study the Assessment Standards for Design across the three grades. Progression should be clearly evident across the grades.

❸ **Identify the content to be taught.**

Analyse the Assessment Standards to identify the skills, knowledge and values to be addressed in each grade. Also consider the content and context in which they will be taught.

❹ **Identify three-year plan of assessment.**

Use the Subject Assessment Guidelines to guide the three-year assessment plan. Consider what forms of assessment will be best suited to each of the Learning Outcomes and Assessment Standards. This ensures that assessment remains an integral part of the learning and teaching process in Design and that learners participate in a range of assessment activities.

❺ **Identify possible LTSM (resources).**

Consider which LTSM will be best suited to the learning, teaching and assessment of each Learning Outcome in the three grades using the Assessment Standards as guidance.

See Annexure 1.

### 3.3.2 Designing Work Schedules for Design

This is the second phase in the design of a Learning Programme. In this phase teachers develop Work Schedules for each grade. The Work Schedules are informed by the planning undertaken for the Subject Framework. The Work Schedules should be carefully prepared documents that reflect what teaching and assessment will take place in the 40 weeks of the school year.

The following steps provide guidelines on how to approach the design of a Work Schedule per grade for Design:

❶ **Package the content.**

Study the Learning Outcomes and Assessment Standards prescribed for the particular grade in Design and group these according to natural and authentic links.

❷ **Sequence the content.**

Determine the order in which the groupings of Learning Outcomes and Assessment Standards will be presented in the particular grade in Design. Besides the conceptual progression in the Assessment Standards for Design, context can also be used to sequence groupings in Design.

❸ **Pace the content.**

Determine how much time in the school year will be spent on each grouping of Learning Outcomes and Assessment Standards in the particular grade.

❹ **Review forms of assessment.**

Revisit the forms of assessment listed for the particular grade in the Subject Assessment Guidelines, and refine them to address each grouping of Learning Outcomes and Assessment Standards as developed in Step 1.

❺ **Review LTSM.**

Revisit the LTSM (resources) listed for the particular grade in the Subject Framework, and refine them to address each grouping of Learning Outcomes and Assessment Standards as developed in Step 1.

### 3.3.3 Designing Lesson Plans for Design

Each grade-specific Work Schedule for DESIGN must be divided into units of deliverable learning experiences, that is, Lesson Plans. A Lesson Plan adds to the level of detail in the Work Schedule. It also indicates other relevant issues to be considered when teaching and assessing Design.

A Lesson Plan is not equivalent to a subject period in the school timetable. Its duration is dictated by how long it takes to complete the coherent series of activities contained in it.

❶ **Indicate the content, context, Learning Outcomes and Assessment Standards.**

Copy this information from the Work Schedule for the particular grade.

❷    **Develop activities and select teaching method.**

Decide how to teach the Learning Outcomes and Assessment Standards indicated in Step 1 and develop the activity or activities that will facilitate the development of the skills, knowledge and values in the particular grouping. At this stage, a decision must also be made about the learning environment in which each activity will take place: if not classroom-based, other options such as the local community are available. See 3.2.9.

Thereafter, determine the most suitable teaching method(s) for the activities and provide a description of how the learners will engage in each activity. Choose a suitable method, for example:
- Learning-how-to-learn activity (use of brainstorming/mind-mapping/ exploring)
- Alternative ways of seeing, doing and thinking
- Learning-by-doing activity (learning and applying practical skills and knowledge)
- Learning-in-the-group activity (collaborative working skills)

Consider the following questions when making a decision about teaching methods:
- Scope: Why are we doing this learning?
- Management: When are we doing this learning?
- Process involved: How are we doing this learning?

❸    **Consider diversity.**

Explore the various options available within each activity that will allow expanded opportunities to those learners that require individual support. The support provided must ultimately guide learners to develop the skills, knowledge and values indicated in the grouping of Learning Outcomes and Assessment Standards.

❹    **Review assessment and LTSM.**

Indicate the details of the assessment strategy and LTSM to be used in each activity.

❺    **Allocate time.**

Give an indication of how much time will be spent on each activity in the Lesson Plan.

### 3.3.4    Reflection and review of the Design Learning Programme

After the Learning Programme has been delivered by means of Lesson Plans in the classroom, the teacher should **reflect** on what worked, how well it worked and what could be improved. Teachers need to note these while the experience is still fresh in their minds, so that if necessary, they can adapt and change the affected part of the Design Learning Programme for future implementation. It is advisable to record this reflection on the Lesson Plan planning sheets.

The word "planning" is normally interpreted in the narrow sense, meaning the way we prepare for a specific activity. It becomes an end in itself. In this guideline, the term is used in a broader and more inclusive sense. Planning is seen as one of the steps of a cyclical process that aims at ensuring continued improvement in teaching and learning through action and reflection. The role of teachers becomes that of researchers investigating the consequences of their own practice of teaching and learning taking place in their own classrooms. Classroom-based action research involves making small scale, deliberate interventions in classroom practice and reflecting on the consequences of the intervention. An individual teacher can undertake this action research alone or a group of teachers involved in the same subject –

from a district "cluster" – can undertake it collaboratively. The cycle of action research is normally made up of four stages: planning, action, observation and reflection.



