Using Media in Teaching

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Using Media in Teaching

Learning Guide

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Saide

South African Institute
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Using Media in Teaching
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Contents

Preface

The SAIDE Teacher Education Series

Using Media in Teaching is one of the modules in the SAIDE Teacher Education Series developed between 1998 and 2002.

This comprehensive multi-media series comprises:
- Learning Guides, which operate much as a teacher does in structuring learning, explaining concepts, exploring debates in the field, and direct readers to other parts of the module at appropriate times;
- Readings which function as a 'mini-library' of edited readings for further exploration of concepts, issues and debates raised in the Learning Guide;
- An audiotape which use interviews and classroom events to develop the issues raised in each of the modules (not for all modules)
- A video which bring issues and debates from the modules to life (not for all modules).

Although designed to support the learning guides, the readings, as well as the audio and video resources could also be used independently of the learning guides. Used creatively, they provide valuable resources to support existing teacher education programmes.

This set of learning guides with accompanying readers develop teachers' abilities to use theory in practice; and to understand, intervene in and improve their practice as teachers. The diagram below shows the inter-relationships of the modules in terms of curriculum coverage.

From within a framing context generated by *Creating People-centred Schools*
- *Being a Teacher* and *Working in Classrooms* cover the professional and classroom contexts within which teachers practise
- *Curriculum* and *Learners and Learning* provide a theoretical understanding of resources or tools teachers may draw on
- *Getting Practical* and *Using Media* draw on the above in guiding practice.

Curriculum and *Getting Practical* are available in second editions from Oxford University Press. The other titles are available on *www.oerafrica.org*.

Inter-Relationship of SAIDE Teacher Education Modules

Creating People-Centred Schools

Being A Teacher → ← Working in Classrooms

Curriculum → ← Learners and Learning

Getting Practical → ← Using Media

Goal
Improve the Understanding and Practice of Teaching
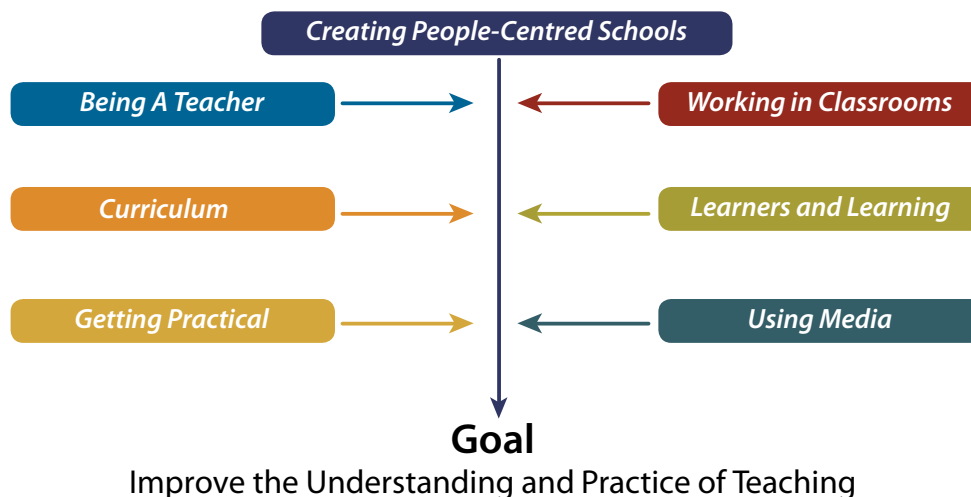
Components of the *Using Media in Teaching* module

The focus of this module is on how teachers might use popular media, textbooks and computer technologies to create a learning environment that equips learners with the knowledge and skills to live and work thoughtfully in a changing country. The model of teaching being promoted is one that:
- actively involves learners
- links schooling with learners' lives and experiences
- develops learners' critical thinking and problem-solving skills.

Two areas in which the content of the module could usefully be further developed or extended are with regard to the use of Open Educational Resources and the use of mobile technology.

Learning Guide

The different sections in this module present a coherent progression. However, the seven sections are downloadable as individual units.

1. **Section One: How to use this module**
   This section outlines the aims of the module, its structure and contents, explains why it focuses on media resources and provides guidelines on how to study the module.

2. **Section Two: Developing a media-rich outcomes-based education**
   Through the example of one teacher's learner-centred, activity-based practice, this section promotes understanding of how outcomes-based education can be enriched through the use of media resources. Although the focus is on an outcomes-based approach, the broad principles and examples are more generally transferrable.

3. **Section Three: Using popular print media in the classroom**
   This section identifies some popular print media formats and then, through examples and case studies, explores ways in which such media can be used to supplement teaching across the curriculum and develop reading, writing and speaking skills.

4. **Section Four: Using popular electronic media in teaching**
   This section identifies some formats used in popular electronic media. Then through examples and case studies, it explores how radio, television and video media can be used to supplement teaching across the curriculum in general and to help improve listening and understanding in particular.

5. **Section Five: Understanding popular media**
   This section explores media literacy and the ways in which both print and electronic media can be used to develop critical thinking.

6. **Section Six: Using textbooks in teaching**
   This section begins by exploring the differences between popular media and textbooks and why textbooks are central to teaching. It then discusses the strengths and limitations of textbooks as preparation for an exploration of how to select appropriate textbooks and then use them effectively.

7. **Section Seven: Using computer technologies in schools**
   Any description of computer technologies soon becomes outdated, but this remains a useful basic guide. It covers: examples of the diverse ways of using computers in schools; the use of CD-Roms, the Internet and e-mail to support teaching; and technology resourcing and planning.
   Although the section refers to a CD-Rom, most of the CD-Rom resources are outdated, so they have not been uploaded on to this site.

Although the section refers to a CD-Rom, most of the CD-Rom resources are outdated, so they have not been uploaded on to this site.

Audiotape

The audiotape is linked to sections of the Learning Guide but contains discussions which could also be used in a free-standing way by anyone interested in the use of media in teaching. It includes interviews with teachers, as well as examples of media resources taped from radio or off a CD. The following clips are downloadable from www.oerafrica.org/teachered.

Part 1 → Teachers talk about the use of popular media resources in teaching.
Part 2 → Using popular media to teach language and literature.
Part 3 → Using electronic media in teaching.
Part 4 → Understanding popular media: Media literacy.
Part 5 → Using textbooks in teaching.
Part 6 → Using computer technologies in teaching.

Video

Like the audiotape, the video is linked to sections of the learning guide, but also offers much scope for creative use in free-standing ways. The following clips are downloadable from The following clips are downloadable from www.oerafrica.org/teachered.

Part 1 → Examples of popular media formats and an introduction to how media can become learning resources.
Part 2 → A teacher using a soccer video clip as a warm-up to a map-reading lesson.
Part 3 → Examples of teachers using popular print media.
Part 4 → Example of a teacher using a radio news broadcast to develop listening skills.
Part 5 → A film crew making an advertisement.
Part 6 → Exploring learners producing their own media in order to develop media literacy and other important language skills.
Part 7 → Example of use of a video documentary on volcanoes in an interactive way in the classroom.
Part 8 → Examples of teachers using a systematic approach to preparing and then teaching media-based lessons (Part 8 incorporates Part 7).

Acknowledgements

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SECTION ONE

How to use this module

What are the aims of this module?

What key learning problem does this module address?

The important question we address in this module is:

> *How can teachers* **use popular media, textbooks, and computer technologies** *to create a learning environment that equips learners with the knowledge and skills to live and work thoughtfully in a changing South Africa?*

Before we answer this question, let's step back and find out what kinds of learning we need to develop in our classrooms.

Both *Curriculum 2005* and *outcomes-based education* suggest that we should cut back on content-heavy, teacher-centred methodologies and begin teaching in ways that:
- actively involve learners in their own learning;
- link school learning with the learners' lives and experiences;
- develop learners' critical thinking and problem-solving skills.

In other words, we need to develop learners who can *use the knowledge* they have learnt in order *to do things in society*, rather than just remember the content they have learnt. But we have an additional challenge. We have to develop learners who are thoughtful and adaptable. They should be able to use their knowledge to solve the problems they face in society rather than simply being defeated by them.

In addition, though, our increasingly *information-saturated* world demands that we develop learners with good reading and information- processing skills and high levels of media literacy. The use of media resources in learner-centred methodologies provides rich opportunities to develop these language skills.

But, as our experience with textbooks demonstrates, media on their own will not create a learning process that is active and focused on developing useful outcomes. In order to do this, we need to understand how media resources can be used by *teachers* within learner-centred and activity-based methodologies, such as *resource-based learning* and *experiential learning*. **Section Two** illustrates how you can begin implementing these kinds of methodologies in your classroom.

Read through Section One *quickly*; it needn't be studied! Return to it regularly to check that you are learning in an appropriate manner.
Spend no more than one hour reading this section.

The structure and content of the module

We have defined 'media resources' widely. It includes all resources that deliberately try to convey a message: the forms of communication that people use to exchange information. These would include newspapers, magazines, radio, novels, television, textbooks, photographs, cartoons, films, advertising leaflets, billboards, songs, the Internet, and so on.

Many South African educators have been conservative in the range of media resources they have used. We have tended to stick with textbooks. A few of us have asked learners to use dictionaries and encyclopaedias. If we teach English (and languages more generally), we'd also use media such as novels (as our 'setworks') or poetry anthologies, and sometimes popular media, such as advertisements or newspapers or magazines.

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Using popular media

The authors of this module persuade educators to be more adventurous. They demonstrate how teachers can use a much wider range of media – particularly *popular* media (media not designed primarily for education) – to enrich their teaching. **Section Three** focuses on how *popular* print media – mainly newspapers and magazines – can be used to support teaching in many different learning areas. Particular attention is paid to ways in which popular print media can be used to improve language skills, such as reading and writing. Section Four explores the educational potential of popular electronic media, such as television and radio. Writers demonstrate how these media can be used to supplement subject teaching while improving learners' listening and speaking abilities.

Throughout Sections Two, Three and Four, reference is made to *media literacy*. In **Section Five** we develop a more systematic understanding of the nature of popular media, in particular its ideological positions and the ways in which teachers can develop learners' abilities to 'read' popular media more critically. This module does not provide a comprehensive education in media literacy, but it does attempt to develop learner understanding of the nature of the different kinds of media studied.

Using new and old forms of educational media

Section Six develops teachers' skills in selecting textbooks appropriately, and using textbooks (whether good or bad) more critically. While we acknowledge that South African textbooks have a problematic political history – as tools for apartheid propaganda – and have often been poorly designed, we suggest nevertheless that they are *fundamental* to good learning. Support materials – including *well-designed* worksheets based on popular media resources – have a vital role to play in linking learning to everyday life, updating textbook information, and making learning a great deal more exciting. But they cannot replace the higher-level, conceptual learning which *good* textbooks can develop. In other words, we distinguish between:

- textbooks as the *educational* medium essential for the construction of a s*ystematic learning framework*; and
- learning *support* materials, such as teacher-designed worksheets using *popular* media, as media that are used in *support* of the systematic learning framework.

Section Seven explores the educational potential of computer technologies. Computer technologies provide both popular media – the Internet has on-line newspapers and magazines, music, and large amounts of information about every subject – and media designed specifically for educational use. Both the Internet and CD-Roms provide teachers with structured learning resources that they could use in classrooms and which learners could use for independent study.

The module concludes with an annotated list of useful resources that learners can use to deepen their understanding of media, and the ways in which media can be used to teach.

This distinction is used in Taylor. N. and Vinjevold. P. 1999. *Getting Learning Right.* This is an analytical summary of 35 South African research studies into classroom teaching and learning. It is published by the Joint Education Trust and can be ordered from them at PO Box 178. Wits. 2050. or by e-maiting info@jet.co.za.

Why do we focus on media resources?

South African education policy

South Africa's new educational policy emphasises that educators and learners need to be media literate if they are to operate effectively in the new millennium. Two of the seven critical cross-field outcomes challenge educators to enable their learners to:

- *collect, analyse, organize and critically evaluate information;*
- *communicate effectively using visual, symbolic and/or language skills in various modes.*

Global changes

This emphasis on developing a better understanding of *media* and *information* is echoed internationally. As societies become 'knowledge' or 'information' societies, so our ability to understand, select and manipulate information – our ability to read critically and be media literate – becomes vital to our productivity and power in society. Worldwide, then, schooling is moving away from the dissemination of information towards teaching methods that develop learner skills in accessing, selecting and understanding information. Invariably, this requires a move away from didactic forms of teaching towards learner-centred teaching and towards analysing the media messages that dominate our lives. This skill- *media literacy* – is developed throughout the module.

Improving South Africa's reading skills

If one of our primary educational challenges in the next millennium is the ability to understand, select, and manipulate information, then *reading* efficiently and critically, and *writing* persuasively, become extremely important skills that we need to develop in learners and in ourselves.

Yet South African research indicates that these are precisely the areas where our education is very weak. A recent study has shown that, at most, four minutes in a 30-minute lesson were devoted to reading – and this in an English class where one of the most important outcomes is the ability to read! In many other classes, such as Science and Geography, learners did no reading. Even where textbooks were available, teachers did not plan lessons in which their learners had time to read.

The current South African neglect of reading causes learners to be unable to read and understand questions in assignments, tests and examinations, and thus leads to their failure. But it also impacts on learners' future life chances: many school-leavers are not employed because they cannot write a simple application fluently, or read simple documents. This module will demonstrate how educators can use different media resources to enrich their teaching and to build a culture of reading in our schools.

See Taylor & Vinjevold. 1999. *Getting Learning Right*. Joint Education Trust, Johannesburg.

What are the module's desired learning outcomes?

Here are some key outcomes for this module. In each section we provide more detailed outcomes. When you assess your competence, use both these outcomes and those that appear in the different sections. When you have finished working through this module, you should be able to:

- Explain how to implement 'resource-based' and experiential learning in your classroom.
- Turn non-educational *media* resources into good *educational* resources.
- Explain the relative educational strengths and weaknesses of different kinds of popular, educational, and computer media resources.
- Implement good resource-based and experiential learning, using the appropriate media to achieve your desired outcomes in different learning areas and at different grade levels.
- Understand the power that media resources have in developing reading and media literacy skills.
- Implement learning activities in all subjects and learning areas that develop reading and media literacy skills, and convey the required content knowledge.
- Explain what it means to be media literate.
- Use popular media in your teaching in a manner that develops the learners' media literacy.

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1.2

How should you study this module?

Tips on using the module's different components

Using the Learning Guide

As you will have noticed, most of the outcomes listed are about *doing* things better. This module is a practical guide to better teaching. It doesn't contain academic readings. Instead it is filled with activities that allow you to practise designing and using different kinds of media as learning resources.

Activities designed for use with learners

The module contains a large number of examples of classroom-based activities developed by teachers. These provide models of the good use of media in education. If you are studying this module through a teacher education institution, your lecturer or tutor may prescribe certain activities as compulsory. If this is not the case, we recommend that you attempt as many of the activities as possible. And don't just read them, do them – with fellow learners or, if you are actually teaching, with your own learners.

Because we have provided activities for a broad range of grades and learning areas, some of the activities may not be suitable for your field. However, if you recognize the learning principles that underlie these activities, you will be able to adapt many of them for your own use. You can use more up-to- date or appropriate newspaper clippings or radio broadcasts and, in many cases, it is possible to adapt the described approach to another learning area. You can also increase the complexity of a module activity designed for the Intermediate Phase so that it can be used in the Senior Phase, or reduce the complexity so that it is suitable for the Foundation Phase.

Activities designed to improve teacher planning and reflection

We have also included a number of 'checklists' and suggested activities that educators can use to develop and evaluate their practice. These may assist you in evaluating your own teaching, or function as a guide when you have to select good textbooks, or decide when to use computer technology, and soon.

Developing a teaching resources file

We suggest you do these activities in a systematic way. To make this possible, you should buy a file that you should divide into three sections:

- a section where you file your responses to the activities you are asked to do in the Learning Guide;
- a section where you file the worksheets and learning programmes you develop as you work through this module - these will become an invaluable part of your teaching resources;
- a section where you file media resources that look interesting for future use, but which have not yet been turned into educational resources.

You may want to store your resources in plastic folders which can be filed. You could label each plastic folder with the topic of the articles, or according to how you could use them in class. Since newsprint yellows over time, you should make photocopies of articles you want to keep. Remember to reference these with the newspaper's name and date!

You could work with other teachers in your school who teach the same learning

You will recognize these activities by this kind of icon in the margin next to them. The recommended time you should spend on each activity is also included.

You will recognise these activities by this kind of icon in the margin next to them. The recommended time you should spend on each activity is also included.

area or the same grade as you do. If all of you collected useful articles, you would soon have a wide variety to choose from.

Using the video

This is a mixed media module: it includes print, audio and video components. But it is this Learning Guide that will give you *guidance* as to when and how you should use the video and audiotape.

The videotape focuses on the use of *popular media:* it doesn't refer at all to the use of traditional media or computer technologies. It aims to give you an overview of the main issues covered in Sections Three, Four and Five. It also aims to *illustrate* how these media can be used in teaching, and how you can teach media literacy. It does this by:

- filming teachers in South African classrooms as they implement lessons using popular media; and
- visiting a film crew shooting an advertisement.

We suggest that you watch the video before you start working through the Learning Guide. Make brief notes as you watch – of issues that interest you and of queries you may have. Use these queries to guide you as you search for answers in the Learning Guide. Later, as you work through the Learning Guide, you will be directed back to specific video clips as we deal with a particular issue in more depth.

Using the audiotape

The audiotape includes interviews with teachers and researchers about the use of media in teaching, as well as examples of media resources taped from radio or off a CD. It covers the entire module and is structured in the same way as the Learning Guide. The excerpts are linked directly to activities or readings in the Guide, and aim either to *deepen* your understanding – by interviewing experts in the field - or to *illustrate* how to teach better by providing audio resources and talking to teachers about how they use these in teaching. The Learning Guide will explain when to listen to the audiotape.

The CD-Rom

In the 2001 edition of this module a CD-Rom was included and referenced in Section Seven. However, because it is dated and also not essential for understanding the module, we have not uploaded the material onto OERAfrica.

How much time do you need to complete the module?

The module is designed to be completed in 120 hours of student work. Because of its flexible design, it can be used as:

- a module that stretches over a full year (40 weeks, at a rate of three hours of work per week); or
- a semester-long module (20 weeks, at six hours of work per week); or
- a short, intensive, full-time, three-week course (three weeks at 40 hours of work per week).

Of course, different learners work at different speeds. Some learners will choose to focus only on some aspects of the module. But, as a guide, we provide 'calendars' which will assist you in completing the module within 20 weeks.

An icon like this will appear in the margin when you need to watch the video.

An icon like this will appear in the margin when you need to listen to the audiotape.

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An icon like this will appear when we refer you to further reading. It gives you a reference to a book that the writers found useful.

Reading further

This module is designed as a flexible learning resource. In other words, it is written to be accessible to first-year trainee teachers, but also to be useful to teachers who are already working but are interested in developing their knowledge of these issues further.

We have made many references in the margins to other texts that may contain either useful practical examples of media-based teaching, or reading around related issues (such as the design of learning materials), or interesting research linked to the issue being discussed. Many of these references are to other modules in this series. Learners who want to deepen their knowledge are encouraged to follow up on these references. The CD-Rom will assist senior teachers and planners in thinking through the appropriate selection of learning technologies. We also refer in the margins to useful learning websites.

Finally, the 'Selected reading' section at the end of the module provides an annotated list of a select number of recommended texts that can be used to deepen your understanding of the various issues covered in this module, and of good media-based resources you can use in your teaching.

Assessing your progress

The key question you should use to judge your progress is:

> *'Can I **teach** what I have just learnt? Can I, for instance, record a news broadcast, design a sensible worksheet around this, and use these to develop a lesson that is both stimulating and develops the knowledge and learning competencies associated with the particular learning areas and learning phase?'*

This can really only be assessed by doing. You need to actually collect the information, design the worksheet, and teach the lesson. You can assess your success by, for instance, asking a fellow student to assess your lesson against some of the key outcomes in this Learning Guide. You can also assess your learners to see whether your lesson enabled them to understand key concepts. It is no use at all to memorise the points made in this Learning Guide and to regurgitate them in an essay or exam!

Teacher educators who are responsible for supervising this module should take note – setting such an exam would achieve very little.

The Guide is written in a style that asks you to interact with the authors, to think about the questions posed and to bring your own experience to your learning. The Guide has many activities that use media as a resource. The idea is that you do these activities yourself and then adapt them, if necessary, to use in your own classroom teaching.

You will usually do the activities on your own, but you may sometimes be asked to compare notes with a colleague. It will be helpful if you do have someone else who is doing the course with whom you can share ideas. If you are studying in a teacher education institution, then find some study partners with whom you can form a study group.

SECTION TWO

Developing a media- rich outcomes-based education

What will we do in Section Two?

Setting the scene

OBE has brought about large changes in South African education. We now aim to teach so that learners can *use* the knowledge they learn. Our focus is on *outcomes* – what learners can do after their learning – rather than on the content we, as teachers, put into the learning process. There is an increased emphasis on skills.

What implications does this hold for the way in which we teach? You may well have participated in workshops emphasising *group work* and *learner-centredness*. You may have practised *activity-based* teaching, or methods where learners are given *real-life* problems to solve in order to learn new information. You may have been told to make more use of your environment in order to teach.

Obviously, if we want learners to use their knowledge, our teaching methodology must build in more time in which learners can practise what they learn. This kind of outcomes-based learning is consistent with a variety of methodologies, including experiential learning, role-plays, simulations, and problem-based learning. They all create active learning environments and focus on developing skills and understanding.

In Section Two, through a story of one teacher's attempt to teach in a learner-centred, activity-based manner, we will deepen your understanding of how media resources can be used to enrich outcomes-based education. We will teach *through example* rather than by telling. The section ends by demonstrating how you can develop higher-order learning by designing your outcomes-based lessons around critical *concepts* in your learning area.

> Keep a record of the time you spend working. We will provide a guide in regular margin notes. This is the start of Week 1 of 20 six-hour weeks.

Desired learning outcomes

By the end of Section Two, you should be able to:
- Explain what a resource-based OBE methodology is, and understand the potential weaknesses and strengths of this kind of teaching.
- Explain how an ordinary resource can be turned into an *educational* resource.
- Plan and teach a resource-based lesson in your learning area that uses a range of *media-based* resources in achieving your desired educational outcomes.
- Demonstrate an ability to design resource-based learning programmes that develop higher-order conceptual understanding in learners.

> Checking your learning: How should you use these outcomes? You may find that they don't mean much *before* you study the section. That's why it is so important to check *back* regularly. Ask: 'Have I achieved any of these outcomes yet? What do I still need to learn in order to meet these outcomes?' Write down those things you still think you need to learn, and use them to focus your learning.

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2.2 Using media resources in OBE: A case study

Using everyday resources to engage learner interest

A teacher staggers into the room carrying a large sack. She empties the sack. The class looks in amazement at the assortment of objects that tumble onto the floor. Nomsa, the teacher, turns to the class and says:

'I've been away and when I returned I found these items in my back room. Clearly someone decided to use this room while I was away. I need to find this person but have no idea of the kind of person I'm looking for. I thought if we analysed these objects we might be able to get a "picture" of the person I'm looking for.'

ACTIVITY 1

Play this game with a partner. See whether you can use these belongings to get an idea of the kind of person who stayed in the teacher's back room. You should ask questions such as: Was the intruder male o rfemale? young or old? rich or poor? homeless or a friend/neighbour? educated or not? etc.

a Write up as accurate a description as you can of the kind of person you think slept in the teacher's back room.

b Explain why you made the deductions you did. (In other words, if you said the person was young, what 'evidence' have you got to support this?)

c Why did Nomsa start her lesson like this? What was she trying to teach her class?

Do this activity quickly. Spend no more than 20 minutes on it. Do it with another teacher or fellow student.

We will often ask you to play the role of learners and actually do activities designed for classroom use. But we also ask you to be reflective: we want you to think *why* these teaching techniques were used, *how* they teach, etc. That is *why* question **c** is important.

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What was this teacher trying to do?

Some of you may have said that Nomsa is wasting everyone's time. After all, she didn't explain the purpose of her lesson. You probably also found it very difficult to agree on the kind of person to whom these objects allegedly belong. So why did she play this game with her learners? This was her reply:

> *'First, I wanted my learners to use their imaginations. I wanted them to paint a picture of this person in their heads. Second, I wanted them to think, to make deductions from the If evidence" (to infer) and to be able to defend their analysis. This is an important learning outcome, especially in history (or Human and Social Studies). Third, I wanted to intrigue them. I wanted them to end this little game wanting to know more ... '*

In other words, finding who these objects belong to isn't important. Nomsa's teaching point is to introduce learners to the key historical concept, the role *evidence* plays in *history*. But she was also developing two other important learning skills:

- The ability to *infer*. This means to analyse something and, by doing so, to understand it better. This kind of skill will also be used in analysing poetry and literature, understanding science experiments, and so on.
- The ability to *imagine*. This is a skill that will also be used in a number of learning areas. Being able to 'brainstorm' as many answers as possible before narrowing these down to a final choice is an important benefit of learning.

Using popular media resources to deepen learning

What did Nomsa do with the interest she had evoked? What concrete knowledge, skills or attitudes did she proceed to teach her learners?

Nomsa's next move was to show the class a number of photographs. She said this new 'evidence' had been received from a neighbour who said she was sure one of these photos was of the intruder. Nomsa asked her class whether the evidence they had gathered from the person's belongings could assist her in identifying the correct photograph. There was a lot of debate, but Nomsa insisted that learners provide *strong arguments* as to why they linked the belongings to a particular photograph.

Then, while the class was still debating furiously, she handed out short biographies of famous historical figures which she had cut from **Time** magazine (see page 16). She told her class that people in her neighbourhood had provided her with this further' evidence'. She asked the class to see whether they could use this evidence to decide, finally, on which of these historical figures might have slept in her back room. When the double lesson ended, all the learners were engrossed in reading the biographies. Nomsa asked them to complete their reading at home and to write half a page explaining their 'verdict'.

> The biographies on page 16 are taken from various editions of *Time* magazine: 12 and 19 July 1999. *Time* is a useful source of well-researched and readable articles about a wide range of topics. However, it does have an American bias, but this can be used to teach your learners to be aware of media and historical bias (see Section Five).
>
> Note that *Time* magazine's 'Letters' page often contains criticisms which teachers could use to extend their learners' thinking.

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WINSTON CHURCHILL It is one of the 20th century's ironies that the most poignant tribute to Winston Churchill came from one of the most repugnant tyrants of our time. Toasting the British leader at Yalta in February 1945, Joseph Stalin said, "I can think of no other instance in history where the future of the world depended on the courage of one man." Without that one man, whose abhorrence of tyranny was matched by his contempt for its appeasers, the second half of the century would have become a Nazi-dominated nightmare. That the world witnessed instead the triumph of democracy, the defeat of totalitarianism (including the downfall of Stalin's own empire) and the emergence of new nations—not least the rebirth of Israel—must be attributed to Churchill's indomitable leadership and prophetic vision.
                                        —**Benjamin Netanyahu, Prime Minister of Israel**

1874 Born Nov. 30 in Blenheim Palace, Oxfordshire, England
1911-15, 1939-40 First Lord of the Admiralty
1940-45, 1951-55 Prime Minister of Britain
1964 Retires
1965 Dies in London

W.E.B. DU BOIS The great African-American intellectual is the Person of the Century for me. Du Bois was the first black Ph.D. from Harvard; he was one of the founding fathers of the field of sociology. He helped establish the N.A.A.C.P. and edited its journal, *The Crisis*, for 24 years. He was an architect of the Harlem Renaissance and the civil rights movement, and throughout his life brilliantly fought against racial discrimination and for the full participation of blacks in American society. He conceived of the *Encyclopedia Africana*, a comprehensive history of the African diaspora. He was a staunch opponent (with Bertrand Russell) of the use of nuclear weapons. He published dozens of books and thousands of pivotal essays. Who could possibly have done more than he to redefine American democracy over 60 years of the 20th century?   —**Henry Louis Gates Jr.**
Chair of Afro-American Studies, Harvard University
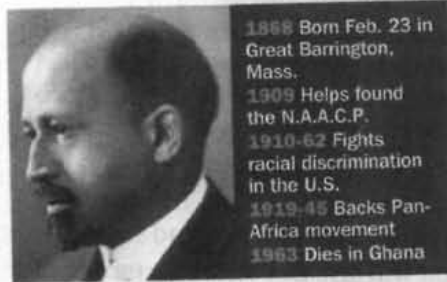
1868 Born Feb. 23 in Great Barrington, Mass.
1909 Helps found the N.A.A.C.P.
1910-62 Fights racial discrimination in the U.S.
1919-45 Backs Pan-Africa movement
1963 Dies in Ghana

ADOLF HITLER It would be awful to see his face on TIME's last cover of the millennium, but I must conclude, with the greatest sadness and reluctance, that the person who had the most profound impact on the events of the 20th century was also the century's most evil person: Adolf Hitler. The century was filled with inspirational leaders who advanced its most powerful *idea*, freedom of the individual—people like the two Roosevelts, Churchill, Gandhi and Martin Luther King Jr. But the poison unleashed by Hitler and his terrible contemporary Joseph Stalin survives. Not only must we still mourn, at century's end, the tens of millions who died as a result of their actions, but we can still see in many parts of the world, from Kosovo to Rwanda, murderous echoes of Hitler's theories and policies, promoted through methods of mass communication and propaganda invented by Joseph Goebbels. The essence of Hitlerism—racism, ethnic hatred, extreme nationalism, state-organized murder—is still alive, still causing millions of deaths. Freedom is the century's most powerful idea, but the struggle is far from over.—**Richard Holbrooke, U.S. Ambassador-designate to the United Nations**

BORN April 20, 1889, in Braunau, Austria
1933 Becomes Nazi dictator of Germany, proposes "Final Solution" to "the Jewish problem"
1939 Starts World War II
1945 Kills himself

MOHANDAS GANDHI is my choice for Person of the Century because he showed us a way out of the destructive side of our human nature. He demonstrated that we can force change and justice through moral acts of aggression instead of physical acts of aggression. Never has our species needed this wisdom more.   —**Steve Jobs, co-founder, Apple Computer Inc.**

BORN Oct. 2, 1869, in Porbandar, India
1915-20 Begins his struggle for India's independence
1947 Helps end 190 years of British colonial rule in India
1948 Assassinated by a fanatic opposed to his tolerance of other religions

Biographies from *Time* magazine

Does this lesson seem to be going anywhere now? When we asked Nomsa why she had done these things, this was her reply:

'I'm a history teacher. But my learners get bored by history. So I had to engage their interest, and learners always seem to love puzzles like this. Another problem is that learners often want to memorize textbook history rather than learn how to think like historians do. I want them to understand how history is written. So I played a game where they began practising the skills historians need. But I know that my learners watch lots of television and really identify with cop stories (on TV and in their lives!). So that's why I used language like "evidence" and "verdict", and why I asked them to be "detectives". I then linked this to what historians do. I posed questions similar to those faced by historians (and detectives): "What happened here? What does the evidence suggest is the truth? As you uncover new evidence, does your story change?" And, finally, "Can you defend the story you have written?" '

Do you think Nomsa has achieved what she set out to do? Did her 'game' increase learners' interest in history and give them an idea of how to do history?

Using educational media to consolidate conceptual learning

Later we found that Nomsa hadn't just chosen any old biographies. She had chosen biographies that had links with the content she needed to cover in the Grade 7 Human and Social Studies curriculum. The lesson began with a couple of learners reporting which biography they had linked to the belongings. Nomsa allowed a few minutes for debate among learners about the validity of the reasons given by other learners. Then Nomsa began consolidating her lesson.

She handed learners a worksheet which asked them to choose one of the historical figures, and then to write a 'few pages' on that figure. (Noms a said it would be part of a chapter for a new Human and Social Studies textbook.) Here is a copy of her worksheet:

Developing a new Grade 7 Human and Social Studies textbook

Human and Social Studies is a new learning area in the South African curriculum. We have been asked to assist publishers in writing a new textbook. I'd like you to do the following research in pairs.

Your four-page 'chapter' should provide learners with an understanding of at least the following aspects. Obviously you may add any interesting additional information.

- Describe the historical period in which the person lived. (What else was happening in the world and in South Africa at the time?)

- Describe the community and country in which the person lived. (What did people wear? What did they do for fun? What kinds of work were they involved in? What was the geography of the country?)

- What were the religious and moral values of the person, his or her community and the wider society? (What kind of political system existed? Were there any inequalities in this society? What kinds of religious worship existed?)

- Conclude your chapter with an 'analysis' of the person's contribution to society. You should provide a convincing argument as to why this person (and his or her society) is important to South Africans.

Check that your research is good enough for publication by consulting the 'Good Research Guide' the publishers have given us.

Saide

This 'Research Guide' – which Nomsa had developed – reminded learners that they had to collect reliable evidence to write their report, It reminded them to remember – from the game they had just played – how important it is to *substantiate evidence* and *develop strong arguments*, It gave them guidance about where to look for further 'evidence'. It said: (Start by reading your textbook and then consult two other books, or Internet references.'

They began this work in class, but only had about ten minutes before the bell rang. Nomsa said they would complete this work in the next two lessons but also told learners that they had to do 'at least an hour's work' outside school hours in order to complete this task.

