15

UNIVERSITY OF
FORT HARE

Eastern Cape Education
Department

Distance Education Project

Core Learning Areas Course

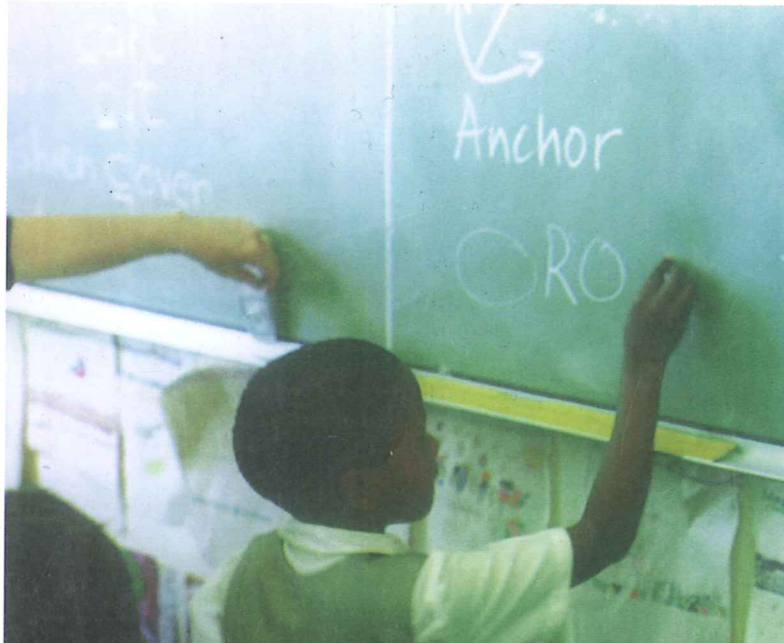
Technology Education

Umthamo 2

An Introduction to Graphic Communication

(Pilot Edition)

May 1999



LOOKING AT GRAPHIC DESIGN

What do we use the stuff for?

3. And then what do you see? Why?

What does the picture tell us?

Does all the writing look the same?

Who makes this stuff?

1. What do you see first? Why?

What do we get in this packet?

2. What do you see next? Why?

Where does it tell us what is inside?

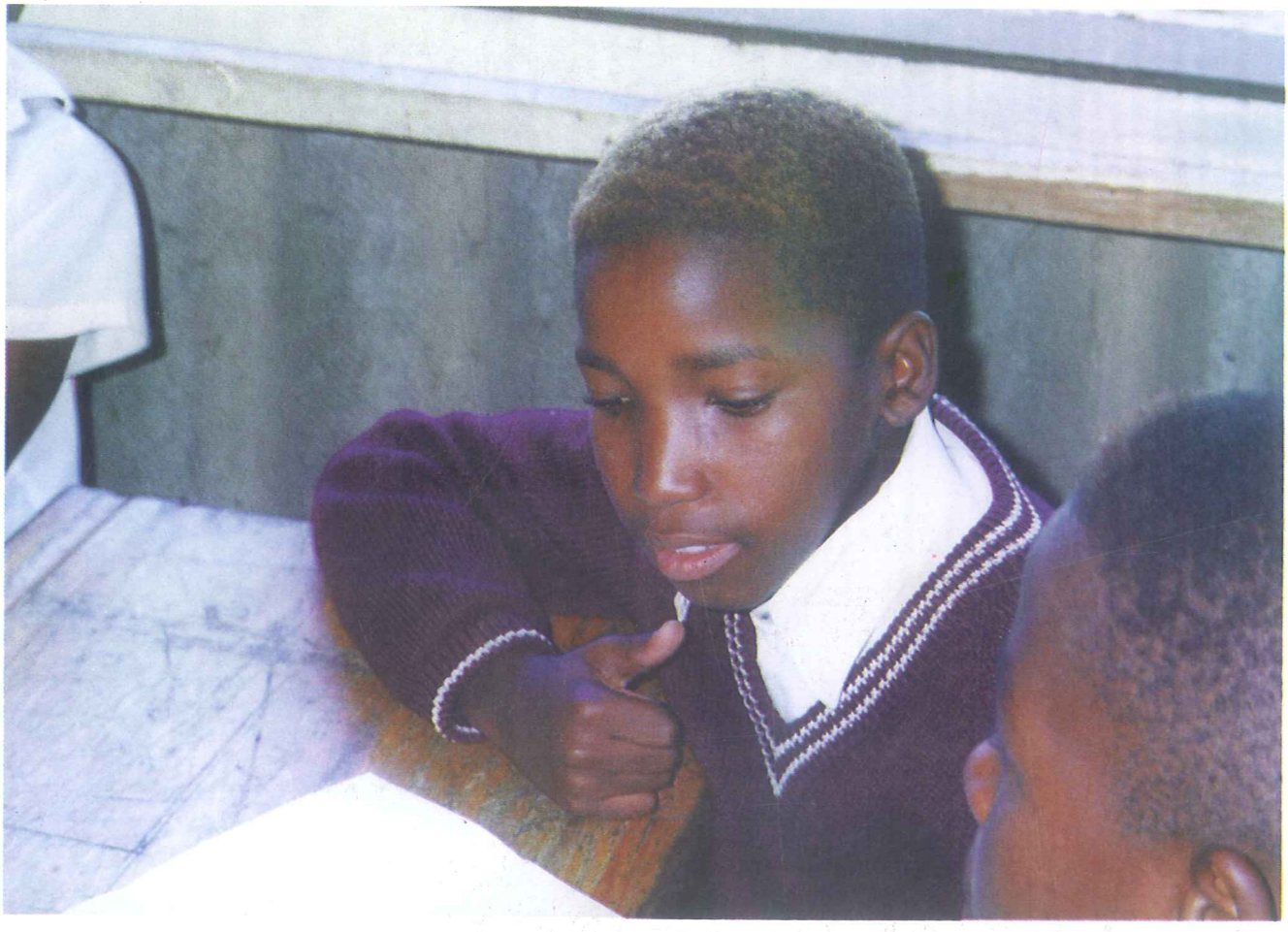
3 Ds

design democracy development

The restrictive political and cultural environment that existed in apartheid South Africa spirited an insecurity in design. Local designers struggled to comment on the tension of the era. Tight economic constraints and sensitive ethnic culture have made the search for a South African dialect a difficult one. Many designers borrow from "African patterns" (like Ndebele), but their over trained eyes produce stylistic and often "plastic" versions of the original, others look to their international peers for guidance. Yet, in South Africa some of the most profound pieces of design have evolved unconsciously from necessity. This is evident in many examples of "township art and design", from squatter housing to the wire masterpieces sold on street corners.

Amrik Kalsi, officer chief of the Design and Production Unit at the United Nations Centre for Human Settlement in Kenya …pointed out that design in Africa has a socio-economic task that goes beyond merely making something attractive and saleable. The appearance, in Africa, of an electric toaster or automobile in the year 2000 "is certainly quite secondary to the protection of renewable resources, the efficient use of non-renewable resources and the plight of the poor," he says. However, the form of a successful design evolves consciously from its function. Nothing is secondary.

Lari Rosenberg. 1995. In ADA Magazine Number 13. (Cape Town: Jennifer Sorrell)



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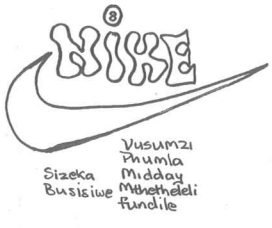
Introduction

In the first umthamo on Technology Education, we introduced you to a new learning area. We set you some activities to try with your learners. We felt those activities would give you some understanding of what is involved in this new learning area. We also described the technological process (see pages 16-18 in that umthamo, Umthamo 5). Turn to those pages. You will see that this process involves **designing, making,** and **appraising.**

Sometimes people make designs for others to follow. Perhaps someone wants to make a similar article, but the original designer and maker is not there to *show* that person how to make something similar. How can they communicate their ideas? One way is to draw a picture of the design, and to write instructions. Another is to make a model. The designer decides to communicate through "graphic communication". S/he makes an illustration, or several illustrations, and writes in additional information. Writing and drawing are very important aspects of the technological process.

Writing and drawing are all around us. There are very few (if any) parts of the world where people are not exposed to print. Think of the food you buy. Most foods which we buy these days, come in packets or packaging. The manufacturers take a lot of trouble trying to package their products attractively so that people will want to buy them. They also try to make their products look quite distinctive so that they can be easily identified. They employ graphic design artists to do this work. How do the graphic design artists make each item distinctive?

Think of flour. There are different companies which package flour. Each company has its own name, and its own distinguishing marks. Two of the best known companies are Snowflake and Golden Cloud. Look at a packet of flour. (On the inside back cover of this umthamo, you will find a picture of a packet of Snowflake flour.) What do you notice? What style of print has the company used? Are there any little drawings or symbols which are on every product that that company produces?



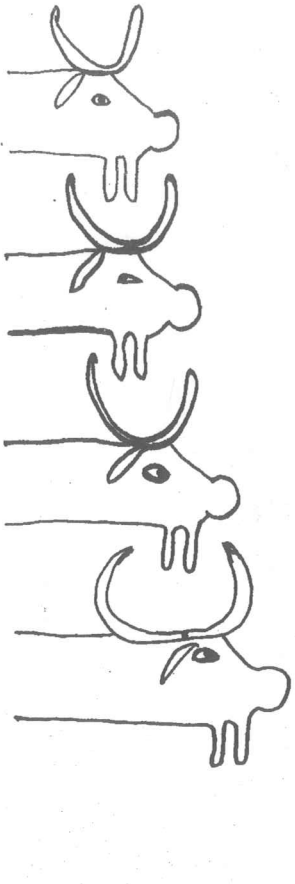
In this second Technology Education umthamo, we want to focus on drawing. Drawing is a skill that is important in most aspects of technology education. In many parts of the world, when you walk into a primary school you will find some of the children drawing and making pictures. It doesn't matter what time of the school day it is, some of the learners will be working hard at making an illustration or drawing in support of their work.

In these schools, drawing is not thought of as a recreation. It is regarded as work. The children are expected to work carefully at making their pictures. The drawings they produce are valued, both for themselves, and as a support to other work that has been done. Teachers and learners in these schools believe that everybody can draw. They encourage drawing at every possible opportunity. Teachers assume that everybody's work should be valued. Learners' attempts to support their work with graphic drawings are praised and encouraged.

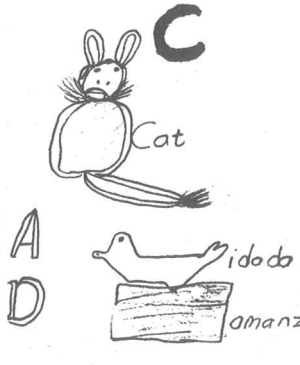
Spend a few minutes thinking about your own experiences. Think back to your childhood, when you were at school. What opportunities were you given to express yourself through drawing and the making of pictures? How did you feel about this at that time, as a school-going pupil? How do you feel about it now, when you think back to that time? Why? How do you feel about your own abilities to make pictures? Why do you think this is so? Open your Journal, and write down your answers to these questions.

Think of very young children. They really enjoy making marks on paper, and other surfaces. They know this a way to communicate their ideas, thoughts, and feelings. It is a natural thing for them to want to do.

In the past, in South Africa, only a small proportion of children had the privilege of exposure to rich drawing experiences at school. Art was thought to be an optional extra. The majority of schools had no materials. And although students at teacher education colleges did a course in Art, they were rarely able to put what they had learned into practice with their learners. In the days of Bantu Education, paints, paintbrushes, paper, cutting tools, inks and other art materials were not provided to schools. Art periods on the timetable were usually given to other 'more important' subjects in the school's curriculum.



There is a need to redress the lack of opportunities of the past. We believe that it is high time that all children were encouraged to express themselves through drawing. We believe that all children, from age 3 years to 13 years, should have many opportunities in each school day to communicate through drawings, as well as through words. This does not need to involve expensive art materials. If children develop a thirst for drawing, they will draw with anything they can find, onto anything else. You can even use a scrap of wire heated in the coals of a fire to draw on a plank by scorching the wood.



In the 1940s, Herbert Read wrote a book called, Education through Art. In that book Herbert Read showed how important Art is. This book convinced the primary education profession that art and drawing are vital to a full and complete development of young learners.

At present in the Eastern Cape, many teachers in Early Childhood and Foundation Phase classrooms encourage their learners to draw. They make sure that there are wax crayons and pencils, and of course paper. Their children draw freely, just as children do all over the world. But what status does drawing have in Intermediate Phase classrooms?

We believe strongly that children in Grades 4, 5, and 6, as well as Grade 7, also need plenty of opportunities to draw in order to support their verbal communication.

There are many ways we communicate. In the first Language, Literacy and Communication umthamo, we though about non-verbal communication, or body language. But people also communicate through music, dance, pictures and sculptures. And we communicate through writing.

Not all writing looks the same. We can write the same word in many different ways. People use different kinds, or styles, of writing (or ***lettering***) for different purposes. We will think about ***lettering*** in this umthamo.

We will also look at the way we can use pictures to communicate messages and information. And we will look at the way drawing and writing can support each other.

To be able to communicate in a clear graphic way, using drawing and design skills, is an important aspect of **all** learning areas, including Technology Education. Within Technology education, a learners will need to be **aware** of the **effect** and the **use** of design, drawing, and of lettering, all the time. This is technological awareness.

If learners work with **systems and controls,** or if **structures** are being built, or **processing** is being thought about, there will always be a need to draw and to describe clearly.

Whatever aspect of technological knowledge is being dealt with, learners will need the **capability** of designing and drawing to communicate ideas in a graphic way. Learners need to develop the capability to use graphic design and drawing skills to communicate what is being designed, made and appraised (technological capability).

The following extract from the New Zealand Ministry of Education makes the same point. In New Zealand, the technology curriculum has been divided into seven areas……

Technological Areas

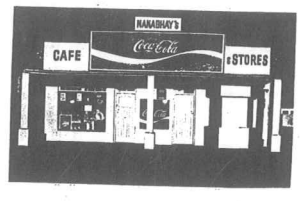
- Biotechnology
- Electronics and Control technology
- Food technology
- Information and Communication technology
- Materials technology
- Production and Process technology
- Structures and Mechanisms

Design, Drawing, and Graphics is an eighth area that embraces the other seven.

"Whichever technological area is selected, design ... is an essential component of the activity. Drawing and graphics ... are also essential in technological practice to depict and clarify ideas and proposed solutions."

(*Technology in the New Zealand Curriculum* - Ministry of Education, Wellington, 1995, page 12)

Communication is a key factor in all areas of the curriculum, including all aspects of technology education.



In this umthamo, we will ask you to look at the packets and packaging of different products which your learners will be familiar with. We will ask you to look at the style of print (or lettering) which each company has chosen to put on their packaging. We will ask you to look for any distinguishing pictures or drawings which a company chooses to put on all, or most, of its products.

You will carry out activities with your learners to experiment with writing in different ways to design different styles of print (or lettering). And you will ask your learners to think about ways to draw things to go with the lettering.

Key Activity

In the Key Activity in this umthamo, you will tell your learners a story and then set them a task of using graphic communication skills in order to illustrate that story. Learners in the Intermediate Phase will design and make a cover for a book of the story.

Learners in the Foundation Phase, or Early Childhood classes will design and make drawings to illustrate the story. You will describe in detail what your learners do. Then you will reflect on this experience and write a reflective report. You will have an opportunity to share your experiences with your fellow teacher-learners. Then you will hand in this two-part report for your umkhwezeli to appraise.