**PLANNING**
Decide on learning tasks (action) based on learners' prior experience and needs

**ACTION**
Put the planned action into effect

**OBSERVATION**
Carefully note the results of taking the planned action

**REFLECTION**
Critically consider the results, reflect on the processes, strengths, weaknesses of the task (action) make further plans based on findings
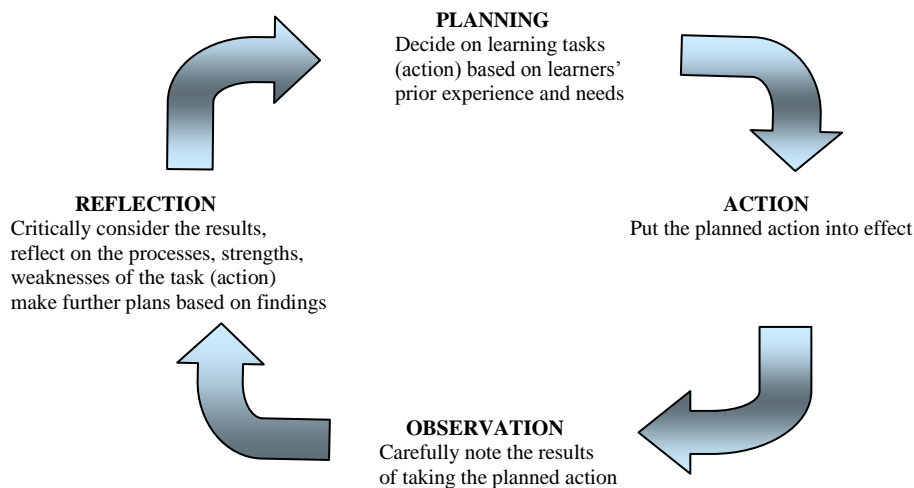
Fig. 4: **Stages of Action Research** (adapted from Hillcoat, 1996, p151)

This ongoing cycle of action research enables teachers to develop a better understanding of their teaching practice and reflect on ways of improving the learning process. In teaching Design, action research planning will specifically refer to the three Design Learning Outcomes, the Assessment Standards, learning and assessment activities, as well as recording and reporting learner achievement. The purpose of planning in this way is to provide a developmental platform for action i.e. teaching, and reflecting on the process to inform further planning.

## CONTENT FOR PRACTICAL DESIGN PROJECTS (Learning Outcomes 1 and 2)

### GRADE 10-12

| Suggested Content Selection Learning Outcomes 1 and 2. | |
|---|---|
| Design Literacy: symbolic language of design: e.g. the use of design symbols, patterns, colours and motifs in society e.g. architecture, advertising, mass media, ICT (information systems, computer icons), corporate logos, posters, clothing, and other design domains<br>Symbolic and communicative aspects: design products can make "statements" which go beyond their immediate purpose e.g. communication of attitudes, values, styles, mood, atmosphere, corporate ethos, overt and hidden (covert) "messages" etc.<br><br>Social and cultural dimensions: the impact of a particular context or need on the design "message" | Formal elements of design:<br>Design tools and techniques<br>Materials, methods and techniques<br>Experimentation<br>Introduction to Design:<br>Elements and principles of Two Dimensional design<br>Elements and principles of Three dimensional design<br>Multimedia processes<br>Visual Communication techniques:<br>Observation, drawing and construction skills<br>Reproduce, model build, make prototypes<br>Reflect and Review<br>Graphic Design and Advertising Design<br>Computer applications |
| Design and Typography:<br>Letters and words as symbols: locally, nationally, in Africa and globally. | Paper technologies and paper-making<br>Developing typographical skills<br>Designing font styles, sizes, colours, relationship to design format and images etc<br>Role of visual images in the print media past and present<br>Integration of printing methods with the design process |
| Culture and Design: locally, nationally, in Africa and globally:<br>Indigenous Knowledge Systems and Fusion : in Design and Craft | Explore Design processes and products in different cultures<br>Cultural issues in Design |
| Social aspects of Design: locally, nationally, in Africa and globally.<br>Human Rights, Social Justice, Inclusivity, HIV and Aids, and Environmental considerations | Explore the impact of Design processes and products on society<br>Design as a "tool for change" or retaining the status quo<br>Social issues in Design |
| Environmental aspects of Design: locally, nationally, in Africa and globally. | Resources, Recycling and Sustainability in Design<br>Environmental issues in Design |
| Landscape Design: the impact of Design on personal and public spaces (a "cross-cutter" linked with many of the above mentioned aspects of  Design) | Explore the impact of Design in urban and rural environments and different social /cultural/economic contexts |
| Business in Design:<br>Develop positive self image<br>Presentation Skills<br>Managing the process, covering costs and making a profit | Time management<br>Organise work space<br>Maintain work area<br>Establish and maintain personal source of reference material<br>Understand business needs in design such as:<br>- establishing target market<br>- responding to client needs<br>- managing the process<br>- developing the product<br>- prototyping<br>- presenting<br>- reflecting<br>- revising<br>- marketing |

| | |
|---|---|
| Ethics: moral and ethical design issues (also a "cross-cutter" linked with many of the above mentioned aspects of Design)<br>Develop "best practice" skills, knowledge and values<br>Explore issues of plagiarism and copyright, intellectual property rights etc. | NB<br>With the increasing reliance of learners on electronic media, downloading from the web creates problems of plagiarism and intellectual property rights especially in essay writing and research projects. Teachers need to monitor this situation closely.<br><br>E.g. CD ROMs presented by learners may be visually seductive in terms of images used and accompanying music but without critical and creative engagement with the information and without the learner's interpretation and knowledge construction, the presentation remains merely an electronic version of cut and paste, or, at worst, rote learning and regurgitation (and possibly plagiarism). |