ACTIVITY 2

Re-read the description of Nomsa's teaching programme. Discuss it with a fellow teacher and then answer the following questions:
a What kinds of resources did Nomsa use to teach?
b Why did she use the various resources? In other words, how did these resources assist learning?
c How did Nomsa ensure that learners also learnt about history rather than only having fun?
d How is this kind of teaching different from teaching that you have experienced?

This is an important activity. Take your time. Discuss it with a fellow learner. Spend about an hour on this activity.

Why not use Nornsa's teaching principles to design your own lesson? Add this to your resource file.

What has this taught us about a 'resource-based' OBE?

We thought Nomsa's programme of lessons was interesting in a number of ways. It demonstrated some of the best features of outcomes-based education, while not lapsing into the aimless and non-educational activities that sometimes characterise OBE. We also thought Nomsa demonstrated how a range of 'new' and 'old' media can be used both to engage learner interest and to develop higher-level conceptual understanding of the learning area.

Here are some points that we would use to 'check' the quality of our own 'resource-based' teaching in future.

Good resource-based teaching

'Checklists' are a set of criteria against which teachers can 'check' their lesson planning and teaching. They provide a useful first step in reflecting on your teaching. We use these frequently during this module. We would urge you to use them, but not to do so uncritically. Instead, we'd like you to adapt those we have developed (like the one we have drawn up from Nomsa's teaching), and then copy them into your resource file. You should find that you will adapt them further as you use them.

- *It should engage learner interest:* The lesson begins with a problem. This problem engages learner interest and gets learners thinking and talking,
- *It should link learner experience with new and unfamiliar educational concepts:* The' game' draws on learner experience of' cop stories' by using 'detective' and 'investigation' metaphors (such as 'use this evidence') in order to introduce important historical concepts and skills, such as the role of research and evidence in history.
- *It should encourage active learning:* Nomsa uses a wide range of resources with *good questions*. This encourages active learning *by* learners rather than lecturing to passive learners. Nomsa seldom lectures. Instead, she observes and intervenes at critical learning moments. Learners remain active throughout.
- *It should use different resources to develop increasingly higher levels of leaming:* Nomsa elicits learner interest and gets them thinking with a bag of simple, non-media, non-educational resources *and* an intriguing puzzle, She then introduces short, historically-flavoured articles from the popular media (the *Time* biographies) and some new questions. Later Nomsa refers learners to longer bits of reading from educational media (such as textbooks and encyclopaedias) to consolidate their learning and to develop more sophisticated reading and writing skills.

- *It should develop in-depth skills and knowledge within an integrated learning area:* Nomsa developed key historical concepts and processes – she focused on enabling her learners to *do* history – but also linked this to the broader understanding of society. She did this through choosing biographies of people from countries covered in the Human and Social Studies learning area, and by means of a worksheet that had questions relating to aspects other than history.

- *It should develop other critical cross-field outcomes within all learning areas:* Nomsa created learner activities that developed *both* specific subject/ learning area skills and knowledge *and* generic skills and understanding, such as reading, thinking, writing, and debating.

What do you think? You may want to refer to some of the OBE literature you have, and assess to what degree Nomsa could be judged a good OBE teacher. We return to Nomsa's teaching in Section 2.4., where we develop the idea of conceptual learning more thoroughly.

Saide

2.3 Transforming popular media resources into learning resources

You should have spent about two hours on this module so far.

This activity will show you just how much (or how little) the media feature in your daily life. Spend about an hour on the concluding part of this activity. Obviously this will be preceded by you recording your 'media use' times as they occur during the day.

This exercise can be used with your own learners. You could use it to teach them an aspect of media literacy. We develop media literacy ideas more thoroughly in Section Five.

The differences between popular and educational media resources

In this module we use terms such as 'media', 'popular media' and 'educational media'. But what do we mean by these terms? Rather than give you a set of definitions, we'd like you to do the following activity. It is an activity used by a teacher in Soweto to demonstrate to learners just how many 'media' they engage with every day.

ACTIVITY 3

a Keep a record of all the different forms of media you experience during a day. This means you should record a timetable like the one below. (The details are those of a 15-year-old Gauteng learner, Zaki.)

23 FEBRUARY 2001: ZAKI TSHABALALA		
TIME	MEDIA	COMMENTS
At home 6 – 7 am	Radio	I listen to music (*YFM*) while I get ready for school.
7 – 8 am	Music tapes	Listen to taxi tapes on way to school
School time 8 – 2 pm	Textbook in maths – only for 5 minutes Educational videos in geography – 15 minutes Novel in English – I read for 1 minute but we read for a total of 10 minutes	We mostly listen to the teacher. Sometimes we use textbooks and worksheets that the teacher has made
Breaks 12 – 12.30 pm	Magazines and tapes – for about 20 minutes	I often read comics and teenage magazines during break, usually while we also listen to tapes
Afternoons 3 – 6 pm	I watched *The Bold and the Beautiful* and *Isidingo* (1 hour in total)	Sometimes I watch some educational TV, but it's quite boring. I always watch some soaps ... often while I am doing my homework (no homework today!)
Evenings 7 – 10 pm	I watched the news and *Generations* (1 hour); then I went to bed and listened to music (*YFM*) for about an hour.	Some evenings I watch a lot of TV, but on others I listen to the radio, or read magazines, or phone my friends

b Compare your 'media usage' with that of Zaki and of a fellow learner (or teacher). Think about these questions:
- What percentage of your day is taken up by media usage?
- How do you engage with media? (Do you listen/watch/read actively, or is the radio or television on in the background?)
- How much time do you spend engaging with media that are designed to educate?
- Is there any difference between the way in which you engage with educational media and how you engage with 'popular' media?

c Work out a seven-day record of your own media use. (If you are working with a class, you could ask them to work out an average use for their group and then for the whole class.)

You will notice that all the 'media' mentioned by Zaki *communicate* something to you. In all cases mentioned by Zaki, this communication has the purpose of either entertaining (music, soap operas such as *The Bold and the Beautiful*), or informing (news), or educating (textbooks). But she doesn't mention a number of other objects that *communicate*. For instance, what about the labels on the coffee tin she used at breakfast, or the chip packet or cold-drink tin that she might have purchased during the day? What about the billboards next to the road she travelled along to get to school? Or the advertising on the taxi she drove in? Or the label on her friend's track shoes (Nike)? These could also be called 'media'. They communicate information about products, but also often attempt to *persuade* us to buy these products.

ACTIVITY 4

Watch part 1 of the video. Then answer the following questions:
a How many different popular media formats appeared in or were mentioned in this short excerpt?
b What ideas were you given about how you, as a teacher, could turn a popular media format into an educational resource?

Let's tackle some definitions now.
- We define **media** as those resources that are **deliberately** used to communicate with us. The purpose of the communication may be to entertain, inform, educate or persuade.
- **Popular media** refer to media that are used by large numbers of people, and include television, radio, films, newspapers, magazines, advertising leaflets, bill-boards, and the Internet. Their major purposes are to entertain, inform, and persuade.
- **Educational media** refer to media developed specifically for the purposes of educating. The most common example would be textbooks. 'Structured learning packages' – print-based, on the Internet, or in the form of CD-Itbms – are becoming more Widely used. All educational media are characterized by a selection of content which is then **logically ordered** so as to develop learning.

Popular media can (and should) play an important role in *supporting* learning. Their strength lies in creating a connection between the learners' experiences and school learning. They can activate learner interest, and can also be used at the end of a learning process when learners explore ways in which formal school knowledge can be usefully applied in real life.

But popular media are not designed in the logical, structured and developmental manner that is essential to good, higher-level learning. This is why *educational media*, especially well-designed textbooks, should remain the *foundation* on which learning in schools is built. While Nomsa frequently used popular media, she used textbooks and other kinds of educational media to *consolidate* learning. Textbooks are designed in a manner that provides teachers *and learners* with a structured, well-
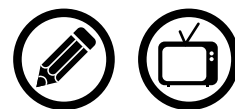
Spend about 20 minutes on this activity. Watch the video twice. Did you find that you noticed more popular media formats during the second viewing than you did the first time? Did you list *indicators* of popular media, such as the radio aerials on cars? What about the billboards that line streets? Did you mention them?

Saide

sequenced path towards a high-level understanding of key concepts in their learning area. In this sense, they are very valuable learning aids.

Using media resources educationally: A brainstorming exercise

In Section 2.2 we introduced you to one form of *problem-based* teaching and learning. Nomsa's lessons also drew on learner *experience*, and used a simulation and different kinds of media to develop an understanding of important historical concepts and to evoke the *experience* of working as a historian. This is sometimes called *experiential learning*. Experiential learning, role-plays, simulations, and problem-based learning are all methods consistent with outcomes-based education principles. They all create active learning environments and focus on developing skills and understanding.

But what role can media play in enriching these methodologies? We suggest that you begin an exploration of this through a quick brainstorming activity.

Do this activity quickly. Don't spend more than 30 minutes on it. A 'brainstorm' means that you write all ideas down. Don't discuss them.

ACTIVITY 5

Look at the picture of objects on page 12. Then, with your partner:
a Write down three objects you would use in a resource-based lesson (or series of lessons) you planned.
b Think about how you could use these objects to enrich your teaching in one or two learning areas. You don't need to think of detailed lesson plans - just brainstorm some ideas. But think also of how you would move from the initial stimulation to a more in-depth study of your topic.
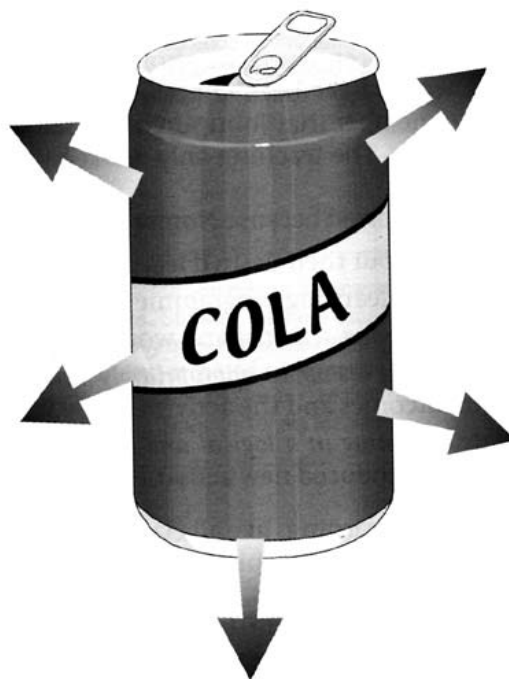
Here is one teacher's example to help you. Her ideas are represented in a spider diagram.

LANGUAGE, LITERATURE AND COMMUNICATION:

Learners could play role of advertising agency.
Initial task: *Design a logo and slogan for a new cold-drink.*
Expansion: *Study other cold-drink adverts… lead into teaching about the kind of language used to persuade people to buy…*

MATHS AND NUMERACY:

Learners could play role of restaurant owner.
Initial task: *Design menu with cold-drink sold in 100 ml and 300 ml glasses (e.g. if this 340 ml can cost me R2.60, how much would I charge per glass?)*
Expansion: *Lead into lessons about ratios and fractions. Could introduce idea of profit (e.g. if we want to make a 10% or 20% profit, what would each glass cost?).*
(One teacher suggested that this be developed into a real business venture where groups compete to sell food and cold-drinks at break.)

ARTS AND CULTURE:

Learners could play role of hospital nutritionists.
Initial task: *Learners could analyse the nutritional ingredients on the can. Then compare with other drinks, e.g. fruit juice.*
Expansion: *Ask to do research about nutritional value of listed ingredients and present report to hospital about 'healthiest' drink (and/or dangers of this drink).*

ARTS AND CULTURE:

Learners could play role of fine artists.
Initial task: *Challenge learners to produce a piece of art with cans.*
Expansion: *Introduce lesson on 'transitional urban' art: paintings, sculptures, cars, suitcases, (etc.), made with tin cans.*
Learners read further. Research what people think of this art.…

A NUMBER OF POSSIBILITIES:

Environmental questions: *What are these cans made of? What happens when we throw them away? Does the company do anything to prevent littering? What more could they do? Do their advertising billboards constitute an environmental hazard?*
History and sociology questions: How popular is cola? What is cola made from? Are the contents worth R2.60? What is he balance of the R260 spent on? Where does it come from? What images does their advertising portray?

ACTIVITY 6

Turn to Part 1 of your audiotape. Listen to the various teachers talk about using popular media resources in teaching. Make notes of points that you think are important. Add them to the 'checklist' you began developing earlier (pages 16 and 17).

Resources don't teach – teachers teach

The brainstorming activity, Nomsa's teaching, and Potato Crisp Pedagogy used a wide range of 'resources':

- *Nomsa* used a bag of personal belongings, a collection of photographs, short biographies cut from *Time* magazine, school textbooks and encyclopaedias.
- The *'brainstorm' teachers* used a cola can, adverts of other cold-drinks (probably cut from magazines), mathematics textbooks, other cold-drink containers, textbooks and reference books on nutrition, examples of 'transitional urban art' (probably some real examples, as well as pictures cut from magazines), textbook or reference books (or magazine articles) on 'transitional' art, information about cola (a video, magazine articles, reference books), etc.
- *Potato Crisp Pedagogy* used crisp packets, potatoes, and a number of information sheets about colonialism, agriculture, industry, etc.

Have we left out any other important resource? We hope you said: 'Yes, what about the teacher?' We often forget that media resources, on their own, don't teach. It is the *teacher* who *uses* resources to initiate the desired learning. Imagine how much
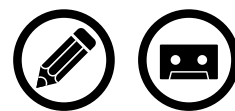
Spend about 30 minutes on this activity. On the tape you will hear John Aitchison, a South African adult educator, talk about an exciting teaching approach called Potato Crisp Pedagogy. Hamburger Pedagogy – developed by American teacher, Ira Shor – is another famous teaching idea developed around food. In both cases, the educators use the food, its packaging, and its advertising to initiate complex teaching about health, development and colonialism, while also teaching reading, statistics and media literacy. Aitchison's ideas can be found in Criticos, C. (Ed.) 1989. *Experiential Learning.* Durban: University of Natal, Durban, while Shor's ideas are discussed in Shor, I. 1980. *Critical Teaching and Everyday Life.* Montreal: Black Rose.

Saide

learning would have occurred had Nomsa's learners simply been given the resources and then been told to 'get on with it'! There would have been chaos! And no learning would have occurred. You may remember that John Aitchison said the same thing about Potato Crisp Pedagogy. The teaching only worked because of his planning and his mediation.

Learning occurred because Nomsa and john:

- were clear about their desired learning *outcomes*;
- *planned* their learning programmes carefully;
- designed *learning activities* and worksheets to guide their learners;
- *selected media resources* appropriately once they were clear about their desired outcomes and the activities they were to use to achieve these;
- *mediated learning in a logical and sequential way:* they kept learners on track and introduced new activities (and media) at strategic moments.

Resource-based learning, like all classroom methods that focus on learning rather than teaching, requires thorough planning. Reading from a textbook, or lecturing to a class, or simply getting learners to copy down notes, can often be done with little preparation. One of the major changes to teachers' work within a resource- and outcomes-based education is the increase in time spent planning. Look back at Nomsa's lesson and the teachers' 'brainstorming' ideas. You will notice that all the teachers plan how they will get learners to move:

- *from* the initial resource-based activity, which was aimed mainly at *stimulating learner interest*;
- *towards* the use of other resources – which are often media resources and usually include textbooks or other books – *to deepen their learning.*

The teachers are clear about the outcomes they want to achieve and guide learners through a number of stages towards the understanding and skills they want their learners to develop. Their teaching is centred on learning. They don't fall into two common traps:

- *Return to thoughtless teacher-centred teaching.* They know that talking about abstract concepts won't result in learning even though they, as teachers, might complete the work!
- *Indulge in poor learner-centred teaching.* They know that activity and talking by learners is only useful when it develops knowledge and thinking. This requires teachers to have a clear learning purpose in mind.

The educational opportunities offered by popular media

By now you should already have a list of ideas about how you could use popular media in your teaching. If this is the case, the next activity is a revision exercise. Do it quickly but imaginatively!

Take about 45 minutes to read this article and answer the activity questions.

ACTIVITY 7

Pair up with a fellow student. Then, in no more than ten minutes, think of as many ways as you can in which different kinds of media can be used in your teaching to achieve these outcomes. Don't debate the ideas, simply write them down.

Oh, media allow us to travel to all those strange places to which we've always longed to go! I love watching travelogues on TV! I've used short clips from these, as well as newspaper travel supplements, in my geography lessons, and my students love it. Sometimes media bring places and circumstances we don't want into our homes, such as news stories on wars or famines. But I suppose these are also useful . . . I suppose newspapers allow us to experience things and places that we will never be able to experience in real life . . .

I like the wildlife and nature programmes on TV. And some of those futuristic science programmes. Showing learners those short bits where the camera records the flower opening really does make their biology come alive! It links their schoolwork with real life! And the other day I recorded a few minutes of a programme that showed how satellites send messages around the world. I mean this is so abstract in the textbook, but these pictures will really clarify things for my learners.

Well, I'm not a teacher but I enjoy reading . . . and listening to the radio. I've always preferred this to TV . . . even when I was at school. I think it's because I have the freedom to imagine what the characters in the radio play are like from their voices, or imagine what the places in my novel look like by interpreting the words and sentences – the atmosphere created! It's fascinating how different people create different pictures in their heads. I'm often horrified by the way in which movie directors interpret characters I have read about . . .

Yes, I also enjoy the radio stories . . . I sit all afternoon listening to the people argue! They have almost become like friends . . . their experiences are like mine! Sometimes I almost imagine that I'm back at the fire and my dad is telling me those stories. Even though he told them many times, I loved them . . .

I think I prefer TV and films. I think these are actually the younger generation's new story-tellers! The *Bold and the Beautiful* or *Star Wars* are their new folktales! They also love comics. But I don't think this is bad. I teach English and often ask them to translate some Shakespeare play into modern soap opera language . . . and give them new costumes. Sometimes I ask them to draw a cartoon strip of their novel. They seem to have fun and, at the same time, practise their reading and writing skills . . .

But you can also use radio to improve language skills . . . and listening skills. I remember a few years ago a teacher of mine often brought in English radio programmes – news, talk shows and stories – and made us listen. Most of the time we enjoyed it. She seemed to have all sorts of exercises, such as asking us to summarize the news, or to turn it from 'reported' speech into 'direct speech'. But the one activity I loved was when she'd stop a story just as it got interesting and ask us to write the conclusion . . .

Saide

Well, what do you think?

We're sure you listed a couple of uses that these people didn't mention. Four things struck us as interesting:

- First, everyone spoke about *reading* in some way or the other. This included reading words on the page but also *images*. This isn't surprising. What distinguishes all media resources from other resources is that they are comprised of words and images – they convey information. This provides us with a rich opportunity to develop the reading skills of our learners across the curriculum.

- Second, everyone spoke about *teaching reading in the context of the real world*. They suggested that we could use media resources to develop our learners' ability to understand and manipulate the *world* around them. While this skill – often called *critical literacy* – has as its foundation the ability to read, it also requires that we teach people how media are used to construct our view of the world and to persuade us to accept certain ideas and dislike others.

- Third, a number spoke of media *evoking interest* and *imagination*. This was expressed in different ways. Some liked the radio because it gave them the freedom to create their own characters and places. They could use their minds to *imagine*. Another person mentioned that travelogues allowed us to 'visit' and see places we could never visit in reality. This allowed learners to picture things and places rather than them remaining abstract words on a page.

- Finally, many suggested that popular media could be used to *link school learning with learners'* lives. Introducing concepts through a medium familiar and accessible to learners – such as newspapers or television – increases the chances that learners will be interested and able to under- stand concepts. Newspapers also provide many examples of how school knowledge can be used practically.

The potential dangers of using popular media in education

Using popular media, learner experience and games to brighten up learning is exciting and can contribute to better learning. But there are dangers. As we increase the range of media in our teaching, we should try to avoid these dangers.

Have a look at this summary of an **English** lesson plan.

LESSON PLAN: GRADE 10 LANGUAGE AND COMMUNICATION

Topic:
The AIDS problem

Outcomes:
- *Learn what AIDS stands for.*
- *Understand what a big problem AIDS is in South Africa.*
- *Be able to do something about AIDS in their own lives.*

Teaching method

1. *General class discussion. Show the class a photograph of President Mbeki wearing and AIDS ribbon. Ask them if they know what this means. Then ask them if they remember the Sarafina affair. Do they know what it was about?*
2. *Tell them both of these things about AIDS. Tell them AIDS is a big problem in South Africa so it is often in the news.*
3. *Hand out the newspaper article Á vicious circle: AIDS and gender oppression'. Tell them to read the article on their own.*

4. *Discuss in groups. Write these questions on the board:*
    *   *Is AIDS a problem in South Africa?*
    *   *Does it affect everyone equally?*
    *   *What can we do about it?*

5. *Each group reports back.*

6. *Sum up lesson.*

A VICIOUS CIRCLE : AIDS AND GENDER OPPRESSION

By Chloe Hardy
Complaints Officer: Commission on Gender Equality

South Africa has one of the fastest-growing HIV/AIDS epidemics in the world. Studies show that in 1998, one in eight adult South Africans were infected with HIV. The virus has a disproportionate effect on the poor. Add to this a legacy of gender and race discrimination and the epidemic of HIV / AIDS in South Africa takes on frightening dimensions.

In the industrialised countries of the West, the AIDS epidemic affected specific groups, and was thus easier to contain. In these wealthy countries people with HIV have access to medication and proper nutrition, which allows them to live longer, illness-free lives.

In the past most education campaigns have focused on methods of preventing infection, such as using condoms, abstaining from sex, or staying faithful to one partner. The problem is that these campaigns failed to take into account the realities of women's lives. In South Africa, women's social and economic status makes it difficult for a woman to talk to her husband or lover about using condoms, and impossible for her to insist on mutual faithfulness in their relationship. Many women do not know that they have the right to refuse to have sex with their husbands or partners, and many more face marital rape if they try to refuse. The millions of South African women who fear domestic violence or being abandoned and left destitute do not have the power to choose safe sex.

Rape statistics in South Africa are terrifyingly high. Every day, women and girls are raped by gangs, by strangers, by members of their communities, by their boyfriends, and by their relatives. Taking a combination of drugs (including AZT) within 72 hours of being raped might reduce the risk of infection, but these drugs are expensive. A good medical aid will cover the cost, but this is no comfort to the high percentage of women who are unemployed or working in low-income jobs.

Women are differentially affected by HIV/AIDS in other ways too: because women are exposed to more fluid during sex, it is easier for a woman to contract HIV. Women are also put under a lot of social pressure to have children. This means having unprotected sex, and running the risk of becoming pregnant when HIV positive.

One of the hardest choices is deciding whether to tell family and friends about their HIV status. Due to public ignorance and the stigma surrounding the disease, people with HIV/AIDS are often rejected by their relatives and friends, at precisely the time that they need them most. People who live in poverty generally have no one but their families and communities to turn to in times of illness. When people with HIV/AIDS are abandoned and ostracised by their communities, they fall into further poverty, and this hastens the onset of AIDS. Prejudice and discrimination against those with HIV/AIDS leads to silence, which leads to further infection.

Even when they do not have HIV, it is ... the ill and orphaned,

AIDS. WHATEVER YOU NEED TO KNOW THERE'S ONE FREE NUMBER TO CALL.

AIDS HELPLINE
0800-0123-22

CHARLE
MOTT F

Aids Consortium
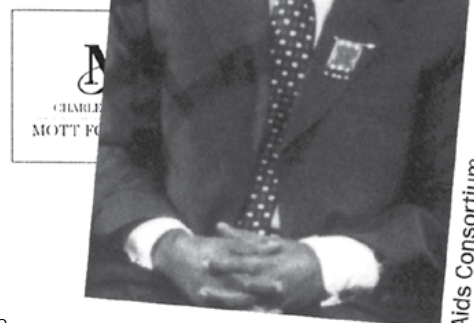
What did we think of this lesson?

We were initially impressed. There were clear outcomes listed. The teacher chose a photograph of a well-known personality and event to introduce the topic. She followed this up with a provocative and interesting newspaper article. The teacher also designed a lesson that kept learners active, and tried to link it to their lives (by asking what they would do about it).

But then we were reminded that this was supposed to be an *English* lesson. Yet all of the outcomes were really lifeskills outcomes. Do you see any that relate to improving reading, speaking, listening or writing skills? Do any develop media literacy, or any other kinds of literary skills? We couldn't find any, and concluded that the teacher had become so excited by the content of the article that she'd forgotten how she should use this to develop English language competence. While it seems that the learners had a great deal of fun, and learnt something about AIDS, they did not seem to learn much about English. (Obviously they did develop some language skills through their reading and discussion. But this is *incidental* learning. While the incidental learning of language in other learning areas is something teachers should aim at doing – and we will demonstrate how this can be done later in this module – developing language competence should be explicit and conscious in *language* lessons.)

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But, second, even if this was a life skills lesson, learners did not learn about AIDS in a systematic and in-depth way. The teacher only used one article and that article focused, in quite a sensational way, on one small aspect of the problem. We were not convinced that learners really understood AIDS, or could do anything with the knowledge they'd learnt. Their interest had been aroused, but their understanding had not really been developed. Recent South African research provides a number of good examples of classroom practice that is learner-centred, based on learner experience, and which uses group work. In other words, it looks like good outcomes-based and resource-based learning. But, ultimately, the learning – as in this lesson – remains shallow, and important conceptual understanding of the learning area is never developed.

Third, while newspapers, magazines, television, etc. are accessible and potentially exciting, they only offer fragments of information rather than writing that demonstrates sustained argument. An important learning outcome for all learning areas is the ability to link bits of information and use these to develop convincing arguments. So, while popular print media provide teachers with an exciting way of evoking an interest in reading, and of developing lower-level reading skills, they do not provide the means to develop the advanced reading skills required to understand arguments or to be analytical.

Keep these warnings in mind. When using popular media, make sure you:

- Make the link between the media you use to evoke interest and the particular concept you need to teach: don't get distracted by the many debate possibilities offered by unstructured popular media.

- Ensure that you move from the simple, accessible writing and reading in popular media to the kinds of reading necessary for higher-order learning. In other words, consolidate learning by getting learners to read sustained arguments such as can be found in good textbooks.

- Enable your learners to make links between the fragmented 'facts' that often dominate popular media, to begin developing conceptual understanding and using this to analyse and argue.

We will deal with these issues in much more detail as we move through this Guide.

Conceptual depth in media-based OBE: Concluding the case study

Let's return to our observation of Nomsa's teaching. We think that she provides us with a number of ideas about how to avoid the potential dangers referred to in Section 2.3.

Getting learners to use skills and understanding

We were interested in how Nomsa would continue her teaching in Human and Social Studies. Would she leave the topic she'd developed – the role of evidence in historical research – and move on to other parts of the curriculum? This is what she said she would do:

> *'No, I will continue developing the concepts introduced this week. But I'd change the kinds of activities, for two reasons:*
>
> • *First, my learners need to go out and practise the research skills they've learnt. I want learners who can **do** history, not just know about it!*
>
> • *Second, these learners are quite young. They get bored quickly, so I need to vary what they do to keep them interested. But I must make sure the learning still develops to a higher level and doesn't become fragmented.*
>
> *'So I have planned a two-week activity in which my learners research the history of their family. They will then work in groups to develop rr community" histories by pooling the histories of a couple of families. I've been thinking that we may develop a huge wall newspaper at the back of the class where they pin up the stories and photographs and other historical rr evidence" they have collected from their families. What do you think of this?'*

We thought it sounded interesting, so Nomsa showed us a 'Research Process Guide' she had designed for each group. It drew on the previous week's 'research' (see Section 2.1) and included questions like:

1 Where will you find the information required?
  • *Primary* sources of evidence: Interview family members and family friends. Read through original letters (if your parents have kept these) and collect photographs and other objects that give you an idea of the times.
  • *Secondary* sources of evidence: Visit the 'library' and read through newspapers and other documents from the period. (The 'library' is a file of articles I have photocopied from research I did in the Johannesburg library.)
2 Work with a friend to develop an interview schedule. What kinds of questions will you ask people? How will you record what is said?
3 How will you decide on the 'truth' when different people tell you conflicting stories? (In my 'library' there is an interesting article that might give you some ideas.)

If you want to complete this module in 20 weeks, you should now be starting *Week 2* of your studies.
   Section 2.4 is complex; it needs to be worked through slowly and with a couple of re-readings.

Note how Nomsa slips in two new history terms, *primary and secondary sources*. She doesn't do this through asking learners to memorize definitions. Instead, she illustrates their meaning by *using the terms in an activity*.

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This project ran for more than two months. It began with intensive classroom-based work where interview schedules were designed (as well as making other practical arrangements). After that, a lot of the work – like interviewing – was done after school while the reading of secondary sources was done in class. Nomsa did no formal talking, but she was available for queries. There were many of these! Each day she'd check a few learners' work-in-progress to ensure that learners were working and were on the right path.

This is one way of consolidating learning. Through this research project, learners have to *read* history, *understand* concepts and processes, use these, and finally *write* up a report. Clearly Nomsa is ensuring that a number of critical cross-field outcomes, as well as specific Human and Social Sciences outcomes, are being developed in this series of lessons. Learners are enjoying active learning, but they are also achieving a higher-level conceptual understanding of history.

Integrating history into the Human and Social Studies learning area

Nomsa's lesson might be described as out of step with *Curriculum 2005* because it still focuses on the subject *history* rather than the learning area *Human and Social Studies*. This is not entirely true. We remarked earlier that Nomsa had chosen biographies of people who, in some or other way, linked with other topics in the Human and Social Studies curriculum. For instance, she asked them to describe the country the historical figure came from. The 'geography' part of Human and Social Studies introduces learners to other countries, and Nomsa's worksheet got them to begin this kind of research.

We feel Nomsa's determination to ensure that learners developed real and useful *historical skills* would assist the learners to achieve *integrated* learning. This is so because *doing history* requires, first, higher-level learning which learners may well use in studying other areas as well. Second, the process of historical research demonstrated to learners that history, geography, economics, etc., occur in an *integrated* way in real life. They didn't need to be told this. And, third, the language and research skills would be used in other parts of this learning area and in other subjects.

Is role-play and research an appropriate teaching method for young learners?

Well, Nomsa's experience suggests that it is. But she did give us some advice: 'Change activities regularly to keep interest high.' We believe that useful skills – such as research skills – can be taught to young learners as long as:

- You ensure that they link in with your learners' lives and experiences. This would increase interest levels (and thus the ability to learn) as well as meet one of the 'rules' of good teaching, namely, proceeding from the familiar and concrete, and moving slowly to the less familiar (unknown) and abstract.

- You teach the concept at a simple level. Don't develop all the skills and under-standings required to be a *real* history researcher, and don't develop them in complex ways. Instead, simply induct learners into the role of 'historian' by teaching them some basic history research processes and doing so through a meaningful set of activities.

What do we mean by conceptual learning and concept-based teaching?

Nomsa used many learner-centred and problem-based methods in her teaching. She also used a variety of media resources and worked hard to use the interest she had evoked in learners to develop both:

- a deeper understanding of particular content in her Human and Social Studies syllabus;

- a more sophisticated ability to use important historical skills and concepts.

But we have also noted that media-based experiential learning sometimes results in superficial learning. Learners have great fun but learn only a few, often irrelevant facts, rather than information they can use. How do we develop a teaching style that ensures that students learn in a way that allows them to use the information they have learnt?

We would suggest that teachers move away from a focus on dozens of disconnected facts and, instead, focus on developing in their learners:

- the key **concepts** of their learning area. These concepts should allow learners to categorize information from their environment, and to organize such information in useful ways.
- the key general ideas - **generalizations** - from their learning area, to help them understand relationships, explain cause and effect, and predict likely consequences.

What do we mean by 'concepts'?

Concepts are tools for thinking about the world. When we say: 'What is a vegetable?', what comes into your head? Maybe potatoes, or cabbages, or tomatoes? But if! say 'a rose', the concept 'vegetable' gives us the *conceptual tool* to say: 'No, that is not in the *category* of vegetable.' We can justify this by saying: 'It cannot be included because one of the *criteria* of "vegetable" is that it can be eaten by humankind.'

Someone might then say: 'Oh, so a steak is a vegetable?' We know that it isn't. But if our concept 'vegetable' *only has that one criterion* – that a vegetable is something which can be eaten by people – then meat should be included. This indicates that we need to develop a *number of criteria* in order to develop our concept, 'vegetable'. The concept 'vegetable' should contain enough criteria to enable us to *organize* large amounts of information – all the facts we learn – logically. It should answer the question: 'What, exactly, makes a vegetable a vegetable?'

We will use an example of a concept that learners have to learn about in a number of learning areas – Human and Social Studies, Economics, Development Studies, and even Technology – to illustrate what we mean by 'concept-based' teaching.

The general concept 'industry' enables us to bring together different kinds of factories and activities for making goods. By organizing this information conceptually, we can begin discussing bigger and more important questions such as: 'How does industry assist in the development of our country?'