Purposes

The main purpose of this umthamo is to kindle an awareness in you (as teachers) of slogans, styles of lettering, logos, pictures, drawings and designs. We can find examples of all of these everywhere in our world. It is important that we understand how they are used. And it is important that we can use them ourselves. We believe strongly that it is important that primary teachers realise the major role that graphic design and drawing play in getting messages across in our modern, technologically advanced world.

A second purpose is to promote a concern for redress. Developing skills of drawing and design has been very seriously neglected in most of our primary schools for far too long. In developing school policy, colleagues in a school need to bear this in mind. Collectively, we need to look for ways to remedy these inherited problems, even if resources are limited.

Outcomes

After working through this umthamo, you will have

- developed an awareness of the role graphic design and drawing play in effective communication, not just in Technology Education, but in all learning areas.
- seen the value of using the real life experiences of learning in developing the skills learners will need for real life. As a result you will find ways to use this real life experience and awareness as a means to build your learners' confidence in drawing and design, and the use of graphics for communication.

First draft of a design for a book cover by Masibulele Vellum, age 11 years. Grade 5. Mpongo Primary School.

Unit 1 - Developing graphic awareness

In the first Technology Education umthamo we gave you a reading about the history of technology. You read about some of the earliest technological inventions. In this umthamo we want you to think about the fact that people have recorded events in their lives since the earliest times.

One way people celebrate the importance of something is to make a record of that thing or event. The first deliberate records to communicate important things or events were paintings in caves or shelters. Marks and designs were also cut into rock. There are some places where people from thousands of years ago recorded their presence in a place by making the marks of their hands on the wall of a cave. They did this by either printing with paint on the actual hand, or by blowing paint over the hand on the wall, leaving an outline of the shape.

Did you know that our province has one of the richest records of rock art painting in the world? The rock art is the work of the San or Bushmen people.

Ask your learners if they know of any such paintings in your area. Stress that these paintings should not be damaged or harmed. They are a valuable heritage and, in time, will be an important tourist attraction.

We will try to include some background information in the reference box file for this umthamo at your Centre.

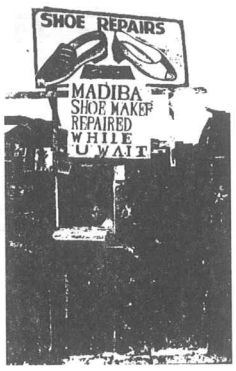
We all learned about the Ancient Egyptians and hieroglyphics and papyrus (paper made from reeds). We learned about cuneiform and writing on tablets of clay. Developing an interest in finding out about the history of writing would be a way to integrate the work in this umthamo with a learning area like Human and Social Sciences.

From a technology point of view, developing writing **systems,** and developing writing **materials** and tools would make a very interesting long-term project.

Even today, people are very inventive about the places where they leave written messages. Think of the names of towns and villages carefully spelt out in white-wash painted rocks on the sides of hills and mountains.

In cities, rebellious youngsters paint graffiti messages on walls and the sides of buses and trains. This is know as graffiti art. Sometimes it can be quite rude and offensive. At other times it can be very amusing and clever. The writers of these messages choose carefully how they will write their messages. They take time, trouble and a pride in making the lettering visible and eye-catching.

These days, there is hardly any place in our world where people do not see print around them. Even in the most remote rural villages of our province, people see print on the commodities which they buy. Unlike the past, when people took their own containers to a shop to buy the basic necessities, almost everything we buy today comes in some kind of packaging. And the packages usually have some writing (or print) and a picture (or visual image) related to the product. So from a very early age, our learners are exposed to print in their homes.



There also signs on shops and businesses. These include the name of the shop or business, as well as one or more of the products or services offered at that place.

Roads also have signs. There are signs which indicate the speed limit, signs to warn of dangers, and sometimes a STOP sign.

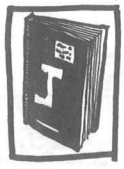
Pre-reading activity

Now we are going to ask you to read an extract from a very important book about language by an American professor, Shirley Brice Heath. Shirley Brice Heath wrote the book, Ways with Words, after spending ten years in two working-class communities in North Carolina in America. She lived, worked, and played with the children and their families in those two communities.

In this book, Shirley Brice Heath describes the way the people in these two communities use language. She describes the way they speak, and the way their children learn to talk. She describes the way print fits into their lives, and how they use print.

We want you to read these six pages because in them Shirley Brice Heath describes how **print is everywhere in the environment** of these two communities. She also shows how quickly the children learn to read the print in their environment, ***before*** they go to school.

Close your eyes. Think of your own home. Think of the kitchen. Try to picture the ingredients that you use to cook meals. Some of the ingredients are fresh, like vegetables and fruit, and others are dried, canned, bottled, or come in packets and boxes, and have labels. What do those labels look like? What is printed on them? Does all the print look the same?



Now open your Journal. Write the date and time. Then write down what you remember and what you saw in your mind's eye. Try to describe in detail one of the labels you pictured. If it helps, draw a picture of the label in your Journal.

When you have finished writing, turn to the extract. Go through the six pages, reading the first sentence of each paragraph. (There are eight paragraphs in all.) This will give you some idea of what the passage is about. You will have prepared yourself for a more careful reading.

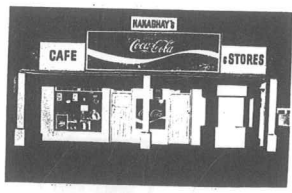
Now read the extract. It is quite long, but it is very important. And it is related to what we are thinking about in this umthamo. First of all, read the whole passage right the way through, as quickly as you can. Don't stop when you come to a word you don't know. Jump over it. Don't look it up. Just read on. The sentence which that word is in, may help you to guess what it means in that particular sentence. Sometimes the sentences that follow explain what an earlier word or phrase means.

Often you can 'guess' at the meaning from the way a particular word is used alongside other words, that is from its context.

Post-reading activity

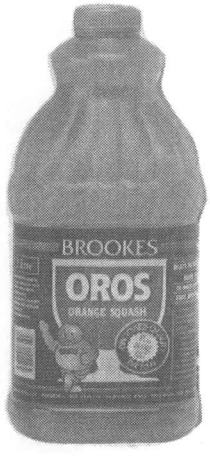
When you have read the whole extract through once, you can either put it aside and you can think about what you have read. Or, you can re-read it carefully, and try to picture the community Shirley Brice Heath is describing.

Spend some time thinking about the children you know. Think about the print that they may see in their homes and the local environment. At what age, or stage, did they recognise items by the labels on the packets or packaging? Around what age were they able to distinguish between the different packets of flour, sugar and mealie-meal? What about the words, Coca-Cola? What other words do you remember a small person recognising?



Think of the print in your local environment, the print your learners are exposed to outside school? In what ways could you use that experience of print, and how could you bring it into your classroom?

We are going to ask you to carry out your own research in your classroom to find out what print and packaging your learners are aware of and familiar with. You will need to collect a number of sample packages and labels with different kinds of writing on them. Make sure that you collect the kinds of packages of products that your learners will be very familiar with. You could also collect pictures of signs which you think your learners will know.



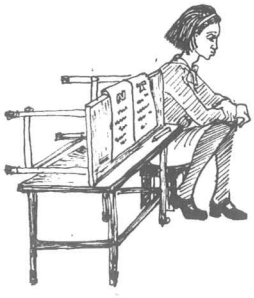
Activity 1 - Looking at packages and print

Option A

If you work with learners in a pre-school class, or with Grade 1 learners, you will need to collect quite a lot of samples of material.

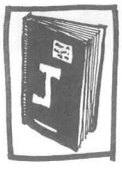
You will find some samples of packaging which your learners will probably know on page 17.

On the day that you plan to carry out this activity, make sure that you have planned carefully. Plan so that while you work with one group at a time, the other learners can work at other tasks quite independently. Make sure that you have your Journal with you so that you can make notes of any interesting things that happen, or which your learners say. Then work with one group at a time.



Gather a group either around a table, or set of tables, or around you on the mat. Then show your group of learners one of the packets which you have brought with you. Ask your learners some questions to focus their attention on the label on the packet. You want them to notice the print, and any drawing or symbol.

- What can you tell me about this packet?
- What do you think was (is) inside it?
- How do you know that?
- Look carefully at everything you can see on the packet. What do you do with this? Show me.



Start off with one or two questions, then follow your learners' lead. They will guide you with regard to what they are interested in, and what they notice. Make brief notes of what they say in your Journal.

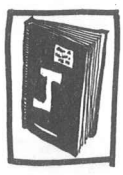
When you have 'read' one of the labels, take another packet which you are sure most of them will have seen before. Again, ask some questions to focus their attention on the label. In this way you will be guiding the way they will look at the other labels or pictures which you will show them.

Then take one of the labels or pictures from a magazine or newspaper of a familiar commodity. Ask your learners what they can tell you about that label or picture. Work in the same way as you have done with the two packets. Listen to your learners' responses and ask questions which follow naturally.

You will have to judge how many labels, or pictures, or packets, or boxes you can show each group of learners. If they are very interested, you may be able to deal with a lot. If they seem to lose interest, stop.

To finish off this activity, draw your learners attention to the way the words are arranged on the packet. Ask them, What do you see first when you look at this label/picture/ packet?

- Why do you think that is so?
- What do you see next?
- Why do you think that is so?
- And then what do you see?

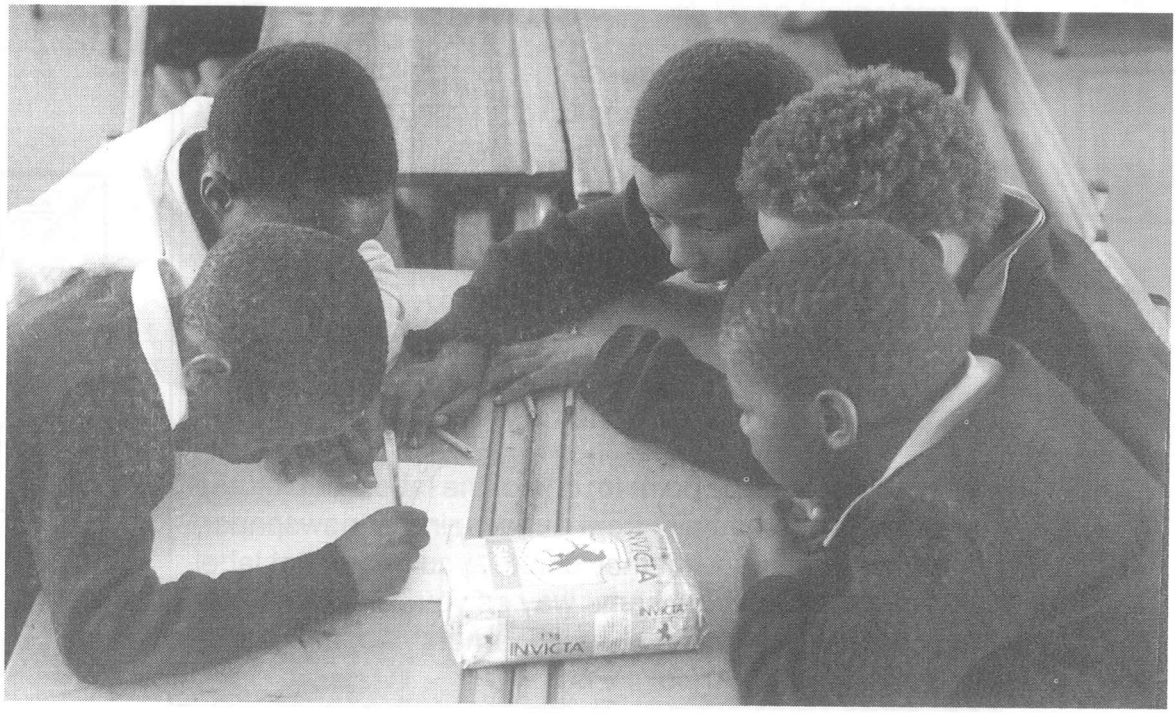


Again, make brief notes of what your learners tell you.

Finally, ask your learners to look for other labels and packages at home. Tell them to bring some in so that you can make a display on the wall of all the packages, labels and signs which they see in or around their homes.

Later in the day, open your Journal. Read the notes you made as you carried out this activity with your learners. Did your learners surprise you? Why? What did you find most interesting about this activity?

Take a clean sheet of paper and write your name, *Umthamo 15 - Technology Education 2: Activity 1- Option A,* and the date at the top. Then write down your answers to these questions. Make sure that you give enough details so that someone who reads what you have written can build up a clear picture in their mind of what took place in your classroom when you tried out this activity with your learners. Store this writing safely in your Concertina File.



Activity 1 - Looking at packages and print

Option B

If you work with learners in a Grade 2 or a Grade 3 class, you will also need to collect quite a lot of samples of the labels and packages your learners have seen before.

Then, you have a choice. You could either stick these labels and packets on to a large sheet of paper. Or you could decide to put them up on the chalkboard, during a break, before your discussion. Or you could put each label, or packet, up (on a large sheet of paper, or on to the chalkboard) as you introduce it. You will have to decide which way you would prefer to work, or which would be more suitable or interesting for your learners.

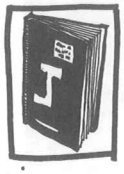
You will find some samples of packaging which your learners will probably know on page 17.

On the day when you are going to introduce these labels and packets, make sure that you take a few packets and boxes with you to introduce this activity to your learners. You should also take your Journal to school with you. You will need to make brief notes of what your learners say, and what happens.

Gather your learners around you. Then show your group of learners one of the packets which you have brought with you. Ask your learners some questions to focus their attention on the label on the packet. You want them to notice the print, and any drawing or symbol.

- What can you tell me about this packet?
- What do you think was (is) inside it?
- How do you know that?
- Look carefully at everything you can see on the packet. What do you do with this? Show me.

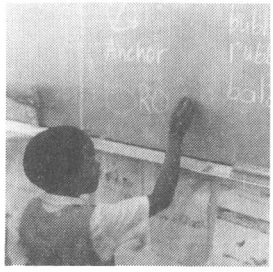
When we trialled this Activity at Mpongo Primary School, we found that a packet of samp worked very well.



Start off with one or two questions, then follow your learners' lead. They will guide you with regard to what they are interested in, and what they notice. Make brief notes of what they say in your Journal.

When you have 'read' one of the labels, take another packet which you are sure most of them will have seen before. Again, ask some questions to focus their attention on the label. In this way you will be guiding the way they will look at the other labels or pictures which you will show them.

Then either take, or point to, one of the labels or pictures of a familiar commodity from a magazine or newspaper. Ask your learners what they can tell you about that label or picture. Work in the same way as you have done with the two packets. Listen to your learners' responses and ask questions which follow naturally.



You will have to judge how many labels, or pictures, or packets, or boxes you can show each group of learners. If they are very interested, you may be able to deal with a lot. If they seem to lose interest, stop.

To finish off this activity, draw your learners attention to the way the words are arranged on one packet. Ask them, What do you see first when you look at this label/picture/ packet?

- Why do you think that is so?
- What do you see next?
- Why do you think that is so?
- And then what do you see?

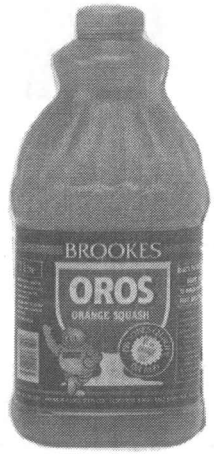
Again, make brief notes of what your learners tell you.