## Key Topics

| | |
|---|---|
| Selected Design studies:<br>- Industrialised nations<br>- Developing nations<br>- Indigenous Knowledge Systems: this includes local, South African (national), Pan African and global<br><br>History of Typography (Lettering):<br>Invention of the printing press, use of the printed image, illustrations and cartoons<br><br>The Industrial Revolution:<br>Invention of photography and printing technology<br>Arts and Crafts Movement / Art Nouveau: revival of Craft and Design<br>Pre and Post WW1<br><br>German Expressionism (Design):<br>The Bauhaus and Scandinavian Design<br>New Objectivity (graphic design and politics)<br>Weimar Republic (graphic design and politics)<br>De Stijl (architectural, functional design, typography)<br><br>Art Deco:<br>1920s-30s: capitalism and production; changing role of craft and design in pre and post industrial societies - quality gives way to quantity<br><br>Post WW2:<br>Pop Art<br>Architectural design:<br>International Style<br>Modernism,<br>Post Modernism<br><br>South Africa:<br>Centres: Rorke's Drift, Smitsdrift, Montebello and other centres for Design and Craft (learners should study local centres as well as nationally known ones or pan African where possible)<br>Resistance Art and Design: 1976 onwards<br>Architectural Design<br>Contemporary Craft<br>Contemporary Design industry / Design and globalisation<br>- fusion of local, national and global design<br>- mass media, electronic print media, Internet and Web design etc. | Selected studies: Design in Africa past and present<br><br>Design in myth, ritual and dance: the African Masque (art, design, music, dance and drama)<br>Dress and Body Decoration and Ornamentation<br>Classification of African masks<br>Design and function of masks<br>Facial Characteristics of masks<br>Tribal styles<br>Design, Craft and Applied Arts in Africa<br>Sculpture in Africa<br>Architecture in Africa<br><br>Textiles in Africa:<br>e.g.    Egypt<br>        Ethiopia<br>        Ghana<br>        Mali<br>        Nigeria<br>        South Africa<br>        Zimbabwe<br><br>Influence of Technology<br>Issues of Gender and Culture<br><br>The role of Public Galleries and Museums, past and present:<br>Issues of Conservation and Heritage<br>Design, Craft, Applied Arts and Architecture in Archaeology<br><br>Contemporary African Design, Craft and Architecture:<br>Indigenous architectural practices and social systems<br>Fusion of Indigenous Knowledge Systems with contemporary Design practices<br>Local, national, pan African and global influences<br>Public Architecture and spaces |

| Research Projects: LOs 1, 2 and 3 | | |
|---|---|---|
| Design Topics:<br>Local, South African, African, Global<br><br>Framework:<br>- Topics can progress in depth and breadth through the phase<br>- Final presentation: modules are collated and presented as a complete research project for the grade and band. | Research Skills<br>Comprehension skills<br>Writing skills<br>Interviewing skills<br>Planning skills<br>Ethics (plagiarism, Internet downloading, copying, authenticity issues etc)<br>Presentation skills<br>Bibliography / References | Presentation can be written or in a design format e.g.<br>    Written (essay style accompanied by visual information)<br>Posters<br>Exhibition/ Display style presentation<br>Video/ Audio<br>Electronic:<br>CD ROM<br>Web Site or any other relevant/ innovative method of presenting information |
| - Aspect/s of South/ Southern/ African design, craft, architecture: can be researched within learner's own community, or through structured projects at galleries, museums, heritage sites etc.<br>- Field trips are encouraged: if learners want to interview or visit local designers, crafters, architects and other practitioners in the design field, teachers should ensure that privacy is respected and establish whether such interactions would be acceptable. It might be useful to arrange a combined visit with other schools or invite design or craft practitioners to your school as part of a "designers in residence" programme | | |

## CONTENT FOR DESIGN THEORY (Learning Outcome 3)

NOTE: Content has not been listed where Assessment Standards are self-explanatory.

### Learning Outcome 3: Design in Context
The learner is able to demonstrate design literacy and to understand design in cultural, environmental and business contexts, both historically and in contemporary practice.

**GRADE 10:**

| TERM 1 |
| --- |
| AS: Demonstrate a basic understanding of design as outlined in the definition.<br> • Design Process:<br>  Definition for design, procedures, thinking, looking, doing, critique.-<br> • Design Procedures.<br>AS: Demonstrate an awareness of the fact that design is a human activity.<br> • History of Graphic Design.<br> • Introduction to history of Design techniques and media from Paleolithic until late 1900.<br>AS: Demonstrate a basic knowledge of the theory that underpins and terminology that describes design.<br> • Design Techniques and Mediums<br>In this component the learner must be exposed to a short introductory history of each of the following mediums and the techniques related to each. The characteristics, materials and processes of each medium and how they have been used through history must be studied.<br>  o Pencils, Charcoal, Chalks, Pastels, Crayons, Metal point.<br>  o Pen and Ink<br>  o Oils, Watercolour, Gouache, Tempera, Acrylics<br>  o Printmaking<br>  o Technical illustration: Early Engineering and Architectural drawing – On-site recording.<br>  o Studio reference and Orthographic reference<br>  o Airbrush |
| **TERM 2** |
|  Design in a Social/Environmental Context<br><br>AS: Discuss the purpose of the products, images, signs and symbols used in design<br><br>AS: Demonstrate an awareness of how design shapes the physical and social environment<br><br> • Careers in Graphic Design<br> • Design Equipment<br> • Copying and Photo printing<br> • Seven Main Categories in Typeface Design<br> • Typesetting methods:<br> • Hot metal, Photo-composition,<br> • Strike-on systems, Electronic typesetting<br> • Layout |
| **TERM 3** |
| Design in a Social/Environmental Context<br>AS: Understand and explain ways in which design can be used to benefit society<br><br> • Terminology:<br>  o A glossary of terms applicable to Design.<br>  o Universal Principles of Design to Enhance Usability, Influence perception, Increase Appeal, Make better Design Decisions and Teach through Design.<br><br> • Gestalt principles of perception:<br>o Common Fate<br>o Figure-ground relationship<br>o Good continuation<br>o Proximity Similarity<br>o Uniform connectedness<br>o Closure |

| TERM 4 |
|---|
| Design in a Social/Environmental Context<br>AS: Recognise that different value systems and traditions have influenced the development of African and South African design, pas and present.<br><br>AS: Analyse examples and relate them to their cultural, historical and contemporary contexts.<br><br>AS: Identify the methods and intentions of communities and individual design practitioners.<br><br>AS: Compile and present findings using one ore more methods.<br><br>Design in a Business Context<br>AS: Display an awareness of some of the ways in which design products and services are marketed. (Any example from recommended LTSM: Craft Art in South Africa; or Woolworths source book.)<br><br><ul><li>Study four contemporary South African designers from different categories:<ul><li>Glass</li><li>Metal</li><li>Weaving</li><li>Beadwork</li><li>Mosaic</li><li>Embroidery</li><li>Wood</li><li>Wax</li><li>Basketry etc.</li></ul></li></ul> |