However, we cannot discuss 'industry' unless we all know what we mean by this word. We must all have in our minds some image of *groups of people working, mostly in buildings, using machinery, with some kind of power source, to produce things in large quantities*. These would be the criteria that constitute the concept 'industry'. This would allow us to say: 'No, we don't think women weeding in a field would fit the concept of industry.'

From concepts to generalizations

Concepts, generally, are fairly abstract. 'Industry', for instance, means little until we connect it to real objects, people or situations. Only when we have a very clear picture of what it involves in reality do we 'understand' a concept. Only when we have this 'understanding' can we make sensible general statements about it, such as:

- Industries are usually found in or near towns.
- Industries give many people employment and a wage.

These statements are called 'generalizations'. We're sure you will all realize how often we 'generalize' and how important the ability to generalize is. The problem is that we often generalize without thinking carefully. We might not have been clear about the concepts we are using in our generalizing. For instance, we might say: 'By abolishing caning we are destroying discipline in schools.' But, as soon as we say this, we

The rest of Section 2.4 is adapted from an excellent publication produced by the International Foundation for Education with Production, Gaborone: Seidman, G. and Stuart, J. 1990. *Working for the Future* - A Teacher's Guide. It is also a very useful source of simulation games.

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are assuming that caning is a part of the concept 'discipline': that caning is a defining criterion of the concept 'discipline'. The problem with this generalization is that we haven't thought about:

- whether this is a useful criterion;
- what the other criteria may be.

Being clear about how we organize our information – how we conceptualize – enables us to be far sharper in our generalizations. It improves our thinking and problem-solving skills.

The relationship between facts and concepts

Concepts are more important than facts, but facts are needed as the starting point from which to develop concepts and the related generalizations.

Take the example of 'industrialization', a concept derived from 'industry' but on a still more abstract level. We can **build it up** by studying different kinds of production processes (in the past and the present), and by looking at what is happening in the learners' own country. For instance, it is important to know facts such as: 5% of our population are miners, 15% are factory workers and 3% are farmers.

Although these are not worth memorizing (because they will have changed in five years' time), they are useful because they allow learners to compare their country against other countries. This would allow learners to make judgements as to whether a country is 'industrialized' or not. Obviously, though, they can only make this judgement if they know what the criteria are for the concept 'industrialized country'. If the criterion is simply 'a country is industrialized when more people are employed in industry rather than agriculture', then the facts above will allow us to say that this country is 'industrialized' (since 20% of people are employed in industry and mining, and only 3% are employed in agriculture).

The relationship between facts, concepts and generalizations

By' generalization' we mean broad statements that express some important idea; they may describe a general state of affairs, or point to a general relationship, such as cause and effect. Like concepts, generalizations can be formed at many different levels of abstraction and generality. Some merely describe, others go further. Here are some examples: 'Our industries are based on our mines' generalizes *within* a country, while 'Industries are usually found in towns' generalizes *across the world*. Both of these are fairly concrete generalizations. A more abstract statement might be: 'Industrialization implies urbanization.'

Some generalizations give explanations. Here is one: 'One reason for the rapid growth of British industry in the 18th century was the capital (wealth) accumulated from colonial trade.' This generalization could be extended so that it takes the form of a more general 'law of development', such as 'Industrialization requires previous capital accumulation'.

It is obvious that learners would not 'understand' such a statement unless they had studied the facts on which is it based. It is also obvious that learning facts without drawing them together into such powerful and useful generalizations is often a waste of time.

Another use of facts is to check generalizations against them. Some generalizations may be in the form of a hypothesis or prediction, such as: 'If a country has a good mineral resource base, industrialization will take place.' Such a statement can – and should – then be tested out against historical and modern evidence: do *all* countries with good mineral resources develop industries? If not, what conditions hinder or promote industrial development? Here, accurate facts are very important. The relationship can be summarized in a diagram:
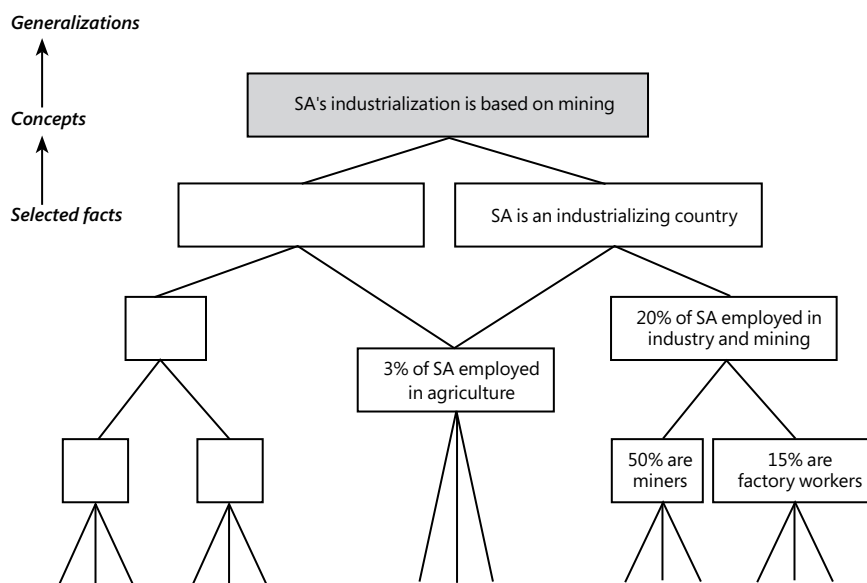
It is the generalizations, together with the concepts embodied in them, which learners should understand and remember. The individual facts, such as the percentage of the workforce in mining, the names of industries and the towns where they're situated, can be *forgotten* once they have served their purpose. The understanding of 'industrialization', for example, is what matters.

How do we *teach* conceptually?

How do we learn to understand such concepts? How did you acquire the concept of 'industry'? Gradually, or all at once? By visiting factories? Or by working in one? By seeing pictures? By reading? By listening to someone who has experienced industrial work describing it? Or from several of these possibilities?

When we teach we want learners to gain real understanding as quickly and accurately as possible. We can only do this by building on the experiences they have already had. The concepts must be related to something they already know. If the concept is very far from their experience, the teacher must bridge the gap in some way so as to lead them to it.

In some learning areas this is relatively easy. For instance, development studies or economics is about the real world, and it is often possible to link new concepts firmly to learners' previous experience. If real experience isn't possible, the teacher must provide some new 'experience', either real, Simulated, or by way of newspapers, books, magazines and ptctures. Some possible practical ways of doing this for the concept 'industry' would be to:

- Arrange a visit to a factory.
- Use pictures from books, magazines or newspapers, or television, or any other form of visual aid.
- Relate the concept of 'industry' to anything in the children's environment that exemplifies it, such as heavy machinery in the fields or on the roads.
- Use a story in an 'industrial' setting, either from a book, or told dramatically by the teacher, or by a worker you invite into the class.

The more examples used, the better! Learners may need many examples before they grasp fully what 'industry' is, and what it isn't. It is easier, of course, to do this with some concepts than others; it depends on the level of abstraction. For instance, the concept 'capital' is quite abstract. The teacher may need to provide a real or simulated experience - a classroom game with play-money would be a simulation,

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or a real productive exercise can be carried out, such as buying a box of fruit, for resale at a profit, or raising chickens, in order to explain this.

What we have discussed here is the so-called inductive approach. It is considered to lead to much better understanding of broad concepts, because it is based on the concrete experience of the learners.

Teaching concepts inductively

First, the teacher must have an overall view of the structure of the syllabus (or desired learning outcomes), and indeed, of the whole subject matter of the learning area. She must know what concepts and generalizations are critical to an understanding of the learning area. But this does not mean that all concepts are taught at once: good teachers will also know what concepts learners will not acquire until they are older or go on to further study.

Second, the teacher needs a clear understanding of learners' current understandings so that she can build on their present experience. Third, she must encourage learners to be active in their learning. In turn, the teacher has to plan the route carefully from where the learners are to where she hopes they will get to. She must plan it stage by stage, paying attention to the building up and to the pacing of each part, as well as to ways students participate in learning.

Building up

As we have said, the teacher starts with the learners' own present knowledge, with their familiar environment. She starts with facts, low-level concepts, and concrete ideas and statements that are easily illustrated. She builds up to broader concepts and more abstract generalizations, covering wider perspectives, until she has led the students to a peak of understanding from which they can survey all the concepts and their relationships, laid out like a map before them.

But the path of the learners and of the teacher are different in this respect: the teacher has been there before and knows the way. In fact, in planning her teaching, she works 'downwards'. She starts with the most abstract concepts and the broadest generalizations that she hopes the learners will eventually reach, and moves downwards, deciding which concepts they will need on the way, and which generalizations will make good halfway steps. Then she chooses a selection of suitable facts to study which will illustrate the ideas, and takes examples from the familiar environment to exemplify the concepts. Finally, she plans the learning activities that will introduce the students to the concepts and ideas.

The learners start off at the bottom of this 'ladder'. They experience the learning activities, they learn the facts, form the concepts, begin to draw suitable conclusions and slowly begin making general statements. Thus gradually, through the course, they work upwards through a long series of ever more abstract concepts and generalizations, until they achieve the comprehension of the broad concept.

Table 2.1 Teaching and learning the process for industrialization

Abstract concept Industrialization Urbanization	**High-level generalization** Industrialization requires previous capital accumulation Urbanization leads to a more complex society with a more highly differentiated division of labour, etc .	Teacher begins here
Concrete concepts Industry Capital Specialization, etc.	**Low-level generalization** Industries are usually found in towns Industries provide wage employment Workers in modern industry are more highly specialized, etc .	

Factual content
Studies of currently developing countries, i.e. China, Kenya, Tanzania, South Africa
Historical accounts of industrial revolutions in UK, USSR
Studies of own country; statistical data; maps, plans
Information about particular local industries

Learning activities
Reading stories and textbooks
Referring to newspapers, government publications, television, films
Listening to teachers or others, e.g. workers
Carrying out productive, co-operative projects
Studying tables of data
Visiting factories

Learners' previous experience
Earlier school knowledge
Knowledge of own community and surroundings
Facts picked up from other sources
Work experience (?)

Left arrow label: Learners moves from own concrete experiences to abstract conceptual understanding — Learner begins here

Right arrow label: Teachers must translate learners' abstract understanding into ideas that they can relate to concretely

Note: Obviously, this is not a complete list of concepts and generalizations that can be learnt under this topic. They are some examples to show how you can think about and plan for concept-based learning.

Finally they understand where the teacher has been taking them. It is often a good idea to give the learners a rough outline of the ground they will cover, showing them where they will be going. But they cannot start their learning at the top; they always need to climb the 'ladder' themselves.

Pacing

The teacher has to ensure that each stage is understood before learners go on to the next stage .

- *Internalizing new knowledge.* Starting from a familiar example, or from sorrie real or simulated experience, the teacher will add new facts, introduce new concepts, or give a new, more technical name to some familiar phenomenon. Then she must ensure the learners have taken in (assimilated) this new knowledge and, if necessary, reorganize (accommodate) their old knowledge to fit it.

  For example, vague knowledge about car factories and gold mines, together with old memories of the steam engine, might now be reorganized and fitted together as examples of 'industrial processes'. This is an absolutely crucial stage. The process of internalizing knowledge takes place *in the learners*, not in the teacher. But she has to help this process. She must pause, and give time to the learners to carry it out.

- *Applying new knowledge.* The teacher must then check to see how far the learners have really internalized the new knowledge and made it their own, how far they 'understand' it. The only real proof of understanding is whether they can *apply* it: by producing it in a new form, such as a statement in their own words, a new pictorial or diagrammatic representation, or by giving a new example, or by applying it to a *new context*. For example the question, 'If we had industries in our village, what difference would they make?' tests understanding of the concepts

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One way of organizing one's teaching so that learners will make systematic conceptual progress is to use the sort of 'progress maps' that have been developed for the various learning areas by the Gauteng Institute for Curriculum Development (GICD) (phone: (011) 728 7068). These 'map out' learning pathways that take learners from simple or familiar facts and concepts, to more complex conceptual understanding and higher-level operations that learners should be able to perform using those concepts. Progress maps (which schools can develop themselves for specific purposes) are a way of systematically **building** learners' conceptual development and avoiding haphazard teaching.

of industrialization. Time spent on this is well worth it: if basic concepts and ideas are well understood, the learners will then learn the next stage more rapidly.

Participation in learning: doing it themselves

The teacher should encourage the learners to become active partners in the learning process. Having presented them with suitable factual content, and directed their attention to relevant experiences and examples, she should make them draw their own conclusions, and encourage them to formulate their own generalizations at each stage.

The learners may draw different conclusions from the ones the teacher first had in mind; this is all to the good. Teacher and learners can test these against the evidence together. If the learners have made reasonable statements, the teacher should accept these and then encourage them to look still further.

Learners may not use precise language at first; they may not even know the right words. Yet they may be showing understanding in spite of this. They can be guided *gradually* to use the correct words and concepts. To express their own ideas is the first and most important step. To encourage this, you should construct your teaching like a spiral. Learners should keep meeting the most important concepts again and again, in new and more abstract forms. For example, 'industrialization' will appear:

- in different countries;
- in different historical time (the industrial revolution, current economic plans, etc.);
- as a form of production;
- as a strategy for development.

Each time they meet it, the learners' understanding of industrialization should widen and deepen, until they can handle it at an abstract level. Instead of just describing it, they should be able to write an essay on 'How industry can help a country increase its wealth', or 'How the process of industrialization will change people's ways of living'. Provided the main concepts are understood, and the learners have learnt through study of some facts and real examples to draw relevant generalizations and explain relationships, they will not only be able to pass the exam, but will also be able to participate in the process of 'developing' their country.

What have we learnt in Section Two?

Key learning points

About new methods of teaching

- Outcomes-based education is new to schools in South Africa. But it isn't new in other parts of the world, or in business and industry. Good resource-based OBE is part of a 'family' of teaching methods that includes role-plays, simulation games, problem-based learning, and experiential learning.

- These methodologies all assume people learn best when they are interested in what they are learning, actively involved in their learning, and where learning is linked to life.

- This suggests that, as teachers, we should aim to:
  - Make learning fun: use games (such as simulations and role-plays), or build learning by using puzzles and problems.
  - Ensure that learners understand why they are learning something: build new and abstract knowledge on concrete learner experience, and then demonstrate how new knowledge can.be used practically.
  - Cut back on teacher-talk and increase independent and group study by learners.
  - Design learning programmes around media resources: this ensures that learners are active and that they practise reading and debating.
  - Design materials that interest learners and activate a questioning and critical attitude to learning.

About the educational use of popular media resources

- Many things can become *learning* resources: anything from a puddle in the playground to the local bus timetable. The limit is our imagination and our *resourcefulness*.

- We should use a wider variety of resources to activate learner interest, and to deepen their knowledge of abstract and difficult concepts. But we must realize that resources only become educational through the thoughtful intervention of a teacher.

- Planning learning processes is a very important skill in resource-based OBE. In particular, this must focus on leading a learner from the interest activated by an initial resource through to deeper conceptual understanding.

- Aimless, 'busy' activity that doesn't result in learning is a danger in resource-based OBE: ensure that media resources and activities get learners to think and reason.

- Popular media resources are particularly good at:
  - activating learners' experience and contextualizing school learning;
  - providing learners with experiences they could never have: travelling back in time, visiting exotic worlds, listening to famous figures talk;
  - evoking learners' imaginations;
  - improving learners' ability to use language: reading, listening, second- guessing, modelling talk;
  - improving learners' critical literacy;
  - updating textbook content.

You should have spent at least two hours working on Section 2.4. Make sure you understand it before continuing.

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About teaching conceptually

- Move *from* the fun and activity of media-based and activity-based teaching to developing higher-order conceptual understanding of your learning area.
- Conceptual understanding, rather than memorization of facts, is vital in a world where facts change rapidly and where the aim of teaching is the application of knowledge.
- Focus on developing some key concepts. The concepts should:
  - enable learners to categorize and organize large amounts of information;
  - enable learners to generalize and use this ability to solve problems;
  - build from learner experience and facts. But facts must only be taught in order to understand the concept, not to be memorized.

A summative assessment activity

This is an important activity and will take some time to complete. Set aside at least five hours to do it. This could be spread over two or three days. Include the lesson programme developed in your resource file. You may want to copy your fellow student's lesson programme and file that too. We will not comment immediately on this activity. Instead, work through Sections Three, Four, Rve and Six and then see whether you can assess it yourself.

We'd like you to do three linked activities at this point:

a Re-work the 'checklist' of criteria for good resource-based teaching that you copied down earlier (see pages 16 and 17). Add any new ideas that you have learnt about since then. This 'checklist' should act as a summary of key learning points.

b Choose a key concept in the learning area you teach. Then develop a programme of activities using media resources to teach this concept. Use your checklist to ensure that you include the important ideas that Nomsa, John Aitchison, and Education with Production (in Section 2.4) have provided.

c Swap your learning programme with a fellow student or teacher. Assess each other's programmes and integrate any ideas you learn from your fellow teacher's programme into your own.

SECTION THREE

Using popular print media in the classroom

What will we do in Section Three? 3.1

The term '*popular* media' describes a wide range of media, including magazines, newspapers, television and radio, whose main purpose is to inform, entertain or persuade. But popular media also carry resources designed specifically for *educational* purposes. Many teachers use popular media programming with clear educational *content* and *intent* – such as the SABC's *Learning Channel* or *Learning Zone*, or the teaching supplements carried in newspapers like *The Teacher* – in their teaching.

However, teachers don't tend to exploit the educational potential of *non- educational* popular media programming, such as soap operas (*Isidingo* or *Generations*), or soccer commentaries, or newspaper cartoons. In this section we will explore how popular *print* media – in particular newspapers and magazines – can be used to improve classroom learning and teaching. In Section Four we explore the educational potential of popular *electronic* media formats.

> You should have spent about 12 hours studying this module so far. To keep to a 20-week schedule, you should now begin *Week 3* of your studies.

Different popular print media formats

'*Popular print media*' is a term that describes a wide variety of media formats that include newspapers, magazines, billboards, and advertising flyers. Our focus will be magazines and newspapers, but even these are different enough to offer teachers a rich variety of potential teaching resources.

First, while both magazines and newspapers tell their (stories' using similar formats – words, photographs, diagrams, graphics, cartoons, statistics, advertisements, letters from readers, horoscopes and puzzles – they differ in important ways:

- In general, magazines are concerned with *entertaining* their readers, while newspapers focus more on *informing* readers .
- Magazines contain many in-depth 'human interest' feature stories: stories about places or personalities. Newspapers, however, carry mainly short, 'hard news'

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stories with a few in-depth stories linked to the news and politics.

- Magazines make more use of photographs – colour fully and prominently – and carry more colourful adverts. Newspapers carry photographs of recent events, diagrams, graphs, maps and tables of statistics, weather, financial and entertainment information, and political cartoons and editorials linked to the latest news.

Second, not all newspapers and magazines are the same: they differ according to the kind of readership they try to attract. While many could be classified as 'general interest' publications – *Cosmopolitan, Bona, The Sowetan, The Star*, there are others that can be regarded as 'specialist' publications – *Business Day, New Sdentist, or Getaway*, for instance. Specialist publications offer more in-depth articles that could be useful in teaching subject content. We also noticed that weekly newspapers – such as the *Mail and Guardian* or *Sunday Independent* – carry longer, more analytical articles than daily newspapers.

Publications in South Africa still tend to target racially-defined audiences. So, for instance, while *The Sowetan* may carry news that some would regard as being of interest to an 'African' readership (for instance, lots of soccer news), *The Star* seems to target a predominantly white audience (it carries lots of rugby news). Social class – or income – is also emerging as important in the kinds of articles carried by magazines or newspapers. A magazine like *Ebony*, for instance, seems to cater for a (younger) black, upper middle-class audience, while *Bona* seems to cater for a slightly older, less affluent black audience.

It is important to understand some of these differences, not only so that we can use popular print media appropriately, but also so that we become more familiar with the way in which the media work. This familiarity is called becoming 'media literate', and is regarded as an important learning outcome in new South African education policy. This can be taught through a 'media literacy' activity such as Activity 8 below.

ACTIVITY 8

Divide your class into groups. Hand each group two different newspapers and two different magazines. Ask them to skim through them. As they do so, they should:

a Write down the differences they see *between magazines and newspapers*. Ask them to look at the kinds of stories (South African or international, about personalities or politics, positive or sensational news), the *length* of stories, the *language* used, the people featured (rich or poor, black or white), the use of photographs, etc.

b Write down any differences they see *between the two magazines* they have, and then *between the two newspapers* they have.

Then begin a class discussion in which you list the findings of the different groups on the chalkboard. Your role as teacher is to help learners organize their findings in order to develop a clear idea of some of the essential characteristics of magazines and newspapers.

This is a simple activity aimed at familiarizing learners with popular print media and introducing them to the idea of reading media more thoughtfully and critically. Later, in Section Five, we provide examples of other ways of teaching media literacy. You will notice that this kind of activity can be taught at differing levels of complexity. The complexity depends entirely on the kinds of questions and activities you, as the teacher, set the class.

Third, as we have mentioned, each magazine or newspaper carries a wide variety of formats within their covers: from adverts and cartoons through to statistics, photographs and good writing.

This variety – of formats used within publications, of differences between magazines and newspapers, and differences among magazines and newspapers – provides teachers with a rich pool of teaching and learning resources.

Desired learning outcomes

In Section Three we provide a number of examples of lessons in which different popular media formats have been used to achieve these outcomes. We don't expect you to use the *same* news reports, adverts or photographs in your own teaching as we have used. Instead, focus on understanding the *principles* that are modelled in the various examples, and choose media more appropriate to the learning area and grade you are teaching. By the end of this section, you will be able to use popular *print* media to:

- *Supplement your teaching in different learning areas.* You will know how to use different newspaper and magazine formats to activate learner interest in the topic you want to teach, to contextualize this learning within their life experiences, to make abstract ideas more concrete and to update and supplement textbooks (Section 3.2).

- *Develop the reading skills of your learners.* You will know how to use newspaper and magazine formats to improve basic reading skills, such as skimming, scanning and reading more quickly and with better comprehension, as well as to summarize, improve vocabulary, and develop a reading culture in your class (Section 3.3).

- *Develop the writing and speaking skills of your learners.* You will know how to use newspaper and magazine formats to improve writing and debating skills. This includes developing basic writing skills such as presenting information in an organized and logical way, as well as more advanced skills such as writing persuasively and imaginatively. You will also learn how to use popular print media content to raise debate and develop learners' critical and argumentative skills (Section 3.4).

Checking your learning: How should you use these outcomes? You may find that they don't mean much before you study the section. That's *why* it is so important to check back regularly. Ask: 'Have I achieved any of these outcomes yet? What do I still need to learn in order to meet these outcomes?' Write down those things you still think you need to learn, and use them to focus your learning.

Sections Three, Four and Five carry text boxes that provide ideas on how to use particular teaching methodologies successfully. Section 4.4 contains tips about how to collect, evaluate, and store popular print and electronic media resources in an orderly manner. *Media literacy* ideas are discussed in Section Five.

Saide

3.2 Supplementing teaching across the curriculum

Popular print media cover a wide variety of topics, and generally they do so in a lively and accessible manner. Journalists also tend to write about the impact on society of things which might be dealt with in an abstract way in learning areas such as biology, science, or economic studies – thus demonstrating their practical usefulness.

In Section 3.2 we provide a range of teaching ideas in which popular print media are used to:

- activate learner interest in the topic you are trying to teach;
- contextualize learning by linking the topic to the learners' life experiences;
- make abstract concepts more 'visible' and concrete so as to improve learner understanding of the topic;
- update and supplement textbook knowledge.

We have chosen learning areas and levels randomly. Don't be concerned if the example isn't in the learning area that you teach. Rather, 'walk through' the teaching experience and try to understand the principles underlying the use of the media resource in each case. This is what we did. We observed teachers and spoke to them. In this module we present the lessons as we observed them and then provide our assessment of their usefulness. Enter into a debate with us!

Activating learner interest

One of the biggest problems facing teachers is how to get learners interested in the topics and concepts they have to teach. Learners often regard school knowledge as having no connection with their lives. It is seen as something to be learnt and fed back to examiners. Because learners can't see any link between their schoolwork and their lives, learning often becomes boring and difficult. Let's see how a Johannesburg teacher used a soccer report in the newspaper to stimulate her class's interest in a geographical concept – map reading – that forms part of the Human and Social Studies learning area.

Using a soccer report to introduce map-reading skills: 'Finding the way to the World Cup'

The teacher knew that almost all of the Grade 7 learners in her class were soccer fans. So she decided to hand out copies of a newspaper article which listed all the teams playing in the 1998 World Cup soccer finals, as well as a worksheet which she designed to go with the article. When she had handed these out, she displayed a mock 'ticket', saying: 'I have a ticket to the World Cup final. I will give this ticket to the person who can find his or her way to the World Cup venues most quickly.'

FINDING OUR WAY TO THE 1998 WORLD CUP
Worksheet

Read the newspaper article you have been given. Then answer the following questions:

1. Find the names of all the countries that are playing in the 1998 soccer World Cup in France.
2. Locate these countries on the map supplied. (Use your marker pen to highlight the name of the country on the map.)
3. Label two major cities in each of the countries you named.
4. Work out the direction of the following cities from Johannesburg:
   - Paris (France)
   - Buenos Aires (Argentina)
   - Tokyo (Japan)
5. Imagine you have arrived in Paris and have tickets for matches in the following French cities: Marseilles, Toulouse and Lens. Tell me what distance (in kilometres) you will travel if your bus took you:
   - from Paris to Marseilles;
   - from Marseilles to Toulouse;
   - from Toulouse to Lens; and then
   - from Lens back to Paris.

   You should use the scale provided on page 71 of your atlas to calculate this.
6. How long would it take you to do this journey if your bus travelled at an average speed of 120 kilometres per hour?
7. Do you think South Africa should host the 2006 World Cup? Discuss all the advantages and disadvantages that holding this competition can bring to a country.

Reproduced from The Star newspaper, 22 May 1998

What did we think of this lesson?

This lesson engaged the interest of the Grade 7s, which is always a good start to learning. Furthermore, they could relate to what they were learning. It seemed that even though the learners knew that the 'ticket' to the match was not a real one, the process of mapping the routes to Paris, and to the various matches and competing countries, aroused considerable excitement. They could see the potential benefits of map reading because this skill, which might otherwise have seemed abstract to them, was located in the context of a topic of great interest, and linked to the idea of a real-life use.

In addition, the Grade 7s learnt a number of map-reading skills, such as using the *compass* to calculate direction and *scale* to measure distance. The need to convert distance on the map to real kilometres also allowed them to practise basic mathe- matical' skills.

Finally, by inserting an 'open' question at the end, the teacher encouraged the learners to present their own opinion, and she provided a *challenge* which 'extend- ed' them by requiring them not only to think of *arguments to support claims* in favour of South Africa hosting the World Cup, but also to think of arguments for the *oppos- ing point of view*.

We saw a Soweto teacher playa similar game with his class using South African soccer. The strength of his lesson was that he used a local Johannesburg map and got learners to plot the route, and then measure the distance (using the scale on the map), from their homes to the Johannesburg Stadium. This local context was likely to give learners a much better understanding of what a kilometre actually is because learners had actually experienced walking part of the route on the map. Learners using international maps often convert the map scale into real kilometres mechanically because they have no real-life experience of the distance denoted by 'a kilometre'.
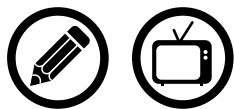
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ACTIVITY 9

Watch part 2 of the video. Jane Roach teaches a similar map-reading lesson using a *television* soccer commentary. Make notes as you watch, then answer the following questions.

Can you think of any ways to *extend learning* in these lessons? Think of:

a how you would increase the depth of the geographical skills learnt, such as direction-finding or calculating distance;

b how you would *broaden the scope* of the geography or Human and Social Studies content knowledge to be learnt.

Ways in which these lessons could be extended

Both teachers focused only on scale and compass directions. We felt that they could also have introduced (probably in a later lesson):

· *more depth* by asking the learners to calculate the directions from the cities *back* to Johannesburg (i.e. for the return trip – there would be 180° difference between these and the answers to worksheet question 4, for instance);

· *more breadth* by using *relief* or *road* maps. This would have allowed the teachers to develop further skills in map reading by asking learners to describe, for instance, the *kinds of terrain* over which they'd have to travel to get to the various cities mentioned in question 5. The use of relief or road maps would have introduced them to new kinds of map symbols.

We also felt that question 7 was so open that it became vague, and lost some of its educational value. It would probably encourage more valuable learning if the teacher also provided a number of articles on South Africa's economy, climate, and politics. These would give the information learners would require in order to begin making thoughtful decisions. The teacher could also have used some of the many articles that appeared in newspapers during the debate about South Africa hosting the Olympics.

Contextualizing school knowledge

Another way of engaging learner interest is by teaching in a way that demonstrates how the knowledge being learnt is genuinely useful. Learners are more prepared to learn something that they can use.

Do you remember how Nomsa taught history? She used a mixture of games (the detective /investigative game), and a simulation of historical research, to demonstrate the practical usefulness of school learning. Role-plays and simulation games are powerful teaching tools. Here is an example of a relatively simple *shopping* simulation that makes use of a freely available advertising flyer to teach basic numeracy.

Using advertising leaflets to teach basic numeracy: 'The Shopping Game'

Mrs Bophela, a Foundation Phase teacher of numeracy and mathematics in Mpumalanga, collected a selection of advertising leaflets from her local supermarket in Nelspruit and used them as the basis for an arithmetic lesson. Here is her story:

> *'I was faced with a problem. The children in my class were getting bored by just doing pages and pages of addition and subtraction exercises from the textbook. When they were busy one day, a bright girl said to me: "These prices in the textbook are wrong. A litre of milk costs R3.00, not 83c." She was absolutely right, of course, and I thought how silly it was for them to be working with such outdated prices.*

'It just happened that, the same afternoon, I went to the super- market to buy groceries for the weekend. As I was paying, I saw a whole pile of advertising leaflets that had pictures of lots of groceries and their prices. I asked the manager if I could have a pile of these to use at school. He was pleased to let me have the leaflets.

'I looked at them carefully to see if they contained enough food items for the activity I had in mind. I still wanted the class to practise their sums, but I also wanted them to link these sums to the world around them. I thought it would be a good idea to get them to use the prices on the leaflet in order to work out how much it costs to feed a family for one week. I thought I'd get them to **play the role of a parent** who had to develop a home budget.

'The next day, I handed out one supermarket leaflet to each pair. This created quite a bit of excitement. I told them that they had R300 to buy groceries for their family – two children, a mother and a father – each week. I also told them to cut out the pictures of the items they wanted to "buy", and to stick these pictures and prices on a piece of paper. Then I asked them to add up the prices of these items and see if they had any change from the R300.'

*Note that Mrs Bophela' s reason for using popular media was to **update her textbook**, which carried out-of-date and thus unrealistic prices, as well as to link the learning of basic arithmetic functions to life_*

One of the teachers who helped us to evaluate this part of the module was Mrs Masipho Meyiwa. She liked Mrs Bophela's lesson very much, and decided to try it out with her own class. We'd like you to turn to your video now, and watch her teach this lesson.

ACTIVITY 10

Watch Mrs Meyiwa's lesson (part 3 of the video) twice. Take notes as you watch the second time. Then answer the following questions:

a Identify the different parts of Mrs Meyiwa's lesson. In other words, draw up the lesson plan you think she was working to.
b Now re-read Mrs Bophela's description of how she used the supermarket advertising leaflet. In what ways was her lesson different to the lesson that Mrs Meyiwa taught?
c Can you think of ways in which either of these teachers could develop this lesson further? Remember, they should develop both the conceptual depth and breadth of the learning area.
d hink about ways in which you could use an advertising leaflet in your own learning area. Write a short description of your ideas.

We suggest you spend at least 1,5 hours on this activity. Work on your own at first, but then share your ideas with a fellow student or teacher. If you are confused about the reference to conceptual depth and breadth, refer back to Section Two.

What did we think of these lessons?

We liked the simplicity of the *simulation* and its immediate link to the concepts and skills being taught. In contrast to the soccer examples, the 'shopping' example links **directly** with the basic numeracy skills the teachers want to teach. The simulation also had appeal to the level of learners being taught. We decided that if you were working with older learners, you'd need to change the game in two ways.

First, you'd need to *increase the complexity of skills learnt*. Obviously, they would have to practise more advanced mathematical skills than addition and subtraction. You could, for instance:

- Increase the *breadth* of study by introducing the idea of *regular budgeting*. Groups could work out what money they would need to live on each month. This would involve them in *researching* the costs of other goods and *multiplying* these costs by the quantity they would need over a month. They would also need to *plan* how they could calculate the monthly cost of those services that are paid for quarterly (for instance, water), or on an annual basis (such as rates).

- Increase the *depth* of skills by introducing the concept of *interest* on hire purchase or budget accounts, and on investing money. Your learners would need to work this out and make decisions about whether to pay cash up front, to use budget accounts, or to invest money rather than spend it. A number of algebraic functions, as well as percentages and ratios, could be introduced in this kind of game.

- Consolidate learning by introducing articles clipped from the personal finances pages of newspapers that deal with *personal budgeting* and *investing*. This would provide learners with the information they need to make decisions of this kind. Clearly, the focus on personal finances would make these activities useful in either a life skills lesson or an economics and management sciences lesson.