Then take a word which has been written in cursive lettering, for example *Kellogg's.* Write the word on the chalkboard **exactly** as it has been written on that packaging. If nobody knows what it says, tell them. Then write it in capital letters. Let your learners read it again. Then write it in small letters, or a mixture of small and capital letters, and let them read it again. Point out that we can choose to write words in different ways. We can use different lettering.

Finally, ask your learners to look for other labels and packages at home. Tell them to bring some in so that you can make a display on the wall of all the packages, labels and signs which they see in or around their homes.

Later in the day, open your Journal. Read the notes you made as you carried out this activity with your learners. Did your learners surprise you? Why? What did you find most interesting about this activity?

Take a clean sheet of paper and write your name, *Umthamo 15 - Technology Education 2: Activity 1- Option B,* and the date at the top. Then write down your answers to these questions. Make sure that you give enough details so that someone who reads what you have written can build up a clear picture in their mind of what took place in your classroom when you tried out this activity with your learners. Store this writing safely in your Concertina File.



Activity 1 - Looking at packages and print

Option C

If you work with learners in a Grade 4, Grade 5, Grade 6 Class (or even a Grade 7 class), you will need to have one or two samples of labels and packets. On the day **before** you plan to carry out this activity, ask your learners to look for packets and labels at their homes. Ask them to bring as many *different* labels and packets the next day for a special activity. If you have one or two samples to show them, they will understand quickly what you are looking for.

It is also a good idea to collect more samples of labels and packages which your learners will know. Sometimes learners forget to bring the items we ask them to bring. Or perhaps they don't have access to certain items. Or perhaps their families won't allow them to take things from home to school. So, to be sure that each group has some samples to look at, make sure you have enough for each group to have at least five different labels or packets.

On the day when you plan to set your learners this activity, make sure that you take your Journal to school with you so that you can note down anything your learners say or do.

Start off by showing your learners one of the packets which you have brought with you. Ask your learners some questions to focus their attention on the label on the packet. You want them to notice the print, and any drawing or symbol.

First of all, say something like, "Look at this packet carefully. Look at the words, the picture(s), and any symbol. Look carefully at everything you can see on the packet. What can you tell me about it?"

When you have 'read' one of the labels, take another packet. Again, ask some questions to focus their attention on the label. In this way you will be guiding the way they will look at the other labels or pictures which you will show them.

Now focus their attention critically on the print on the label or packet.

- What do you see first?
- Why do you think this is so?
- What is this information? Is it the most important information?
- What do you see next? Why?
- And then what do you see?

You will find some samples of packaging which your learners will probably know on page 17.

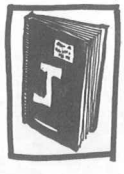
When we trialled this Activity at Mpongo Primary School, we found that a packet of samp worked very well.

Remind your learners that you asked them to bring in some labels and packets for the next task. When each group has some labels and packets in front of them, tell your learners that you want them to look very carefully at the writing, or lettering, on each label or packet.

As they study the different kinds of writing, ask them some questions to guide their observation.

- How have the words been arranged? Are they straight (like on the Snowflake Flour packet? Or have some been written in a curve (like Grand-pa powders)? Or have they been written in a diagonal (like Schweppes)?
- Why do you think the designer chose to use that kind of writing, or lettering?
- What effect do capitals have?
- Why do some designers choose to use cursive lettering?
- How do designers manage to make some letters look very big? Is it just by using capital letters?

Give your learners about 10 minutes to discuss the labels and packets in front of them. Make sure that each group has someone to make brief notes of their discussion. As they work, you can appraise the way each group is working, and make brief notes in your Journal.

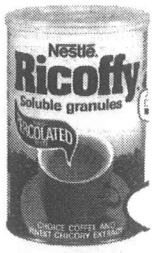


After 10 minutes, conduct a class discussion. Give each group a chance to talk about one of their labels or packets which they studied. After all the groups have spoken, allow some discussion. Chair this discussion in a democratic way. As your learners report, make brief notes of what they say in your Journal.

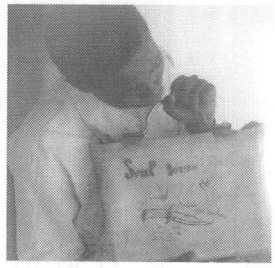
Then ask if any of your learners have written their names or drawn something on their rulers, books or book bags. Get them to show the rest of the class.

Finally, ask for some volunteers to help you make a display of all the different labels and packets which you and your learners have brought into the classroom. You could do this at a break or even after (or before) the school day.

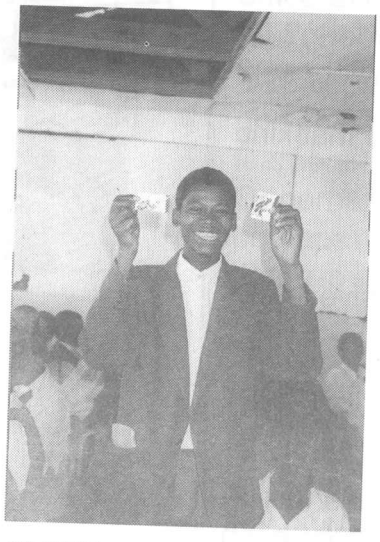
Later in the day, open your Journal. Read the notes you made as you carried out this activity with your learners. Did your learners surprise you? Why? What did you find most interesting about this activity?

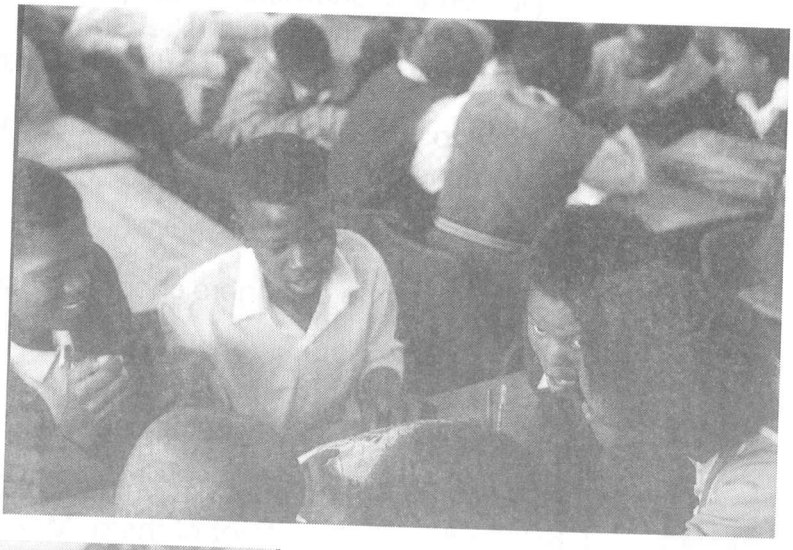


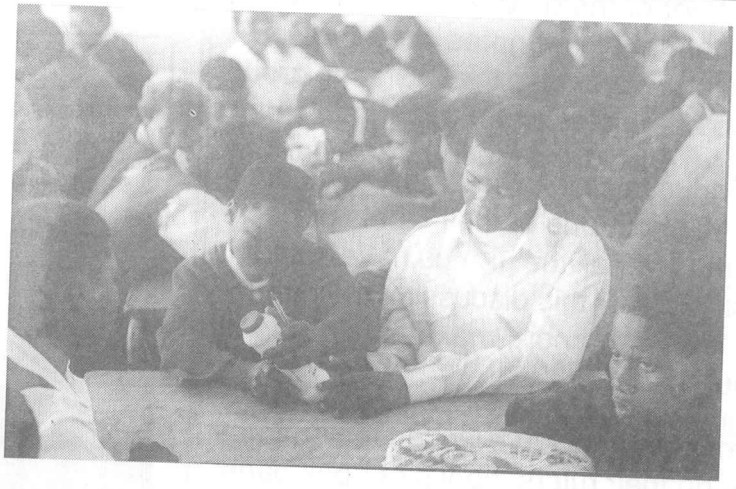
They should feel confident about this because you will have modelled this when you demonstrated how to look at the graphics and lettering on a packet.



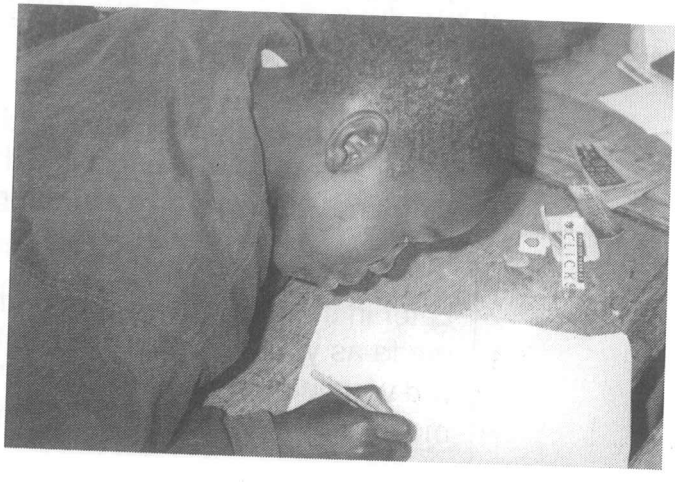
Take a clean sheet of paper and write your name, *Umthamo 15 - Technology Education 2: Activity 1 - Option C,* and the date at the top. Then write down your answers to these questions. Make sure that you give enough details so that someone who reads what you have written can build up a clear picture in their mind of what took place in your classroom when you tried out this activity with your learners. Store this writing safely in your Concertina File.







- *Identifying lettering styles*
- *Looking carefully at labels on a packet*
- *Looking carefully at labels on a container*
- *Writing about lettering*



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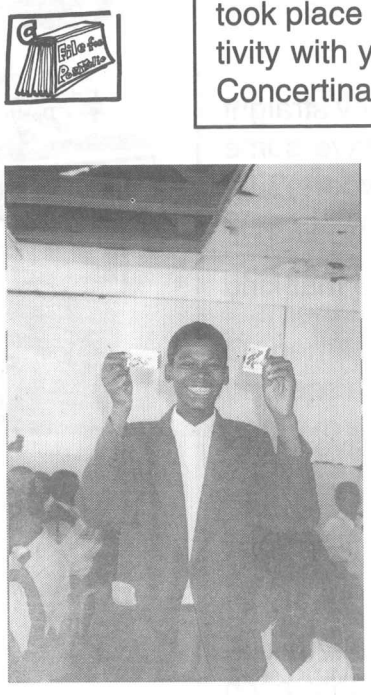
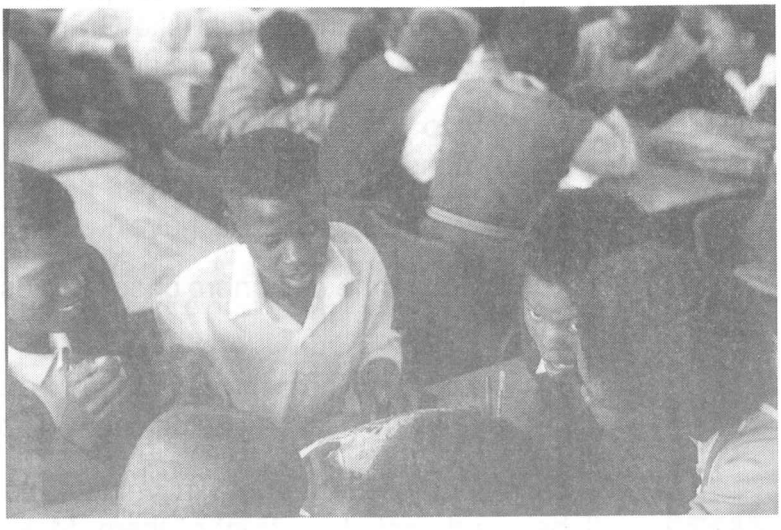
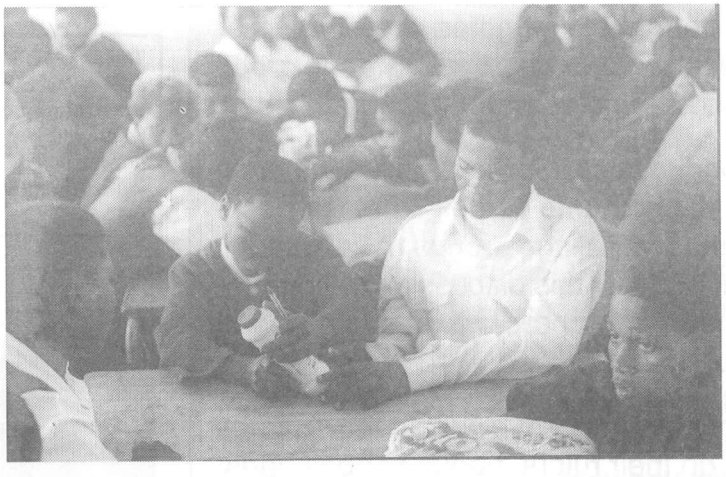
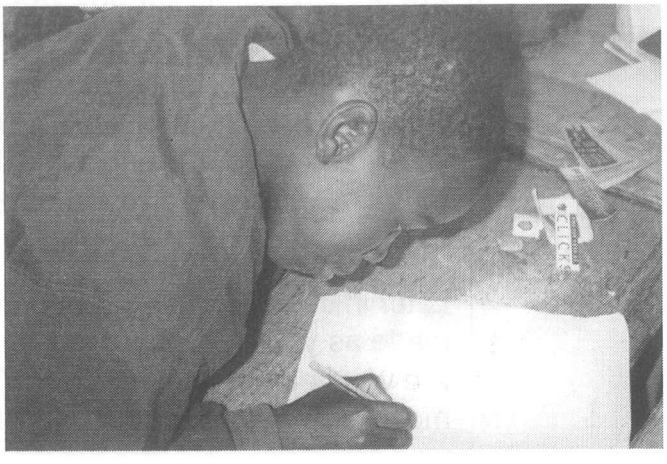




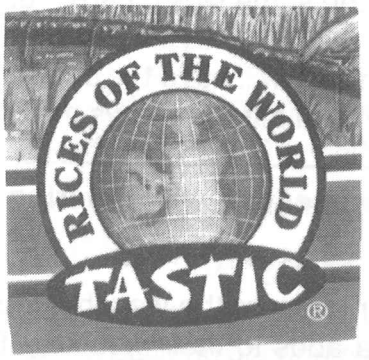


- *Identifying lettering styles*
- *Looking carefully at labels on a packet*

- *Looking carefully at labels on a container*
- *Writing about lettering*




Potato Chips
SIMBA
ORIGINAL CHUTNEY FLAVOUR


RICES OF THE WORLD
TASTIC

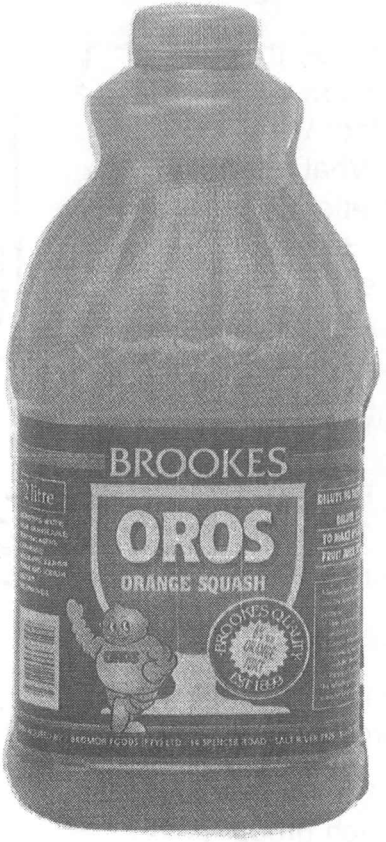

KIWI
SINCE 1906
QUALITY SHOE POLISH
PROTECTS • WATERPROOFS • SHINES
BLACK
6 001130 001022


Schweppes
Dry Lemon


Nº 1 SKIN PROTECTION
Vaseline
BLUE SEAL
PURE PETROLEUM JELLY


Golden Cloud


TOWN TALK
FURNISHERS
ALL PRICES INCLUDE V.A.T.
TT 04/205

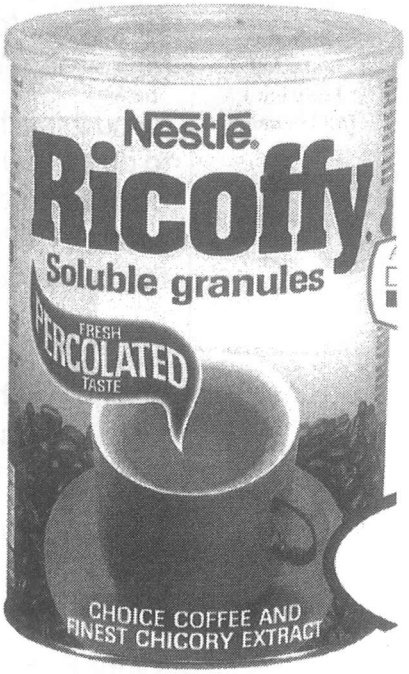

BROOKES
OROS
ORANGE SQUASH


DAIRYMAID
Country Fresh
CREAMY VANILLA


You're always in touch.
vodacom
CELLULAR COMMUNICATIONS WORLDWIDE


Telkom


ProNutro
ALL-IN-ONE ORIGINAL CEREAL
NOW WITH NUTRO CEUTICALS
"Boost up your day"
500 g


Nestlé
Ricoffy
Soluble granules
FRESH PERCOLATED TASTE
CHOICE COFFEE AND FINEST CHICORY EXTRACT


Sanlam

On another day, in the same week, carry out the next activity. In this activity you will ask your learners to think more about lettering. And they will have the opportunity to experiment and write words in different ways themselves.