### GRADE 11

| TERM 1 |
|---|
| AS: Demonstrate an understanding of Design in relation to practice.<br>History of Graphic Design<br>History of typography<br><br>AS: Demonstrate knowledge of the theory that underpins and terminology that describes design.<ul><li>Typography</li><li>The structure of type, Choosing a font, Styling text</li><li>Main categories in typeface Design</li><li>Concise history of font: 1900 – 2000</li><li>Design Terminology (Revision of Grade 10 terminology)</li></ul> |

| TERM 2 |
|---|
| Design in a Social/Environmental Context<br>AS: Compile and present a research assignment showing evidence of thorough and coherent planning and referencing skills.<br><br>AS: Investigate, reflect on and interpret information from a variety of sources and understand the influences shaping the development of design, including African and South African design, past and present.<br><br><ul><li>Research Assignment: South African and African Design, Past and Present. (Open Choice of text.)</li></ul>OR<br>AS: Discuss and explain the context and purpose of products, images, signs and symbols used in design. (LTSM: Any GOOD RESOURCE MATERIAL)<br>AS: Understand and describe the materials and processes used by communities or individual design practitioners.<br>Research assignment (LTSM: any )<br>AND<ul><li>Design Procedures</li><li>Working to a brief</li><li>Design Grid and layout design</li><li>Illustration</li><li>Types of Photography</li><li>Design and Applied Photography</li><li>Setting up a document for print:</li></ul>Reproduction and Printing. Letterpress, Lithography, Gravure, Screen printing, Collotype, Flexography, Half-tone image formation, Photomechanical reproduction of colour, Colour separation, Imposition, Scoring, Folding and Binding, Paper-making process. |

| **TERM 3** |
|---|
| Design in a Business Context |
| AS: Discuss the basics of costing and pricing in the marketing of a design product or service |
| • Field trip / Excursion: TASK: Visit a Design Studio and Company and do a Research project on basics of costing and pricing in the marketing of a design product or service. |
| AS: Demonstrate an ability to design products and services in terms of target market. |
| Task: Market research on selling one of their own designs. |
| AS: Understand the business and social responsibility of designers. |
| • Four Contemporary European Designers each from a different category, e.g. use any designer from the book: Design Culture Now. |
|      o Architect: Julie Bergmann |
|      o Furniture Design: Roy McMakin |
|      o Information Designer: Bruce Licher |
|      o Industrial Designer: Cannondale Corporation etc. |
| AND |
| Two contemporary South African designers each from a different category – any two done during Grade 10 or any two new ones. |

| **TERM 4** |
|---|
| Design in a Social/Environmental Context |
| AS: Critically reflect on how design shapes the physical and social environment |
| AS: Understand and describe the materials and processes used by communities or individual design practitioners. |
| • Design and the computer, hardware, software, image file formats |
| • Web design and the internet |
| • Requirements for logo's, packaging, poster, newsletters, letterheads, brochures, advertisements |
| • Universal principles of Design to enhance usability, influence perception, increase appeal, make better Design decisions. Select any five from the book Universal Principles of Design. |

**GRADE 12**

| **TERM 1** |
|---|
| Design Literacy |
| AS: Investigate, reflect on and interpret information from a variety of sources that show global influences shaping the development of design |
| AS: Compile and present a comprehensive and formally-structured research assignment or activity showing evidence of thorough and coherent planning and referencing skills |
| Concise History of Design: ( LTSM: The New Design Sourcebook ) |
| • The study of "The Arts and Crafts" movement (Fitness or purpose) from 1850-1900 |
| • The study of "Art Nouveau" (the languid line) from 1980-1905 |
| • The study of "The Bauhaus" (the machine aesthetic – design for industry) from 1900-1930 |
| • The study of the "Art Deco" movement (popular modernism) from 1925-1939 |
| • The study of the "Modernist" age (consumerism ad style – the age of streamlining) from 1935-1955 |
| • The study of the "Pop/New" age (Modernism goes pop – the age of affluence) from 1955-1975 |
| • The study of the "Post Modernism" (Style now – Less is a bore) from 1965-to today |
| AS: Discuss, explain and demonstrate the context and purpose of the products, images, signs and symbols used in design to convey overt and hidden messages that reinforce or challenge stereotypes, biases and prejudices, past and present. |
| AS: Make value judgements informed by a clear understanding of design. |
| AS: Analyse, interpret and critically reflect on examples and relate them to their cultural. Historical and contemporary contexts. |
| • Evaluation of Design: |
| The learners must be taught how to evaluate designs/works (not designers) in terms of the application of the Principles and elements of Design. This will be based on compulsory works, comprising of two by two non-South African Designers and two South African Designers which were included in the Grade 10 and 11 Design Curriculum. |
| AS: Understand Design theory and use Design Terminology correctly |
| • Terminology: A glossary of terms applicable to Design (LTSM : Design Basics) |
| • Universal principles of Design to enhance usability, influence perception, increase appeal, make better Design decisions and teach through Design. Select any FIVE: |

| TERM 2 |
| --- |

Design in a Social/Environmental Context

AS: Demonstrate an understanding of the ways in which design can be used to reinforce or challenge social, cultural, environmental and ethical issues.