The same idea – of practising basic arithmetic and mathematical procedures in real-life situations – can be adapted in many other imaginative ways. For instance, teachers could use property and situations vacant pages, and mortgage interest tables, in an activity where learners are asked to work out where they would be able to afford to live given a particular income. They could also work out how the overall price of a house will differ, depending on changing interest rates and the length of time they take to pay off their mortgage.

Second, it would be advisable to *change the context*. While shopping is of interest to teenagers, we doubted whether they'd be interested in buying food for the family! We decided we'd probably use other kinds of adverts- for clothing, music, and other forms of entertainment and a slightly different budgeting exercise. So, while the principles we want to teach remain the same, we would ensure that the information and contexts chosen are appropriate to the interests of our particular learners.

Simulating real-life situations

The Fruit Farmer

Simulations are teaching activities in which learners are placed in an artificial situation – for instance, as shoppers – that intentionally imitates a real-life situation – for instance, shopping. Simulations range from simple activities (such as the 'Shopping Game') and board games (such as *Monopoly*), through workshop activities for fairly large numbers of learners (with written instructions for participants taking various roles), to sophisticated computerized simulations that may be carried on the Internet.

Board games are an ideal form of simulation to use in large classes: they allow for individual and small group work, and keep learners in their desks, which most other role-play/simulation does not! Here is a board game designed to teach Intermediate Phase Human and Social Sciences and/or Economic and Management Sciences learners about the world of work.

> ### Being an Entrepreneur: Playing the Fruit Farmer
>
> 1 Make sure that your group has a dice and each player has a pencil and piece of paper.
> 2 Write the heading 'Costs' at the top of your page.
> 3 Throw the dice to see who starts. The person with the highest number starts.
> 4 Take turns to throw the dice and move the number of squares indicated by your throw each time.
> 5 When you land on a square, read and follow the instruction in the square.
> 6 As you play the game, note the payments you have had to make under your heading 'Costs'.
> 7 Once you have 'made it to the market' - in other words, reached square 24 - add up all your costs.
> 8 Subtract this total from your selling price of R250 (you will see this in square 24).
> 9 The answer you get to is your profit or loss. The person with the largest profit is the winner!
> 10 When the game is complete, discuss what factors led to high profits or high losses along the way. In other words, discuss what good entrepreneurs need to do in order to win!

ACTIVITY 11

Play this game with another teacher. As you do so:

a Discuss *what* this game teaches you about fruit farming as a form of economic activity.

b Discuss *how* games of this kind teach.

c Discuss how you would follow-up such a lesson. How would you create further depth and breadth in learner understanding?

d Do you think you could design a board game to teach a concept in your own learning area?

Strictly speaking, role-plays and Simulations are different kinds of teaching activities. For our purposes, though, we don't make a distinction. The basic idea is to put learners into different roles in simulated life situations in order to demonstrate to them how school knowledge is useful in life. For good ideas about using role-plays and simulations in senior and further education phases, and in adult education, see Christopher and Smith. 1987. *Leadership Training through Gaming* - Power, *People and Problem-solving*. London: Kogan Page.

This game is taken from the April 1999 edition of *The Teacher*, a newspaper that often carries good educational supplements. You should systematically collect board games carried in newspaper supplements. Visit a shop that has a colour laser photocopier and spend a few rands duplicating the board game. Stick the copies onto cardboard and laminate them. If you do this, you will soon collect a cupboard full of useful and durable teaching resources, and will have paid very little for them.

Spend about 40 minutes on this activity. While we'd like you to enjoy the game, we'd also like you to concentrate on working out how board games teach. So don't skip the discussion!

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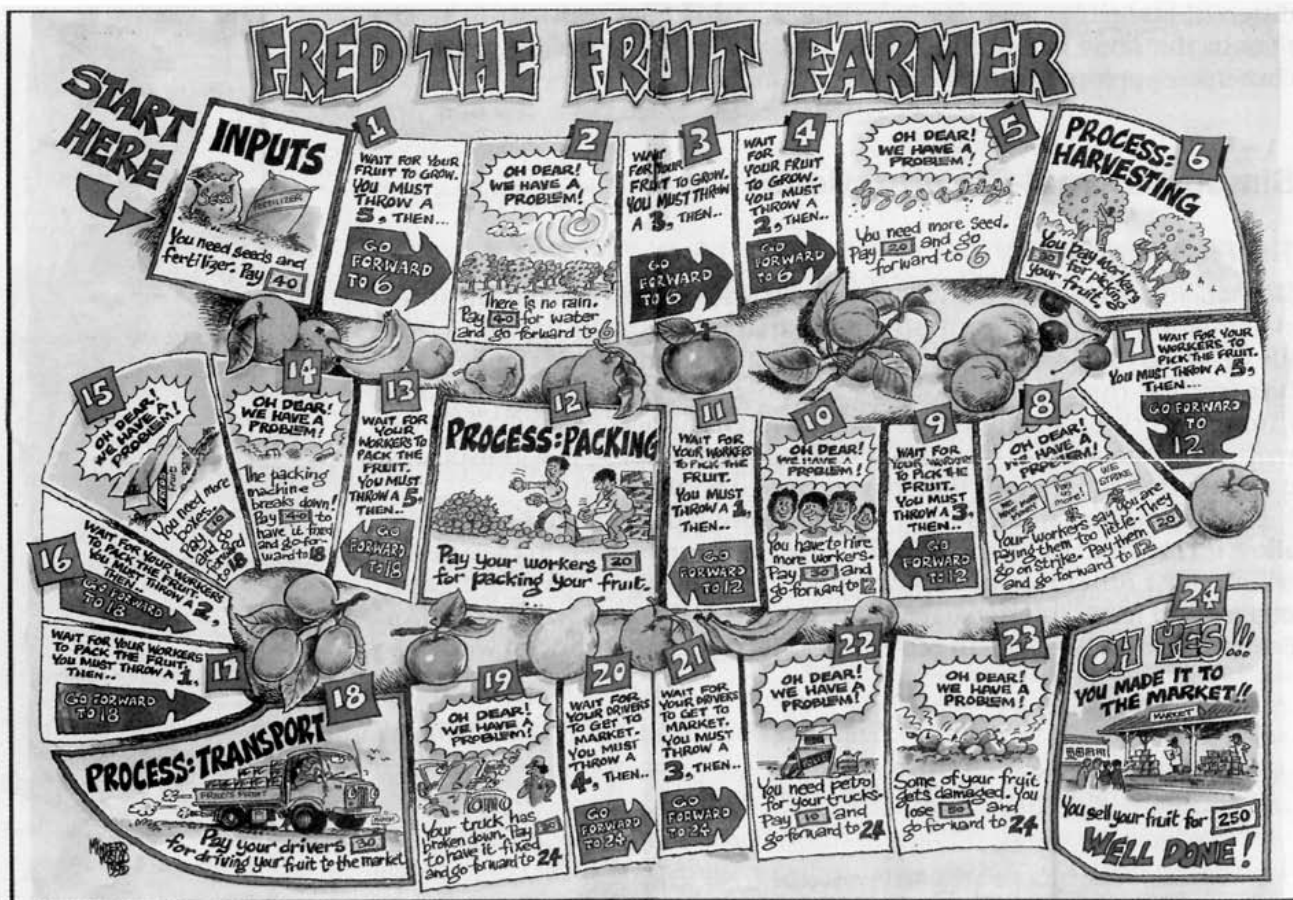
© **JA** Junior Achievement Southern Africa

What can we learn about teaching from this board game?

This is a very simple simulation that any teacher could design. In order to design a board game, you must:

- Know what key points you want to teach. For instance, this board game introduces important factors of production (different kinds of workers, machines, etc.), shows some of their limitations (machines break, workers strike, etc.) and what the impact of these are on your profit or loss.
- Simulate the process you want learners to learn about. For instance, in this game learners realize that damaged fruit will lead to losses – if they land on square 23 they have to pay R50 – or that raises in worker salaries will eat into profits. (The International Trade Game on page 51 demonstrates this even more vividly.)

We thought Fruit Farmer was a little too simplistic and allowed learners little opportunity to make choices. For instance, in this version learners have no choice about how to react to a strike (square 8). They simply pay R20 (presumably an increase in wages) and move on. It might have been fun – and would have developed critical thinking skills and further understanding of collective bargaining – if the game had forced learners to choose what to do when a strike occurred. They could either:

- have paid a salary increase and so moved production forward quickly – the consequences of this action would be no delays and happier workers, but they'd have to carry higher wage costs and thus reduce their profit;

  or

- refuse to pay higher salaries, and thus be asked to move backwards (simulating the delays in production that would ensue from such an action). But learners would realize that this choice – unhappy workers and delayed production – would save the longer-term costs of higher wages.

This would lead to a much higher-level debate. It would raise:

- *critical reasoning questions* (linked to knowledge): you could ask whether the decision would have been different had the goods not been perishables. Perhaps a quick settlement was necessary because the fruit would have rotted, which would not have occurred had the goods been non-perishables, such as shoes. Should management mechanize the process? Why, or why not?
- *ethical issues* (linked to attitudes and values): does management have a right to withhold salary increases? Do workers have the right to strike? Why? Does management have a right to mechanize?

The International Trade Game
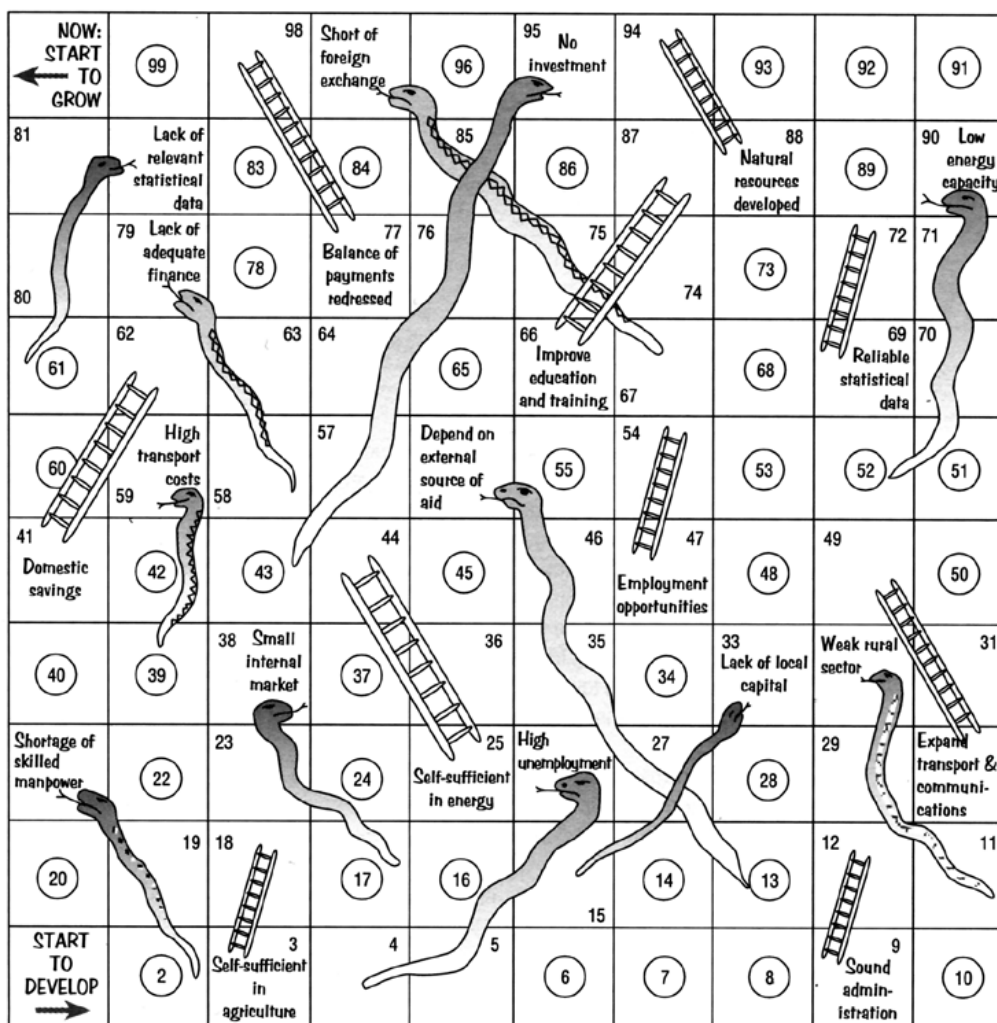
Here is another example of a board game. It is used in *Education with Production* schools in Southern Africa to teach key concepts in Development Studies. In this case, the game uses the design features of a traditional board game, *Snakes and Ladders*, to teach about the impact of foreign aid on local development. It is played with the same equipment as Fruit Farmer, this board and some dice.

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You will notice that the game clearly teaches that:

- phenomena such as high unemployment will have a detrimental effect on a country's development (the game does this by 'punishing' learners who land on this square by sending them back to square 4);
- actions such as developing a sound administration will impact positively on development (the game does this by rewarding those who land on square 9 by sending them forward to square 12).

This is a much more effective way of teaching the requirements for development than lists of 'advantages' and 'disadvantages'!

Using property pages to teach urban settlement geography

Here is another example of the way in which a local newspaper can be used to make a conventional part of a Human and Social Studies lesson more relevant for learners. In this case, the teacher has used the property section of a weekend newspaper and a worksheet to introduce concepts in *urban settlement geography*. Read through the worksheet.

Planning cities: Grade 9

1. Make a copy of an outline map of Greater Johannesburg to show the names of all the suburbs. Put this on one side until you have answered the questions below.
2. Examine the property pages to answer these questions:
   - In what parts of the town can you buy factory space?
   - Where would you look for shops to let?
   - Name the suburbs where you can rent flats.
   - List the suburbs where house prices are over R500 000.
   - Where are house prices the lowest?
   - In which areas are there townhouses for sale?
3. Use the information for the questions in 2 to help you draw a land use map of greater Johannesburg.
   - Find the locations mentioned in the property pages where you'd find factories, shops, flats, expensive and cheap houses, and townhouses.
   - Mark these on the Johannesburg map. Mark each type of property in a different colour.
4. Examine your map. Do patterns of land use emerge? In other words, where are you most likely to find industrial property - in the north, south, central (etc.)? What kind of houses border these areas?
5. Discuss these findings with your group. Then write a page in which you advise a new investor where she should:
   - open a factory;
   - open the shop through which she'd sell her goods;
   - buy property.
   Remember, you must give reasons why the investor should follow your advice. In other words, explain why this pattern of land use has emerged and what the implications are for her life in Johannesburg.
6. Now turn to page 23 of your textbook. Read from pages 23 to 26. Does this offer you any further ideas? Revise your page in light of the information you found in your textbook.

Making abstract ideas more 'visible' and concrete

The activities mentioned already provide ways of making learning more meaning-ful. This will obviously make the often abstract school concepts more *concrete* and *visible* to learners. You will also have noticed how the 'Planning cities' worksheet turns 'urban settlement theory' into a problem- solving activity that locates new theory firmly in real life.

   Another way of integrating 'real life' into school teaching is by organizing visits to museums, art galleries, factories, and so on. We strongly recommend that teachers design learning programmes that include visits to places like these.

   But we realize that visits are difficult to organize. Popular print media allow learn-ers to visit places *vicariously*: they can do so by being given the opportunity to 'see' strange places, people and things through the use in teaching of good television documentaries or radio interviews (see Section Four), or photographs, current stories or up-to-date graphics from magazines and newspapers.

You should now have spent about 18 hours studying. To keep to a 20-week schedule. you should now begin Week 4 of your study.

Using photographs

The Sunday Independent, 5 November 2000

Fair Lady, 27 October 1999
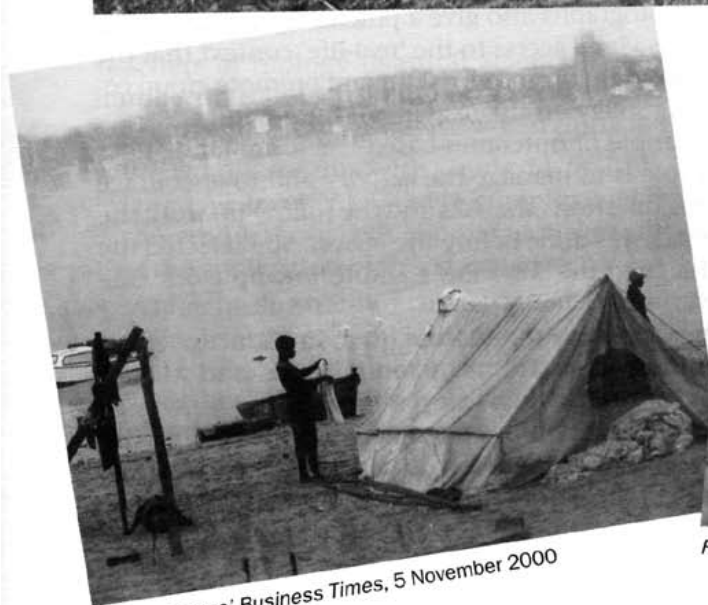
Sunday Times' Business Times, 5 November 2000

Fair Lady, 27 October 1999

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Do this activity with a partner. Spend no more than 20 minutes on it.

ACTIVITY 12

Do this activity with a partner.

Photocopy enough copies of the photographs on page 51 (or similar images) for each pair of learners in your class to receive a pair of images. Divide the class into pairs and distribute the images, one image to each learner.

a Write down a few questions that you would like to ask about your picture (10 minutes).

b Swap your picture and your list of questions with your partner. Try to answer your partner's questions based on what you can see in his or her picture. Afterwards, your partner should try to answer the questions about your picture.

c Discuss the questions each of you asked and your answers to each other's questions.

d What are the lives of these people like? Are they similar? If not, how are they different? What causes the differences?

e Discuss what kinds of things you have learnt from doing this activity.

Linda, the teacher who suggested this activity to us, justified it by arguing that it was a 'stimulating' way to introduce a new topic:

> *'Good photographs evoke deep emotions and offer a number of possible interpretations. This is especially so when you provide **contrasting** photographs, as I did. This arouses learners' interest and gets them talking. By evaluating each other's questions and answers, the learners are forced to consider a **range** of possibilities.*

> *'This works so much better than my coming into class and saying, "OK, today we are going to talk about different kinds of communities in South Africa ", and then going on to give a whole lot of economic and geographic details. By the time this lesson is over, I haven't directly **taught** much at all yet, but the class has **learnt** quite a lot. '*

Linda uses photographs mainly to evoke learner interest. Instead of a long-winded introduction, she immerses learners in a set of questions that actively engages them. But the photographs also give a potentially abstract topic meaning by allowing learners *visual* access to the 'real-life' context that the topic addresses. The questions develop enquiry skills and promote group co-operation instead of focusing solely on the relaying of information.

This lesson is a good example of outcomes-based teaching. Linda does little direct teaching. Her role is to manage the activity and to encourage deeper learning through the questions she asks and the follow-up work she designs. Most of Linda's work was done before the lesson. She selected the photographs, then she designed the worksheet and follow-up work. She *planned* well!

Linda explained that she would use this discussion to introduce a lesson about children's lives in different situations in South Africa (and Africa). Later she would ask senior learners to do *research* in a number of reference books to explore economic development in different communities. But she uses the photographs with intermediate learners too. Here she limits the number of reference books to a couple of selected newspaper and magazine articles and the prescribed textbook.

Using specialist magazines

Good quality photographs also help teachers bring the outside world into classrooms in a highly visual way: they are a way to 'travel' without leaving the class. Specialist magazines, such as *National Geographic* or *Getaway* (a South African travel magazine), are rich sources of photographs for teachers of Human and Social Studies, Natural Sciences, and Environment Studies.

Specialist magazines offer a great deal more to teachers. For instance:

- *National Geographic* has become world-renowned because of its high quality fold-out maps as well as its beautiful photographs.

- Readily available magazines, such as *Time*, carry accessible articles that demonstrate how science, geography, history and biology knowledge is used in everyday life. You may remember, for instance, how Nomsa used *Time* to teach learners to think historically in her Human and Social Studies lesson earlier (see Section Two).

- Newspapers and magazines use lively and attractive diagrams and statistics to illustrate their articles (see page 56 for another example of this). These provide learners with far more 'visual' access to learning than a purely text-based book would offer. For instance, look through 'How to build a body part'. In particular, notice:
  - the drawings of cells and bones used in the text. Imagine these in lively colour. Illustrations of this sort create much more excitement among learners than the dull line drawings often found in textbooks. They give learners a more vivid idea of the concepts they are learning about.
  - the way in which theory about the cell- a common part of the school syllabus - becomes more meaningful as it is linked to real-life medical challenges.

ACTIVITY 13

a How would you use 'How to build a body part' to extend a biology (or a Natural Sciences) lesson in exciting ways?
b What kinds of questions would you ask to link this article to school biology/Natural Sciences?
c What level would you pitch your lesson at?

What did we think?

Teachers of biology (Natural Sciences) will no doubt come up with a number of technical questions, depending on the grade that they are teaching. But, as non-biologists, we would think in the following way:

- We would use this with Grade 11 or 12 learners for two reasons: the language level is relatively complex *and* learners need to understand something about cells in order to make sense of this article, which looks at the application of this knowledge.

- While the illustrations could be used as an introduction to school topics, we believe the content is more appropriate for extension work. We would design a worksheet that includes two kinds of questions:
  - those that help learners link this article with the work they have already done, such as: What do you already know about cells that would explain how cells will do the work (of growing new tissue) for you if you treat them right?
  - those that assist learners to understand the new ideas in the article, such as: Why does blood pulsing against the walls of artificially-grown blood vessels 'gradually *strengthen* the muscle cells used? *or* What actually happens when new organs are *rejected* by the animals or humans into which they are transplanted?

- We would make a lot of use of the illustrations. We thought we'd probably enlarge them (through colour laser printing) and laminate them and use them as charts that we would display on the walls of our classroom. We'd probably make reference to them later as we try to explain how the school knowledge that we are learning is being applied medically.

Many foreign magazines are expensive. There are solutions to this problem:
- If your school has a library or media centre, and any funds at all are available for purchasing books, a subscription to magazines such as *National Geographic* would be one of the school's better investments. Special school discounts are offered.
- It is possible to buy old editions of magazines more cheaply. Second-hand copies can be bought at second-hand bookshops while new (but dated) editions can be bought at street markets and at shops that sell magazines by the kilogram.

The article on page 52 is from the March 8, 1999 edition of *Time*. If possible, try to get a copy of the original to do this activity. It will make your reading easier and will give you an idea of the excitement created by the colour illustrations. Do this activity with other teachers. Spend about 20 minutes on it. It doesn't matter if you aren't a Natural Sciences teacher: do the activity anyway!
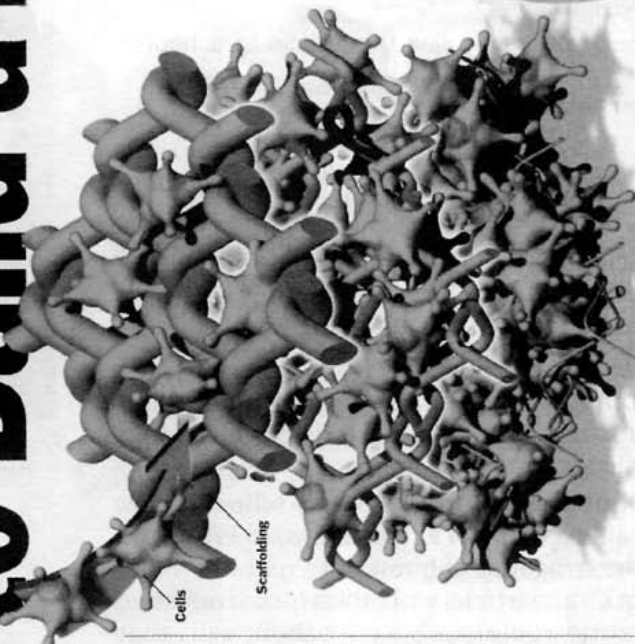
Saide

How to Build a Body Part

SCIENCE

Need a hand, or perhaps a liver? Scientists are finding ways to help you grow your own

By JOSH FISCHMAN

THERE'S A HUMAN LIVER SITTING IN a lab dish in Madison, Wis. Also a heart, a brain and every bone in the human body—even though the contents of the dish are a few cells too small to be seen without a microscope. But these are stem cells, the most immature human cells ever discovered, taken from embryos before they had decided upon their career path in the body. If scientists could only figure out how to give them just the right kick in just the right direction, each could become a liver, a heart, a brain or a bone. When a team from the University of Wisconsin announced their discovery last fall, doctors around the world looked forward to a new era of medicine—one without organ-donor shortages or the tissue-rejection problems that bedevil transplant patients today.

Doctors also saw obstacles, though. One of them was a U.S. Congress skittish about research on stem cells taken from unwanted human embryos and aborted fetuses. Indeed, last week 70 lawmakers asked in a firmly worded letter that the Federal Government ban all such work.

Yet the era of "grow your own" organs is already upon us, as researchers have sidestepped the stem-cell controversy by making clever use of ordinary cells. Today a machinist in Massachusetts is using his own cells to grow a new thumb after he lost part of his in an accident. A teenager born without half of his chest wall is growing a new cage of bone and cartilage within his chest cavity. Scientists announced last month that bladders, grown from bladder cells in a lab, have been implanted in dogs and are working. Meanwhile, patches of skin, the first "tissue-engineered" organ to be approved by the U.S. Food and Drug Administration, are healing sores and skin ulcers on hundreds of patients across the U.S.

cells, grow them in the lab and then injected them into a piece of coral fashioned into the shape of the missing digit. "Coral's got lots of interconnected channels for the bone cells to grow in," says Vacanti. It also degrades as bone replaces it. The patch was implanted back on the thumb a few months ago. "It looks like he's growing good bone," Vacanti reports. "He could get most of his function back."

Moving from the thumb to other hand parts, Charles' brother Joseph Vacanti, a transplant surgeon and tissue-engineering pioneer in his own right, has

First, Make a Scaffold Like as gardeners training a vine, researchers build a trellis or scaffold out of biodegradable material, like coral or a special polymer. They seed it with cultured cells of the organ they're growing, which multiply, take the desired shape and become self-supporting. The scaffold then dissolves

How have scientists managed to do all this without those protean stem cells? Part of the answer is smart engineering. Using materials such as polymers with pores no wider than a toothbrush bristle, researchers have learned to sculpt scaffolds in shapes into which cells can settle. The other part of the answer is just plain cell biology. Scientists have discovered that they don't have to teach old cells new tricks; given the right framework and the right nutrients, cells will organize themselves into real tissues as the scaffolds dissolve. "I'm a great believer in the cells. They're not just lying there,"

looking stupidly at each other," says François Auger, an infectious-disease specialist and builder of artificial blood vessels at Laval University in Quebec City. "They will do the work for you if you treat them right."

FLESH AND BONES. Treating bone cells right is what Charles Vacanti, an anesthesiologist and director of the Center for Tissue Engineering, has been doing at the University of Massachusetts Medical Center in Worcester. When that machinist lopped off the top of his thumb, Vacanti took some of the victim's bone

grown human-shaped fingers on the back of a mouse, demonstrating that different cell types can grow together. He and colleagues at Boston's Massachusetts General Hospital shaped a polymer to resemble the end and middle finger bones. These shapes were seeded with bone, cartilage and tendon cells from a cow. Then the medical team assembled the pieces under the skin of the mouse—"just like you'd assemble the parts of a model airplane," says Vacanti.

VEINS AND ARTERIES. Blood vessels present a special challenge: they must be strong yet flexible enough to expand and contract with each heartbeat. Joseph Vacanti's group has grown a tube of sheep-muscle cells around a polymer, added closely packed lining cells to the inside and stitched it into a sheep's pulmonary-artery circuit. Blood pulsing against the walls gradually strengthens the muscle cells, just as weight training builds biceps. To make smaller vessels, Laval's Auger bends a sheet of muscle cells
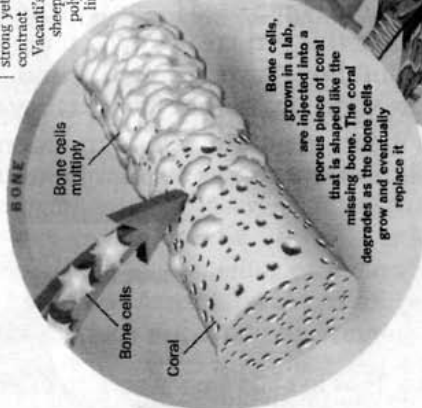
New Seedbeds for Bone and Arteries

Given the right framework and the right nutrients, cells will grow together and function as organs. Research pioneers are developing different strategies to grow skin, bone, blood vessels and internal organs. These efforts require both medical and engineering skills

BONE

Bone cells multiply

Coral

Bone cells

Bone cells, grown in a lab, are injected into a porous piece of coral that is shaped like the missing bone. The coral degrades as the bone cells grow and eventually replace it

BLOOD VESSELS

Plastic tube

Muscle cells

Lining cells

Backing cells

A sheet of smooth muscle cells is wrapped around a plastic tube and re-enforced by a layer of backing cells. The tube is removed and lining cells are scattered on the inside. They grow together and form a continuous sheath

around a plastic tube and reinforces it with an outer layer of stiffer cells. Then he removes the tube and seeds the inside with lining cells, which soon grow together. The vessels have worked well in animal tests, and in the lab have withstood blood pressure 20 times normal.

LIVERS AND BLADDERS. Anthony Atala, a surgeon who makes bladders at Boston's Children's Hospital, has taken muscle cells from the outside of dog bladders and lining cells from the inside and grown them in his lab. The cells, fed the proper growth-prompting chemicals, happily go forth and multiply. "In six weeks we have enough cells to cover a football field," Atala says. He placed a few muscle cells on the surface of a small polymer sphere and some lining cells on the inside. When he inserted the artificial bladder into a dog's urinary system, the bladder began to function like the real thing. Bioengineer Linda Griffith at nearby Massachusetts Institute of Technology is doing similar work with rat-liver tissue.

THE HEART—AND BEYOND. One drawback with all these techniques is that it takes time, usually several weeks, to grow organs using the patient's own cells. Although using these cells sidesteps the rejection problem, time is a luxury many patients, particularly heart patients, can't afford. So Michael Sefton, who directs the tissue-engineering center at the University of Toronto, has proposed building a "heart in a box"—complete with chambers, valves and heart muscles—from cells genetically engineered to block the signal with which the body marshals cells to attack invaders. Sefton envisions spin-offs along the way—like immune-system-resistant replacement valves—to justify the project's $5 billion cost.

Replacement hearts—or even replacement heart parts—are at least a decade off, estimates Kiki Hellman, who monitors tissue-engineering efforts for the FDA.

"Any problem that requires lots of cell types 'talking' to one another is really hard," she notes. Bone and cartilage efforts are much closer to fruition, and could be ready for human trials within two years. And what of those magical stem cells that can grow into any organ you happen to need—if the law, and biologists' knowledge, permit? "Using them," says Sefton, "is really the Holy Grail."

TIME, MARCH 8, 1999

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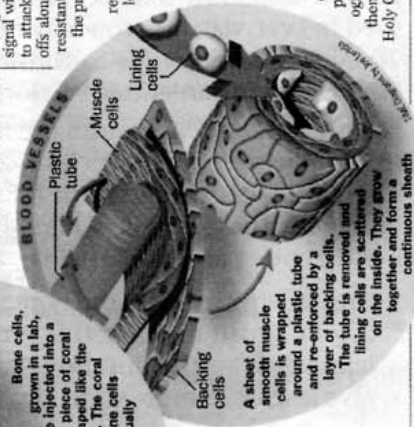
'Knowledge maps':
Using wall maps to develop a 'visual' understanding of the world

An important critical cross-field outcome is that we should develop lifelong learners. One way to achieve this is to develop classroom environments that are vital and alive: that demonstrate a *culture* of learning. A way of doing this is to link different topics taught in a learning area – or even across learning areas – through an ongoing learner-maintained classroom 'exhibition'. We have called this a 'knowledge map'.

'Knowledge maps' can be used in all learning areas. But their basic teaching aims remain similar:

- To link school learning and everyday knowledge through regular learner 'searches' of newspapers and magazines for relevant pictures, stories and statistics to make abstract knowledge more visual and concrete to learners.
- To link different pieces of knowledge – within and across learning areas – spatially and conceptually. This will provide learners with a more integrated understanding of school work, the world and our place in it.

An Eastern Cape teacher we spoke to showed us how she had used a wall map and newspapers in her Human and Social Studies teaching. On her back wall was a large world map which she had taken from a newspaper supplement and laminated in order to prevent it from going yellow. The map was surrounded by pictures of scenes from countries around the world. Each picture included a caption written by a member of the class. This caption explained the significance of the picture. The pictures were linked to the appropriate place by a piece of coloured string.

The teacher believed that keeping up to date with current affairs was an essential part of her teaching. In order to do this, she set aside one lesson a week during which learners were asked to pin up and talk about a photograph and news report they had cut from newspapers at home during that week. The teacher also provided her own pictures to brighten up the wall map.

Saide

Although the manner in which photographs were collected in this class was rather random, the teacher said it had been exciting when, later in the year, she could point to an article about an earthquake in Japan as they studied volcanoes and earthquakes.