Activity 2 - Experimenting with lettering

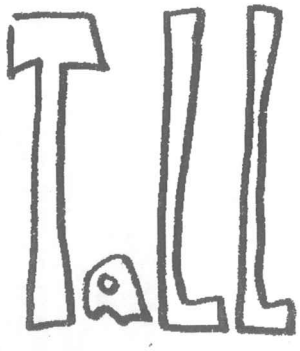
Option A

Discuss with your learners the way the sound of certain words in isiXhosa adds to their meaning. For example, "inyhobha-nyhobha" (for syrup), "igogogo" (for paraffin tin), "krwitsha", "tsweba". Are there others that come to mind? The sounds adds to the meaning.

Suggest that your learners think about doing a similar thing with written words. Ask your learners to get into groups and to make sure everybody has a pencil and some scrap paper.

As a class, discuss words such as tall, fast, small, cloud, triangles. (You can choose to do this in whatever language you and your learners prefer, isiXhosa, seSotho, or English. It will depend on the age and stage that your learners are at, and the language policy of your school.)

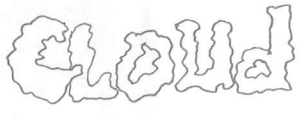
Start with a word like "tall". Write the word, "tall" on the board in ordinary writing. Ask for suggestions of how you could make the word look more like its meaning. What does a tall person look like? (Long and thin.) What animal is tall? (A giraffe.) How can I make the first letter tall? (Draw it long and thin.) Now what about the 'a'? Should it be tall or short? Let's leave it short. A tall person looks taller next to a short person. Now what about the 'ls'? Make them tall, too.



If you think they have the ideas, give them the word, "fast" to do on their own. If you judge that they are not yet clear, do that word with them. Ask, Is a fast car flat in front, or pointed? (Pointed.) Draw a pointed 'F'. Ask, Shall I do the same for the 'a'? (Yes.) And the other letters?

What can I do to make it look faster? Add speed lines.

Then give them a word like "cloud". Ask them to think of what clouds look like, and then to write the word in a way that makes you think of a cloud.



Give them a few minutes to work. Then let each group decide on one option, and present that idea, or rough design, to the class.

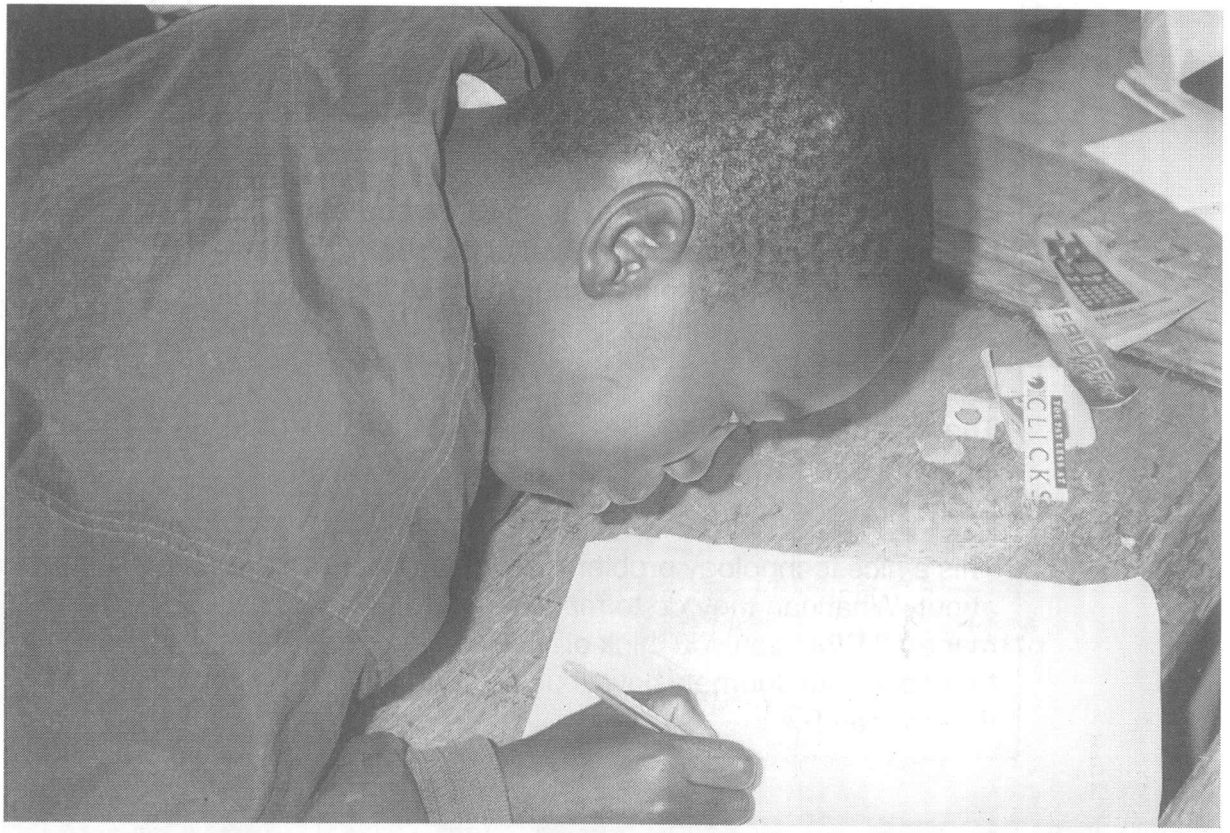
Work in this way with a number of words.

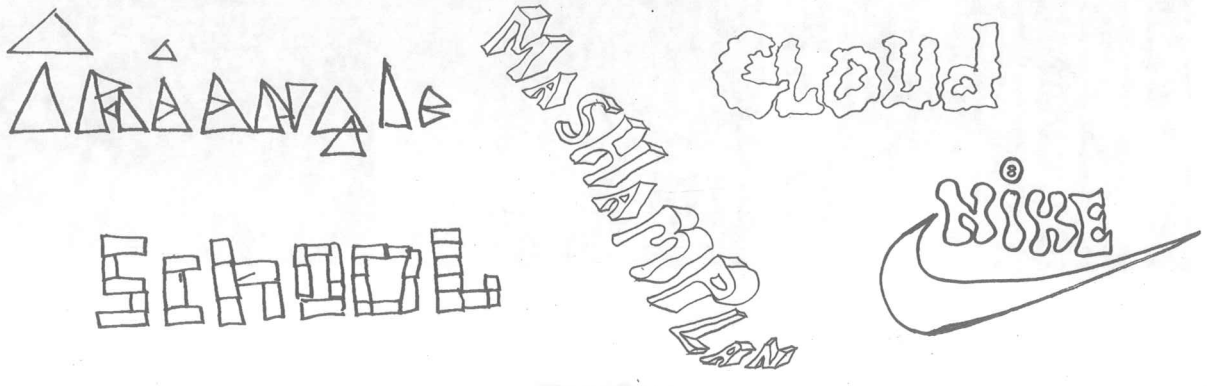
To finish off this work on experimenting with lettering, let each group work on a word of their own choice. Another time, or for homework, let your learners come up with examples of their own to add to a display at the back of the class.

FUN LETTERING or *Graphic* Writing

When the display is partly complete, add another suggestion. What about building or constructing the word out of the actual thing it refers to? For example the word, "feathers". You could cut the letters out of an old hessian bag (or an old flour or rice bag). Then you could stick feathers into the fabric to make the letters feathery!

You could take dry leaves to make the word, "leaves". Wire could be used to make the word, "wire".





Activity 2 - Experimenting with lettering

Option B

What can we do for younger children who are not yet writing in the formal sense? You can choose to work with your whole class, or with one group at a time. Whatever you decide, gather your learners around you and talk to them about the sounds of different words.

First of all, draw their attention to the fact that some words sound like the things they stand for. For example, "inyhobha-nyhobha" (for syrup), "igogogo" (for paraffin tin), "krwitsha", "tsweba". Maybe they will think of others.

As a class, discuss words such as tall, fast, small, cloud, triangles. They may have fun making suggestions of how you could write a word like "tall" or "cloud". Let them give you advice as you write their suggestions on the board, or on a large sheet of paper.

Very young children like to try and write their own names in their own way. Why not give them some clay or plasticine, and ask them to mould or shape the letters of their name.

Another thing is to get dry river sand, or sea sand that has been washed clean by the river or the sea. Your learners can pour the sand onto paper to make the words or letters which they want to. Some may even write their names in sand.

They might like what they have done. But there is a problem with sand writing. It is not permanent. It can blow away.

This a nice technology problem for your learners to think about. What can they do to make their sand writing permanent? What can you think of? We would be interested to read in your Journals how you and your learners solve this problem.

Nosisi writes her name in sand, with a graceful, fluid, controlled movement.

The boys have modelled their names in clay.

Unit 2

Graphic drawing skills: lines, form and shape

We have seen in the previous unit, how our world is full of graphic images and messages. Visually, we are bombarded with logos, images and signs. They compete to catch our attention. In Unit 1 we concentrated on the lettering. In this unit, we will think about the pictures.

The text (words) is supported by images (pictures). Or, the images are supported by text. The two combine, and work together dramatically to get the message across.

In the picture below, the writing tells you that this is a company that sells furniture. But the logo, or drawing, is of a happy man, smiling and looking smart, with a hat and a bow-tie. The picture supports the writing. This is a shop where smart, happy people shop, or where a smart happy person serves you.

With this umthamo, we have given you an A3-size copy of the Town Talk logo to use with your learners.

Go back and look at the pictures we showed you in Unit 1, on page 17. Notice how drawings support and add to the meaning of the writing. The powerful figure tells you Pronutro is about energy. What about Simba Chips? What is the message of the crown the lion is wearing? And the shoe polish? Even if you can't read the words, you can identify the logo of the Kiwi bird.

Do you see how graphic designs (pictures and drawings) add to the message of the writing? Can you remember the picture, or symbol, for Spar shops? Can you remember its shape and colour? What shopping store chain relies on a simple red box for recognition?

If we have an idea, or something in mind, we can tell someone else about it. In other words, we can communicate verbally. Or we can represent that idea or thing in one or two other ways, *without* using words. We can draw (or make a picture) of that thing or idea. We could also shape or construct a *version* of that thing in the form of a model. Drawing, and modelling, are very powerful ways of communicating.

If drawing and modelling are very powerful ways of communicating, we need to ask ourselves a few serious questions.

Remember the quote from the New Zealand Ministry of Education? "Design, drawing and graphics are essential for all aspects of Technology Education."

- Are we giving our learners enough opportunities to develop their skills and confidence in drawing and modelling our classrooms?
- Do we, as teachers, know about effective ways to encourage, and challenge, children in order to enable them to develop these skills?

Open your Journal, and write the date and time. Then spend a few minutes thinking about these two questions. Think of your own classroom, your own learners. Try to answer these questions honestly. Then write down your answers to these questions in your Journal.

Some thoughts about drawing

What is drawing? Drawing is making meaningful marks on surfaces. It is about pulling or pushing or scratching with some tool in order to make marks on some surface. If we push in one place, we get a dot. If we push or pull in one direction, we get a straight line. If we vary or change direction as we pull or push, we get curved or wavy lines. We can make marks with many different kinds of materials, on many different kinds of surfaces.

If these marks are deliberately made, and carefully combined in some way, then they can communicate an idea or represent a mental image. By joining up and combining lines we can make shapes on flat surfaces. (We can, of course, also make shapes by cutting along a line, or imaginary line, with a pair of scissors or a blade on a flat sheet of material.)

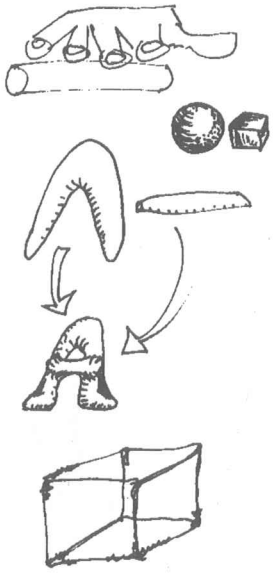
As we have seen in the second Maths umthamo, umthamo number 13, these shapes have names. We have also seen that shapes can be positioned and combined to form other shapes. (Just like a musician can compose music out of sounds, a person can compose a picture or image out of basic shapes.) Think of tangrams!

Someone who draws has to compose, or organise, the shapes and forms in any picture that they draw. This means that drawing is usually a **careful, thoughtful** activity.

Some thoughts about modelling

Certain materials can be shaped or bent, stretched, rolled, pulled, or even joined to form structures that can represent something. This is known as modelling.

We can model with all kinds of materials. Think of soft wax, or clay, or dough. These materials can be rolled, beaten, squeezed, pressed, pulled and joined. We can control the way we shape and model something so that it represents an idea in our head. (Remember how the learners modelled and represented the separate letters of words in Unit 1?) We can form solid shapes and build structures. We can also join materials like wire or wood to form the framework of a solid shape.



Young children draw and model naturally and spontaneously. We believe that children in primary schools should be given the **chance** and the **freedom** to explore and enjoy making marks on surfaces (drawing). They should also be encouraged to model and build structures with materials such as clay, wire, cardboard and wood.

This should not just happen by chance, after school at home. It should be part of the overall POLICY of any primary school to encourage and promote drawing and modelling. Why? Because these activities underpin the **design** aspect of technology education and are also very much a part of the **make** aspect. Rich experience with drawing and modelling will also help children seriously appraise and evaluate their work in technology education.