- Any SOCIAL ISSUE concerning the South African Visual Culture:
  - Choose only ONE
  - Examples: (Book: South African Visual Culture)

Information Design / Advertising: Advertising dilemmas in contemporary South Africa

- Architecture: A shopping mall as visual culture
- Fashion: Fashion and the female soldier in South Africa
  - Publishing: Constructing Femininity in Huisgenoot (p.90-130)
  - Technology/Industrial Design: The politics of human technology interactions
  - Technology/Industrial Design: Digital media and sub-cultural expression
  - Music: Re-framing youth identities in contemporary South Africa
  - Photography: Between objectivity and subjectivity: understanding photography Cinematography: Cinema as visual culture.

AS: Demonstrate an understanding of the designer's responsibilities in relation to environmental issues and sustainable design.

- Two Contemporary Non South African Award winning Designers – each from a different Design Category:

It may be any two of the following or any example from Design Culture Now OR Inspiring a Sourcebook:

  - Industrial Design: Ron Arad
  - Architecture: Thomas Heatherwick.
  - Interior Design: Tokujin Yoshioka.

| TERM 3 |
| --- |

Design in a Business Context

AS: Demonstrate a basic understanding of marketing design products in terms of target market, packaging and advertising.

How to run a Design Business:

- How to produce advertising that sells
  - Jobs in advertising
  - How to apply for a job
- How to run an advertising agency
- How to get clients/how to advertise
- Necessity of research

AS: Demonstrate an understanding of responsible design by taking into consideration human rights and environmental issues throughout the process

- Any ONE Contemporary South African Design Agency/Creative director: (Use design Magazines example: Financial Mail ADFOCUS )

Can be any of the following:

  - Agency of the year
  - Media agency of the year
  - Agency profile

AS: Explore career opportunities within the design discipline

Compile and present research showing evidence of coherent planning and referencing skills on careers in Design.

| TERM 4 |
| --- |

AS: Understand design theory and use design terminology correctly.

Revision of terminology done in Grade 10 and Grade 11.

*        Revision of work done during term 1, 2 3

**ANNEXURE 2:**
**INSTRUCTIONS REGARDING THE DESIGN WORKBOOK/SOURCEBOOK A3**

**1.    GENERAL REQUIREMENTS FOR GRADE 10, 11 and 12 WORKBOOK/SOURCEBOOK (LO 1)**

Learners will need a separate workbook/sourcebook for each year (Grade 10, 11, 12).

In preparation for the outcome of the final practical product as given in the brief/theme, the learner will be required to explore the answer by presenting the following in an A3 workbook/sourcebook (± 30-x 42-cm):

-    An exploration, drawing and research/reference for the given theme or project.
-    Complete preparatory drawings as they develop from the brief/theme.
-    Written or explanatory comments about the final practical work/s in terms of the given brief/theme.

**The workbook/sourcebook is to be A3 in size (± 30 cm x 40 cm).**
The workbook/sourcebook is to be presented in the form of an album (i.e. like a book).  It must open easily and have pages that turn easily.  The workbook/sourcebook may be made of light cardboard or paper; alternatively the learner may use an A3 sketchbook (±30 cm x 42 cm). No marks will be deducted because of the type of paper used. No window mounting, plastic covers or acetate will be permitted. All work smaller/larger than the size of the workbook/sourcebook is to be glued onto the A3 size pages of the workbook/sourcebook.

Ensure that the workbook/sourcebook is presented professionally.

Help learners:
-    to see the context in which their practical work is produced
-    to direct interest beyond their immediate environment
-    to develop their own work and appreciate the work of others

The workbook/sourcebook should be a genuine record of discovery and collection and **must include drawings from observation and experience**, photographs taken, ideas noted, interview notes, etc. Resources may be gathered from visits to galleries, designers, artists, museums, libraries and workshops.

**The workbook/sourcebook is to contain the following:**

- **INDEX (with page references for different practical products/projects – clearly marked)**
  Recommended: 1 project development process per term and then the preparation for the practical examinations (term 2 and 4). This means 5 chapters per year in the workbook/sourcebook (minimum).

- **EXPLANATORY NOTES / RATIONALE / RESEARCH**

  A rationale of the practical work/s (design/s) should be submitted in the workbook/sourcebook. This rationale may be a short, concise description comprising a maximum of 100 words, clearly stating the learner's interpretation of the brief/theme and how his/her practical work solved the problem set by the brief. The learners should also mention if any information gathered during the workbook/sourcebook process was carried through into the final practical design/s. The workbook/sourcebook must consist of a collection of annotated images (an interaction between text, visuals and sketches).  The **presentation and layout** of this component is important.

- **REFERENCE MATERIAL**

  If the learners use reference materials, such as photographs as the basis for their designs, these must be included in the workbook/sourcebook. (NB the use of photographs, as a source of reference should be closely supervised by the Design teacher.) The teacher must encourage use of learner's own photographs.

  Pictures / photos / collages of used images may be presented in the workbook/sourcebook. (Please note that only using magazine pictures or photos pasted in the book will not deserve any marks.) Learners must create a layout or composition to show their involvement with the material as pasted in the workbook/sourcebook.

  Any form of direct copying / plagiarism should be strictly penalised.

- **DRAWINGS**

  The workbook/sourcebook must comprise of drawing/s to stimulate the learner's problem-solving activity in relation to an aspect of the practical design brief / theme in any of the categories of design chosen.

  **Preparatory drawings**

  Preparatory drawings showing evidence of research and investigation of the design brief should be included in the workbook/sourcebook for each practical project. These pages are to be divided into:

  (i)     Process drawings/ Small thumbnail sketches (Minimum 1x A4 page – may be arranged/ scattered throughout the chapter for one practical project) and
  (ii)    One final tonal drawing (Minimum 1x A3 page) per Term.

  These pages should show the learner's development of possibilities indicating approaches to solving the problem set by the brief/theme and should show evidence of final selection and decision-making. Learners should select a source of preparatory work relevant to the question chosen to answer.  Any suitable material and methods may be used in working out ideas.