This teacher used *newspaper* travel supplements rather than glossy magazines because these were more accessible to her learners, but also because they carried a variety of photographs from around the world. An interesting idea was that she asked one group in class to track weather conditions around the world by cutting out weather reports in newspapers and pictures of snow or floods, etc., from the appropriate region. She says this gave learners a much better understanding of different hemispheres and changing seasons.

What did we think of this teaching idea?

It certainly brightened up the classroom! But more than this, it seemed to lead to a class that was interested in world affairs and was constantly having to look at a world map to work out the position of places on this map. Learners told us that they found themselves visualizing the map when they listened to the news on television: they were able to 'see' the names of places (rather than just hear them) and were able to place them in relation to other countries.

Is this an option limited to Human and Social Studies teachers?

ACTIVITY 14

Work with a fellow teacher and see whether you could use the knowledge map idea in your learning area. Have a look at its key learning outcomes to guide you.

We thought this was appropriate for many learning areas. After all, news- papers and magazines cover learning areas such as:

- *Language, Literacy and Communication*. The class could search for theatre, book, movie and music reviews; stories about writers, about communication, etc. Then they could plot where these came from (e.g. most of the movies we see are from California!) or where the stories come from.
- *A Natural Sciences* teacher said she would get her class to read magazines and weekly newspapers to keep abreast of scientific discoveries, technological innovations, ecological disasters or threatening disasters, and so on, and involve learners in 'marking' the locations of these on a world map.
- *Economic and Management Sciences* (business pages, labour news, stock market prices, etc.). One of the writers said he'd get his class to plot changes in South Africa's foreign trade regularly, and get the latest gross national product figures from newspapers, etc., in order for his class to realize just how unequal the world is.

These activities can be done as part of a particular class project within a single learning unit, or as an ongoing 'Current Affairs Watch' throughout the school year, with learners being encouraged to look out for news or articles relevant to the chosen theme.

Updating and supplementing textbooks

Textbooks require lots of research and take time to write. As a consequence, the information contained in textbooks is often out of date even before the books are printed! This is an increasingly serious problem in the rapidly changing societies that we live in. If you'd like to work with up-to-date information, then supplement the information contained in textbooks with that carried in popular media.

While specialist magazines, such as *National Geographic*, provide high-quality pictures, these magazines aren't essential for this kind of learning. Newspaper travel supplements in particular, and newspapers more generally, also provide photographs of many of the people and places learnt about in school.

Spend about 30 minutes on this activity. Do it with another teacher who teaches in your learning area.

Updating economics textbooks

One of the writers told us a story of a teacher who had done this supplementing really well. He had to observe a student teacher assigned to teach an economics lesson on 'parastatal' organizations. The old, out-of-date textbook said that Telkom, Eskom, Iscor and Sasol were parastatals, but the daily newspaper carried stories about these organizations being 'privatized'. The teacher had a choice:

- Teach the textbook so that learners are prepared for the exam (but with information that is outdated); or
- Teach from the newspapers and so give learners up-to-date information *and* an idea of how things change.

The teacher used *both* the old textbook (to sketch the history of these businesses in South Africa), and newspaper articles (to provide up-to-date information on these organizations, and easily understandable articles on what 'privatization' meant). The whole experience generated considerable interest among the learners. They had to do a 'news hunt' in newspapers at home each day and bring along cuttings on the privatization debate. What could have been a dry and abstract economic concept had become real for all the learners as they read the ongoing arguments about these companies (in which some of their parents worked) changing their nature.

Who are the environmental culprits?
Updating textbook statistics while developing a critical literacy

Specialist magazines, such as *New Scientist* or *New Internationalist* or even *Time* and the *Financial Mail*, will provide teachers with an ongoing supply of interesting, accessible, and up-to-date statistics, information and analysis – as well as photographs.

Because it takes some time to gather national and international statistics, those that appear in textbooks tend to be somewhat out of date. More recent statistics can often be found in some specialist magazines and newspapers. In many cases, these statistics are attractively and imaginatively presented. But the problem is that figures and graphs and statistics are often treated uncritically as 'the truth'. An important challenge for teachers is to develop a more critical understanding of these features.

The New Internationalist is one magazine that provides excellent photographs, graphics, statistics and articles dealing with development and environmental issues. It is a good resource for Human and Social Studies, Technology, and Economics and Management Sciences teachers. Particularly useful are the monthly 'Country profile' inserts, which provide up-to-date statistics on developing countries.

Here is an example of statistics presented in *New Internationalist*. How would you use these to teach?

It is a good idea for teachers or schools to subscribe to specialist magazines in their learning area(s). Instead of all science teachers subscribing to one magazine, perhaps you could decide on sharing a couple. And remember, these kinds of subscriptions may be tax-deductible!

Saide

Forest as fuel...

People all over the world are taking direct action to save forests which continue to be decimated. In ten countries the forest is being destroyed at a rate of more than two per cent a year. The reforestation going on in some Western countries is almost entirely of conifers rather than of traditionally diverse woods that include broad-leaved deciduous trees.

The best reforesters...
(average annual rate of reforestation 1981-90)

...and the worst deforesters
(average annual rate of deforestation 1981-90)

Ireland	UK	Switzerland	Germany	Hungary	Portugal	Philippines	Thailand	Pakistan	Bangladesh	Haiti	Jamaica
1.3%	1.1%	0.6%	0.5%	0.5%	0.5%	2.9%	2.9%	2.9%	3.3%	3.9%	5.3%

But who are the saints and who are the sinners here? Bangladesh, for example, has little alternative to wood to serve its energy needs – and at 4.4 gigajoules (4,400 million joules) its consumption of energy per person per year is the lowest in the world. Germany, meanwhile, may be replanting but it is the world's third-largest importer of energy. The US alone consumes a quarter of the world's energy.

Energy consumption per head (1991, in gigajoules)[2]

HIGHEST

United Arab Emirates – 656

Canada – 328

US – 324

LOWEST

Vietnam – 7.7

Burma – 6.5

Bangladesh – 4.4

18 NEW INTERNATIONALIST / MAY 1996

ACTIVITY 15

How would you make good use of this presentation of statistics, from *The New Internationalist* (May 1996: 18), for teaching:

a   about ecological issues?
b   how to interpret statistics (probably for Grade 10s and upwards)?

How would you highlight the fact that the blame for denuding the world's forests may not be a simple matter?

How we would use these statistics to teach

We split this feature, reproducing the top half of the statistics on one work-sheet (i.e. the introduction and the graphic showing the best reforesters and worst deforesters) and the lower half of the graphic on another work-sheet. Half the small groups formed in class received Worksheet I, the other half received Worksheet 2. We explained the key problem as being the rapid deforestation of the world, and asked the groups to find the culprits and suggest solutions.

Worksheet 1 Deforestation: Which countries are at fault?

Forest as fuel...

People all over the world are taking direct action to save forests which continue to be decimated. In ten countries the forest is being destroyed at a rate of more than two per cent a year. The reforestation going on in some Western countries is almost entirely of conifers rather than of traditionally diverse woods that include broad-leaved deciduous trees.

The best reforesters...
(average annual rate of reforestation 1981-90)

...and the worst deforesters
(average annual rate of deforestation 1981-90)

Ireland 1.3% | UK 1.1% | Switzerland 0.6% | Germany 0.5% | Hungary 0.5% | Portugal 0.5%

Philippines 2.9% | Thailand 2.9% | Pakistan 2.9% | Bangladesh 3.3% | Haiti 3.9% | Jamaica 5.3%
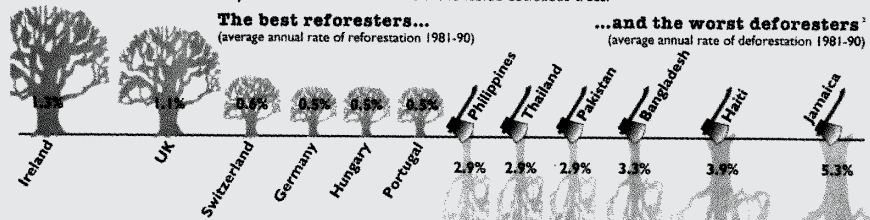
1 What does it mean to refer to a country as a 'deforester'?
2 What do you think it means to refer to a country as a 'reforester'? And to say that a country (Ireland) has an average annual rate of reforestation of 1.3%? (What exactly does this mean?)
3 What general conclusion would you be inclined to draw about the kinds of countries that are good 'reforesters' or 'low deforesters'?
4 What do the 'reforesting' countries have in common, apart from being 'reforesters'? Locate them on a world map.
5 What do you think the 'deforesters' might have in common? Locate them on a world map.
   • Who is at fault?
   • What would you do to solve the problem?

Worksheet 2 Deforestation: Which countries are at fault?

The modern world needs energy to develop. This energy has often been created through the burning of timber.

In turn, this has led to large forests being destroyed. Read these statistics and then discuss:

But who are the saints and who are the sinners here? Bangladesh, for example, has little alternative to wood to serve its energy needs – and at 4.4 gigajoules (4,400 million joules) its consumption of energy per person per year is the lowest in the world. Germany, meanwhile, may be replanting but it is the world's third-largest importer of energy. The US alone consumes a quarter of the world's energy.

Energy consumption per head (1991, in gigajoules)

HIGHEST

United Arab Emirates – 656 | Canada – 328 | US – 324

LOWEST

Vietnam – 7.7 | Burma – 6.5 | Bangladesh – 4.4
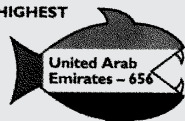
1 Who are the largest consumers of energy in the world?
2 How is this linked to the problem of deforestation?
3 What do the high energy consumption countries have in common? Locate them on a world map.
4 What do the low energy consumption countries have in common? Locate them on the map.
5 How are graphics used to visually reinforce the points being made about energy consumption?
6 What is significant about the energy consumption statistics being 'per head? How else might energy consumption figures be presented?
   • Who is at fault?
   • What can we do about the problem?

Saide

The groups discussed this problem in terms of the information they had been given for about 15 minutes. We then asked them to give short reports on their 'findings'. Not surprisingly, we found that the groups came up with different analyses! Before the debate became too fierce, we asked groups to swap worksheets. They spent another 15 minutes in discussion before reporting back.

Why did we do this? Why didn't we simply hand out the same worksheet – with the entire graphic on it – to the whole class?

We wanted to demonstrate to learners – and not just to tell them – that analysis of statistics is often more complicated than it seems at first. They noticed this as they received new information, so their 'solutions' had to be adapted. This also pointed out that real understanding comes from knowing the relationship between issues – in this case, deforestation and energy consumption. Looking at just one of these issues on its own permits easy solutions. But, when you add both, the problem seems a great deal more complex. If we had given learners the entire graphic, we would not have set the scene for debate and for them to change their minds. On the back of their worksheets, they had one 'homework' question:

> How would you categorise South Africa? Is it a reforester or a deforester? Is it a high or low energy consumption country? Would your answer differ on the basis of region or race group?
> - First, answer this question on the basis of your experience. What do you think is the answer?
> - Then, answer the question after you have done some research. Do your answers differ? Why or why not?

The above questions demonstrate what can be gained by making the effort to plan questions and tasks with care. They lead the learner towards an in- depth, critical understanding of both ecological issues and statistics. And the discussions they engender should point, if the teacher is alert, towards increasing depth and breadth in further lessons.

For instance, the teacher could provide a map showing relative economic wealth or production (from an atlas or a book on such matters), and ask the learners to locate the various countries mentioned on such a map, and then discuss what they have found. The teacher could also ask why it is important that both reforestation and deforestation statistics are based on information from the same years, or that on both sides the rates are annual. It could also be pointed out that these statistics do not touch on those countries where commercial logging is destroying vitally important rain forests, such as Brazil, the Congo Republic and Indonesia. Articles on this problem abound in the media (a good source is the Mail & Guardian), so it should not be difficult to get learners to find out whether reforestation takes place in these countries and, if it does, whether it helps to restore the ecological balance.

Almost all good teachers make worksheets for their classes – some occasionally, some almost every day. Because a badly thought-out or shoddy-looking worksheet is worse than no worksheet at all, you should have a clear reason in mind before starting to design one. As more improved, well-designed textbooks and other materials become available, it is foolish to waste time and effort on producing worksheets that do little more than duplicate what's already there.

DESIGNING EFFECTIVE WORKSHEETS

- *Be clear about the learning outcome you want to achieve.* Find a way of indicating this to learners on the worksheet so that they will be clear about the purpose of the activity.
- *Think carefully about how you will assess learner competence on the basis of the activity, and set out the instructions accordingly.* Read them over afterwards to check that the learners will be clear about what they are required to do.
- *Try to engage, challenge and extend learners.* Worksheets should not simply be created to 'keep learners busy'. Questions should be 'problematic' so as to provoke debate.
- *Include an element of fun.* Structure the worksheet as a game or challenge that will exercise skills of problem solving and critical debate. At the Foundation Phase level, worksheets should allow for learners to develop observation skills and dexterity, and not just involve colouring in pictures.
- *The worksheet's appearance should be appealing.* Look carefully at the design and layout of magazines and advertisements, and adapt what you see in producing your worksheets.
  - Don't just arrange pictures in dull rows. Cluster them, overlap them, and arrange them in interesting 'shapes' across the page. Consider drawing a frame around them.
  - If available pictures are too big or too small, try to reduce or enlarge them on a photocopier.
  - You could superimpose comic-type speech bubbles on pictures, or cut/blank out significant shapes within pictures to create tasks for learners to complete.
  - Don't overcrowd the worksheet -leave sufficient white space for it to look attractive and professional.
  - If you have access to a computer, use different fonts for headings.
- You'll need:
  - a very fine-point black pen;
  - a good, sharp pair of scissors;
  - a retractable blade knife;
  - a ruler (preferably stainless steel);
  - a glue stick;
  - a plentiful and varied supply of old magazines, shop catalogues and other printed media;
  - a white correcting fluid pen;
  - access to a photocopy machine, preferably one that reduces and enlarges.

Using newspaper reports to teach Technology

The problem of outdated textbooks was a problem faced by Sam Gumede, a teacher at a school near Port Shepstone in KwaZulu-Natal, when he was told he had to teach Technology to Grade 9s. When he started the year, there were no Technology textbooks. So he had to plan his lessons from old metalwork and woodwork textbooks, general reference books on Technology, and worksheets that he designed himself.

He knew what he had to teach: one of the specific outcomes for Technology at Grade 9 level stated that: *Learners should understand and apply the technological process to solve problems and to satisfy needs and wants.* The range statement suggested that one of the themes this specific outcome could apply to was housing.

Sam thought a while and decided that his lessons needed to:

- *interest his learners.* 'They will learn nothing is this doesn't happen,' he said. This was one of the reasons why he rejected an article he'd found on British housing problems in the 19S0s.
- *develop the learners' knowledge of housing.* This could include points about how houses are designed and built, but also ideas about why there is a shortage of housing (and so on ... Sam had a number of ideas).
- *teach this knowledge in a way which developed their problem-solving skills.* In other words, he had to get them to think about, debate, and apply their knowledge to solve housing problems.

Saide

Sam knew that South Africa had committed it elf to building a million houses in five years. He was sure that there had to be articles in the news- papers about housing. Sam also knew that housing was a big problem in his area. It was a problem that affected his Grade 9 learners. He began reading through a pile of newspapers at the local library and came across this article in a supplement to a Sunday newspaper. It seemed to him that this article would link with their lives and stimulate interest in the learning outcome (technologies used to build) and in the theme suggested by the range statement (housing).

Taking the cost out of building houses

This cheap DIY home is made from mud

By ANGUS BEGG

Using no more than your own hands and the earth we walk on, it is possible to build an attractive and functional house for less than a fifth of the price of a conventional one. So says Australian architect and academic Brian Woodward.

He has just ended a second visit to an area near Rustenburg in North West Province. There he has been teaching rural people, with the assistance of local non-governmental Organisation the Thlolego Development Project, how to build these "mud houses", His own home, on the 300ha farm where he lives in New South Wales, is made of mud bricks - and would put many a Sandton stereotype to shame.

A beautiful, double-storey house with a floor space of 200 square metres, it has excellent lighting, built-in temperature controls and superb acoustics. The all-natural materials were obtained on-site. Earth was used to build the walls and floors, and wood and thatch form the roof. And he built it entirely by himself. Since labour can cost up to 40 to 50 percent on a house built by a contractor, this means he spent just over a fifth of the cost of a conventional house.

Woodward, an architect and lecturer with 20 years practical experience in environmentally sustainable, low cost building design and construction. is a member of an organisation called Earthways Sustainable Building Resource centre. He has been instructing people on how to train others to build dirt-cheap, good-looking houses

Brain Woodward's mud double-storey house in New South Wales, Australia　　　　PHOTOGRAPH: BRIAN WOODWARD

and his students hailed from Zimbabwe and South Africa.

Yet Woodward says the interest in such houses is not restricted to this part of the world, where low-cost housing is a perennial problem. He says it is verging on the fashionable with the other end of the socio-economic scale in Australia.

He says he moved into this line of work after periods at Oxford University in England and the University of few South Wales, because he felt "humans had lost the skills to build. getting contractors to build houses in- stead of

homes. A home is part of the people who live in it, not just a shell you inhabit".

Woodward says his houses are constructed according to the concept of "passive solar design", which allows a house to be cooler in summer and warmer in winter. Woodward considers the environment and sustainability of the lifestyle in these houses, with the result that easily recyclable materials are used. A grey-water re-use sys- tem is employed, as are composting toilets, the likes of which are now used in a number of exclusive game lodges in

the Sabi Sands Game Reserve.

The initial reaction of rural people to his mud-brick houses was "we don't want to go back to that". But when they saw pictures of his own house they sat up and took notice, he says. "This is far from a low-quality, dusty house," says Woodward. "It's actually a modern, almost futuristic concept in housing:'

In concentrating on low-cost housing he has had to introduce the standards found in a "high-quality" house without the increased expenditure.

The windows are a case in point. Provision is made for a separate vent

for air and fixed glaze windows for light. "These are easy to make for someone with no carpentry skills. which allows for much bigger windows to be made, thus lending an air of affluence to the house because of the amount of light allowed in."

The biggest savings, says Woodward, are made on labour. because the owner builds the home by him- or herselL

"We've tried to use techniques and materials which increase the labour content. such as the walls. the material for which can be 20 percent of the total cost. We've replaced that cost with labour. as you make your own bricks of earth." Corrugated iron is used for roofing as it is the cheapest material available. On the next course, he says he is "considering using a thatch roof, especially as rural people have thatching skills and raw materials"

The only "negative" Woodward can think of in the construction of these mud-brick houses is physical effort and time. But he sees great potential for the project in South Africa. Some of the country's top building companies have expressed interest in the scheme.

"The ideal would be for a company to come on site with expertise and resources and set lip a production situation where local people could use the facilities provided in exchange for their labour.

"A company could set up a mud-brick making facility at which locals could make the bricks for their own use, and in payment for the equipment, make bricks for the company," says Woodward.

Reproduced from the 'Reconstruct' supplement to the Sunday Independent

SAM GUMEDE
LESSON PLAN: GRADE 9 TECHNOLOGY
RANGE STATEMENT: HOUSING

Lesson 1:

1. Begin lesson by talking about learners' housng (7 minutes). Ask them:
   - What kind of house do you live in?
   - Who built it?
   - What kind of house would you like to live in?
   - What do you know about how to go about getting this kind of house?

2. Then hand out article. Ask learners to read it (20 minutes). Questions to focus reading (write on chalkboard):
   - What for you was the most promising point about Brian Woodward's way of building houses as a possible solution to your housing problem?
   - If you had to use this method of building, on what do you think you would make the biggest savings?
   - How do you think a house could be designed to be naturally cooler in summer and warmer in winter?
   - Why does Brian Woodward suggest fixed windows that do not open? Where would you situate separate vents for air, and how would you make them?
   - What would be needed to make mud bricks strong enough to build a double-storey house and to last many years?

3. Conclude lesson with whole-class discussion around following questions (13 minutes). List learner responses on chalkboard.
   - What are the problems faced by people in South Africa in gaining access to housing?
   - Does Woodward's article suggest any possible solutions to these problems? Can you think of alternative solutions?

Lesson 2:

1. Re-cap ideas from previous lesson (5 minutes)
2. Introduce class project on housing. Hand out worksheet that includes main outcomes and 'tips' on how to proceed, as well as possible references (10 minutes). The first part of the project requires groups of four learners to:
   - Design and make a simple mud brick-making machine:
   - Decide on the kinds of materials they would use to make the bricks.
   (Learners have to consult the article or books, fellow learners or community members if they need ideas.)
3. Class read through worksheet, begin planning, and ask questions of 'clarification'(25 minutes).

Stage 3 (four weeks):

1. Learner groups complete research (four lessons).
2. Learner groups present design plans. Class discuss and make suggestions for changes (three lessons).
3. Learner groups use their machines to make bricks (three lessons).
4. These bricks must then be used to build part of a simple wall at the school (four lessons).

Stage 4 (one week):

Each group to write a short report on their project. They are to be asked three questions:
- Describe your building process.
- Was it successful? What were the weak points? What would you do to overcome these?
- What did you learn about technology and housing?

Saide

What did we think of Sam's lessons?

Sam overcame a number of learning problems through the use of the newspaper:

First, he used newspaper information to 'update' his textbook. Old 'technology' textbooks focused almost entirely on classroom-based woodwork, metalwork and technical drawing activities, not social issues like housing. He had to find information elsewhere. Sam therefore carefully photocopied the article and stored it in a portfolio. He added any new articles he found on housing to this. He also managed to find more technical articles on brick-making and building from technical magazines which he used as a follow-up to the project. This allowed him to develop higher-level learning in the same area: he provided learners with new ideas for brick-making and introduced them to the ways in which commercial bricks are made.

Second, he managed to introduce relatively abstract concepts – housing, and the mechanics involved in designing a brick-making machine – through an issue with which his learners were familiar - a local housing project. He engaged with his learners. Most remained interested through- out and, because they used their knowledge in practice, they were far more able to remember important content.

Third, he integrated knowledge, skills and attitudes. Learners learnt from the newspaper about South Africa's housing problems and about ways in which bricks could be made cheaply. The project involved them in thinking about the need for, and then designing, a brick-making machine. They then had to make bricks and begin building a structure. This was a practical activity, but it was also one that took values seriously: it made learners more aware of social problems, involved them in a project that could assist the community (in this case, their school), and provided an excellent opportunity to learn how to work collaboratively.

Sam Gumede's teaching programme was designed so that competence in the areas of *knowledge, skills, attitudes* and *values* was developed in the learners. This ts a good example of outcomes-based education. Popular media, because they are such a strong reflection of life, tend to reflect knowledge, skills and value issues in an integrated way.

Some of us wondered whether Sam Gumede's undertaking was too ambitious. But simple brick-making machines are not too difficult to construct if one has metalwork equipment, and it must be remembered that this was a project that kept the class busy for some weeks.

You should have spent about 24 hours studying at this point. To keep to schedule, you should now begin **Week 5** of your studies.

Developing reading skills

One of South Africa's biggest challenges is improving the reading skills of its citizens. Our very poor reading competence as a nation impacts negatively on things as different as learner performance in international maths and science competitions, and the ability of factory workers to work productively. Yet, worldwide, *reading and information literacy* are becoming the skills essential for success in learning, work and life. South African education's critical cross-field outcomes emphasize the importance of developing learners who can read well, and who do so critically.

By using media in *all* the learning areas, we provide substantially more opportunities for practising reading. It is an obvious but important truth that we can only learn the skills of reading *by reading*! We can only communicate better by actually listening, talking and writing. Another simple but important truth is that language teachers who work alone will never develop in learners the level of language competence required.

Reading must become a cross-curricular activity. This becomes possible if teachers use more print-based media in their teaching. In other words, teachers need to create an atmosphere in class that encourages reading at school and at home.

> In *Section Six: Using textbooks in teaching*, we provide evidence of just how serious this problem is. A worrying new trend in South Africa, though, is that not only learners but teachers are spending less and less time reading. This poses serious questions about their ability to teach reading.

Developing a reading culture: Making newspaper reading a part of everyday life

This section provides a number of examples of ways in which popular print media can be used to improve reading skills. However, the best way to ensure that learners continue to develop as competent readers is to make newspaper and magazine reading a regular activity. Learners should start seeing reading as the logical way to learn, to find new information, and to be entertained.

How can this be done? The 'knowledge map' idea, and the 'newspaper hunt' which accompanies it (described in Section 3.2) } is one way to do this. This ongoing activity relies on *self-initiated home reading* (but reading that is encouraged and monitored by the teacher through the need for learners to contribute to the knowledge map), as well as *structured classroom reading time*. The learning focus is to develop competence in a particular learning area. But the process also places reading, rather than rote learning or teacher lecturing, as a central function within learning.

In order to make this work, you need to:
* *Make sure newspapers are always available to the learners in your class.*
  - If the school cannot afford a subscription to any newspaper, bring your own newspaper to class regularly, and encourage learners to do the same.
  - Arrange with newspaper companies – who are often willing to donate day-old newspapers to schools – to collect these regularly.
* *Establish a reading comer in your classroom.*
  - Buy a cheap pine bookcase and construct a 'box library' which you place in one corner of the class.
  - Keep recent magazines (especially specialist magazines) and newspapers, educational supplements, and alternative textbooks and reference books in this 'library'.
  - Encourage learners to contribute to this 'library'.
* *Make reading a conscious part of your teaching strategy.*
  - Refer to reports and photographs from newspapers in your teaching.
  - Spend regular time each day (or week) involving learners in newspaper 'hunts'

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for news on particular things.
- Make home-based 'hunts' a part of structured learning.
- Set up a wall map or newspaper and integrate these articles into the map or newspaper.
- Encourage learners to use the box 'library' by setting research based on the publications, or by rewarding learners with reading time.

This will begin developing a culture of reading in your class and will impact positively on the learning of all subjects and learning areas. In addition, though, teachers can improve reading skills – such as skimming and scanning, comprehension, and vocabulary – by using popular print media in shorter, 'one-off' activities.

Newspaper 'hunts': Learning to skim, scan and select information

Newspaper 'hunts' are games learners can play to familiarize themselves with newspaper formats, at the same time as improving their reading habits and speed. This newspaper 'hunt' was initially designed as a media literacy activity: its teaching intention was to familiarize learners with the conventional structure of newspapers. But, as you notice, it is an ideal activity through which to begin developing learners' abilities to *skim* and *scan* and thus *improve their reading habits and speed*.

Do this activity with a fellow teacher. Spend about 20-30 minutes on it, but limit your search time. An important learning outcome should be that learners realize they can't read the whole newspaper and so must scan it.

You can adapt this kind of activity for any grade. For instance, in a Grade 5 class you might use copies of only one newspaper, but in a Grade 10 class you might introduce three different newspapers. In the latter case, the learning focus would be on comparing newspapers with different target readerships, and discussing why such differences exist. Adapt the time taken for the activity according to the learners' prior experience of newspapers.

ACTIVITY 16

a Find a daily newspaper. Then - in no more than 10 minutes -look in the newspaper for each of the following kinds of newspaper texts and draw a circle around each:
  - *the main news story*
  - *a map showing the expected temperature for the area where you live*
  - *a letter to the editor*
  - *a photograph of an event in an overseas country*
  - *an article on a South African sporting event*
  - *an advertisement for a job*
  - *the current rand/dollar exchange rate*
  - *the editorial or opinion page*
  - *a graph or table which includes statistical information*
  - *a political cartoon*
  - *an article about an event in Africa*

b Compare your 'findings' with those of your fellow learners. What are the similarities and differences in your findings?

What can we learn from this 'newspaper hunt'?

First, the 'hunt' through a newspaper *within a strictly limited amount of time* should 'force' learners into *developing a better reading strategy*. They should realize quickly that they can't read everything, so they will begin reading only headings and sub-headings, glancing at photographs and illustrations in order to get a *general* impression of the newspaper's structure.

This is a useful introduction to an important reading skill, **skimming**, that learners should be taught to use when they begin reading textbooks and other, more advanced texts. The objective of 'skimming' is to gain a *general impression* of what is important and thus whether it is worthy of your further attention. The underlying aim of 'skimming', therefore, is to *save the reader time*. It involves paging swiftly through the publication, looking at headings, sub-headings and pictures, and perhaps reading *no more* than the first and last paragraphs of one or two articles or chapters.

In some cases, for instance searching for the rand/dollar exchange rate, learners would first need to find the appropriate article or section on the relevant page through a quick skim of the newspaper and then, second, *scan* through the article for the particular piece of information required. **Scanning** is aimed at *finding a particular piece* of information. You can scan a whole newspaper for a report on a particular event, or scan a report for a particular fact. Scanning involves looking purposefully for something, and not reading every line. When you recognize that even a whole section is not likely to be relevant, you ignore it and go on to the next.

Both scanning and skimming are skills that put readers *in charge* of their reading. When these become habits, reading speed and reading comprehension improve.

Second, as an *experienced* newspaper reader, you will probably have found the various items quickly because you knew, for instance, that sport appears at the end of most newspapers. Your **media literacy** is probably a good deal more developed than that of your learners. A newspaper 'hunt' provides a way to familiarize learners with newspaper formats – main news on the front page, sports news on the back page, editorial opinion and readers' letters near the middle of the newspaper - which is an important *media literacy* skill that we need to teach our learners as we introduce newspapers into our classrooms. Once learners have learnt the 'conventional' format of newspapers, they will be able to find their way around the newspaper quickly.

> You could design a 'hunt' that enables learners to notice that certain pages do not carry 'objective' news – the editorial section. Instead, these pages carry articles that reflect the opinion of the newspaper. Learners won't simply 'notice' this. Teachers will need to develop activities and questions that allow learners to 'discover' this. They could, for instance, ask questions such as:
> - Where in the newspaper do you find comment and opinion rather than news reporting? (What makes this page different from the rest of the newspaper?)
> - What forms do the comment and opinion on this page take?

The journalist's pyramid: Learning to scan, summarize and organize information

Well-written news stories are good examples of crisp, clear writing. This makes them good resources for teaching basic reading skills, such as scanning and summarizing. Their simple structure, easy reading style, and high interest value make them ideal for working on improving learners' reading speed. Here is one activity you could use to begin developing these skills.

ACTIVITY 17

Give each of your learners a newspaper (or share one between two). Ask them to find the main news story and to read only the first two paragraphs of this story. Then answer the following questions:
- Who was the story about?
- What was the story about?
- When did this happen?
- Where did this happen?
- Why did this happen?

> Do this activity yourself before you do it with learners. Don't spend more than 15 minutes on it. You could do the same activity with a radio news broadcast to improve listening skills.
> Play part 4 of the video. Watch how Olivia Mbi teaches listening skills using a radio news broadcast.

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What did we learn from this activity?

First, we noticed that most of the important information – the answers to the five questions – is contained in the first paragraph or two. Journalists are trained to answer these five important questions – the 'SWs' – at the beginning of their article because newspapers are designed for quick reading. You can't leave the important points to the end because readers may not read this far! Only once these basic 'information' questions have been answered will the articles continue with explanation, *supporting* details and quotations. This is often called the inverted *'journalist's pyramid'*.

Generally this later information is what makes the story interesting, but if you didn't have time to read it, you would still know the main details of the story. Unfortunately, newspapers tend to focus on immediate information and often don't provide structured explanations or arguments. Newspapers often even neglect to answer the 'why' question. But, by making learners aware of this structure and its strengths and weaknesses, you begin developing basic **newspaper literacy skills**.

Second, by limiting the time learners have in which to read an article, and by providing them with the five 'W' questions, you can begin instilling in them the good reading habit of *scanning*. These basic questions could form the guiding questions for most reading. Once this basic skill has been instilled, and once learners have practised scanning in newspapers, teachers could go further by showing them how to *use* scanning – where we know what *kind* of information we are looking for in order to develop good **summaries**.

This could be achieved by using the journalist's pyramid as a starting structure. But, as we develop learner skills, we could ask them to adapt and expand on these questions. Notice how one class we watched did exactly this as they read through an article on the claims Sophiatown families are making on properties that were taken under apartheid.

Sophiatown families will be paid

By Joshua Raboroko

SOPHIATOWN. Johannesburg, families who lost their property and land under apartheid laws have been given the assurance that they will be financially compensated by the Land Restitution Court if they submit their claims before December.

Gauteng Land Claims Court commissioner Mrs Emma Mashinini told rnore than 500 families at a meeting in Diepklcof Sowetc, on Sunday that her office has already received numerous claims from people who were forcibly removed from Sophiarown during the apartheid era.

Hundreds of families - mainly Africans, coloureds and Indians - who lost their property opted to make financial claims rather than have their land and properties back.

They welcomed the news that Land Affairs Minister Mr Derek Hanekom had set aside R30 million for the restitution of land to those deprived during apartheid.

Mashinini urged people to form committees that would represent their claims to the court, saying these committees should sit on a weekly basis to discuss problems.

She said the properties would be evaluated by experts.

They would ascertain how much each family would receive as compensation.

Most of the families who lost their properties were now living in Sowero townships Meadowlands, Diepkloof Dube, Lenasia, Tladi and Rockville.