The more opportunities learners have to model and draw, the better they will get at these activities, and the more confident they will become. They will challenge themselves further, as they improve and invent or discover better ways to do things. It seems all human beings are naturally creative and inventive. Drawing and modelling are wonderful ways to express our feelings. They are also important and effective ways to represent our new or different ideas. We can draw or model the designs we have in mind.

Think of the early Christians who drew a fish in the sand as a sign of their belief.

People draw in the sand, decorate their bodies and mark things which they make with patterns, designs and pictures.

Since ancient times children have shaped and constructed models as toys and playthings. They have made dolls out of maize/mealie cobs and scraps of cloth, bark and leaves. They have modelled cattle from clay, and today they build wire cars.

So why do we find people today who say, "I can't draw!" or "I'm no good with my hands?" Is it because all the time spent in school has denied them the chance to use and develop these skills? Have they been given the chance to learn by doing under the guidance of a sympathetic supportive and understanding somebody?

Here is a concrete example of the way in which a very young child can invent or discover some aspect of drawing for herself. Read the story of Nomafu aged 2 + years, and see the evidence of how she taught herself to draw a house.

When Nomafu was about 2 + years of age, her mother spent a year overseas doing advanced studies. Nomafu stayed in Bofolo with her father and her brother.

One weekend, when the father was working on the college time-table, Nomafu was also working on the floor near his desk. As he worked on the time-table, every now and again he would find a mistake. So he would crumple up the paper, and throw it towards the waste-paper basket in the corner. And then he would start working on a clean sheet of paper.

Nomafu was working on drawing. Just like her father, she would crumple up the paper and throw it in the corner, before starting on a new page with a new drawing.

Her father chuckled to himself to see how she was imitating his actions in her own work. What he didn't realise was just how serious and important her work was (not until later, that is).

After some time, maybe half-an-hour, Nomafu came and showed him what she had done. He was amazed to see her finished picture. It was a house. She had never drawn a house before. Most of her drawing work had been circles and squiggles and lines.

Her father went to the waste-paper basket and retrieved her stages of work. What he saw was quite amazing. This little child, not yet three, had carefully and persistently worked away for more than half-an-hour, trying hard to discover the way to draw a house. Nobody helped her. She helped herself. And she succeeded proudly.

You can see that she knows in her mind what she wants. She wants a roof (a triangle), and a building (a rectangle). She doesn't know how to draw or how to put these shapes together. But she perseveres.

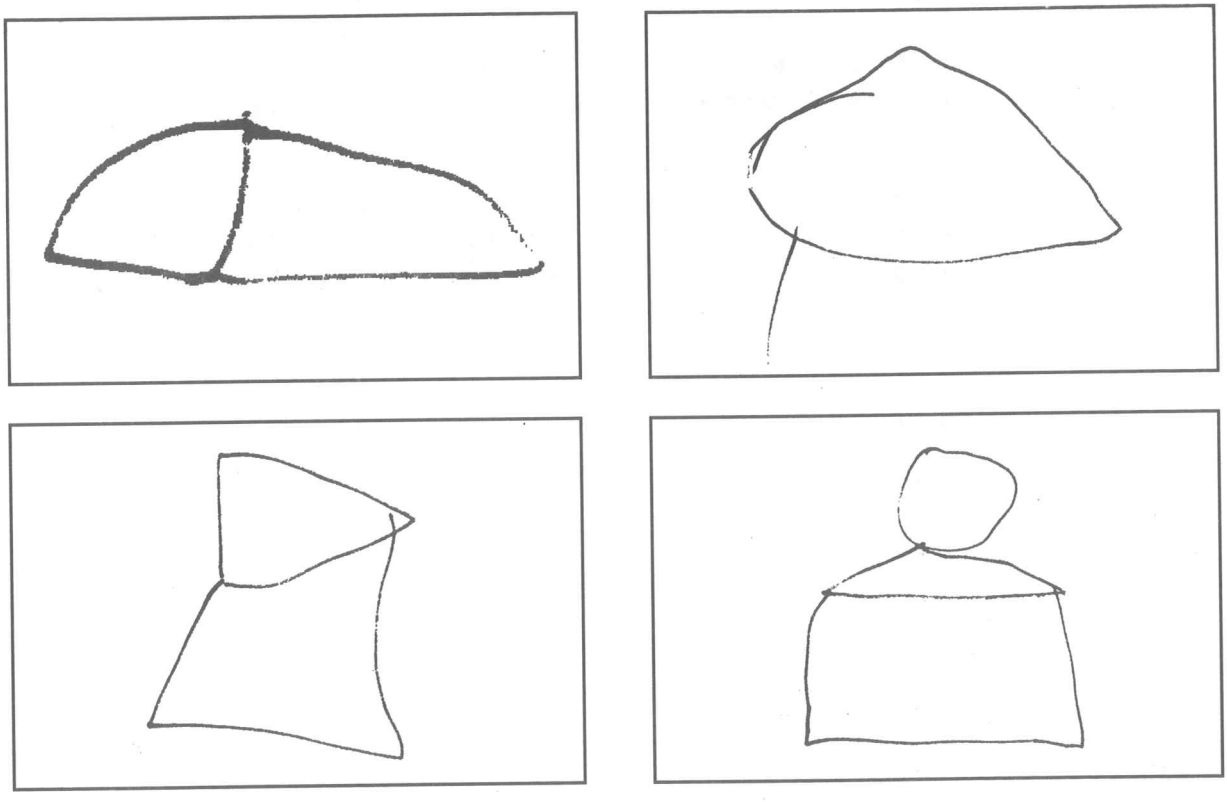
Then she gets it right. She celebrates by filling in the details: the windows, with window panes, the stairs, the door,

When people say that young children have an attention-span of less than 10 minutes, they DON'T KNOW YOUNG CHILDREN!!!

even the door handle. All this observation and experience just waiting to be released.

Often learning is not a slow gradual process. It can be a sudden breakthrough, and an explosion of activity and development.

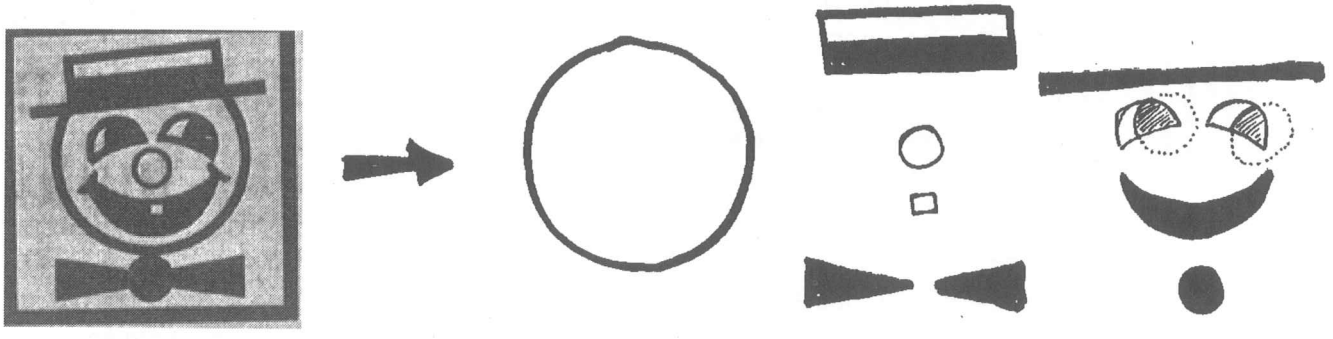
Do children in school ever get a chance to challenge themselves and to develop their skills in this way?

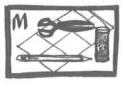


A selection of Nomafu's discarded draft drawings, together with the final drawing.

One way to draw is to arrange, or compose, shapes. Some logos and graphic designs are deliberately drawn by re-arranging and composing geometric shapes.

Look at the Town Talk man again. What shapes can you see? How has the bow-tie been drawn? (Two triangles, with a circle on top.) How many circles have been used? Where is there a rectangle? Can you see the square?





Activity 3 - Looking for shapes in pictures and drawings

Find pictures or photographs in old magazines or newspapers. You can also ask your learners to find pictures and to bring them. It is best to find pictures where there is something shown 'full frontal' view, or directly 'side on'. This is so that the shapes are more obvious. Fully 'side on' or 'front on' pictures are not always easy to find.

We found when we trialled this activity that it worked best to introduce it with two examples. First, use the A2 picture of TOWN TALK logo with the whole class. Look at the picture and identify the geometric shapes used to compose the picture of the smart, smiling man in a hat.

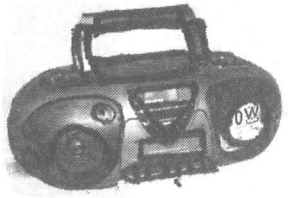
As the learners identify, or point out shapes, deconstruct the picture by drawing the shapes on the board alongside the picture.

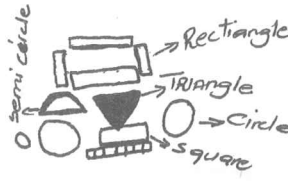
Next stick up a large side on picture of a motor car, or a taxi. This time, as a shape is identified and pointed out by learners, outline the shape with a dark crayon, or koki pen. Now let them work on their own pictures.

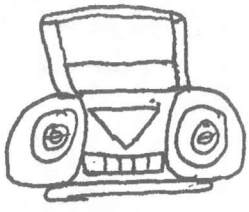
Let your learners work in small groups or pairs. They need to look for geometric shapes which they know like triangles, circles, squares, rectangles, and so on. Then they deconstruct, or break down, the picture by actually cutting out the shapes which they can see. Alternatively, they can outline the shapes with a dark pen or a crayon.

Then, each learner tries to redraw their own version of that picture on a blank sheet of paper. As they finish, get your learners to talk about what went well, and what they would like to do better next time. Or they could talk about how they think they could improve their drawings. As they talk, circulate and listen to their comments. Concentrate on praising what is good and giving constructive, encouraging advice. Avoid negative criticism.

If you are working with younger learners, you may want to work with a single group, while your other learners are busy working independently on other tasks. Look at the picture together with the group. Encourage your learners to point out the shapes which they can see, and to outline each shape with their finger to show the others. When the group agrees about a shape, a learner can outline the shape with a dark koki pen, or a dark wax crayon. Leave the children to each make their own copy of the picture, while you start work with another group.

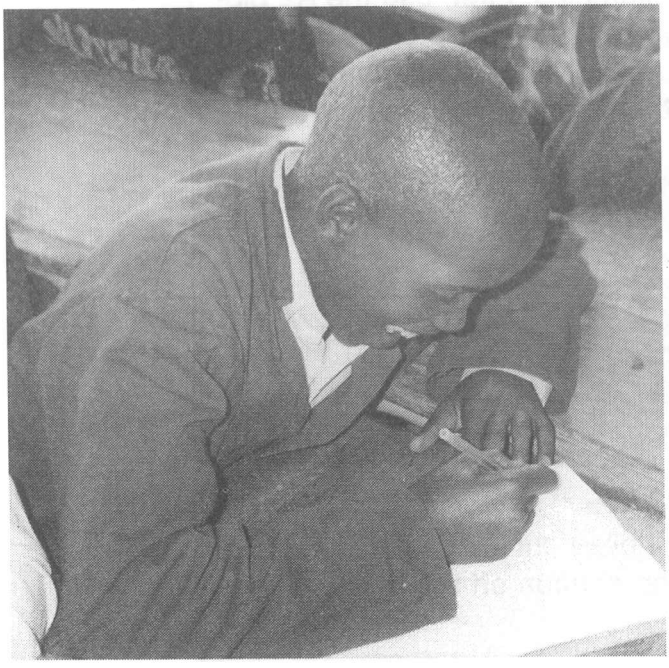


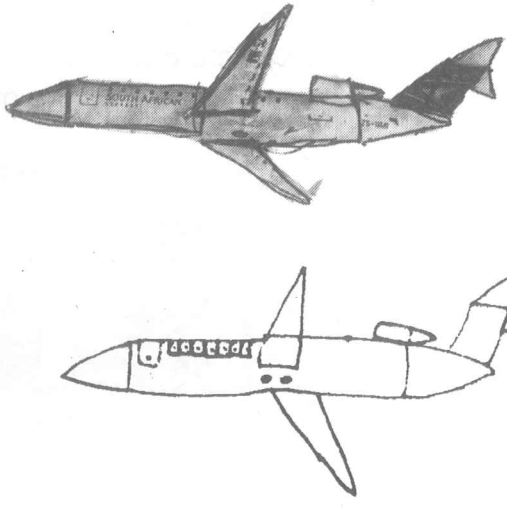




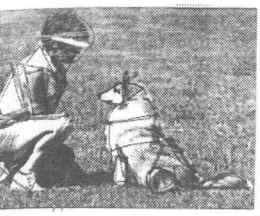
Nopinkie Qhole
14 years old
Ngwevana School.

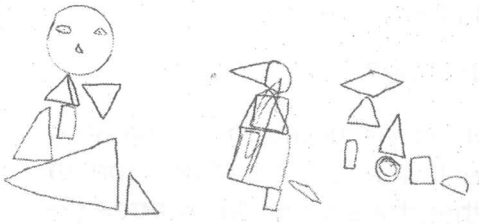
Remember. The solvent of koki pen ink evaporates very quickly. The pen will last much longer if you keep the lid, or cap, on whenever you are not actually writing with the pen.

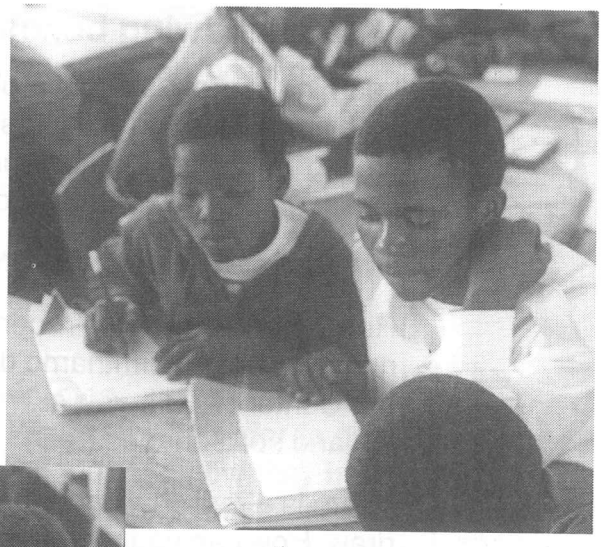


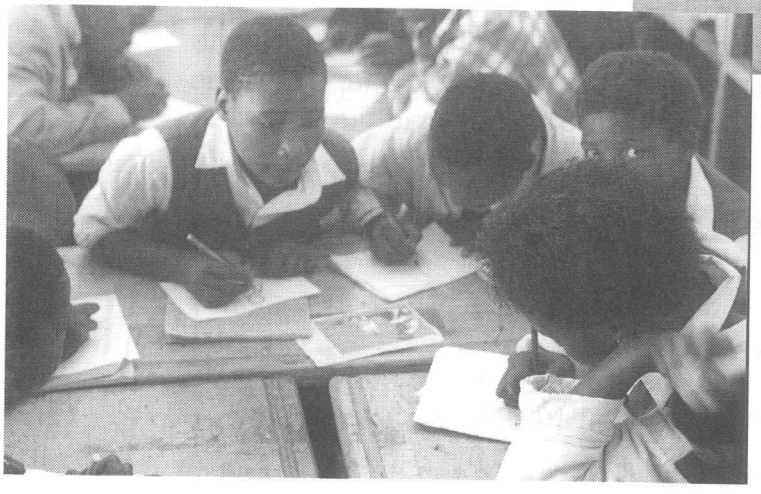


Siphokazi Tshaka
13 yrs old
Ngwevana - P. School.