  **Process drawings**

  Brainstorming (rough, spontaneous drawings/notations showing initial ideas for developing designs) compositional layouts/ organization of designs/ construction plans/ letter-types/ material experiments/ technical explorations/ media studies, together with short explanatory notes/ postscripts should be included. The final composition/ concept/ layout/ logo/ construction must then be developed by the learner in terms of colour plans, colour swatches and experiments with techniques, different layouts and materials. Note: Maquette can also be included in a workbox as part of the process drawings.

  **Final Drawings**

  One A3 drawing of the theme or concept done during a term. This sketch must be seen as a complete work. The final tonal sketch can be completed in grey pencils or any monochromatic drawing media

or can be completed in colour (any drawing media). This sketch must be relevant to the theme/ category. Aspects as used in the final works for each category must be shown.


## 2.    LO 2: DESIGN FINAL PRACTICAL PRODUCT/S

**Instructions to teachers and learners:**

The following are not part of Design but fall under Visual Art:
- o  Graphic Art Printmaking (relief, serigraphy, planography, intaglio etc.)
- o  Photography (is only used for reference purposes in Design)

## BASIC REQUIREMENTS:

**Basic Design**
The main objective is to familiarize learners with design in the environment and to begin to analyse good and bad design aesthetically. The elements and principles of art must be introduced in basic design projects.
Emphasis should be on producing designs stylistically with drawing as a fundamental basis.
Experiment with all types of lettering or font and layout.
Experiment with different media in all the categories of design, e.g. watercolour, plaka, marking pens, colour pencils, ink, material paint, glass, steel, lead, wood, fabrics and clay work.
The emphasis should be on perceptual drawing and abstraction of organic and inorganic forms and how to translate and interpret what is seen in terms of colour and design.
A variety of topics, e.g. subjective, objective, decorative, historical, mythological and imaginative should be explored.
Basic techniques with different media should be explored.
Printing processes e.g. photocopy, omnicrom and the computer may be used to develop an idea in the workbook/sourcebook to a final hand made practical product.
Learners must begin to produce projects for particular purposes.
Explore a variety of media relevant to the different disciplines/ categories in Design.

The practical requirements of the Practical Examination apply also to the Practical Year work project/s.

The marks given to the practical works will be determined by the following aspects:
- The complexity of the work e.g. a promotional sticker (A4) compared to a full brochure (A3). The latter involves more work, manipulating font, lay out, creative image representation, stylisation of aspects etc. A cup compared to a teapot is less complex except when there is a very good creative solution to the design of the cup. Teachers should encourage a learner to choose projects/ works, which show the learners' skill and media manipulation abilities in a specific category.
- The creative solution that has been implemented in order to answer the brief/question.
- The personal style that the learner developed and the way the learner shows how the medium can be manipulated in order to create special effects.
- The visual impact and professionalism of each work.

# 3. GENERAL APPROACH TO ALL THE PRACTICAL DESIGN CATEGORIES (LO 2 PRACTICAL PRODUCT)

The emphasis is on two-dimensional and three-dimensional representation with different media in each category. Hand-rendered techniques, composition/layout are important concepts that should be dealt with. Learners should start to use creative solutions and should experiment with the way in which the media can be manipulated to create different effects.
The combination of different media in one design may be introduced, provided it is integrated and compatible to the theme and design.
The composition principles and elements of art must be re-emphasized.

Learners must begin to explore and research any category of design chosen historically and locally. The importance of planning and developing a theme must be introduced in an A3 workbook/sourcebook.

Learners should by now develop their own style and should manipulate the media (e.g. paintbrush, clay, fabrics, metal, digital etc.) in order to create special design effects in each category. The hand made product is of utmost importance. Industrial design should be taken beyond the two-dimensional design stage and a functional final product must be made.

## Four categories of Design:

The learners choose ANY of the following practical Design Categories/ Components:

- Category I: Communication/ Information Design
- Category II: Craft Design (basically two-dimensional design)
- Category III: Craft Design (basically three-dimensional design)
- Category IV: Environmental Design and Digital Design (schools must apply to provincial head to do this section)

During the Grade 10 year a learner should be encouraged to experiment with as many media and techniques as possible. Learners should try to do a practical project from each of the main categories (if available and possible). Schools or centres that are able and have the necessary permission to do Environmental Design and Digital Design may also include a project from this category).

## CATEGORY I: COMMUNICATION/ INFORMATION DESIGN

Communication / Information and Graphic Design: Learners must apply different styles/ techniques to create works in which they use the following: stylization, hard-edge, painterly, simplified, distortion, enlargements, lettering (by hand), layout etc. gouache, plaka, basic printing (**not photo-printing**), any drawing media etc.

- **COMMUNICATION / INFORMATION / GRAPHIC DESIGN** includes the following options:

  **Presentation design – Product directed**: Logos (10)/ Advertisement /Poster / Story board/ Brochure/ Stationery (letterhead, complimentary slip, business card, envelope)/ Package/ Promotional item

  **Corporate design – Company directed:** Logos (10)/ Advertisement/ Poster/ Story board/ Brochure/ Stationery (letterhead, complimentary slip, business card, envelope)/ Package/ Promotional item

  **Information design – Event directed:** Logos (10)/ Advertisement/ Poster/ Story board/ Brochure/ Stationery (letterhead, complimentary slip, business card, envelope)/ Package/ Promotional item

Suggested requirements for the sections above:
- Brochure (A4 to A2 size)
- Black and white or coloured advertisement for a newspaper or magazine (A4 / A3 size)
- Package (any size) designed and folded
- Promotional item (made by the learner)
- Design Stationery (learners who choose this category will need to include an A4 letterhead, a standard envelope, a complimentary slip and a business card)
- Poster / Billboard (A3 to A2 size)
- Informative signage (2 x A4 size)
- Promotional storyboard (± 6 frames = A3 to A2)
- Promotional Sticker (A4-A3 size)
- Learners may include ± 10 finished logo designs on two A3 pages as one of the options above.