Most families were no longer interested in moving back because the area was now developed and occupied by people who would obviously resist their move.

Most important facts (5Ws)

Who?	**What?**	**When?**	**Where?**	**Why?**
Sophiatown families who lost their properties under apartheid	Have been given assurance that they will be financially compensated for lost properties	On Sunday- not clear when compensation will occur	At a meeting in Soweto addressed by land claims court commissioner claims	Not clear– maybe because of many

Supporting information

How many?	**How much?**	**What must people do?**	**Why compensation?**
More than 500 families	R30 million for all deprived of land under apartheid	Form committees to take representations to court	People have new houses, don't want to move back

What race?	**Where do these people live now?**	**How will propertIes be evaluated?**
African, coloured and Indian	Soweto townships, such as Meadowlands, Diepkloof, Tladi, Dube, Rocklands, and in Lenasia	By experts

Comments from people?
None provided

You will notice that the essential details of the story are contained in the 'fat' top-end of the pyramid. But this *should* arouse in readers an interest in finding out more details. The details beneath our heading 'Supporting information' are not essential to the story, but they do increase our understanding and interest.

- Can you think of any other questions that are *not* answered by this reporter?
- Did you notice that the reporter uses no direct quotes from anyone?

The important point here is that learners now have a *structure* to guide their reading and, ultimately, how they organize information when they write and learn. It turns them away from unstructured summaries where important detail is often left out and unimportant information included!

Both 'newspaper hunt' and 'journalist's pyramid' suggest the importance of having **questions to guide reading**. Imagine if learners had simply paged through the newspaper. Do you think they would have learnt as much about the structure of the newspaper? It is certain that they would not have done – at least, not within one lesson. The same is true of the Sophiatown article: without the five 'W' questions, learners would have experienced more difficulty in interpreting the main points made by the writer of the article.

The *search* for information, and the organization of information initiated by the questions, directed and structured the learners' reading and learning in a *purposeful* way. This becomes even more important as reading becomes more complex, as it often is when reading textbooks. While some textbook comprehension exercises are excellent, many fail to 'connect' with the learners' worlds and interests. In order to overcome this problem, consider setting your own questions on articles and reports from the popular media.

Such activities need not always be 'full-scale' comprehension exercises such as we find in textbooks. Though in-depth analysis of a particularly significant passage is sometimes valuable, it is probably better for the learners to examine pieces of writing as a regular feature of their language class, answering only two to four meaningful questions rather than scouring passages to answer 10 or 12 questions.

> We re-visit these ideas in Section Six when we provide ideas about how to get learners to use textbooks more effectively.

Playing games: Using language games and crosswords to develop vocabulary

Poor vocabulary is as much of an impediment to quick reading and good comprehension as are poor reading habits, such as the inability to skim and scan. Vocabulary develops as a result of the learners listening, reading, speaking and writing. Consequently, teachers across the curriculum must provide learners with as many opportunities as possible to practise these language skills if they are interested in improving their vocabulary.

But newspapers and magazines contain an array of language games and crossword puzzles that provide teachers with entertaining ways of working on vocabulary.

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Games like these - as well as board games such as Scrabble and Boggle – are 'fun' ways of developing vocabulary. Target appears in newspapers on a daily basis with solutions often appearing in the same newspaper a day later. We would suggest that teachers collect these and:

- integrate them into a teaching plan where learners 'play' these kinds of games regularly in class. They can also be used as a quick 'test' of learners' vocabulary.
- use them to fill spaces at the end of lessons, or the ends of weeks. Obviously they could also be used to keep faster learners occupied once they have completed work. But remember, if this is their only use, you are probably teaching the learners who don't need this extra teaching, while those who do require it never get the chance!

The useful thing about these games is that they don't really need to be integrated into a lesson plan or worksheet: they can stand alone and be used flexibly. All that teachers need to do is collect them regularly and ensure that they file 'solutions' so that they can be found. It is also advisable to glue these to a piece of board and laminate them so that they last a little longer.

We are not convinced, however, that these games have great value in widening or strengthening learners' vocabulary if they are used in isolation. As we have said before, language is learnt best in a context. These games treat words in isolation of any context in speech or writing. Nevertheless, they may provide small 'spurs' to develop learners' vocabulary. ('Target', in particular, impresses learners with the number of variations that are based on one root word.)

Crossword puzzles

Crosswords, if carefully selected by the teacher, can serve to increase learners' awareness of *synonyms* (many crossword clues are in fact synonyms).

But teachers should be careful about their selection of crossword puzzles. Some are:

- *cryptic puzzles* and, while fun to do, probably don't much increase basic word power. However, strong language students may enjoy this kind of crossword puzzle.

- *general knowledge* kinds of crosswords. Again, while some people may enjoy doing these, they probably do not have much impact on vocabulary. They are also unlikely to be much use in developing useful general knowledge as they often focus on 'trivia'.

> In the past, many teachers have drawn on the popularity among learners of crosswords, and developed their own to teach and test content knowledge, This is obviously an interesting alternative to worksheets and tests. But good crosswords take time to develop!
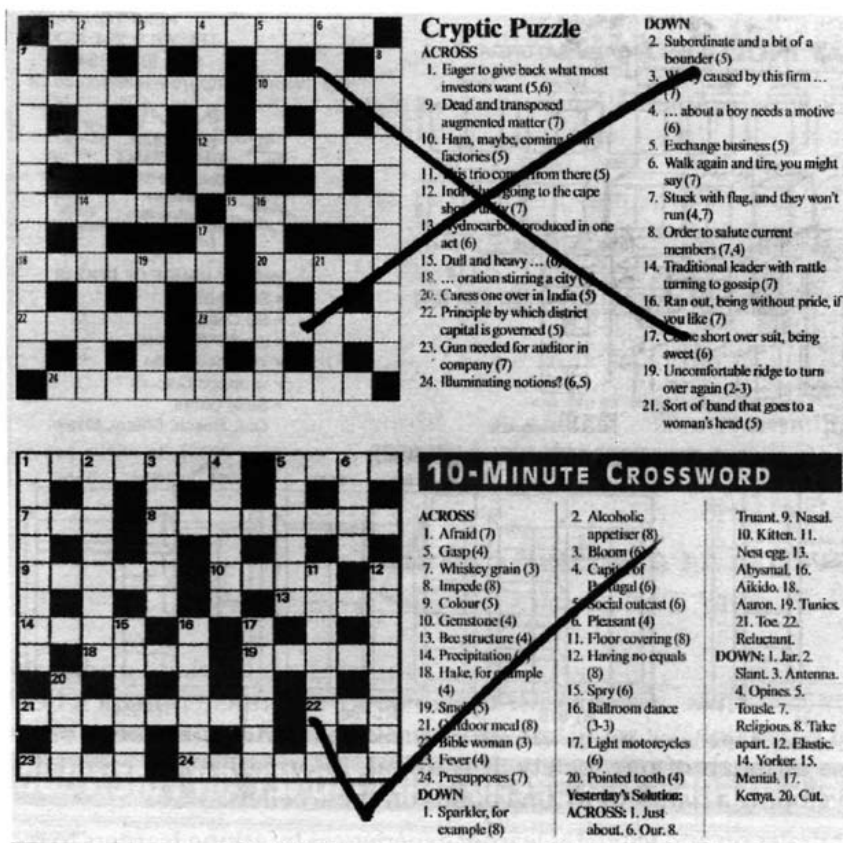
In order to have a variety of language and crossword puzzles available and re-usable, we suggest teachers:

- collect the puzzles and their solutions regularly;
- photocopy these;
- paste them onto cardboard with the puzzle on one side and the solution on the other;
- laminate these so that they last and can be re-used. Learners should use koki pens on crosswords so that their work can be wiped off.

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3.4 Developing writing and speaking skills

The reading activities mentioned in Section 3.3 will go a long way to improving *writing* skills as well. Creating an atmosphere that encourages reading – of almost anything – will ultimately impact favourably on *all* language skills.

In this section we present some ideas of how to use popular print media for the specific purpose of developing writing skills, from basic skills – focusing on writing in an organized and logical way, through to more advanced skills – focusing on writing imaginatively and persuasively. Many of the activities will also have the effect of developing speaking skills.

But, again, we begin with an idea that will develop a more general atmosphere that encourages writing. It is our strong belief that if teachers develop a culture that makes reading and writing a normal and desirable part of learning – at home and at school- then language competence will grow.

Developing a writing culture: Producing and publishing newspapers.

Writing in most South African classrooms is an artificial undertaking: learners do it because they are told to do so, and teachers mark it because that is their job. Yet we all know that writing – of different kinds – forms the basis of much of our society. It is useful, informative and entertaining. Developing a *culture* of writing builds on these beliefs:

- It draws on and validates learner experiences by asking learners to record these in a published form.
- It draws on the popularity among learners of popular media formats by using these as the form through which writing is done.
- It demonstrates that learners should write well because this increases the enjoyment readers get from a well-written article, rather than because of grammatical rules.

Developing a classroom-based wall newspaper

Teachers have also used their noticeboards – and the *format* and *processes* of a newspaper – to encourage learners to write. How does this activity work?

- Some learners are assigned the role of newspaper 'reporters'. These reporters – who may have specialist 'beats' such as arts, sport, etc. – interview fellow learners, teachers, parents, local community people, and write up these reports. They may also be asked to summarize information from the mainstream media in order to develop a weekly 'current affairs' column for their classroom newspaper. Topics of general or special interest drawn from the local, national or international scene can be reported, as well as classroom debates or class outings .
- Other learners – assigned the role of sub-editors – will then sub-edit (in other words, correct) the reports and 'lay them out' on the class noticeboard in a format that resembles a newspaper front page.

Wall newspapers should look as much like the front page of a normal newspaper as possible. In a sense you are running a 'simulation' game in which your class play the role of reporters. It is thus important to make the activity as realistic as possible.

Grade 7 learners at a Durban school spent a day developing
their wall newspaper, Sarnia Times *(Photo by Costa Criticos)*

In order to achieve a realistic look, teachers should encourage learners to:
- type or word-process articles on A4 sheets – these would then run like the columns of a newspaper;
- take their own photographs - you can buy very cheap cameras these days! – and have these developed in a large 'Jumbo' size so as to make them fit on the giant-sized wall newspaper;
- make up collages from existing pictures in magazines and newspapers to illustrate the front page;
- draw their own cartoons for the front page;
- practise their writing style by developing large, attractive headlines (these can also be developed on computer word-processing programmes).

Wall newspapers could take a number of forms. They could be produced as a once-off class project (around a particular theme), or be developed over a whole semester (where they change continually). Teachers could introduce a competitive edge – by running four or five classroom newspapers – and allowing each 'news team' to 'scoop' other teams by getting the 'latest' news. This would spur interest, as well as widen involvement of learners.

Visit a real newspaper and study newspapers, in order to develop learner interest and understanding of newspapers before you begin the process.

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Producing a 'real' school or class newspaper

ACTIVITY 18

Part 6 of the video is about getting learners to *produce* their own media in order to develop their media literacy and other important language skills.

a When you watch this part, make notes of the main points made by the various teachers who are interviewed.

b What ideas do these teachers provide about how to use newspaper and radio *production* to develop your learners' language and media skills?

c Are there any constraints you can identify which would prevent you from doing these activities in your school? Talk to fellow teachers and see whether you can work out ways of overcoming any of the obstacles you identified.

Spend about 30 minutes on this activity. It is important that you speak to fellow teachers and try to identify constraints to using these kinds of activities in your teaching, as well as ways to overcome these constraints.

Developing a real school (or class) newspaper is a powerful teaching tool. But it is also an ambitious undertaking. The level of ambition can range from:

- a regular weekly, fortnightly or monthly newspaper, professionally designed using a desk-top publishing computer programme; through to
- an irregular publication that mixes handwritten and typed (or word-processed) articles and is cheaply photocopied and stapled.

Newspapers can range from the basic roneoed newsletter containing only type (on the left and far left), to another basic photocopied type-and-photograph newsletter (centre), to a professional DTP design and print version (on right).

Ultimately, the teaching power of this activity – in fact, all newspaper production activities -lies not in how professional the finish is but in the process that learners go through. They develop:

- *selection skills* as they decide on the content of their newspapers;
- *interviewing skills* as they gather information for their reports;
- *writing skills* – especially the use of direct and reported speech – as they write up their reports;
- an ability to *recognize and correct language errors* as they sub-edit their reports;
- an understanding of how language competence has practical benefits.

The editor of this module once used this technique with his learners. *The Eastwood Times* was the result. This is his opinion of this kind of teaching method:

> *'I sometimes look back at this newsletter and feel embarrassed about how 'unprofessional it was. But then I remind myself of just how motivated a class of Grade 10s became in doing it. Eastwood is a school in a working class "coloured" area. Many of the learners had little interest in schooling, or in English. This newsletter gave them enormous amounts of fun and confidence. I often saw them working at four in the afternoon! It also developed their ability to be critical: the principal ultimately "banned II the newspaper when it began investigating what they saw as school corruption!*

> *'But, as a teacher, it allowed me to channel writing activities into a meaningful activity. I didn't have to mark meaningless essays on topics like "The Life of a Shoe ". Instead I assessed the articles they submitted for publication. Good ones were published and poor ones weren't. In the end I didn't make this decision. Instead, I asked the editorial team to evaluate articles according to how interesting they were and how well they were written. They knew these were important criteria because other readers complained about badly written or boring articles! In the end I think this class learnt more about writing in English – and about newspapers and censorship – than I could ever have taught them through formal class teaching.*

> *'The class also learnt some basic business skills. They had to raise money to print the newspaper and so tried to gather advertising from local businesses, charged fellow learners to place a classified advert, and sold the newspaper for 10c!'*

> Instead of forcing learners through often meaningless paragraph, letter and essay-writing routines, teachers could also aim at evoking authentic learner experiences, and getting learners to express these through media formats such as cartoons, letters to the editor, plays and short stories, and then publishing these. Publication can be achieved through submitting these to a real newspaper (letters to the editor) or by photocopying and then selling them to other learners and parents (cartoons, life stories).

Learning to write in a clear, logical and organized manner

'The intrepid reporter': Researching and writing systematically

Communicating information in an organized and logical manner is an important academic and life skill. It is also a skill that is often lacking among learners. The 'journalist's pyramid' (see pages 70 and 71) provides, in the form of the five 'W' questions, a basic structure for organizing writing. Here is an activity in which learners should be encouraged to use the 'journalist's pyramid' as a structuring device, once they have been introduced to the way in which typical newspaper reports are structured.

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ACTIVITY 19

Pretend you are a reporter, and are sent either to:

- a laboratory where an important biological discovery has taken place. Maybe it is the discovery that the kidney purifies blood, Your task is to write a newspaper report for tomorrow's newspaper in which you explain the discovery (Sciences); *or*
- to cover some historical event. Maybe it's the bombing of Hiroshima. How would you report this to the world? (Human and Social Sciences - history); *or*
- to tell the story of Julius Caesar's assassination. Maybe you can convert the details of the Shakespearian play into a news report (English or history).

Write your report according to the 'journalist's pyramid' and limit it to 300 words.

What did we think of this activity?

First, we felt it was a *writing* exercise that could be used profitably across the curriculum. It would provide learners with an interesting way of revising their work, as well as developing writing skills such as summarizing and organizing information.

Second, we noted that the activity could be developed in different ways. You could sharpen learner skills by asking that they write a very short report of, let's say, 50 words. This would test their ability to distinguish between *essential* facts and *supporting* information. Once this had been completed, you could ask learners to pose further questions about the information they have: What more would you like to know? A second story, possibly a newspaper feature, could then be written.

Third, it provides ways for teachers to collaborate. For instance, learners could learn about newspaper formats in a language class, then do the basic research (in the guise that they are reporting on, let's say, the bombing of Hiroshima) in their Human and Social Sciences class. They could hand in the work done as part of both their language and Human and Social Studies assessment. Where teachers (including language teachers) set this activity *without* introducing learners to the basics of newspaper reporting, the written results are likely to be disappointing.

'Sentence salad': Developing order and sequence in reading and writing

Most of us recognize logical order when we read, though we are not usually all that conscious of it. In fact, we are most likely to think about logical order in what we are reading when it is *absent* – when some information which the writer seems to expect us to know is missing, or when the writer 'jumps' from one point to another seemingly unrelated point without signalling a link between the ideas. Here is a simple activity for Grade 4s in which an advert from the 'What's on' column in the newspaper is used to provide practice in ordering ideas logically:

ACTIVITY 20

This advert has been torn into bits. But I'd like to attend this event. Could you help me by putting the advert together as it initially appeared?

a Put the above sentences into an order which makes sense. In other words, re-write the advert.

b Can you explain what helped you to choose the correct order?

c Discuss your order with a partner. Is your order the same as your partner's?

d Now write your own newspaper advertisement. It could advertise an event that is happening at school.

Practise this activity before doing it with you learners. Spend about 15 minutes on it. Then try it with a class. Discuss your experience with fellow teachers.

For such activities to have much effect on learners, similar activities need to be given to them quite frequently over a sustained period. Grade these activities so that they become more complex over time. For instance, this is a simple Grade 4 level activity, but the same principles can be used at more complex levels, for example by cutting up longer adverts or more complex magazine, newspaper or textbook articles. ('Ufe Story' is a slightly different example of this idea.)

'Life Story': Another activity for developing order and sequence

Somewhere between teaching the need for logical structure in straightforward passages like the one above, and the need for such structure and how to achieve it in more complex arguments, one can build learners' 'feel' for sequence through the medium of storytelling – especially if their attention is drawn to it explicitly. Logical sequencing is one of the basic skills of story-telling. It can be developed (also at about the Grade 4 or 5 level) by asking pairs of learners to construct the life story of an imaginary person (or someone they know) as in the following activity.

ACTIVITY 21

Hand out a newspaper or a magazine, a large piece of paper, scissors and felt-tipped pens to each person – or pair of people – in a class. Tell them that they are going to use pictures and information from the newspaper to tell the story of an imaginary person, from his or her birth to death. They will do this by cutting out information from the newspaper and linking it to particular ages in their imaginary person's life. Your worksheet might look like this:

Before you do this with a class, try it out with fellow teachers. Spend about an hour on the activity. This activity is adapted from the Education Foundation's *Newspapers in Education Guide*, 1994.

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1. Decide whether you want to describe the story of a man or a woman.
2. Find the classified advertisement section of your newspaper and cut out one announcement from the Births column and another from the Deaths column. This will show the start and end of the life of the person whose story you're telling,
3. Search for and cut out pictures, headlines and parts of advertisements, or anything that can tell us something about this person's life story (pictures need not all look like the same person).
4. Plan your story by arranging the cuttings in a suitable order on the blank paper you have been given (do not be tempted to 'skip' this step - don't just start gluing straight away).
5. When you are satisfied, glue the cuttings onto the paper. Use a pen or crayon to draw arrows to mark the 'reading direction' of your story.
6. Share the telling of your story to the class.
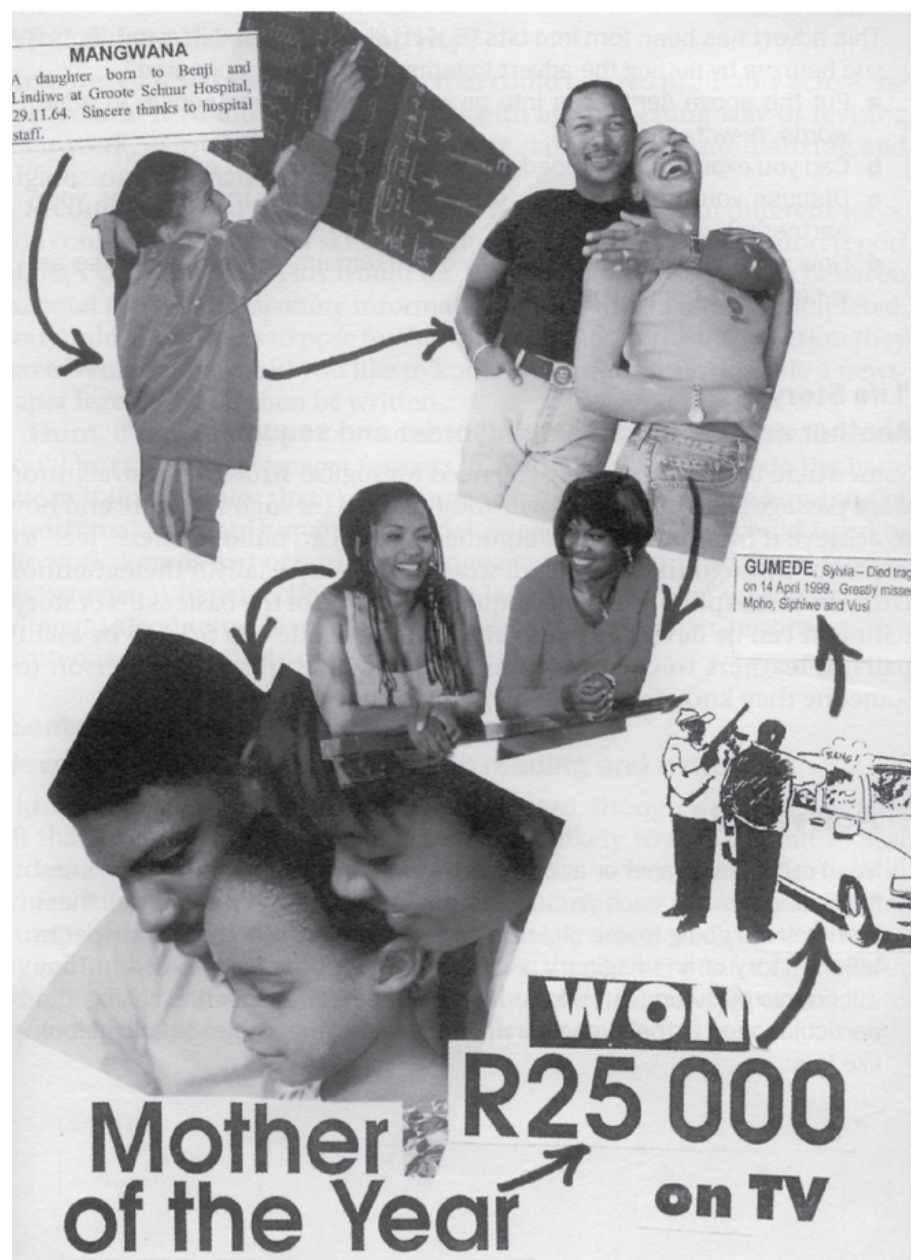
This is an example of the efforts of one Grade 4 class.

Remember, the main reasons for doing the activity are:

- to develop the learners' sense of logical order (What comes before other things in one's life?);
- to develop their imaginative skills (Can I imagine my way into the life of this stranger? Can I make him or her interesting?);
- to develop learner familiarity with the structure of newspapers.

What will learners gain from these activities?

'Life Story' develops similar skills to those developed in the 'sentence salad' activity, but adds more freedom and imagination to the activity. It also introduces oral presentation that will develop speaking skills.

Look back at activity 20. Learners are asked: '*Can you explain what helped you to choose the correct order?*' This question reflects the main 'learning' point of sentence salad activities. While learners should be able to get the advert into its correct order, it is even more important that they can explain why. They should be able to say: 'I placed the sentence *There will be drag cars, racing vehicles, street-rods, custom vans and kit cars on display* before *A group of Hatley-Davidson bikers and some stunt bike riders will also perform* because the second contains the word '*also*', which suggests something else has already been described'.

The teacher should move around among the learners to ensure that they do not skip stage 4 – the ordering stage – of 'Life Story'. At the search stage, the learners will find suitable pictures etc. randomly as they page through the media material, so this activity is very much about the storytellers 'making order out of chaos' - as happens in all creative acts.

You could extend this activity by getting the learners to *write* their *own* life stories. Emphasize the need to *order* the experiences recounted. This does not mean that everything has to be written in *strict chronological* order (writers could *start* where they are now, or in the future, and go back to the beginning, as many authors do). But they should make such decisions knowingly – breaks from an obvious order should be planned, not haphazard.

Learning to write imaginatively and persuasively

While newspaper reporting is a powerful 'model' of simple and direct writing style, teachers will need to move learners *beyond* newspaper conventions and develop more advanced reading and writing skills. As we said earlier, newspaper reports focus on providing information, not argument; thus the five 'W's are more useful for organizing the key *content* of many kinds of writing, but they tell us little about ordering points in a logical *sequence* that will/take the reader with it'. The 'inverted' journalist's pyramid does that, but suggests a structure that is suitable for little other than newspaper reports. So it is also important to provide 'models' of more complex structures, such as building an argument. We will now provide some ideas of how to develop more sophisticated writing skills – learning to write more creative, sustained and persuasive pieces of writing – using the popular print media.

> You should now be beginning Week 6 of your studies and should have spent at least 30 hours working on this module.

Imaginative writing contains a clear writing style, and a logical sequence, but must also be absorbing and vividly written. Teachers need to convey to learners that 'using their imagination' in writing involves an intense effort of recreating from *memory* elements of real experience (their own, or the experience of others 'through the filter' of their own experience of events). These vividly-imagined or remembered *details*, when combined in a story about recognizable and quite familiar happenings, are what make successful stories.

This, together with a vocabulary that enables the writer to i*nvest ordinary details with emotional content*, is what makes the reader sit up and say, 'This is wonderful- I've felt just like that before!' And such a vocabulary does not need to include numer-

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ous erudite-sounding, multi-syllabled words – or even a 'dictionary-full' of adjectives and adverbs. It does require a good stock of strong and subtle verbs and nouns, however. These are what will enable learners to develop a priceless ability – to express themselves and 'tell their own story' vividly, simply, and with conviction.

Popular media *formats* can provide resources for doing this in a number of ways.

Translating setworks into popular media formats

Reading good writing is one of the best ways of improving writing. But how can we get learners to read good writing?

Literature setworks are supposed to fulfil this function. But they often don't. Learners regard them as 'difficult' or 'boring'. Teachers often contribute to this by making the study of poetry or Shakespeare into a mathematical exercise, rather than highlighting the joy that can come from good writing. This is particularly so when teaching Shakespeare to second language students, or to students who struggle with language.

'Translating' setworks into popular media formats can be a challenging and exciting project that will develop a number of language skills. Here are some ideas capable of being adapted in many ways.

Re-imagining a 'classic' play

Ask learners to translate a *scene* from a Shakespeare play – translating the entire play will be too demanding in most cases – into a local adaptation of that play. Learners should 'imagine' what the modern, local equivalent of a Hamlet, for instance, would look like and speak like. What would the Soweto equivalent of a castle and a lord be? (See pages 199 and 200 for an excellent example of a Northern Province teacher who does something similar.)

In other words, the task is to:

- translate Shakespearian English into, for instance, *Isi-kasi* (an urban mix of languages/township lingo);
- re-costume the character in a way the class imagines that person would dress if he or she lived in Soweto today.

In order to develop an understanding of *characterization* and *plot*, you should ask the class to keep these consistent.

This activity could be followed up by showing the class the different ways in which different directors have interpreted the same Shakespeare play. For instance, there is a Zulu version of *Macbeth* and, recently, a very trendy and topical (for South Africa) version of *Romeo and Juliet* was made.

As an alternative to producing a play, the class could be asked to develop a cartoon strip or storyboard for a film.

'What if ... 1' games: Turning a poem or short story into a news report

Teachers could use the same principle – translating 'high literature' into popular media formats – in another way.

- Find newspaper reports of incidents such as a lover's tiff or 'triangle', or a crime mystery that has (or hasn't) been solved. Ask learners to read these (and remember the journalist's pyramid structure).
- Then point them to a setwork short story, poem or play. Ask them to rewrite these as dramatic news stories.
- An exciting variation of this could be asking learners to expand on the initial story, play or poem. Ask learners to answer questions such as:
  - 'What led up to the event described in the poem or story?
  - What happened next? What if this/that happens? (For instance, ask them to imagine how Romeo and Juliet would have ended had Romeo not died.)

Or else, ask learners to allow a literary character to enter our world. For instance, *what if* Hamlet found himself in Thabo Mbeki's cabinet and was put in charge of 'Safety and Security':

- Would Mbeki have liked Hamlet?
- What would they have spoken of?
- How would Hamlet have handled his portfolio?

An ongoing idea would be for teachers to bring to class newspaper and magazine stories that *illustrate* the key plot points or themes in literature. In the intense ANC-Inkatha struggles in KwaZulu-Natal, for instance, a number of stories have appeared about young people who have suffered as a result of loving someone in families linked with the opposing side. And the intrigue within government often resembles the moral dilemmas Shakespeare writes about in his histories and trage-dies.

ACTIVITY 22

Listen to Part 2 on your audiotape. On it you will hear a short excerpt from a Shakespearian play that has been adapted by learners and acted out. This is followed by teachers talking about the benefits of these kinds of activities.
a Make notes of the points made by the speakers
b Then, with a fellow teacher, choose a poem, short story, or excerpt from a play or novel and adapt or extend it.
c Once you have completed this activity, discuss with other teachers how it works as a learning activity.

This is a time-consuming activity but. if done well. it is very rewarding. Spend up to three hours on it. And don't forget to talk about what you learnt in the process of doing the activity.

What will learners learn from these activities?

These kinds of 'translation' and 'what if?' activities – there are countless adaptations of the basic idea – are powerful teaching tools in that they teach language skills while introducing learners to models of good writing in a painless way. These activities will:

- familiarize learners with the setwork being studied;
- familiarize learners with the many different ways of telling stories;
- develop learner understanding of how key literary devices, such as character and plot, function to make a story or play interesting;
- provide valuable practice in writing ordered, coherent and imaginative narrative;
- improve acting and speaking skills when produced as a play or radio reading.

Models from the media: discursive writing with a difference

The best way to learn writing skills is undoubtedly to write, and write regularly. But there is also much to be said for exposing learners to high-quality models of good writing. If they are occasionally set the task of analysing such a model in order to understand what *makes* it good writing, and what lifts it above the ordinary or dull, so much the better.

The essay or 'feature article' on page 83 appeared some years ago in *The Cape Times* when Dr Chris Barnard (the heart-transplant surgeon) was writing a regular column for the 'comment' page of that newspaper. We think it provides an excellent model of a well-written essay. Other feature articles of similar merit appear quite often in a variety of newspapers. Look out for the best ones and keep them.

You can do the following activity yourself, and set it for learners in Grades 11 or 12.

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ACTIVITY 23

Read the essay on page 83 twice (skimming it once and reading it more carefully a second time, or vice versa), then carry out the tasks that follow:

a Identify what makes the beginning and end of this essay so powerful.

b Why do you think it is so important to take care to begin and end an essay effectively?

c Try and think up a powerful opening and closing sentence (or paragraph) to an essay on 'Being a Teenager', 'Dating' or 'Writing essays' (or all three if you really enjoy this!).

d Number the steps in Chris Barnard's argument alongside the text.
- How does he build up his argument before he finally convinces us of his case in the last line?
- Does he simply state his opinions, or does he supply evidence to support them at each stage of his argument?
- Does he take into account arguments that are opposed to his own?

e How does he bridge the gap between high-level medical and moral dilemmas and the ordinary reader?

What can we learn from this activity?

An essay like this is easy to dissect in the ways suggested by the questions above, and vividly illustrates the following writing skills which would mean little to learners if the teacher simply talked about them in the abstract:

- thinking of beginnings and endings which have impact;

- quoting a well-known poem or other piece of writing;

- introducing anecdotes (a chat with a taxi driver, and the story of Eli Khan) to bring otherwise-abstract arguments 'down to earth';

- providing factual evidence to support assertions (the facts concerning brain death). Note that such facts do not necessarily *prove* beyond all doubt that a claim is valid; other facts may be produced to suggest that it is not. However, the point is *not* to make assertions that seem to have *no* support – it is finally up to the reader to decide whether to accept the argument as persuasive or not;

- building a clear, step-by-step argument that takes into account arguments that oppose the writer's own, thus making for a much more persuasive argument – opposing arguments can be presented and refuted one at a time, or they can be presented as a single argument and then 'demolished';

- 'bridging' paragraphs so that the reader can follow the argument logically, without having to 'jump' from one point to another point that seems unrelated to it. Words and phrases like 'However', 'On the other hand', 'In addition' and' A quite different … may be seen in … ' are important for this purpose;

- ensuring that the essay's conclusion *follows satisfyingly* from the arguments and evidence that precede it.

We all have to go but death is not an enemy

"DO NOT GO gentle into that good night," a famous Welsh poet told his dying father in a poem which is now almost a classic affirmation of life in the face of death.

The poet was Dylan Thomas whose own flame of life was such that he burnt himself out in his early 30s, but not before he had left behind a wealth of poetry and prose that praised the life forces in all its forms.

Real enemy

The real enemy, according to Thomas, wasn't death. It was all those creeping, petty betrayals of good, well- rounded living: the tickey-snatching lives of middle-class respectability; the neatly-ordered mind of the bureaucrat, the drunken and disorderly mess of existence lived by the truly poor, and in fact anything that inhibited a gut reaction to life and love.

I never met Mr Thomas who died some time during the 50s but I know I would have liked a man whose advice to the terminally ill was to "rage against the dying of the light", meaning not a niggling, complaining whine against illness but total defiance of all death can do until the last defeat pulls you down.