A follow-up to Activity 3 (for learners of any age)

Let your learners cut out shapes at random from some old magazines. Get them to cut out triangles, rectangles, squares, circles, and semi-circles of all different sizes and colours. Then they can use these to make a collage (a picture made and composed by sticking down cut out bits). Suggest that they make a picture of an animal, a bird, a person, or even izim or isigebenga! This will be a good preparation for Activity 6 when the younger children make a frieze of a story.

A teacher needs to be sensitive to when children are ready for new ideas and new challenges. Perhaps then, they can be shown certain specific drawing techniques, and helped to face the challenge of drawing with greater precision in draughtsmanship. In the next unit, we will present activities for you to try where you encourage drawing in young children and perhaps try to develop specific drawing skills in older learners.

When children have a rich background of experience, and have developed sufficient confidence and dexterity in drawing and modelling, then may be the time to discuss and teach them more.

Unit 3 - Drawing boxes and blocks

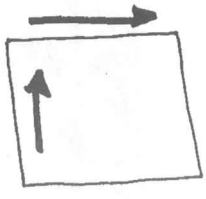
Learning to draw is about problem solving. You have to solve problems which you set yourself. Drawing problems are about finding the best way to represent an idea you have or a message that you want to communicate.

Remember the story about Nomafu?

Remember the most recent Maths umthamo, umthamo number 13. That umthamo dealt with shape and position. In the Content Audit, you saw that there were flat shapes (2-D), and solid shapes (3-D).

There is a real challenge that everyone has as they learn to draw. How can you represent or draw a solid shape that has 3 dimensions (3-D) on a piece of paper that has only 2 dimensions (2-D)?

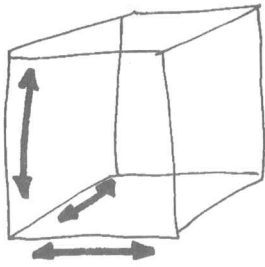
A regular flat shape that covers a surface can be measured in 2 directions:



- along its length
- across its breadth.

2 directions to measure = 2 dimensions = 2-D.

A regular solid shape that fills a space can be measured in third direction:

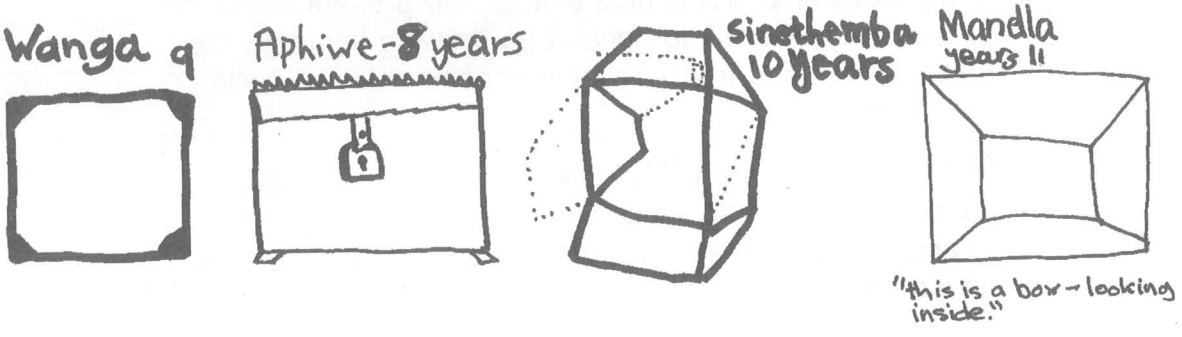


- along its length
- across its breadth
- up it height.

3 directions to measure = 3 dimensions = 3-D.

Finding out the stage children are at in solving the 3-D ‡ 2-D drawing problem

In the first activity of this unit, we would like you to do some more research. We want you to collect examples of the different attempts children make when they try to draw a box or a block. We don't want you to do any teaching or to give any guidance at this stage. You just need to find out (research) what children can do without any help.



Activity 4 - Drawing a box

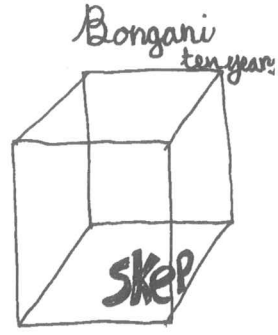
Make sure that all the children you are working with have something to draw with and some paper to draw on. Tell them that you want them to do their own drawing of a box. It can be any box that they want. It is their very own box, drawn in their very own way of drawing boxes. Tell them that they have about 10 minutes to do their drawings. When they are finished, they can look at and praise each other's drawings.

When we trialled this activity, we interviewed some of the children about their drawing. We did this in order to get them to explain what they had done, and how they had learned or taught themselves certain graphic design skills. This was very interesting and very useful. As they gave answers, we recorded what they said neatly next to their drawing. You might want to do the same thing with your own learners.

In this way we get what is called a "protocol" (remember the first Maths umthamo, Umthamo 5?). The learner explains her/his thinking and action.

After 10 minutes tell your learners that you want them to write their names and their age on the back of their drawings. They should also write the date, and the place. If you are working with learners in a pre-school or Grade 1 class you will probably have to write most of this information yourself.

This can serve as the introductory part of the next activity. You can go straight on to Activity 5 with your learners once you have collected their drawings.



Later, in your own time, look at the drawings your learners have done. Try to compare and sort them. From a research point of view, you are **collating data.** See if you can identify stages in the development of the skill of representing a 3-D solid object on a flat (2-D) piece of paper. Arrange your children's work in a logical sequence. Write some comments and take these with you, together with your learners' drawings, to share at the next face-to-face session.

At the next face-to-face session, you will pool your findings with those of your fellow researchers in a mixed group. Then each Centre will compile a joint report of the **findings** regarding the ages and stages at which certain drawing skills are learned as the problems get solved.

In the next activity, we will think of a way of encouraging learners to be more observant. Careful observation may be an important skill for drawing. In this activity, we need to check that we know the **features** of the 3-D solid shape that we want to draw.

Then we have to find ways to represent those features on a flat surface. It is the features of the solid shape that we want to note so that we can record them in a clear way on a flat sheet of paper.

Activity 5 - Closely observed boxes

This is an activity to try with any learners. For this example, you will need a closed cardboard box, or a solid block of wood. You will also need straws, or small bamboo sticks or strips of card.

Part 1 - Thinking of Features (Parts of a face)

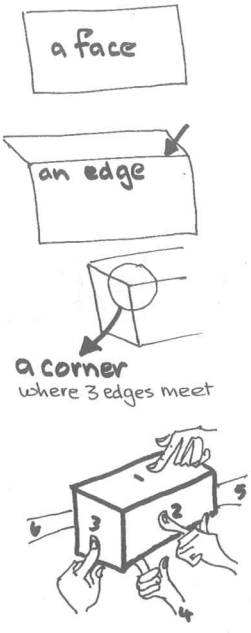
We know someone by their features. We recognise a friend because we know their features. What are the features of a face?

- Draw an egg shape, or an oval on the chalkboard, or onto a large piece of paper.
- Ask your learners, "What features, or parts, must I add so that I have a face?" As the learners name the features, ask them to point them out. Then call the child who has named a particular feature to come to the front and to draw that feature/those features onto the face. Label the features in whichever language you choose.
- Now show the children a box or a block of wood. Ask them to identify the parts, or features. Do they know them?
  - flat faces, or sides (rectangular surfaces)
  - corners (points where edges meet)
  - edges (lines formed between faces).

Thinking of Parts (features of a box)

- Now ask, "How well do you know a box/block?" Hide the box or block from sight.
- "How many faces does a box or rectangular block have?" Let them guess. Watch their body language. How and when do they find the answer? Do they use their hands? Do they stare into space?
- Call up children, one by one, to put a single finger on a face (one child's finger per face). How many children are needed? Six children means six faces.
- Write up

A box shape has 6 faces

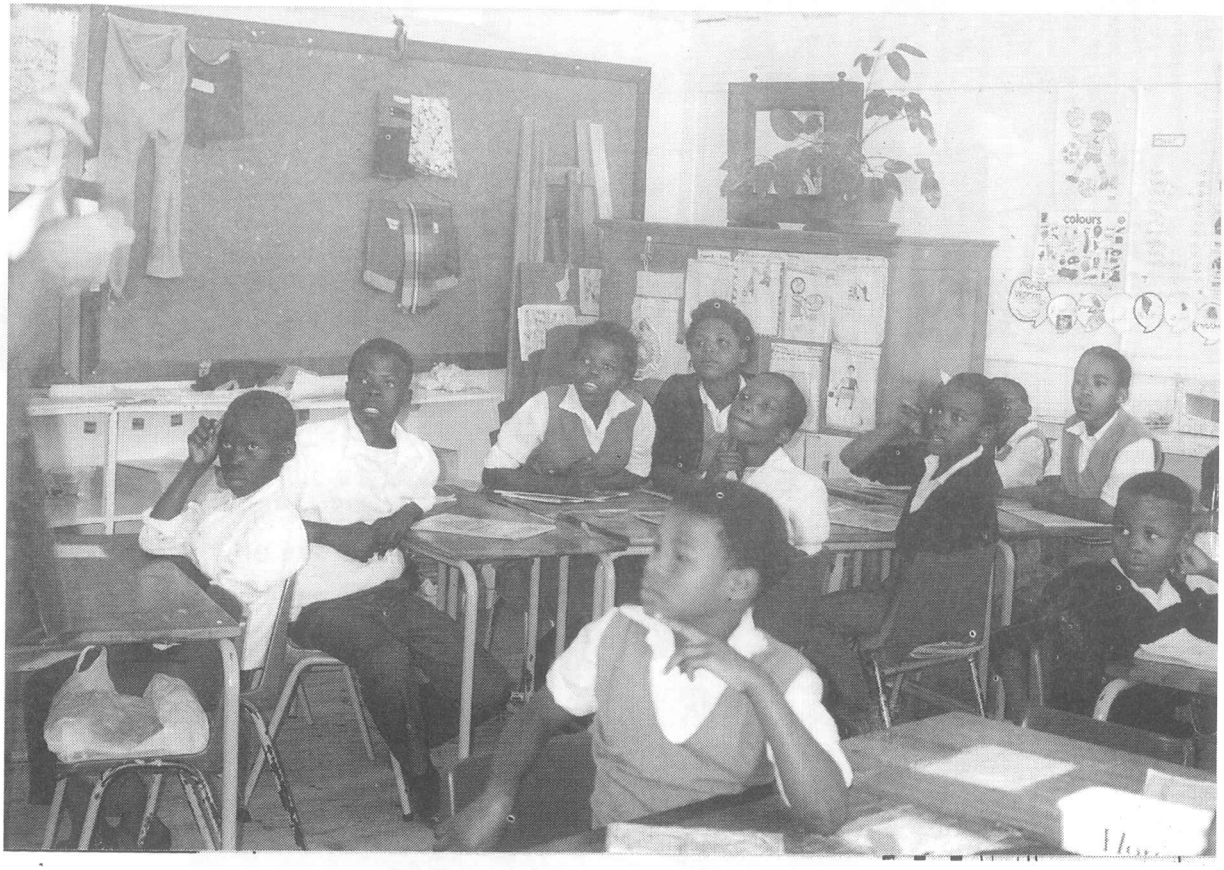


- Hide the box again. Now ask, "How many corners does a box shape have?" Let them predict. Once again, call up children, one by one, to put a single finger on a corner (one child's finger per corner). Eight children means eight corners.
- Write up

A box shape has 8 corners

- Hide the box again. Ask, "What about the edges? How many edges does a box shape have?" Do you think it will be a bit difficult to get 12 children to come to the front to each put a finger on an edge? Might it be a bit chaotic? Maybe it will be fun to try! (Instead you could give your learners little balls of sticky Prestik to stick on each edge. How many learners? How many little balls of Prestik? How many edges?) 12 learners stick 12 balls onto 12 edges. A box has 12 edges.
- Write up

A box shape has 12 edges



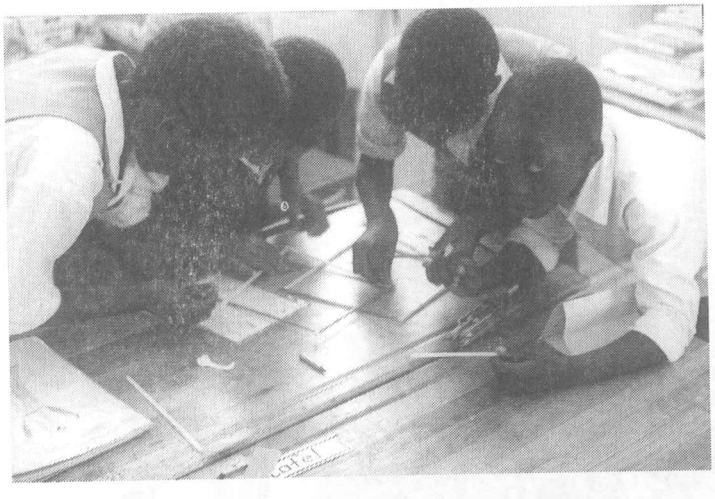
Thinking about the number of corners on a box.

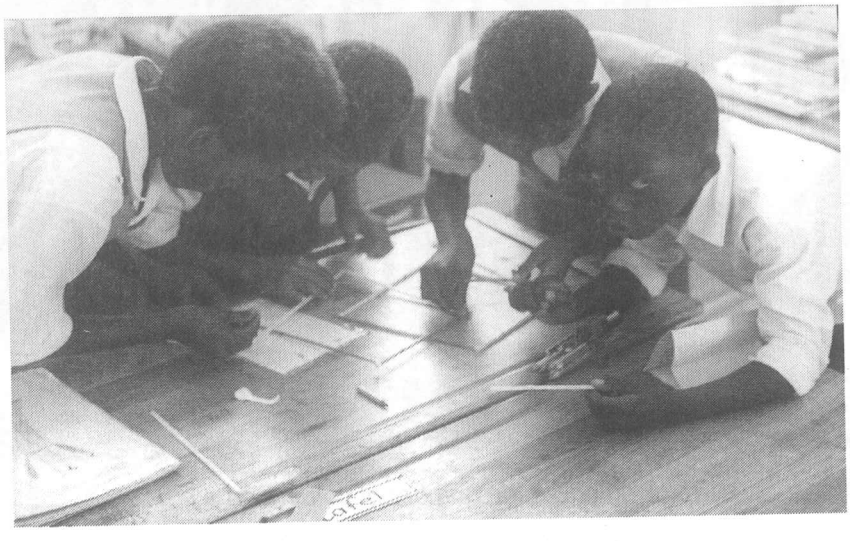
Part 2 - Constructing a Box

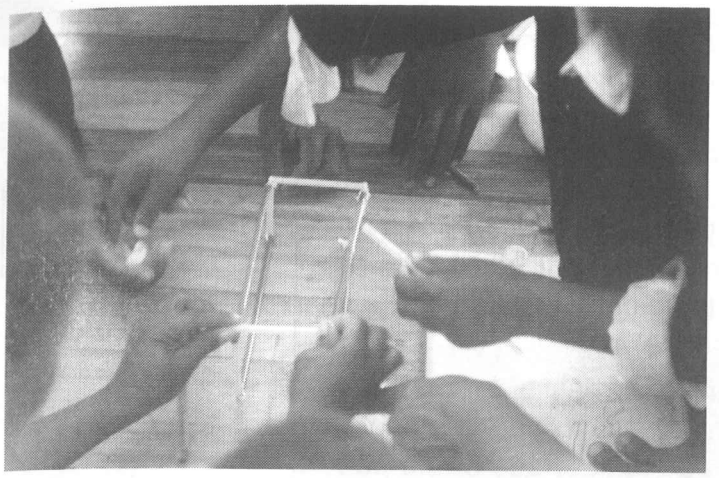
Working with younger learners

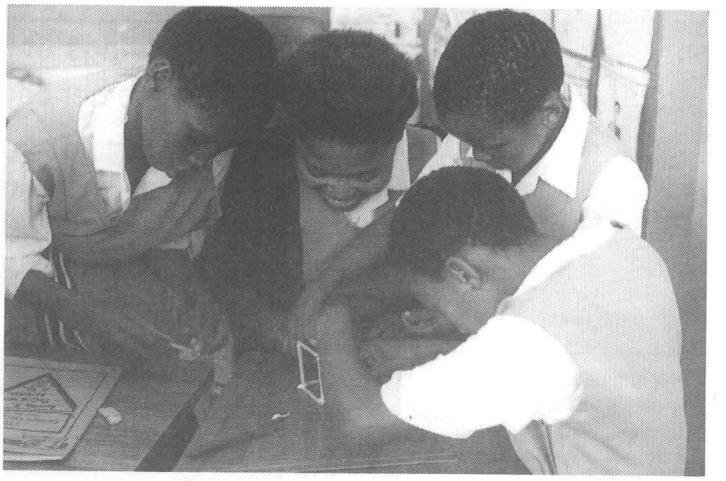
- Now let's try to make (construct) a box. Let your learners solve the problem of re-creating a box shape out of straws, reeds, lengths of wire, or strips of card and string that you have collected.
- Tell your learners you want them to use the sticks or straws to build the framework of a box. For younger learners (pre-school - Grade 1) make sure that each group has 12 sticks or straws or lengths of wire of equal length. They must also have some easy means to join or hold the sticks together. Prestik works well with straws. Sticky tape is good for sticks. If all sticks are the same length, the shape will always be a cube.
- For older learners (Grade 2 or 3), you can challenge them a bit and give some groups 8 straws of one length, and 4 of another. In this way, they have to make a rectangular box.
- What do 4 long, 4 medium, and 4 short straws give you? Investigate and find out with your learners.