**General requirements for the above:**
The project is advertising media for one specific client, event or product. The learner must create an identity by formulating a name and then a logo for the client, event or product.
This logo should be used on ALL of the advertising media.
The stages for the development of a logo must be shown in preparatory drawings in the A3 workbook/sourcebook. When the final logo (master-copy) is developed this should be shown in the preparatory drawings hand-rendered in black and white and colour.
When designing a brochure, poster, story board etc, include hand-rendered or hand painted headings. The brochure should indicate areas for text with lines or with font. A brochure may be flat or folded in any way. All the components in this category should show a learner's ability to skilfully manipulate the design media by hand. Hand-rendered techniques and skill should be emphasized in all the sections. Layout and lettering are of importance.

- **GRAPHIC ILLUSTRATION / DESIGN** includes book covers/ CD covers/ illustration:
  A book cover or magazine cover including back, front and spine (2 cm)
  Total size A4 to A2
  CD cover (CD format or double CD size)
  Illustrations (A3 to A2 size each)
  Storyboard based on ±5 progressive sequential illustrations in frames
  Write below each the sounds and words explaining your illustrations
  Size: A3 to A2 with ±5 frames

  **General requirements for the above:**
  Illustrations do not have to include lettering. Learners who choose illustrations should show various styles of illustrative work in any drawing or painting or printmaking media. A variety of hand-rendered techniques must be used in this section. Lettering and layout are important on the book / magazine cover and can be presented on an acetate overlay.

- **DECORATIVE DESIGN** includes:
  **Pattern design: Table cloth/ Place mat.**
  - Conceptual design: Wall design

**Practical Requirements:**
Design the following components as EITHER pattern designs or conceptual designs. Colour plans should be included.

### Pattern Design-
A repeat design for any of the following:
- Table-cloth
- Wall-paper / Curtaining
- Place-mat/Carpet
- Tiles with Border designs
- Size: Minimum A3 to A2 each

OR

### Conceptual Design-
Size: minimum A 3 to A2

## CATEGORY II: CRAFT DESIGN (BASICALLY TWO-DIMENSIONAL DESIGN)

- **FASHION**: Different media: Gouache, markers, colour pencils. Layout and representation is important. Two-dimensional representation (front and back – A3 size) as well as repeat patterns for material e.g. mix and match (2 dimensional representation A3 to A2 or/and 3 dimensional product making (life size).

- **WALL PAPER AND GIFT WRAP:** Different media: Gouache, markers, colour pencils. Stylization and repeat patterns: Half-drop etc. and colour combinations. Wrapping paper (A3 to A2 size).

- **TEXTILE DESIGN:** Different fabrics/ material, material paint or ink, wax, dye etc. Any kind of application on the fabric / material e.g. hand-painted, block printing, silkscreen / stencil printing, batik, embroidery etc. The work should consist of a minimum of TWO applications of media:
  embroidery, fabric embellishment, manipulation or assemblage with found objects (beads, string, etc.), batik, block printing or silk-screening and hand painting. The size of the work should be approximately 1000 mm X 1000 mm
  Do not make the fabric into any article.

- **FIBRE DESIGN:** Different fabrics/material, embroidery, found objects, beads – self-made, string - raffia, nylon, plastics, dye – self-made or bought etc. Experimenting with functional and non-functional / decorative objects, wove and embroidery techniques etc.
  Include the final cloth sample, as well as full scale colour plans for each of the colours used. No photographically produced images or repeat patterns may be used.

  **Practical Requirements:**
  The product made should not be smaller than 300 mm in diameter and the woven piece not less than 800 mm x 800 mm in width.
  The fibres may include any natural or synthetic material that can be woven or spun, for example, raffia, plastic, wool, grass, or fabric.

- **GLASS CRAFT:** Glass, lead strips, soldering rods, cement etc. Experimenting with functional and decorative designs. Learners must create their own designs. Existing designs may not be used. Knowledge of stylization must be shown. Different traditional techniques must be explored. Glass construction must be by lead strips or soldering joints (no glue may be used) or concrete. Glass casting is allowed. The stained glass should be joined with lead strips or soldered glass and must show

an understanding of construction joints and be neatly finished. Concrete may also be used. No glass paint or liquid lead on glass will be allowed. The traditional method should be applied. Designs should show a clear progression and transformation of realistic forms into a pattern or stylized object for stained glass work.

- **BEADWORK/ MURAL DESIGN/TAPESTRY/ WEAVING/ CARPET DESIGN/ APPLIQUE:** Use material typical to the art form. Work must be presented in two-dimensional form and must then be made as a final product.

## CATEGORY III:  CRAFT DESIGN (BASICALLY THREE-DIMENSIONAL DESIGN)

- **CERAMICS:** Paper mache, clay, cement, etc. handwork - e.g. slab, coil, pinch etc. wheel work, casting, slip work and any contemporary decoration techniques (under-glaze and glaze) or experiments - staining, relief-carving, Cloissonism etc. Objects should show evidence of hand and / or wheelwork.  Work should show a variety of decorative processes and / or techniques and at least one work must be glazed. All work must be fired. Own size.

- **JEWELLERY:** Different methods - soldering, riveting, clasping and any other constructional technique. Any durable material, metal – alloys, copper, brass, bronze, silver, gold, tin, aluminium, perspex, enamel, plastics, leather, beads – self-made, ivory, wood, found-objects etc. fixings and attachments used should be mechanical. Own size.

- **INDUSTRIAL DESIGN:** Any durable material, metal, wood, plastic, glass etc. different styles - Art Nouveau, Art Deco, international etc. must be explored to create a functional and ergonomical object. Learners may also include two-dimensional designs of different objects. Proper construction methods must be applied e.g. grind, weld etc. when the objects are constructed three dimensionally. Industrial design should now be taken beyond the two-dimensional design stage and a working design prototype must be created. Works must show the design (2D) and construction (3D) of an object.