Doctor's role

Yet Thomas and I would have sharply disagreed on my role as a doctor in the fight between life and death. I don't accept the common view that the aim of every doctor should be to conquer death, nor do I go all the way with Thomas's description of death as an adversary or an opponent. Too often have I seen it come as a friend, a welcome release.

Human impotence in the face of death was brought home to me by a New York cab driver. "Step on it," I told him. "I must be there by 8:15."

He eyed me in the mirror, shifted a fag-end from one corner of his mouth to another and spoke out of the side of his mouth.

"Relax, mister," he told me. "There are only two things y'gotta do. Y' gotta pay taxes and some day y' gotta die."

I've no doubt that he made the same crack to all his passengers but I've never forgotten that cab driver's over- simplification of what life is all about.

There may be some dispute about taxes but death for all of us is a certainty. From the instant of conception we are all dying. Each has a life expectancy which is programmed by the genes. It is finite and diminishes with every second that passes.

It is an awesome thought for the human mind to comprehend and everyone has their own formula for coping with it.

Some live it up. Others deprive them-selves of all pleasures, possibly in the belief that if they suffer enough now they may not feel so much pain at the end. Many immerse themselves in work, politics, religion and sometimes activities which shorten their life span but seem to stop the pain of the inevitable from getting through.

Whatever they do, each person knows what quality of life is acceptable to

them and when this is gone they will reject mere existence or the pointless breathing in of air.

To me, the doctor's role is clearly one of maintaining the quality of life for as long as possible, not to beat death or even to stave it off. A good life deserves a good death - that "good night" of Thomas's poem.

Thousands of words have been written in an attempt to define the moment of death but it is important to recognize that death is a clinical impression it is diagnosed when certain symptoms or signs are present.

For hundreds of years English common law ruled that life does not end as long as breathing continues and the heart beats – an erroneous concept as the beating heart and the expanding Iungs are there to keep the brain alive.

As the brain is the organ which deter-mines the quality of life, the need for these functions cease when the brain has died.

The cessation of heartbeat and breath-ing may occur before (as in the case of a heart attack or electrocution) or after (as in the case of a head injury) brain death.

But once the brain has died there is no further need for these other organs and they die at various intervals afterwards. Total death of the body is therefore by degrees, as the lungs stop drawing in air, the heart ceases to beat, the circulation slowly trickles to a halt and the blood

cools.

There can be few doctors who have not seen life become intolerable before the heart stops its spontaneous beating. The moment of intolerance is felt not only by the dying person and the doctor but all those – friends and relatives – who knew the patient's requirements for being alive.

The Chris Barnard column

Dilemma

This has become the physician's dilemma in an age of modern technolo-gy, an era in which "life" may be supported by heroic measures that can sustain but not cure vital organs. These measures may appear as almost miracu-lous but often they prolong the onset of death rather than the process of life.

Yet, as any doctor will confirm, the human ego is such that is can only feel a sense of guilt and defeat in the face of another's death.

The story of 78-year- old terminally ill Eli Khan makes the point better than I could. His last request to his hospital doctors was to be allowed to die with dignity – not like the man in the next bed who had "tubes sticking out all over". He did not want his children to remem-ber him that way.

Last wish

His doctors promised to honour his last wish but when the time came they could not resist the temptation to start intensive care which involved intrave-nous feeding and intubation to a respira-tor.

Later that night Khan awoke, reached out and switched off his respirator.

When his doctors went to see him again he was dead. On the bedside table was a note, scrawled in his uneven hand: "Death is not the enemy, doctor. Inhumanity is."

Using cartoons and photographs to stimulate and support writing

Using graphic novels to model and Support good writing

Ever since the first comic books (graphic novels) arrived on the scene, they have earned the disapproval of some teachers. Many believe comics are aimed at unthinking entertainment, that their stories are obvious and predictable and their characters stereotyped, and the 'darker' comics present an undesirable world of violence and sex to 'immature' readers. The drawings of characters, and their language, usually lack subtlety, and are often sexist and racist.

Nevertheless, the graphic novel format has features that merit the teacher's attention. For a start, teachers today have little chance of influencing young people's values or getting them to think critically if they fail to engage with the culture of youth. Comics are an important element of youth culture in almost every country today, so teachers who capitalize on the appeal that comics have for many learners (rather than being judgemental) gain ready access to learners' interest.

For this reason, several South African organizations that provide health and other education to people with little schooling, have realized the ability of this format to communicate important information and change attitudes in a lively and accessible

Many public education campaigns in South Africa use cartoon formats to communicate their message. Here are two examples: on the left is *The Storyteller Group's Start-up: A Step-by-step Guide to Starting and Growing your Own Small Business* (1999); on the right is Soul City / Jacana Education's *Soul City: Violence: How can we stop it?*, page 20.

way. The best of these, for example the booklets produced by the Johannesburg-based Storyteller Group, feature sophisticated techniques of narration, illustration and education.

But, apart from using these kinds of comics to teach *content* – there are some excellent graphic versions of Shakespeare plays and South African novels available – teachers can adapt virtually any comic or cartoon strip to develop language skills.

Comics – carefully selected by the teacher – can provide an extremely useful resource for teaching reluctant readers, and readers still struggling to read and write in a second language. This is partly because of the 'support' offered by the pictures, and the 'comfortable' and undemanding nature of the format (i.e. the very characteristics that usually offend language teachers).

Short excerpts from comic books, or single cartoon strips from newspapers, can be used to enliven the teaching of a number of important language skills. For instance, teachers could blank out the words in the speech bubbles with a correcting fluid pen, and then photocopy the comic page or strip as a worksheet. Learners can then be instructed to do a number of different kinds of activities.

Using cartoon strips to develop imagination and storytelling skills

• Learners are supplied with cartoon strips with the speech bubbles blanked out. They are asked to develop their own 'story' by supplying new words for the speech bubbles. You should persuade them to supply words that 'fit' with a logical 'reading' of the cartoon pictures.

The teacher finds a suitable cartoon, blanks out the dialogue using a white correcting pen, photocopies this (enough for each learner), and asks the learners to write their own dialogue.

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- Learners can also be asked to produce their own cartoons. Point them to an excerpt in their novel and ask them to develop a cartoon from this. Learners will practise reading and 'edit' the story into one told entirely through the direct speech of characters. Make the point that the quality of the cartoon characters is not that important; it is the story that IS important.

Using cartoon strips to develop multi-lingual writing and explanation skills

- The teacher can copy a cartoon *twice* on the worksheet, with the speech appearing in the top copy – in any language. Learners are asked to fill in a *translation* of the words that appear in the top copy in one of the languages the learners are learning. (See below, and on page 87.)

- Pairs of learners – who must sit back-to-back – try to identify the ten details that differ in a pair of slightly different cartoons (for instance, in one a person's tie is spotted; in the other it is striped). Ask learners to question each other about the points of difference and come to an agreement about what they are, using the target language. Children's supplements sometimes carry 'Spot the difference' games, but you can easily make your own (especially ones that will appeal more to older learners) by using a correcting pen and a very fine black pen to change details on a photocopy of the original cartoon.

- Learners, again seated back-to-back, attempt to explain a cartoon to their partner so that the learner can draw this cartoon on another piece of paper without seeing the original cartoon. This is a challenging activity, so teachers need to maintain a reasonable level of order.
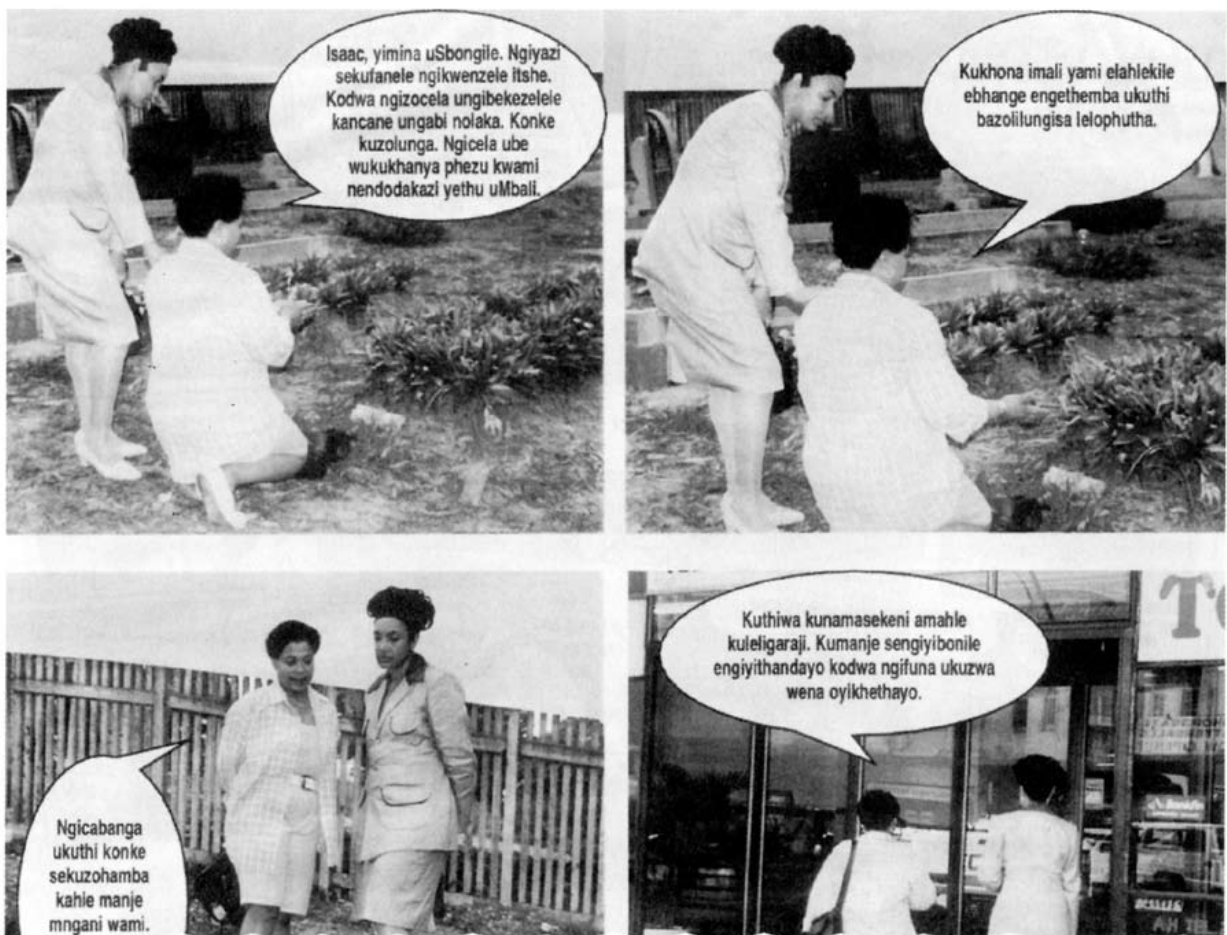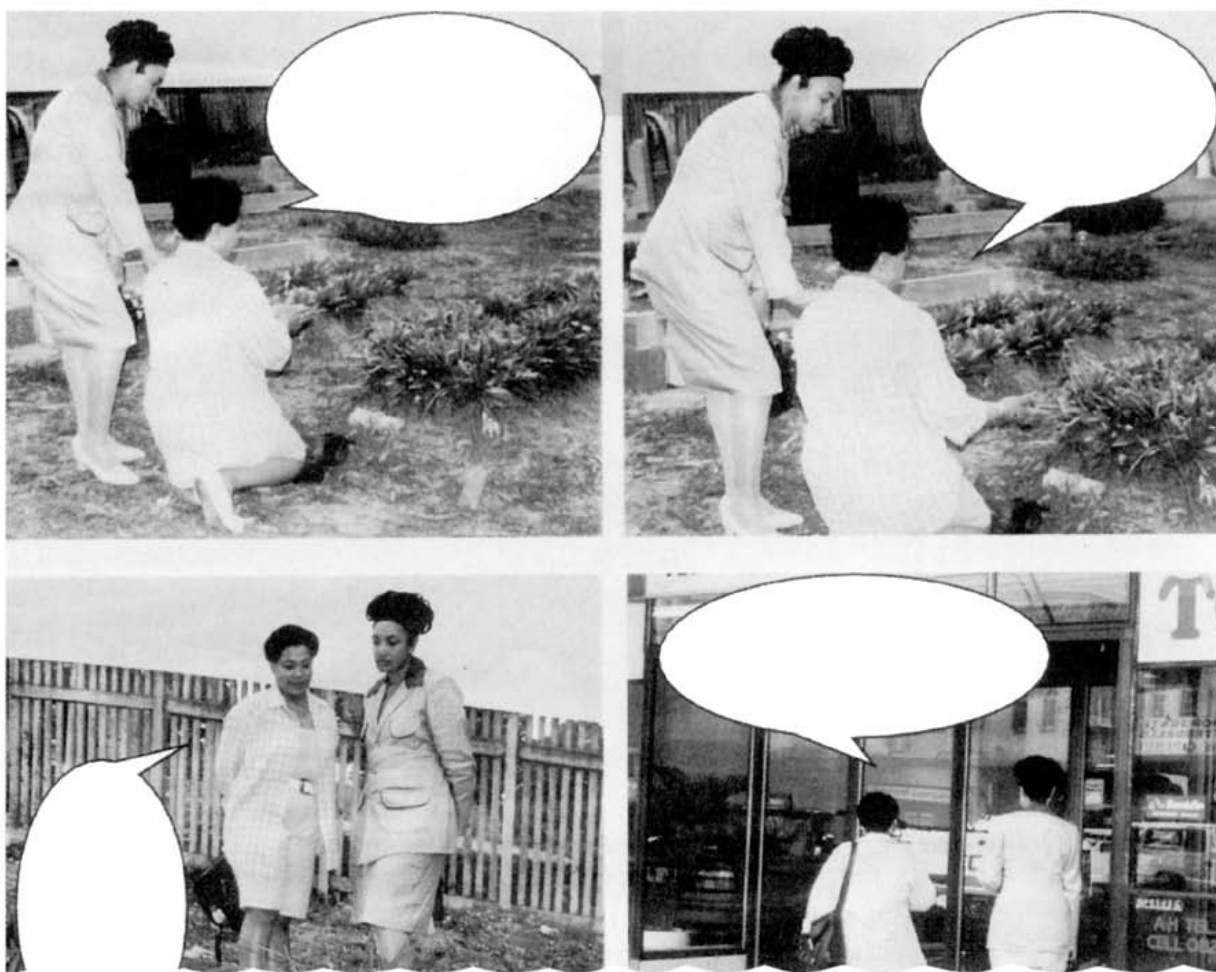
Using photographs as a stimulus for creative writing

Ordinary images can be arranged together with captions or other images to provide stimulating writing tasks. For instance, a quite ordinary picture of a very 'ordinary' family group from an advertisement could be shown to learners, with the caption *What will happen when Sissy announces she is pregnant?* Or a picture of an elegantly-dressed person could be cut out carefully and pasted on a totally unexpected background (such as a piece of scaffolding high on a building, or a jungle) to present a bizarre image. The instruction would be: *How did he/she get to be here?* The important teaching action in all these cases is asking the right questions and getting learners to brainstorm ideas. Don't settle for the ordinary: push learners to think of the unusual.

For instance, for the picture on page 88, ask learners the following questions (and others you may think of):

- How did he get there?
- Why is he there?
- Where will he go next?
- What is he feeling?
- What will he do when he's told… ?
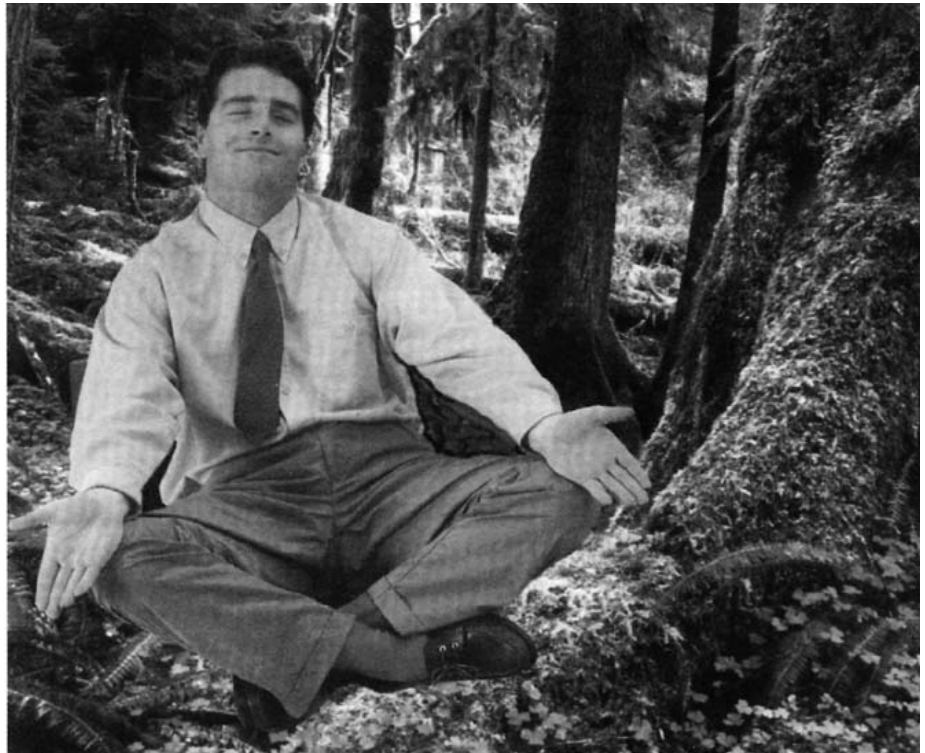
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Everyday media other than photographs can also be arranged with a little imagination to provide powerful stimuli for creative writing. For instance:

- Photocopy a page from the 'Flats to let' column of a newpaper, with a few of the adverts ringed with a felt-tipped marker. Ask learners to make up a story based on this. (Note that the 'Positions vacant' or 'Jobs offered' column could be used in the same way.)

SECTION FOUR

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Using popular
electronic media
in teaching

What will we do in Section Four?

Popular *print* media offer good opportunities for improving learners' reading and writing skills in particular. Popular *electronic* media provide teachers with excellent resources for improving language skills, such as listening and speaking. Like newspapers and magazines, radio and television also provide a rich resource base for enriching the teaching of content knowledge in different learning areas.

Television and radio carry a variety of formats. Many are common to both - such as advertising and news - but the different nature of each medium tends to favour particular formats:

- Radio, for instance, is dominated by *audio-based* formats, such as music, talk shows and news.
- Television, however, is dominated by formats that are *visually strong,* such as drama, news and documentaries.

You should now begin *Week 7* of your studies. You should have spent at least 36 hours working on this module so far.

Listening…

Watching…

The range of formats used in popular electronic media

- **News and current affairs** often appear on both radio and television. These provide an excellent means for teaching history-in-the-making, politics, civics, lifeskills, business and economics, and current affairs.
- **Special interest magazine programmes and documentaries** are also common on *some* radio and television stations. In South Africa, *Safm* and SABC3 tend to

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broadcast the most informative and interesting programmes on science and technology, arts and culture, and development and ecological issues. There are also shows that focus on language issues and books.

- **Talk shows and interviews.** While both television and radio flight a large number of talk shows, on the whole radio (in particular *Safm*) broadcasts the most *in-depth* interviews. These help learners to gain up-to-date information, sometimes from experts, on issues such as health, science, environment and the economy. Listening to interviews also familiarizes learners with questioning techniques.

- **Soap operas, dramas and movies.** While almost all radio stations used to carry soap operas, only a few stations still do. But a large amount of television broadcast time is dedicated to these formats. Some raise interesting ethical and political issues, and teachers could use *short* excerpts from these to raise debates in learning areas such as *life orientation*.

- **Advertisements.** Radio adverts are often extremely inventive since they have to rely totally on words, sounds and music. Many television adverts make use of extremely sophisticated techniques to get viewers to associate products with certain ideas and 'images'. Both qualities make adverts ideal resources for teaching critical thinking and media literacy.

- **Songs and music.** These can be used to develop an understanding of idiom and other modes of language use, They also engage the learner in a way that poems or textbook passages might not, and are often useful in values education.

- **Weather reports.** Climatology is a traditional part of the curriculum, but is often taught in a highly abstract manner. Weather forecasts, particularly those on television that use symbols, can be used to contextualize this content.

- **Sports commentaries and traffic updates** are carried by both radio and television. Although they don't have direct relevance to school curricula, imaginative teachers have used them to activate learner interest in school subjects in interesting ways.

In addition to these popular formats, many radio and television stations carry more consciously *educational* programming. This includes:

- **Programming linked directly to formal schooling.** The South African Broadcasting Corporation (SABC), for instance, broadcasts *Learning Channel* (directed at senior and further education learners) and *Schools TV* (which provides support for Foundation Phase teachers). Both of these are directly related to the formal school curriculum. Some newspapers, for instance *The Sowetan*, even carry the print versions of the lessons broadcast.

- **Programming that is broadly educative and informative.** This includes:
  - SABC education department magazine programmes such as *Take 5*. These *support* schooling but do so in an entertaining and informal manner (and are thus sometimes called 'edutainment').
  - Edu-dramas, such as *Yizo- Yizo* and *Soul City*. These tend to tackle issues of broad public concern, for instance, drug-taking, health, domestic violence, or the culture of schooling, but 'teach' through popular television formats like soap operas.
  - Various kinds of documentaries and magazine programmes, such as the environmental programme SO/50, or the information technology programme, *InTouch*. These are not designed for any direct educational use but provide enormously valuable resources that teachers can use in classrooms.

Desired learning outcomes

By the end of Section Four, you will be able to:

- *use a variety of popular electronic media materials and formats to* **enrich and supplement your teaching in all learning areas.** You will learn how to use radio and television to engage learner interest, contextualize abstract ideas, supplement textbook knowledge, and engage in values education (Section 4.3).

- *use popular electronic media to assist you in* **developing the listening and comprehension skills** *of your learners*. You will be introduced to activities you can use to develop learners' ability to listen and process heard information, and a number of writing skills in discursive and imaginative writing. Many of these are integrated with other learning areas. In addition, second language teachers will be introduced to a number of effective radio- and television-based activities (Section 4.4).

- *teach learners how to* **produce simple popular electronic media formats** and, in the process, develop their interviewing and speaking skills, as well as their knowledge of learning area content (Section 4.5).

- **collect, evaluate, and store popular print and electronic media resources** in an orderly manner (Section 4.6).

Checking your learning: How should you use these outcomes? You may find that they don't mean much before you study the section. That's why it is so important to check back regularly. Ask: 'Have I achieved any of these outcomes yet? What do I still need to learn in order to meet these outcomes?' Write down those things you still think you need to learn, and use them to focus your learning.

Saide

4.2 The educational opportunities offered by radio and television

Using radio as a learning resource

Radio is essentially an *auditory* medium: it tells stories through words and sounds. It is not surprising, then, that radio is particularly good for developing language skills such as listening in particular, and *speaking*. But it also provides resources for supplementing the teaching of content knowledge.

Radio programming can be used to teach a wide range of knowledge and skills. Radio:

- *models appropriate use of language.* It demonstrates to learners how language is spoken in different ways in different situations. For instance, while the news reader uses formal language, the person hosting a talk show or phone-in programme will be more relaxed and informal.

- *provides a means for learners to practise listening and note-taking skills.* It offers interesting content and, when recorded, can be controlled by teachers and learners in order to maximize the learning that takes place.

- *opens up a wide range of options for multi-lingual teaching* because it broadcasts in most of South Africa's official languages.

- *carries hours of music and popular song* which can be used productively in the hands of a creative language teacher. In fact, as we show, pop songs offer teaching opportunities for teachers of other learning areas too.

- *has been called the 'theatre of the mind'* because it allows listeners so much freedom in using their own imagination. Radio gives you only sounds and voices from which you are free to imagine different kinds of people and places.

In addition to encouraging the use of *imagination*, radio programmes – news programmes, interviews, documentaries and magazine programmes – contain large amounts of new *information* that can add to learners' knowledge on a particular topic, for instance science, local environments and economics. This provides teachers with a rich resource for updating and supplementing teaching across the curriculum.

Making the best use of radio

To use radio effectively, teachers must consciously teach learners to *listen*. Radio requires *sustained* and *active listening* abilities, in the same way as reading a book requires mental activity.

In addition, teachers must keep an eye on radio listings in order to record useful resources for learning. On the one hand, this is relatively easy. In South Africa most radio stations are news and music stations so the number of stations to monitor is limited. In order to access resources to supplement content knowledge teaching, *Safm* is probably the best source. However, regional language stations carry school-linked educational programming and soap operas, while some community and regional stations run talk shows that sometimes have interesting guests and/or debates on controversial issues.

On the other hand, keeping an eye on radio listings is difficult. First, the programming of all stations is seldom listed in one publication. Second, as you will notice in the listing below, details of each programme are never listed. In other words, teachers need to listen with their finger on the record button!

RADIO OCTOBER 3-9

SAFM FM 104,3 – 107,3
TODAY: NEWS at 06.00, 07.00, 08.00, 10.00, 11.00, 13.00, 15.00, 16.00, 18.00, 20.00, 21.00, 23.00
05.00 Early Classics **06.03** Rodney Trudgeon's Sunday Morning Concert **08.07** The Music and the Message **08.40** Word of Mouth **09:02** Bookshelf **09.40** Inner Ear **11.03** Media at SAfm **12.30** The Editors 13.30 Sundays at One **15.01** From Pen to Print **16.03** Grandstand **18.03** Ecowatch **18.30** The Editors 19.00 The Evening Church Service **20.07** NPR Weekly Edition **21.02** Music 'Til Midnight 23.59 Link up with World Radio Network
MONDAY: NEWS at 05.00, 05.30, 06.00, 06.30, 07.00, 07.30, 08.00, 09.00, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 16.30, 17.00, 17.30, 18.00, 18.30, 19.00, 20.00, 21.00, 22.00, 23.00
05.03 Crack of Dawn **05.56** This New Day **06.05** AM Live **08.30** The Tim Modise Show **10.03** The Bruce Millar Show **11.30** Woman Today **12.30** Total Exposure **13.07** One o'Clock Live **14.03** Rodney Trudgeon's Classical Hit Parade **15.02** PM Jive with Rafe Lavine **17.05** PM Live **19.00** Appleton Market Update **19.30** Well Versed **19.40** Future Watch 20.00 The Pursuit of Health **20.30** The Law Report **21.04** The Jon Gericke Show 23.59 Link up with World Radio Network
TUESDAY: NEWS at 05.00, 05.30, 06.00, 06.30, 07.00, 07.30, 08.00, 09.00, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 16.30, 17.00, 17.30, 18.00, 18.30, 19.00, 20.00, 21.00, 22.00, 23.00
05.03 Crack of Dawn **05.56** This New Day **06.05** AM Live **08.30** The Tim Modise Show **10.03** The Bruce Millar Show (including The Green Update and Techno News) **11.30** Woman Today **12.30** Patricia's People **13.00** One o'Clock Live **14.03** Rodney Trudgeon's Classical Hit Parade **15.02** PM Jive with Rafe Lavine **17.05** PM Live 19.03 Appleton Market Update 19.30 Well Versed **19.40** Word of Mouth **20.02** Pat on their backs 21.04 The Jon Gericke Show 23.59 Link up with World Radio Network
WEDNESDAY: NEWS at 05.00, 05.30, 06.00, 06.30, 07.00, 07.30, 08.00, 09.00, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 16.30, 17.00, 17.30, 18.00, 18.30, 19.00, 20.00, 21.00, 22.00, 23.00
05.03 Crack of Dawn **05.56** This New Day **06.05** AM Live **08.30** The Tim Modise Show **10.03** The Bruce Millar Show **11.30** Woman Today **12.30** Total Exposure **13.07** One o'Clock Live **14.03** Rodney Trudgeon's Classical Hit Parade **15.02** PM Jive with Rafe Lavine **17.05** PM Live **19.03** Appleton Market Update **19.30** Well Versed **19.40** Pick of Woman Today **20.02** Inner Ear **20.30** Microphone-in **22.01** The Jon Gericke Show **23.59** Link up with World Radio Network
THURSDAY: NEWS at 05.00, 05.30, 06.00, 06.30, 07.00, 07.30, 08.00, 09.00, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 16.30, 17.00, 17.30, 18.00, 18.30, 19.00, 20.00, 21.00, 22.00, 23.00
05.03 Crack of Dawn **05.56** This New Day **06.05** AM Live **08.30** The Tim Modise Show **10.03** The Bruce Millar Show (including The Green Update) **11.30** Woman Today **12.30** Patricia's People **13.07** One o'Clock Live **14.03** Rodney Trudgeon's Classical Hit Parade **15.02** PM Jive with Rafe Lavine **17.05** PM Live **19.03** Appleton Market Update **19.30** Well Versed **19.40** Introduction to the Concert **20.00** Thursday Concert **22.01** The Jon Gericke Show **23.59** Link up with World Radio Network
FRIDAY: NEWS at 05.00, 05.30, 06.00, 06.30, 07.00, 07.30, 08.00, 09.00, 10.00,

| The Editors: current affairs programme – all teachers | Pat on their Backs: consumer programme | Market Update: business news – economics and management sciences teachers | Future Watch: science and technology programme – natural sciences and technology teachers | Bookshelf: a review of the latest books – language teachers | Inner Ear: in-depth interviews with a range of different experts – all teachers |

Using television as a learning resource

Television is essentially a *visual* medium: it tells its stories in images. As a medium, it 'likes' action and movement rather than words and sounds. It presents complete pictures of people and places. It doesn't ask you to imagine. In this sense, it is a passive medium – it does most of the imaginative work for you. This provides educators with both a warning and an opportunity:

- **First**, we must find ways to ensure that learners view television, videos and films *actively*.

- **Second**, we must use the power provided by the 'completeness' of the medium - the combination of explanation and visual illustration.

Television provides teachers with the means to:
- transport learners to foreign lands in travelogues, the news and films - teachers don't need to record entire documentaries;

Saide

- bring historical events alive through documentaries or historical films;
- illustrate abstract and complex biological, geographical and scientific concepts in magazine programmes or documentaries.

The combination of moving visual images and sound make television – *when used well* – a powerful educational medium: it is able to turn abstract concepts and ideas into concrete, visual ideas. Consider the micro-photography that is able to show the inside workings of the human body, or the shots of our solar system taken from spacecraft. Images such as these help learners to break down some of their barriers to understanding.

Making the best use of television

First, teachers don't always need to wait for and record full-length docu- mentaries that fit their teaching entirely. Often a short clip of a volcanic eruption or a hurricane recorded from the news will enrich learning. Likewise, a two-minute recording of a television weather report will allow learners to visualize cold fronts and give meaning to synoptic symbols far more quickly than hours of explanation.

    Second, because television is ephemeral and distracting – the images and words are there, then they are gone, and there are many messages on the screen at anyone time – teachers need to find ways of 'slowing down' the action and consolidating the message. This can be done by:

- supporting television-based lessons with print-based materials, such as work-sheets, textbooks and popular print media;
- using television with one of the message channels - sound or image - switched off. (In this section, we provide ideas on how to do this.)

Third, television is a passive but powerful medium: it sucks viewers in without requiring much critical engagement. Teachers need to develop critical media litera-cy in their learners if they are using television as a teaching aid. We provide some ideas for teaching media literacy in Section Five.

    As with radio, teachers face the challenge of collecting resources from television regularly: this cannot be done the night before you teach! Luckily, television listings are far more detailed than radio listings. (See the example on the next page.) In general, though, magazine programmes seldom advertise their content in the list-ings. So teachers still need to choose potentially useful programming and watch these with a finger on the record button!

Learning by producing radio and television programmes

In addition to listening, watching and learning from popular electronic media, teachers could involve learners in *producing* radio and television programming.

Producing radio

By bringing a tape recorder and microphone to class, teachers can get learners to produce interviews, news broadcasts, magazine programmes and even radio dramas. This is a powerful teaching technique in which learners will:

- learn new knowledge through the research necessary to interview people or produce inserts for a magazine programme;
- develop language skills, such as interviewing and speaking;
- learn to write as they script news broadcasts, radio dramas and magazine inserts;
- develop imaginative skills as they decide how to represent a particular phenom-enon in sound rather than words or images.