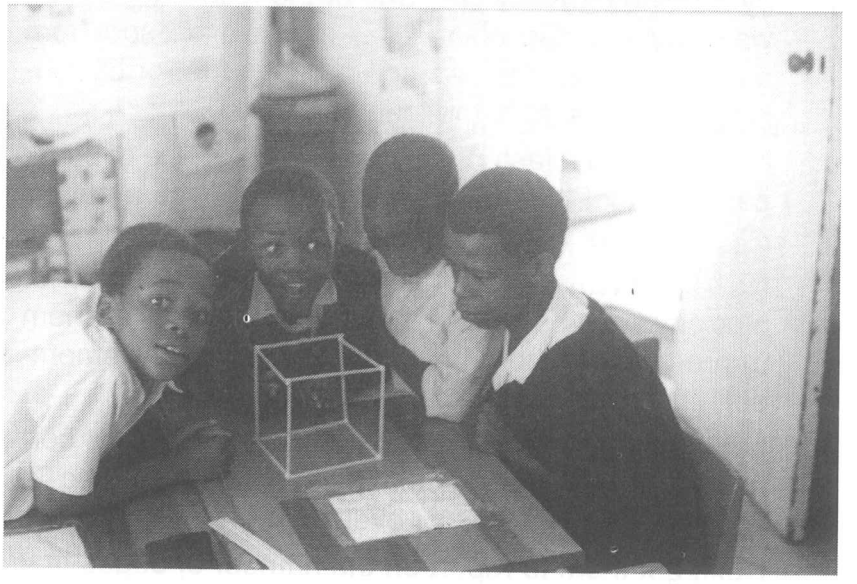
Let them talk about how they make their boxes, and informally assess the boxes which they have made.











Part 2 - Drawing a box so that it looks 3-D

Working with older learners

We suggest that you try the next activity if you are working with older learners. Or if you work in the Foundation Phase, and you want to see what happens with older learners, work with a teacher at your school who works with older children in the Intermediate Phase. and you want to see what happens with older learners, work with a teacher at your school who works with older children in the Intermediate Phase.

- Now that they have thought more carefully about the features of a box, get your learners to look at their first drawings critically. Ask them if they can see faces and edges. Then let them report on what they can see.
- Now give them a chance to draw a box again. This time they must look carefully at a box as they try to draw it, and see if they can improve on their first drawing.

A Choice

If you work with Grade 4, 5, 6, or 7 learners, and you feel that your learners would enjoy the activity with straws, let them do it. It will demonstrate and show clearly the sides, corners and edges of a box.

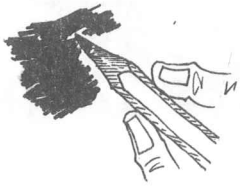
Part 3 - 3-D drawings of boxes

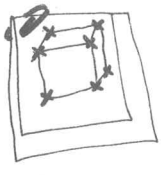
To be done on another day

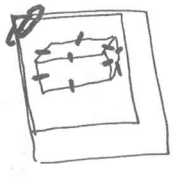
You need to find pictures from old newspapers and magazines, etc of boxes or blocks. Or you could ask your learners to come the next day with their own picture of a box or block. Find pictures such as those illustrated in the examples below. It is best if the picture is taken or drawn from an angle (known as oblique).

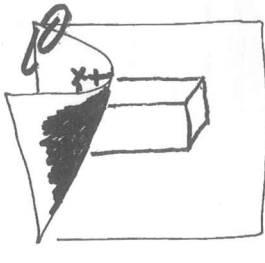
- Make sure that each learner, or pair of learners has their own picture of a box. On the paper at the back of the picture, they must shade the surface of the page by rubbing carefully with any of the following: a dark wax crayon, a dark colour chalk, some black soot from a tin or pot that has been on an open fire, or by rubbing with the side of the lead of a pencil.
- Now they must fasten their picture to a piece of blank paper so that it does not slide around. (Use a paperclip, or pin, or Prestik in the corners.)
- Now tell them to mark all the corners of the box or block that can be seen with a cross, or a dot. Tell them to press hard when they mark the corners. Remember, there are 8 corners on a box.
- Let the pairs of learners report on the number of corners which they can actually see. Some will see 7. Some may only see 6, or even 4.
- Next, get them to report on the number of edges that they can see. Some will see 9. Some may only see 7.
- Now tell them to rule lines along each edge that they can see. Encourage them to press hard.
- Then let them lift the picture off and see the pattern of lines on the blank page underneath.
- Now let them try for a third time to draw a box on their own.
- Then let them compare this drawing with their first attempt.

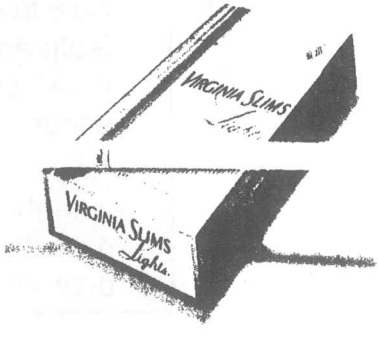
Note. This activity is too technical for young learners.



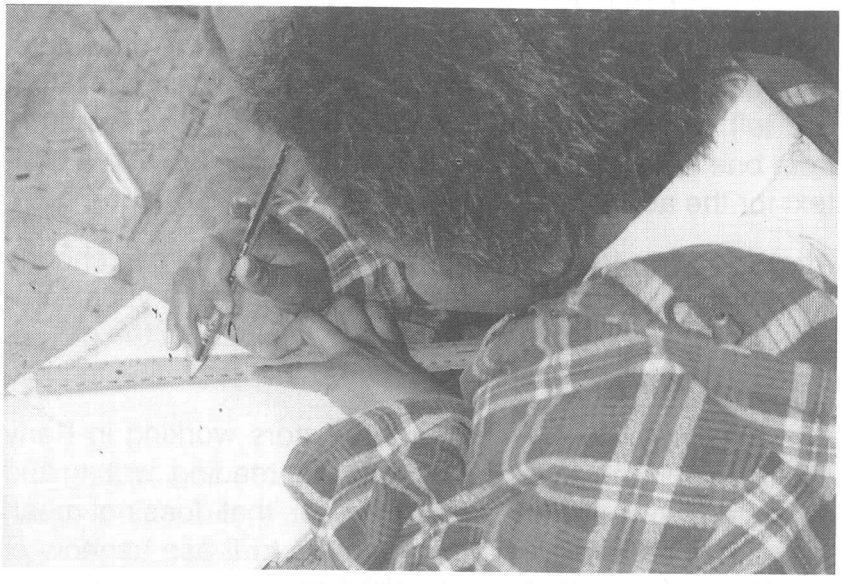








Last year we trialled activities for the first Technology Education umthamo at Ngwevana, not far from East London. When Lukhanyo's learners began to draw designs for pencil holders, one of his Grade 6 learners drew a 3-D box. We were really fascinated. Someone had said to us that children can only be taught to make such drawings when they reach high school. But here was a primary school child making a very careful and precise drawing of a 3-D object.



When we trialled this activity at Mpongo, we were surprised to find that some of the Grade 3s and Grade 4s had already discovered how to do 3-D drawings of boxes.

Don't do this activity with younger children. It is rather technical. Some children at the end of the Foundation Phase may be ready for this kind of technical activity, but others may not. You, as their teacher, will be the best judge of what they are ready for.

For younger children we suggest you give them the task of drawing a house. This will give you an opportunity to see what they do. Remember to praise them.

We don't believe that younger children should be made to feel inadequate about their drawing skills. They should have the freedom to draw as they wish and feel. And they need to feel good about themselves. We may set a task, but the children should set their own constraints.

We believe that young children should be encouraged to draw spontaneously. They shouldn't be too self-conscious about their specific drawing skills They should be encouraged to draw ***often,*** and they should be ***praised*** for their efforts.

Give them a drawing task and see what they can do. We have found that children naturally become a little more self-critical as they reach the pre-teen years. They start to say things like, "I can't draw hands." or "I can't draw well." Before that, they just enjoy drawing. What is your experience?

Unit 4 - Graphic design and story illustrations

In the previous units, you have carried out a number of activities with your learners. In these activities you and your learners have looked at carefully, thought about, and experimented with lettering. And you have been giving them opportunities to draw. You have also set your learners specific tasks to solve problems around representing 3-D objects in 2-D, on paper.

In this unit, we are going to bring lettering and the drawing of graphic images together. In order to do this, we suggest that you tell your learners a story. We have adapted the story from one of the Greek Myths. This story will provide a context for the activity your learners carry out.

In the first Technology Education umthamo, we also suggested a short story you could tell your learners to provide a context for the Key Activity (see page 26 of that umthamo).

After you have told your learners the story, you can choose the option you consider to be most appropriate for your learners. In both options, they will need to think about the picture which they make, and the way they want the writing to look.

We are aware of the fact that educators working in Early Childhood are not in favour of "teaching reading, writing and arithmetic" to young learners. However, that does not mean we should not expose young learners to these aspects of life. Many, if not most, young children are aware and conscious of the print in their environment. (This was evident from the reading in Unit 1. And some of you will have had direct experience of this in Activity 1 and Activity 2.)

Our own experience of working with pre-school learners has shown us that they are anxious to learn to communicate fully in their world. They know that marks on paper, and signs, mean something. They come to school with expectations of learning how to communicate through print. If we deny them access to participating in the world of print, or we hold them back and delay the moment when they can join the "literacy club", we are doing them a disservice. (Smith: 1984)

At the same time, we do not believe in forcing young learners to participate in an activity, if they are not interested. But teachers of young children make it their business to ***know*** their learners. We know that these teachers are capable of making wise decisions with regard to their expectations for each individual learner. You will have to decide what exactly you ask your learners to do. But don't underestimate them. Be guided by their interest.

Whatever Grade your learners are in, you will need to do some preparation. First of all, make sure you have read the story through two or three times, so that you can **tell** it with confidence. Don't rely on reading it to your learners. Try to

tell it in your own words. Tell it in whatever language you feel is appropriate for your learners. Telling the story to your learners is the first part of the **Key Activity.**

The advantage of telling a story is that you can watch your learners' faces. You will be able to adjust the story and modify it to your learners' age, and level. You will be able to make it more relevant to and appropriate for them. You can take your cue from the way they respond as you tell the tale. You are not tied to the words on a page.

On the day when you plan to tell the story, make sure that you take your Journal to school with you. Then you will be able to make brief notes of what happens, and about anything remarkable that your learners say.

The story of Siphokazi's Ityesi

Long, long ago, there was a very powerful Nkosi. He ruled over a great number of people.

One day, one of the amaPhakathi ayo from another village made this Nkosi very angry. The Nkosi was so angry that he decided to get his revenge on iPhakathi layo. The Nkosi thought and thought, and at last he came up with a plan.

The Nkosi called the uMbumbi to his place. The Nkosi told uMbumbi that he wanted him to make a woman out of clay. The uMbumbi was an artist. He made beautiful things out of clay. He wanted to make a very beautiful woman. So he went down to the river where he knew he would be able to watch the women as they fetched water.

The uMbumbi spent a long time looking at them. He studied the shape of their heads, their necks and shoulders. He looked carefully at their bodies and their arms. He noticed the shapes of their legs. And he looked carefully at their hands and feet. He watched the way they used their hands and their fingers. He watched the way they moved. Then uMbumbi went back to the Nkosi's place. He took some special clay, and he began to work.

The uMbumbi worked for two whole weeks. At last the clay woman was finished. She was really beautiful. The uMbumbi was satisfied. He arranged for the Nkosi to see his work. The Nkosi was delighted. The clay woman was very beautiful, the most beautiful woman that he had ever seen.

Then the Nkosi called the four winds. He told them to breathe life into the woman made of clay. The winds breathed into the clay woman, and she came to life and breathed.

Lastly, the Nkosi called all the women of the village. He asked them to adorn the woman uMbumbi had made so that she would be utterly irresistible.

The women braided her hair. They put beads round her head, on her arms and around her ankles. They tied a beautiful beaded inkciyo at her waist. She looked utterly lovely. The Nkosi named her Siphokazi because she was to be a special gift to his enemy.

Now the Nkosi was ready to put the next part of his plan into action. He called all the people of the village and told them that he was going to send Siphokhazi to iPhakathi layo in the other village to be wife of that man. Everybody brought gifts. They brought amabhaso, amakhukho, and sitebe to give to the bride.

The Nkosi, himself, gave her a very special box (ityesi). When he gave Siphokazi ityesi, the Nkosi told her never ever to open it. He didn't tell her what was in it. He only forbade her to open it. He knew that somebody had trapped terrible things in that ityesi.

Then Siphokazi was escorted to the village of her new husband. When he saw her, iPhakathi layo couldn't resist her. She was so beautiful, so lovely. Never before had he seen anyone quite like her. They were married and there were great celebrations.

Siphokazi and iPhakathi layo lived together in great happiness for some time. And ityesi remained closed.

But, often Siphokazi felt drawn to that ityesi. What could be inside? Why had the Nkosi forbidden her to open ityesi? Her curiosity pulled her like a magnet.

One day her curiosity was so great that Siphokazi picked up ityesi very gently. She shook it. And when she shook it, she could hear some very strange rustling noises inside. What could be inside? What was making the strange rustling noises? Siphokazi lifted the lid, just a little, to have a tiny peep inside.