  The object can be constructed of any suitable material but must show proper construction and joining. The object must be ergonomical and functional. Life size.

- **PUPPETRY:**  Wood-dowel sticks, strings, wires, springs, clay, latex, polystyrene, plasticine, paper mache, fabric etc. Puppetry: proportion, mechanization systems for promoting motion in puppets e.g. strings, springs, joints etc. Different construction methods e.g. casting, carving, modelling etc. The marionette should include examples of jointed and string operation mechanized moveable parts.

  The marionette should include examples of jointed and string operation or mechanized moveable parts. Size: Own choice.

- **BASKETRY/ COSTUME DESIGN/ WIRE WORK:** Use material typical to the art form. Work must be presented in two-dimensional form (A3 / A2) and must then be made as a final product. Size: Own choice.

## CATEGORY IV: ENVIRONMENTAL DESIGN AND DIGITAL DESIGN (VISUAL COMMUNICATION)

**NB    SCHOOLS MUST APPLY TO DO THIS SECTION)**

**COMPUTER-GENERATED DESIGN:** Schools should apply to the provincial education department to do this section. Learners should follow the Communication / Information and Graphic design course and explore a variety of different design media: gouache, plaka colour pencils etc. Learners should be introduced to a variety of exercises on the computer to get accustomed to the different functions of the following programs: Corel Draw, Freehand. The finalization of a design or images through the use of computer software:
- Vector based software (Corel Draw/ Freehand):
  The learner should be able to manipulate nodes and bezier curves skilfully in order to create a vector based design. The designs must develop from a hand rendered series of scamps / designs and the manipulation of the final work on the computer should only be created at the end of the process. (e.g. A logo should be developed and done by hand and can then be further developed by computer.)

Other processes such as Omnicrom, Photocopy etc. may also be incorporated in the final stage of this category.

Learners should remember that creative problem-solving and innovative manipulation of a computer design are important factors that will be taken in consideration in this section.

No Clip-Art whatsoever can be used in this section. Learners using Clip-Art will get 0% in the final exam. All visual material used to create a final design must be hand-done and must be exhibited together with the final computer-manipulated product / design. The importance of design as a means of expression must be dealt with where the emphasis is on two-dimensional and three-dimensional representation with the help of the computer, omnicrom, etc.

In addition to programs introduced in grade 10, learners should gain knowledge in the following during Grade 11 and 12:

- Raster based software (PhotoShop/ Photo Paint):
  Learners should use original artworks (self-created).
  Input devices such as scanners, digital cameras and digipens may be used.

- Layout software/ Vector based: (PageMaker/ Quark Xpress):
  Brochures, booklets, magazines etc. should be executed in appropriate layout programs. Import / export functions from Roster and Vector based program must be applied. Mark allocation:
  Teachers and learners must be aware that the hand-rendered design (brochure, poster, etc.) must always be submitted with the computer/ mechanically finalized (computer-aided, omnicrom etc.) design.

**Hand-rendered design (Gouache, Plaka, etc.)               =   50**
**Computer Generated Design (Omnicrom, Computer finalized design)   =   50**
**TOTAL   (Final practical work)                            = 100**

**Practical requirements:**
- Brochure (A4 to A2)
- Black and White or Coloured Advertisement for a newspaper or magazine (A4 to A2 size)
- Package (any size) designed and folded
- Promotional item (totally made by the learner)

- Design stationery (Learners who choose this category will need to include a letterhead, a standard envelope, a complimentary slip and a business card.)
- Poster (A3 to A2 size)
- Informative signage (2x A4 size)
- Promotional storyboard (6 frames = A3 to A2)
- Book cover or magazine cover (A3 to A2). Headings must be included.
- CD cover (CD size, back and front). Headings and lettering must be included.
- Learners may include 10 finished logo designs on an A2 page as one of the options above.

No Clip-Art whatsoever can be used in this section and will be penalized. Copying and plagiarism in this category will be strictly penalized with 0%. All visual material used to create a final computer aided design must be hand-done and must be exhibited with the final computer aided product/ design.

The master copy of the logo design developed (including all lettering) must be hand-rendered, one in black and white and the other in colour.
Headings in the other options must be hand-made and can then be scanned
into the computer to be manipulated.
Any traditional design media can be used to complete the hand done designs e.g. plaka, gouache, ink, pencil etc.  In designing a brochure, poster etc. the main lettering must be hand-done whilst the text must be indicated by lines or computer font.

The learner must create an identity by formulating a name and then a logo for the client, event or product.

Learners must submit a detailed explanation of the computer process that has been followed to create the final product. This must be submitted directly before the explanation of the process in the workbook/sourcebook. Requirements as stipulated in this manual must be followed. Learners may only work in class under the supervision of the Design teacher on the school's computer. Only hand-rendered work and prints of computer images may be handed in as final work.

Digital Design/ Interior Design/ Architectural Design/ Film and video/ Display and exhibition/ Animation.
Reflex and Digital Photography is part of the Visual Art component and can only be used for reference purposes in Design - this is functional photography where the photo's are applied to design e.g. brochure, poster, CD cover etc. Hand done letter work and layout is essential.


4.      **CONCEPTS TO BE DEALT WITH (LO 1 AND LO 2)**

Composition
Colour theory
Drawing skills
Art elements
Art principles

**Two-dimensional and three-dimensional design:**
Different design styles within each category e.g. wheel work, hard-edge, caricatures, illustrative work etc.
Technical, formal and conceptual skill in the planning of each design within each category e.g. layout, lettering / fonts and spacing, soldering, weaving etc.
Different hand-done techniques must be done in each category.

Experimentation in the manipulation and use of technology. (NB Collage, photos, omnicrom and the computer can be used for experimentation in all the categories BUT the hand-rendered product is important for assessment/examination purposes.)

Different media within each category e.g. watercolour, plaka, gouache, markers, colour-pencils, pastels, clay, glass, fabrics, steel etc.