As soon as she raised the lid, out flew all the terrible things - nasty spites. They stung and attacked Siphokazi before escaping into the world. Quickly she shut the lid. But it was too late. All the terrible things had escaped

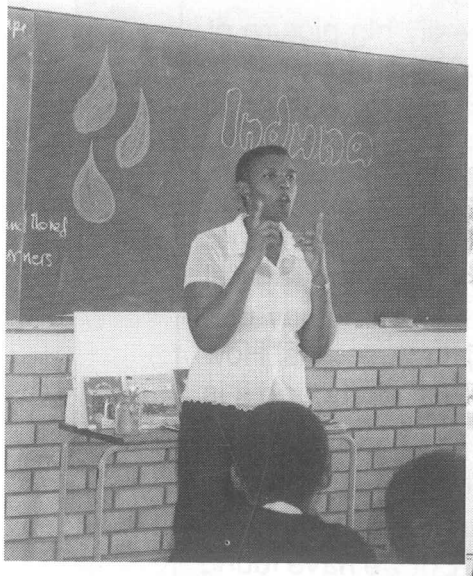
into the world. They were all the sicknesses of the body, like deafness, blindness, lameness, cancer, and Aids. And they were all the sorrows of the mind, like madness, jealousy, fear, and hatred. She knew that she had done something terrible.

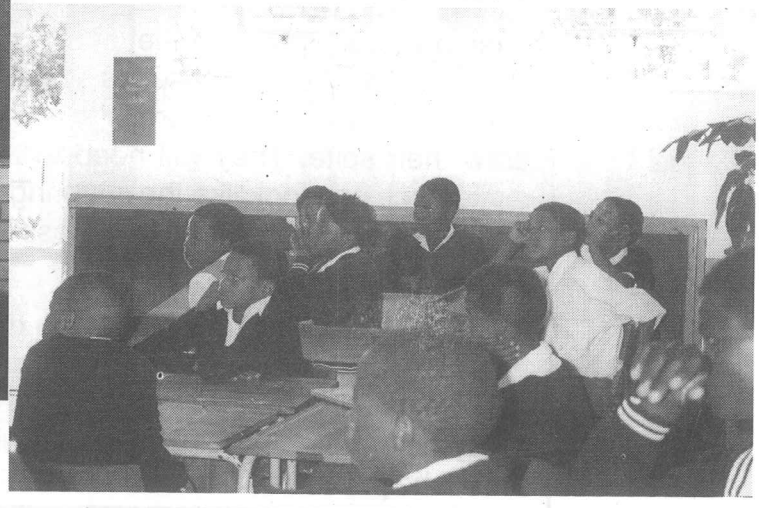
When her husband came home, he found Siphokazi weeping. He asked Siphokazi what was wrong. She told him that she had just tried to peep into that ityesi. She told him that as soon as she had lifted the lid, all these nasty things had flown out, and bitten her all over, and escaped into the world.

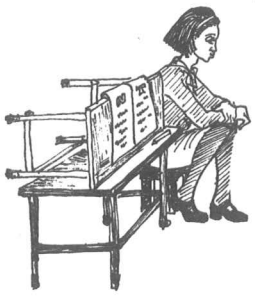
Her husband picked up ityesi. He shook it. He could still hear something inside. So he lifted the lid. Out flew the last creature. It was Hope.

When Hope saw how upset Siphokazi was, she said, "Don't worry, Siphokazi. I will go out into the world. I will go to every corner of the earth so that even though the terrible things are there, I will give the people hope, and they will feel better."

When you have told your learners the story, you can carry out the second part of the Key Activity.







Activity 6 - Using graphic communication to illustrate a story

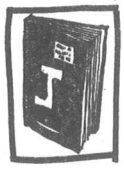
Option A

If you work with learners in a pre-school class, Grade 1 or Grade 2, discuss the story with them. Don't ask questions to test whether they have listened. Instead, ask them to tell you what they think Nkosi, iPhakathi layo, Siphokazi, uMbombi, and Siphokazi's husband looked like. Think about one character at a time, and ask several children to tell you how they pictured that person in the story.

Then ask them to think about all the terrible creatures which flew out when Siphokazi lifted the lid of ityesi. Ask them to describe some of those creatures. For example, what did the nasty spite of blindness look like? What about the spite of fear? Encourage them to think of other dreadful things which might have been in ityesi. And get them to describe these spites to you.

Perhaps they will think of things like a tiny winged creature with the body of a spider and a small cow-like head, and the mouth of a mosquito!

This is an important activity because you have a real reason for asking them to describe something. You don't know what they have imagined. Also, your learners will have an opportunity to use and develop the skill of describing something. You will be linking the learning areas of Art and Culture and Language, Literacy and Communication with the learning of Technology Education. As they share their ideas, make brief notes of what they tell you in your Journal.



Then tell them you want to make a really big picture of the part of the story where Siphokazi lets the nasty spites out of ityesi by accident. Tell them that you want them to make pictures of each of those terrible things.

Then give each child a sheet of blank paper. Encourage them to draw their nasty spites so that they fill the page. They will have to think carefully, and plan how they will draw their spite. They will need to think how they can make each one look like the suffering it represents. How can you make the spite of blindness look as though it is the spite of blindness?

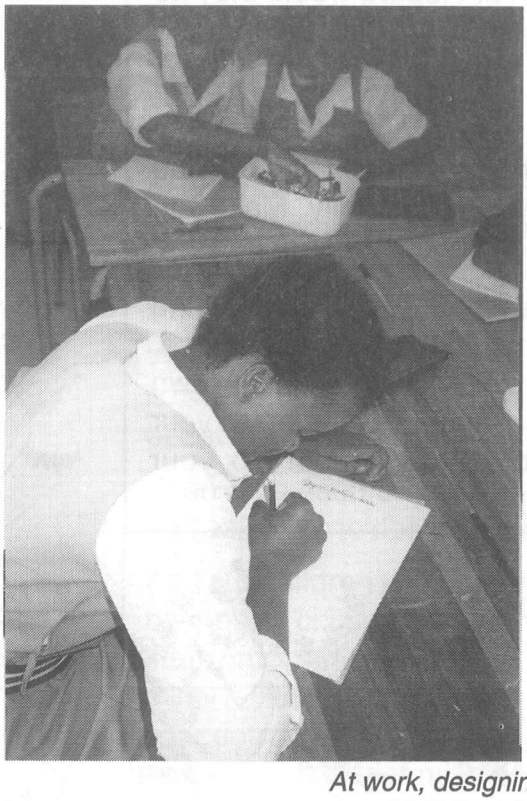
If one child is willing, ask her/him to draw a large rectangular ityesi on a piece of paper. If nobody wants to do this, you may have to do this yourself. But we have found that young children are usually very willing to co-operate and to help their teachers.

As your children work, circulate and observe how each child goes about the task. Do they stop and stare into space? Do they start their drawing straight away? How do they sit? How can you tell if a child is concentrating? What can you tell from their body language? Make brief notes in your Journal.

As your learners draw, don't interfere. If your learners want you to help them, talk to them about what they are drawing and how they want their picture to look. This can help them to clarify what they want to do. Whatever you do, don't draw for them.

As you move around, ask them if they want you to help them write the name of the spite that they have drawn. Ask them for guidance. How must the letters be written? You are talking about the way writing will support drawing. You are giving them a chance to think about print.

When some of the drawings are complete, take the children who drew them with you to the wall where you are going to display their work. First of all, ask your learners to help you decide where to place ityesi. Then get them to help you decide where to position each of the spites . If you involve them in this activity, your learners will feel very proud of their display of their work. They will want to look after it. And they will learn something about the design of arrangements.



At work, designing covers for books.

When the school day is over, sit down and read what you have written in your Journal. Spend some time reflecting on this activity.

- Think about the telling of the story, as well as when you discussed the characters with your learners.
- Think about how they went about the task of drawing, and the writing of their words.
- Then, think about how they participated in making the display on the wall.
- Lastly think about anything that surprised you.

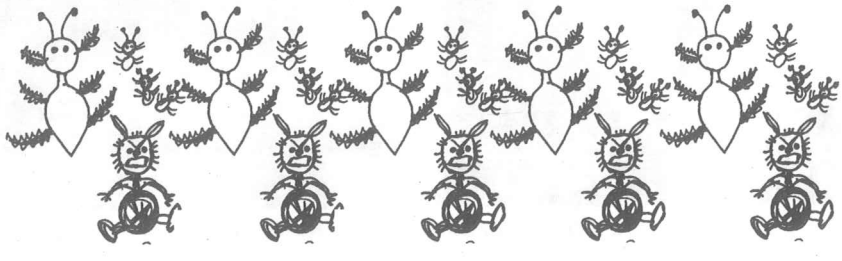
Then take some blank sheets of paper and write in **detail** what happened when you carried out this activity with your learners. Include some of the comments which your learners made. Also, mention anything which surprised you. What have you learned from this experience? How do you feel?

This is your first draft of your Reflective Report. When you have finished writing it, put it safely in your Concertina File. Leave it there for a day or two.

When you come back to the first draft of your Reflective Report, re-read it carefully. Take a pencil, or a pen with a different colour ink, and write in any changes you wish to make. You can check your spelling. You can check that your Report makes sense. Are the paragraphs in a logical order? If a stranger read your Report, would they be able to picture what happened in your classroom, as clearly almost as if they were watching a film, or movie? How could you improve your Report?

Then take some more blank sheets of paper, and re-write your Reflective Report neatly, and carefully. Make the changes to your first draft which you think will improve it.

You will have a chance to share your experiences at the face-to-face session where this umthamo is concluded. You will also have an opportunity to assess your own Report, and your fellow teacher-learners will assess your Report. Then you will hand in your Report to your umkhwezeli for her/him to appraise.



Activity 6 - Using graphic communication to illustrate a story

Option B

If you work with learners in a Grade 3, 4, 5, or 6 class (or even a Grade 7 class), this is what we would like you to do after you have told them the story.

Tell your learners to close their eyes, and to spend a few minutes running over the story in their minds, just like watching a film. Tell them that you want them to have clear pictures of the different characters in the story. Think about one character at a time, and ask several children to tell you how they pictured that person in the story.

Then, you want them to be able to picture the different spites . Ask them to think about all the terrible creatures which flew out when Siphokazi lifted the lid of ityesi. Ask them to describe some of those creatures. For example, what did the nasty spite of blindness look like? What about the spite of fear? Encourage them to think of other dreadful things which might have been in ityesi. And get them to describe these spites to you.

Perhaps they will think of things like a tiny winged creature with the body of a spider and a small cow-like head, and the mouth of a mosquito!

Lastly, ask them to think of ityesi. What did it look like?

Then tell them that their task is to design the cover picture for a book of the story of Siphokazi's ityesi. They will need to think what they must draw in their picture for the cover.

They will also need to think about what writing should be on the cover. What lettering would be most appropriate? Why? Where will they write the title? At the top, or at the bottom of the page, or cover? They may even want to write it on the box in the middle of the cover page.

When we trialled this activity at Mpongo Primary School, it really helped to show the Grade 5s and 6s the covers of several Picture Story Books.

Then give each of your learners a clean sheet of paper and ask them to design their cover for a book of this story.

As your children work at this task, circulate and observe how each child goes about the task. Do they stop and stare into space? Do they start their drawing straight away? How do they sit? How can you tell if a child is concentrating? What can you tell from their body language? Make brief notes in your Journal.

As your learners draw, don't interfere. Don't rush them. If your learners want you to help them, talk to them about what they are drawing and how they want their picture to look. This can help them to clarify what they want to do.

When all the drawings are complete, make sure that each learner has written her/his name neatly in the bottom right hand corner of the page.

Then what? You will have to make some decisions. Will you put them all up and choose those which represent the story best? Is there a way that they can do a joint appraisal, and give reasons for their assessments?

When the school day is over, sit down and read what you have written in your Journal. Spend some time reflecting on this activity.

- Think about the telling of the story, as well as when you discussed the characters with your learners.
- Think about how they went about the task of drawing, and writing the title and any other words.
- Then, think about how they participated in appraising their own and one another's work.
- Lastly think about anything that surprised you.

Then take some blank sheets of paper and write in detail what happened when you carried out this activity with your learners. Include some of the comments which your learners made. Also, mention anything which surprised you. What have you learned from this experience? How do you feel?

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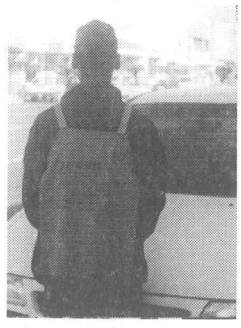
Conclusion

In this umthamo, we have introduced and shared some ideas about the importance of **drawing** and **graphic design** as a means to **communicate** ideas in technology. We have also seen that these aspects are very relevant across the curriculum and in life.



Imonti Car Guard

Drawing and graphic design have been 'neglected' in the past in many of our schools. Urgent attention is needed, if we want to put things right. This notion of **redress** is a very important one. We cannot be content with fixing the situation. In order to properly compensate for something that has been poor, or lacking in the past, we have to give it special attention. We have to make drawing and graphic design a conscious focus in our efforts to improve primary education.

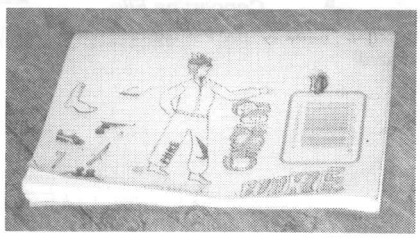
We realised something as we trialled these ideas. The learners themselves are very aware of the importance and value of drawing and graphic design. They give it a great deal of attention. In all the schools, we find amazing examples of complex and careful lettering and drawing. But it is **"under the desk".** It is on the back covers of books, and in notes they write to each other, and pass under the desk.

You will remember that the Grade 2s at Vanani used graphics when they designed signs for their NEW COOKING SHOP (Umthamo 7, page 31).

Here is another example where we tend to underestimate or ignore what children can do. Lukhanyo at Ngwevana, spoke to us after the trialling at his school. He talked about the fact that he now saw a great deal of potential in using drawing and graphic design much more in his classroom. He is going to start exploring the advantages of bringing this aspect of his learners' knowledge and experience into the work in his class.

If like Lukhanyo, you have made a commitment to encourage your learners to make more use of graphic design and drawing skills in the general work of your primary classroom, then this umthamo will have achieved its purpose.

Will your classroom, in the future, have concrete evidence of learners' careful and thoughtful drawings? Will there be evidence of learners challenging themselves to improve their skills and ability to represent their ideas clearly in lettering, pictures and diagrams? If so, then the outcomes of lomthamo will have been achieved.



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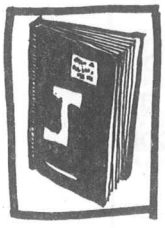
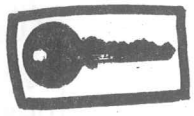


Journal

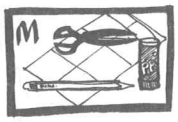
Thinking and Reflecting

Written Report

Classroom or School



Key Activity



Making materials

Reading and Thinking

Discussion

Face-to-face umkhwezeli

Concertina File for Portfolio

Time

UNIVERSITY OF FORT HARE
DISTANCE EDUCATION PROJECT

CORE LEARNING AREAS CORE COURSE
Technology Education

Umthamo 2 - An Introduction to Graphic Communication

First Pilot Edition - 1999

Osman Sadeck, Celiwe Ngetu, Noluvuyo Lehlakane,
Alan and Viv Kenyon

Co-ordinated, illustrated and edited by
Alan & Viv Kenyon

Ngwevana Primary School

Mpongo Primary School

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