SUNDAY OCTOBER 3

SABC 1

06:00 WIND IN THE WILLOWS R
06:30 Video Power R
07:00 Swiss Family Robinson R
07:30 The Gospel Connexion: Local gospel music. Presented by Tshoganyetso Mashile and Innocent Modiba. M
08:00 CCM1 – Contemporary Christian Music on One: Presented by Natasha Stringer and Kingdom Mahlangu.
08:30 Heart and Soul: Religious show. Presented by Amanda Modise and Saul Glasser.
09:00 Educator Express
10:00 Eastern Mosaic: Magazine M
10:30 The Flintstones: Children's series
12:00 The Felicia Mabuza-Suttle Show: Talk show R
13:00 Thunder in Paradise: Action series. Kelly travels to the Middle East where she is caught up in a deadly civil war.
14:00 World's Greatest Stunts: Documentary. Stuntmen and the risks they take. R
15:00 FILM: Coming Unglued Jason and Celina love their dad – and to prove it, he endangers the most important day of his career. Starring Judge Reinhold.
16:30 Reel Planet: A behind-the-scenes look at the latest feature films, television series and music releases, and gossip about the lives of the stars.
17:00 Crux: Religious magazine programme with a youth perspective.
17:30 Unqambothi/Sweet Melodies: Music
18:00 QUANTUM LEAP: Sci-fi series
19:00 HANG TIME
19:30 NEWS Z
20:00 MURPHY BROWN: Comedy series. Candice Bergen stars as Murphy Brown, the outspoken, co-anchor of a news show.
20:30 FILM: On Golden Pond (1981) A married couple visit their New England lakeside home for the 48th summer. Their middle-aged daughter joins them for a holiday of bonding across the generations. Starring Katharine Hepburn, Henry Fonda and Jane Fonda.
22:20 Ultimate Stuntman: Documentary R
23:20 Channel O: Music

SABC 2

05:00 BBC WORLD
06:00 Thula Mabotha: Music programme. Hosted by Cocky "Two Bull". R
06:30 Alpha: Religion
06:45 Bophelo a Pila: Gospel music
07:15 Travel Express: Travel series. Take a trip to New Zealand and Australia.
07:45 Backyard Pleasures
08:15 Hosanna: Religion R
08:45 Issues of Faith: Religion R
TUBE STARTS
09:15 Rainbow Kids: Religion
09:45 Kitty Cats
10:00 The Babies/Mummy, I Will Stay With You
10:30 Moses
11:00 Nature on Track: Documentary series
11:30 Newsmaker: Interviews on current news topics.
12:30 Maak 'n Las: A R
14:30 Laduma: Live Topsport
17:05 Blow by Blow: Boxing
18:00 SPECIAL
18:30 CROSSING THE DIVIDE: Cultural series. A series that brings people of different religions and communities together to learn about each other's lives.
19:00 NEWS M
19:30 UNION SQUARE: Sitcom Michael is upset when Jack and Gaby are cast as lovers in a student film that requires them to have a passionate kiss.
20:00 PEOPLE OF THE SOUTH: Join Dali Tambo as he interviews
21:00 NEWS A
21:15 GROEP SONDER GRENSE: Documentary series. A history of Afrikaans-speaking South Africans presented by Freda who explores her own South African blood lines and was written by Dr Hans Heese.
22:15 On Camera
23:00 Frank Sinatra: Music. More soothing sounds for late-night listening from Old Blue Eyes.
00:00 BBC World: Catch up on news from around the world.

SABC 3

06:00 CNN
09:30 Gardens Wild and Wonderful R
09:45 Today's Health R
10:00 CNN
11:30 Off the Pitch
12:00 In Style R
12:30 Signature: Youth magazine
13:00 Topsport: Roswika – Development boxing bouts.
14:00 World of Endurance
14:30 Due South R
15:30 Reality On the Rocks: Documentary series. R (See Pick of the Day)
16:30 Ancient Voices: Documentary series. Mazes and labyrinths have fascinated people for generations. Final
17:30 The Ways of Our Fathers: Documentary series. A look at ancestors as the guardians of community values and how they serve as intercessors between the living and divinity.
18:00 NEWS HEADLINES
18:03 SURVIVAL: Nature series. Red Kangaroos – A Desert Divided. A feature about a young red kangaroo and his mother.
19:00 PARTY OF FIVE: Drama series. Charlie has to come to terms with Daphne's job as a stripper. Just as Bailey's about to move in with Annie her past catches up with them. Julia and Griffin go away. Claudia is invited to a party by Sarah
20:00 X-HOUR
20:00 X-PRESSIONS – EMPIRE AND ECLIPSE: Documentary series – Part one. The Anglo-Boer War of 1899-1902 tore Afrikaans and English South Africans apart and marginalised black South Africans. Filmmaker Anthony Irving investigates one of South Africa's most notorious wars while commemorating its centenary.
21:00 Rhodes: Drama series
22:00 Men Behaving Badly: The show when Dorothy starts studying and Gary is hanging out with her new student friends.
23:30 Ancient Voices R
00:20 PM Shopping
00:50 CNN
04:00 BBC Learning Channel Open University. Live

Annotations:

Travel Express – human social sciences (HSS)

Educator Express – a teacher development programme

Newsmaker – current affairs programme

Crossing the Divide – life orientation, HSS

Reel Planet – a film review programme – language and communication teachers

x-pressions – a documentary series – in this case could be used to teach SA history in HSS

Groep Sonder Grense – life orientation, HSS

Producing television

As with radio, involving learners in producing their own television programmes is a powerful learning experience. Unlike radio production, though, television production requires more expensive resources and is also a far more complicated process.

However, teachers could draw on the popularity of television *formats* – game shows, soap operas, and news broadcasts, for instance – and *simulate* the production of these in class as a means of teaching. If a video camera is available, these could be recorded, but recording should not be the main point of the exercise. This would allow learners to:

Saide

- revise content knowledge learnt (in a game show or quiz format, for instance);
- practise verbal skills, such as acting, interviewing and reading (in soap operas, magazine and news formats);
- develop literary understanding, language skills and imagination as they translate novels or plays into soap operas, and script and 'storyboard' these.

Supplementing teaching across the curriculum

We have suggested that teachers can use both the *form* and *content* of popular electronic media to enrich their teaching. For instance:

- Many radio and television programmes carry *content* that is directly linked to the content knowledge that is taught in different learning areas.

- By involving learners in *producing* radio and television programming, teachers draw on the popularity of the medium's *form* to teach learners interviewing skills, or to give them practice in their speaking and research skills.

- Both *content* and *format* can be used to evoke interest in learning, and to ground learning in the context in which learners live.

In Week 7; should have completed 37 hours of study.

There are constraints on the use of electronic media in South Africa: many schools don't have their own radios, tape recorders, television sets or video recorders. However, this hurdle isn't insurmountable. First, some 90% of South Africans have access to radio at home. Many teachers have access to tape recorders. Over 60% of South Africans have access to television at home. A fair number of teachers have video recorders at home. This makes it possible for organized and dedicated teachers to use *home* listening and viewing activities as a spur to classroom teaching. Second, it is also possible for dedicated teachers to take their own television set and video player or tape recorder to class so that learners can watch or listen to a programme recorded at home. Third, more and more South African schools – often through the initiative of individual teachers – are raising funds to buy radios, tape recorders, television sets and video recorders. This means that many teachers will have more opportunities to use radio, TV and videos in their lessons.

But how do we use popular electronic media *educationally*? Lessons that are based on these media need to be just as well planned as lessons that use a newspaper, magazine or any other medium. Here are some ideas.

Learning from radio

A musical history: Using popular songs to activate learner interest

Music is one of the biggest interests of all young people. It is also one of radio's most common formats. A problem teachers often face, though, is that their taste in music differs from that of their learners. We believe this is not a major problem, but it does point to the fact that teachers should spend some time learning about the music the young people in their classes listen to.

So, use a variety of musical forms with your learners, but first think about these things:

- What is your *reason* for using music?

- Consider the age of your learners and the kind of music that is appropriate for them.

- Consult your learners about the kinds of music they are listening to (do not assume that you know). This activity could backfire on you if you use dated or 'uncool' songs.

- Think about the language ability of your learners. Don't use songs that have too many new or difficult words.

Saide

- Make sure you have a *clear* recording of the song.
- It is a good idea to have the words written out so that learner can refer to these during activities.

Music is particularly powerful in teaching language and literature - and many teachers have used it in this way - but, as the following activity demonstrates, it can be used to teach other things too. The extract below comes from a South African history book called All that Glitters. In this book the author, Emilia Potenza, uses the classic Hugh Masekela song, 'Stimela', to teach learners about migrant workers on the South African gold mines.

ACTIVITY 24

Turn to Part 3 on your audiotape. Listen to the song and comments by Emilia Potenza about why she used this song. Then work through the worksheet below.

a Discuss the activity with a fellow teacher. Do you think it will work with your learners? Why or why not?

b Can you think of another song you could use in your teaching? Design a similar kind of worksheet for your lesson.

Spend about 60 minutes on this activity. Hugh Masekela's 'Stimela' comes from the CD, Waiting for the Rain. The worksheet is from *All that Glitters* by Emilia Potenza, published by Maskew Miller Longman, Cape Town, 1996.

'Stimela – the coal train'

Many songs, novels and poems have been written about migrants on their way to the mines. You may know some of these quite well.

Migrants on their way to the Rand

1. Read these words of the song *Stimela* composed by Hugh Masekela, the world-famous South African jazz musician. If possible, try to get hold of a tape or CD that includes this song and play it twice for everyone to listen to.

SOURCE 3

STIMELA (THE COAL TRAIN)

There's a train
that comes from Mozambique, Angola,
Zimbabwe, Malawi, Botswana, Namibia,
Lesotho, Swaziland
5 and the whole hinterland of South Africa.
This train carries young and old African men
who were conscripted to come and work on contract
in the gold and mineral mines of Johannesburg
and its surrounding metropoli
10 sixteen hours a day
for almost no pay.
Deep, deep, deep down in the belly of the earth
when they're digging and drilling for
that shiny, mighty evasive stone
15 or when they dish that mish-mash mine food
into their iron plates with the iron shovel
or when they sit in their stinky fungy, filthy,
flea-ridden barracks and hostels
they think about the loved ones
20 they may never see again:

they think about their land and their herds
that were taken away from them with the gun
... and the gatling and the cannon.
And when they hear that chook-chook train
25 a juggin and a pumpin and a smokin and a pushin and pumpin,
a crying and a steamin and a jiggin
they always curse
and they curse the coal train
the coal train that brought them to Johannesburg.
30 Stimela!

2. Working with a partner, first discuss and then write down your answers to these questions:

   a. Why do you think Hugh Masekela wrote this song?

   b. Where was the train coming from and where was it going to?

   c. What is the effect of the use of 'whole hinterland' (line 5)?

   d. (i) What does the word 'conscripted' (line 7) mean?
      (ii) Why do you think Masekela has used this word to describe the men who come to work on the mines? What comparison is he suggesting?
      (iii) What does 'to work on contract' (line 7) mean?

   e. Discuss the effect of the repetition of 'deep' (line 12).

   f. What do you think each man was feeling in his 'belly' (line 12) as he travelled on the train?

   g. What does Masekela refer to as 'that mighty evasive stone' (line 14)? Why does he describe it in this way?

   h. In your own words, explain what the song tells us about the living and working conditions of the workers on the mines.

   i. Explain how, in the case of the Pedi or the Zulu (or any other African kingdom that you may know about), people's 'land and their herds … were taken away from them with the gun … ' (lines 21 and 22).

You will notice that a running theme in this module – the idea of teaching across learning areas – emerges in this lesson too, Although Potenza is using the song's content to evoke an interest in *history*, she also teaches skills traditionally associated with English (or language) teaching, such as comprehension and poetry,

Rush hour:
Using traffic updates to evoke interest and contextualize learning

The *Using Popular Media* videotape carries a good example of a teacher using a few minutes of a television soccer commentary to arouse a class's interest in map reading first thing on a Monday morning! Road traffic updates – which are featured on many local radio stations – have also been used to evoke learner interest in map reading, Let's see whether you can work out ways in which you could teach map reading (or any other topic) using the following traffic update,

You might want to re-watch Jane Roach's TV soccer lesson on the videotape.

ACTIVITY 25
Turn to your audiotape and listen to the traffic update in Part 3,
a Listen to the road traffic update recorded from the radio, Switch off as soon as you hear the 'stop' jingle,
b Plan an activity-based lesson using a traffic update for learners in your learning area,
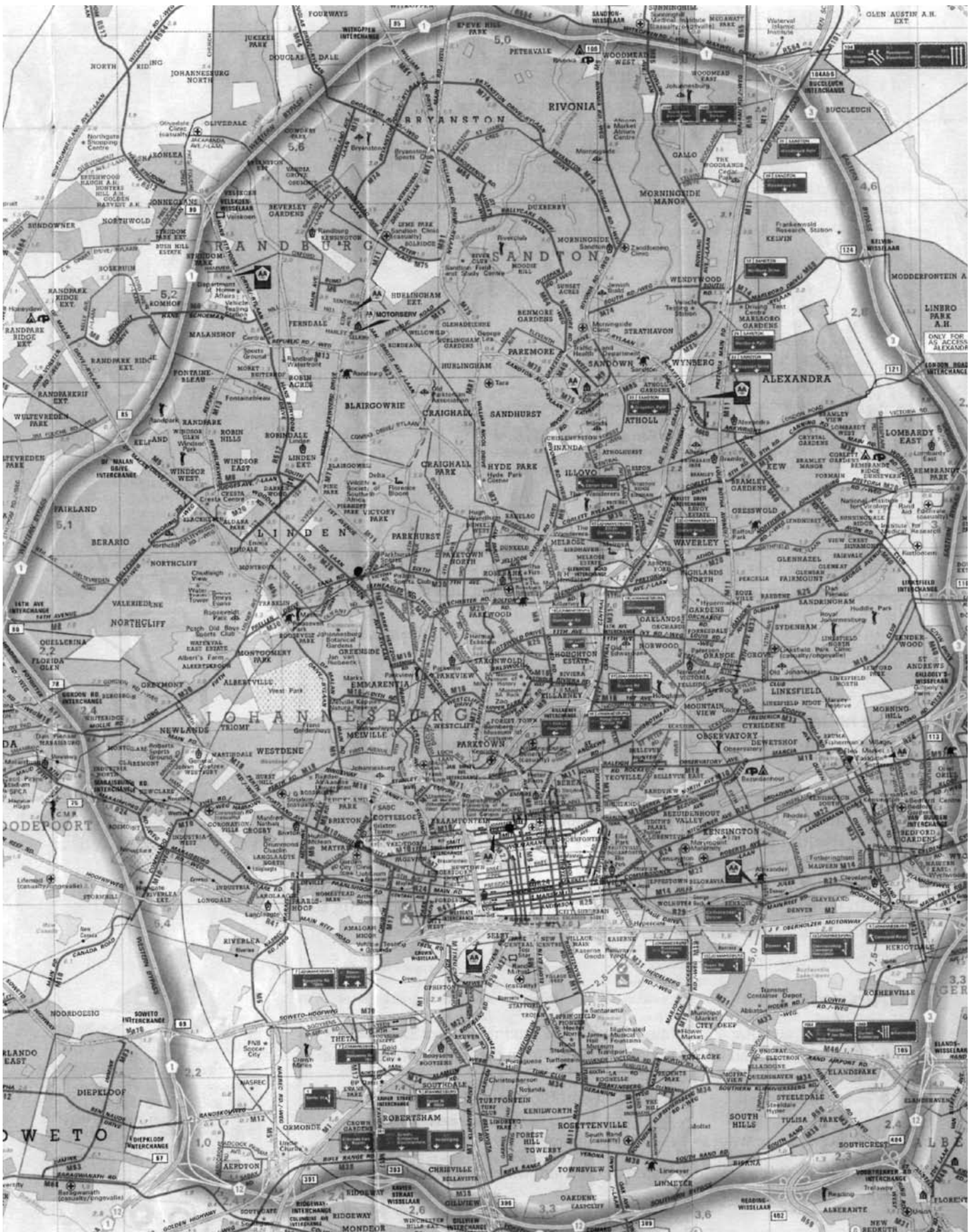**c** Ask a fellow teacher to assess your lesson,

Now turn the tape back on, Listen to teachers who have used this kind of activity in their teaching.

Work with fellow teachers on this activity. Stick to the instruction that you first design the activity before listening to teachers talk about their use of traffic reports. Spend about an hour on this activity.

Saide

Ideas from other teachers

Here are some ideas that teachers who did this activity came up with:

> **Teacher 1:** *'The class could listen a couple of times to the traffic report, then identify all the places mentioned on a map. They could do things like:*
>
> - *plan alternative routes to the CBD based on the traffic information;*
> - *explain the directions to the Taxi Driver Association (my second-language learners would benefit especially from an activity like this).'*

> **Teacher 2:** *'We could use the traffic report to introduce issues to do with cities, such as traffic congestion, road safety, and planning issues. This would probably make these things seem more real than just reading about them in textbooks. My learners could:*
>
> - *listen to traffic reports for two or three weeks and plot where major traffic congestion occurs, and where accidents occur, and see whether any pattern emerges;*
> - *do research as to why this occurs (they could read newspapers or speak to traffic officials to see whether it is a long-term problem and why);*
> - *then plan alternative (new) transport routes into Johannesburg. They could choose whether these would be road or rail, or even an underground railway. '*

'Going up in smoke':
Using electronic and print media together

Lerato Rulashe felt something was lacking in her Grade 6 environmental studies lesson. She had been teaching concepts such as the connectedness of the many natural systems in the biosphere - how one system, when disturbed or damaged by the impact of human activities, so often causes serious and unforeseen damage in other systems, the effects of which maybe felt a great distance away from the original problem. She also wanted to nudge the learners towards the values of caring for nature and working cautiously with natural resources. But these concepts seemed to have little meaning for her class.

She was trying to think of a way to bring these issues to life when she heard a news item about a plane crashing in Sumatra as a result of a vast cloud of smoke that had spread over much of South-East Asia from out-of- control fires. Realizing that this could be what she was looking for, she looked in the newspaper and found a small report about the incident. Over the next few days, more reports appeared. Looking for a photograph of the smoke, Lerato went to the local library to look for back copies of newspapers. She didn't find any photographs, but in the previous day's paper she found a report on the fire itself.

Lerato was disappointed about finding no photograph, but then she had an idea. She popped an audio cassette into her music centre at home and waited to hear if the daily current affairs programme on the radio would run a feature on the fire or the plane crash: she was looking for what she playfully called a 'sound photo'. Her patience was rewarded a day later when she managed to record the extract featured on the *Using Media in Teaching* audiotape.

The effect on her class surprised her. The learners were immediately gripped by the farmer's account of the plane crash, and wanted to know more about how the fires had started. She then played back the part of the broadcast that featured the expert discussing the factors that had contributed to the disastrous fire.

On Part 3 on your tape. Listen to the broadcast Lerato played her class.

Saide

Lerato then handed out copies of the worksheet below:

Do this activity alone or with fellow teachers, before you do it with you class. Spend about 45 minutes on it.

See whether you can collect other radio and newspaper resources that can be used in a similar way.

UP IN SMOKE

Nature body: SE Asian haze a global disaster

JAKARTA — The fires ravaging Indonesia and covering South-east Asia in a blanket of thick smoke are an international catas-trophe, the head of the World Wide Fund for Nature said here yesterday.

Dr Syed Babar Ali, who arrived in Jakarta late on Wednesday, said the scale of the fires "is so big it is an interna-tional catastrophe going well beyond the borders of Indone-sia". But he admitted experts have no solution.

Agus Purnomo, who heads the Indonesian section of the WWF, also called for "immediate use of the army" saying "they are equipped and more trained than the civilians".

However, Indonesia's Forestry Minister Djamaludin Sury-ohadikusumo said more than 8 000 firefighters have brought many fires under control. Neigh-bouring Malaysia, where air pol-lution soared to hazardous levels when the smoky haze drifted north, has also sent more than 1 200 firefighters to Indonesia.

Citizens of six nations wheezed, coughed and prayed for rain yesterday as the firefighters tried to put out blazes.

Millions have been urged to stay indoors or to wear protec-tive masks. So far Indonesia has said two of its citizens have died after complaining of breathing difficulties. Another 35 000 have sought medical attention for the effects of smoke.

In Malaysia, a coalition of environmentalists and physi-cians say at least 8 170 people have been hospitalised. Another 15 000 have sought treatment as outpatients in recent weeks.

A health alert has been declared in parts of the Philip-pines and the haze has also enveloped the tiny oil-rich Sul-tanate of Brunei.

In southern Thailand, a three-day break in heavy seasonal rain allowed the haze to descend over the beach resort of Phuket where poor visibility forced a Thai Air-ways aircraft to divert to another airport. Air pollution levels were double that of legal safety limits in some Thai provinces.

However, the greatest toll has been in Irian Jaya, the Indone-sian-controlled western half of the island of New Guinea, about 2 000 km east of Jakarta. Officials said 265 people have died of famine as well as from disease from contaminated water. Attempts to bring in supplies by aircraft have been stopped by heavy smoke.

Hundreds of fires, many of them lit to clear land, have been burning for months, blackening more than 300 000 hectares and polluting the air. Meteorologists say El Nino, an abnormal weather pattern over the Pacific Ocean, has triggered the worst drought in half a century and delayed monsoon rains needed to clear the air. — Sapa-AP.

Plane crash in smoggy SE Asia

JAKARTA — An Indonesian air-liner crashed as it approached an airport on the smog-hit island of Sumatra yesterday and burst into flames, killing all 234 people on board in the country's worst air dis-aster, officials said.

The domestic Airbus 300 Garuda airlines flight from Jakarta came down in trees as it approached the town of Medan in a hilly region shrouded in thick haze from forest fires that have spread smog over south-east Asia.

An official from the state airline told a media briefing at the com-pany headquarters here that flight GA-152 from Jakarta to Medan had 222 passengers on board and a crew of 12 and none of them survived.

The cause of the accident is being investigated, the official said.

Transport Minister Haryanto Dhanutirto told the state-owned Televisi that "it is true that in Medan and around it, (the sky) is full of smoke" but declined to say if the haze caused the accident.

Haryanto also cited witnesses as saying the plane was flying very low and hit trees before the crash.

Another private television sta-tion, the Rajawali Citra Televisi Indonesia (RCTI), said debris and bits of the plane, some still burning, were strewn over ricefields near Buah Nabar, south-west of Medan.

RCTI said the bodies will only be evacuated to Medan early today because of the thick haze.

An Indonesian television station reported the plane exploded in mid-air.

The Airbus crashed at 0730 GMT while it was approaching Medan from Jakarta, Lieutenant Hando of the Medan police said.

It is the fourth crash in Indone-sia this year but the largest in the country's aviation history.
— Sapa-AFP.

Reproduced from Natal Witness, 26-28 September 1997

1   Look up the following countries in your:
    – Indonesia
    – Malaysia

    and the following cities:
    – Jakarta
    – Medan

2   Draw an outline of the area covered by the smoke on the sketch map provided.

3   Write in the blocks four things that contributed to this out-of-control fire:

4   Write in the blocks four results that the fire has produced:

5   For Thursday, your homework is
   • to watch the television news for any items on the fire in Indonesia; and
   • to create a poster on one of these topics:
      – Caring for the natural environment
      – The danger of starting fires
      – One world – all its parts connected

What did we think of this lesson?

First, it is important to tell you that Lerato extended this lesson by investi-gating El Ninho and the greenhouse effect with her class in the days that followed. She used the excitement created by this disaster to introduce her class to many new environ-mental ideas in the syllabus.

But why was Lerato's lesson so successful? Part of the reason resulted from her use of newspaper reports and a radio broadcast *in conjunction*:

• The radio extract provided the excitement (even the stirring signature tune helped to make up for the lack of a photograph) and all the initial information that was needed to capture the learners' imagination and arouse their curiosity to know more.

• The newspaper reports underlined how important an event this was (covered in more than one medium), and provided further information, including details such as the spelling of place names.

Finally, you will notice that Lerato uses the idea of home viewing in her follow-up lessons. She didn't have access to a TV set at school, so she asked learners to watch a *particular* news cast on *particular* nights. She also provided them with guiding questions to focus their viewing.

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These ideas are adapted from:
Developing English Classroom Resources. 1996. English Language Educational Trust, 6th Floor, Wesley Centre, 74 Aliwa! Street, Durban, 4001.

USING RADIO EFFECTIVELY

It is important to remember that radio is not an educational medium *in* and *of itself*. It is not designed to develop learning in a logical and sequential way towards higher-level learning, So, while it does provide excellent learning opportunities, it requires effort from the teacher to turn the *educational opportunity* into better learning. How can we use radio most effectively?

Things to do *before* the lesson

Try to pre-record radio programmes on audiotape. This gives you an opportunity to decide which part of a programme you really need to use. In most cases, you should *not* play an entire programme to learners. Learners usually find it difficult to maintain concentration for much more than five minutes when listening to an audiotape in class.

Be clear about what the *learning outcomes* for the lesson are, and design an introduction, clear questions or activities, and a conclusion that will assist your learners to achieve these outcomes.

Things to do *during* the lesson

First, don't simply switch on the tape recorder in class and hope that learners will learn something from what- ever you have taped! You need to prepare learners for what they will hear, and what task or activity they will need to do afterwards. For instance:

- *Consolidate what they already know.* Start by asking learners to discuss in groups what they already know, or think they know, about the topic they will listen to.
- *Contextualize the material.* For example, if they are going to listen to an interview, tell them what it is about, and something about the people who are talking. Tell them what station and programme the interview comes from and, most importantly, tell them why they will be listening to the extract.
- *Provide questions to guide listening.* If the activity involves a worksheet, it is usually best to give these out before playing the tape so that the questions can help the learners focus while they are listening.
- *Introduce any new ideas that are key to understanding the excerpt.* Many talk shows and magazine programmes develop ideas to some depth. In fact, in some cases the teacher would need to introduce the programme to enable learners to understand, for instance, business programmes or an interview with an expert in archaeology.

Sometimes such preparation can kill off the interest the new medium may evoke. In other words, all this explanation might bore the learners to distraction! We'd suggest that you vary the way you use radio and that, on occasion, you might introduce an excerpt without any explanation. This is particularly true of short excerpts, such as the traffic update, where the key reason for using it is to evoke interest. Where you want learners to learn significant content knowledge from radio – let's say from an interview – preparation is essential.

Second, if you are using the taped material for any form of listening comprehension, or if the learners will need to grasp and remember what they hear so that they can do an activity, allow them to listen to the material at least *twice*.

- Tell them to listen the first time for *general meaning*, possibly with their eyes shut to help them concentrate on what they hear.
- Once the learners have a general idea about the recorded material, they can listen a *second time* for more detailed information. Give them new questions and let them listen to the material again.

Things to do *after* the lesson

- Extend the listening activity by asking learners to do something with the information they have heard. They could draw a poster, or write a letter or a report which reflects their understanding of the topic.

Learning from television

Television, because it combines both visual and auditory means of explaining concepts, can be a very powerful educational medium. The problem is that too many teachers use it as a child-care mechanism: they play videos at the end of a week to fill time! In the lessons we describe below, teachers do something different. You will notice that while they draw from a range of formats – weather forecasts, documentaries, advertising, news and current affairs programmes – they all do three things:

- They select appropriate and short excerpts from programmes rather than playing the entire programme to learners.
- They often support the television clip with printed media, either text- books or newspapers.
- All of them use worksheets and questions to guide the viewing of learners.

Our main focus in this section is on using television as a *spur to learning* rather than as a 'textbook' that carries substantial content. However, the final activity – Mrs Maphangwe's lesson on volcanoes – does explore some general principles for using longer portions of content-carrying video in class.

Working out the odds:
Teaching mathematical probability through TV game shows

Many game shows on television rely on chance, on the throw of a dice or drawing a particular letter from the alphabet. But are there ways in which we can become better players by working out how good our chance is of picking a particular letter?

Statistics and probability play an important part in our lives, and competence in these will help us make wise decisions. This activity aims to introduce the mathematical idea of *probability* to learners. Read through this teacher's lesson plan.

> You should now begin Week 8 of your studies. In other words, you should have spent about 42 hours on this module by now.

> This game is based on a free Internet teaching resource designed by Philip McGOldrick of the I. E. Radar Centre, Sand Springs, Oklahoma, USA.

GRADE 9: MATHEMATICS—INTRODUCING PROBABILITY

What does the teacher do?	*What do learners do?*	*Resources needed*
Step 1. Introduce lesson by:	*Step 3. Learners choose a magazine or newspaper to research the use of letters.*	*Teacher should have:*
• *Showing a short clip from a game show*	• *Choose a page at random and begin counting the letters.*	• *A short clip of a game show such as SABC's A Word or Two*
• *Or playing 'Hangman' or 'Scrabble' with the class.*	• *Fill out the table provided in Worksheet 1. (Caution: don't jump around the page.)*	*Each learner should have:*
Step 2. Then ask:		• *A magazine or newspaper;*
• *Are there some letters that we use more than others?*	*Step 4. Learners add up total:*	• *Worksheet 1 and a pencil;*
• *Are there some that we hardly use at all?*	• *Grand total should be about 300 (more or less, if desired).*	• *A calculator.*
• *Do you think there may be mathematical rules that could improve our chances of winning at these word games?*	• *Use a calculator to calculate (to 1 or 2 decimal places) the percentage probability of finding each letter.*	
	• *Check accuracy by adding up percentages that*	

> The aim of this activity is to get learners to realize that it is more likely (there is a higher probability) that we will use the letter 'a' when we speak in ' English, for instance, than the letter 'q'. (In Zulu the probability changes: it is more likely that we will use a 'q' or 'z' in Zulu than in English.) By doing these activities, learners begin to learn about the mathematical concept 'probability'. By linking your teaching to newspaper searches, or developing strategies for playing word games, such as 'A Word or Two', 'Scrabble' or 'Hangman' (in English and in another language), you heighten learner interest and show how the concept can be used. You might want to link this with 'Lotto': show that numbers (or letters) drawn randomly have an equal probability of appearing. This probability 'rule' is different from the probability of letters appearing in language.

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*should total between 99%
and 101%.*

*Step 5. The students now
have enough information to
answer and discuss the ques-
tions on the worksheets.*

....

Concluding the lesson:

- *Compare and discuss learner results. Note the similarities and try to account for the differences.*
- *Ask learners to complete Worksheet 2 to review some of the statistical consequences of the study.*
- *Extend learning by asking whether they think it would be wise to value the same letters if they were taking part in a game show in isiZulu, or playing 'Scrabble' in Afrikaans.*

Worksheet 1: Working out the odds

1   Find a page in your newspaper at random.
2   Count at least 300 letters.
3   Put a tick in the appropriate column as you come across a particular letter.
4   Add up each row.
5   Work out what percentage of the total each letter constitutes.

Letter	Ticks	Total ticks	Percentage
A			
B			
C			
D			
E			
F			
G			
H			
J			
K			
L			
M			
N			
O			
P			
Q			
R			
S			
T			
U			
V			
W			
X			
Y			
Z			

What are the top ten letters?

1	%
2	%
3	%
4	%
5	%
6	%
7	%
8	%
9	%
10	%

What are the bottom five letters?

22	%
23	%
24	%
25	%
26	%

Worksheet 2: Developing a strategy for playing "?'

1 How many vowels are in the top ten?
2 Which consonants would be the most useful in English?
3 Which vowel might be the least useful?
4 What percentage of all the letters surveyed were vowels?
5 See if you can make ten different words using only the top five letters.
6 Is the letter K useful when playing the games of 'Hangman' and '?'.
7 I and O are the most useful vowels. True or false?
8 The top ten letters account for about 75% of the letters needed to write in the English language. True or false?
9 The English language could get along fine without the letters J, Q, and X. True or false?
10 If you were producing stickers with letters of the alphabet for use in labelling personal items, such as books, pens or bags, which of these letters would you need most? (Circle 5 answers) A B C D E F G H I J
11 In the game of 'Scrabble', which of these letters would you expect to be worth the most points? Hint: the harder it is to use, the more points it is worth. (Circle the best answer) H V S
12 In 'Scrabble', which of these letters would you expect to be worth only 1 pont? (Circle the best answer) Q N K

ACTIVITY 26

Complete Worksheets 1 and 2. In other words, work through this activity as if you were a learner. Discuss your experience with a fellow learner and:
a List what you think are the key skills and understandings that are learnt through this activity.
b List the difficulties you think you might find in using this game. How would you overcome these?
c Can you use this idea to develop any other, similar, teaching activities?

This is a complex activity, so practising it before you do it in class is essential.

Spend about 1½ hours on this activity. Discuss your experiences with other teachers and adapt the game accordingly. Then use it with your learners.

This is an interesting activity. It introduces learners to the concept of probability through an entertaining and imaginative research experience, without approaching it in an abstract or highly technical way. In the process, learners also gain practice in using calculators and working out percentages. In addition, they gain some understanding of the frequency of vowels and consonants in the English language.

Although it takes a game show as its inspiration – as the means through which learners are engaged – the television clip really isn't that important. The activity could proceed without it.

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But the teachers could extend the activity by challenging learners to develop a game show where, for instance, players should have either a 90% or 10% chance of winning. Ask them how many letters, and which letters, they would include in either case.

The teacher who developed this lesson has already added an interesting extension that will demonstrate that the probability of certain letters occurring differs from one language to another.

Weather forecasts:
Using television and newspaper weather reports in conjunction

Synoptic charts and symbols are all a traditional part of school learning. They are also concepts that learners have difficulty grasping. Yet the kind of weather we can expect is of great importance to all of us. This is why radio, television and newspapers all carry weather forecasts and reports.

Instead of plunging first into the abstraction of textbook explanations of the weather, some imaginative teachers have introduced weather map reading by showing video clips of television weather reports, and backing these up with weather maps from a newspaper. Read through this worksheet designed by a Cape Town teacher for a Grade 5 class.

Grade 5: Understanding the weather

Watch the television weather report. As you watch, note the following:
1   What kind of weather did the Western Cape experience yesterday (according to the report)?
2   What kind of weather is predicted for today?
3   Draw the symbols for wind direction and a cold front on a piece of paper.
4   Now examine the weather page in the newspaper you have been given.
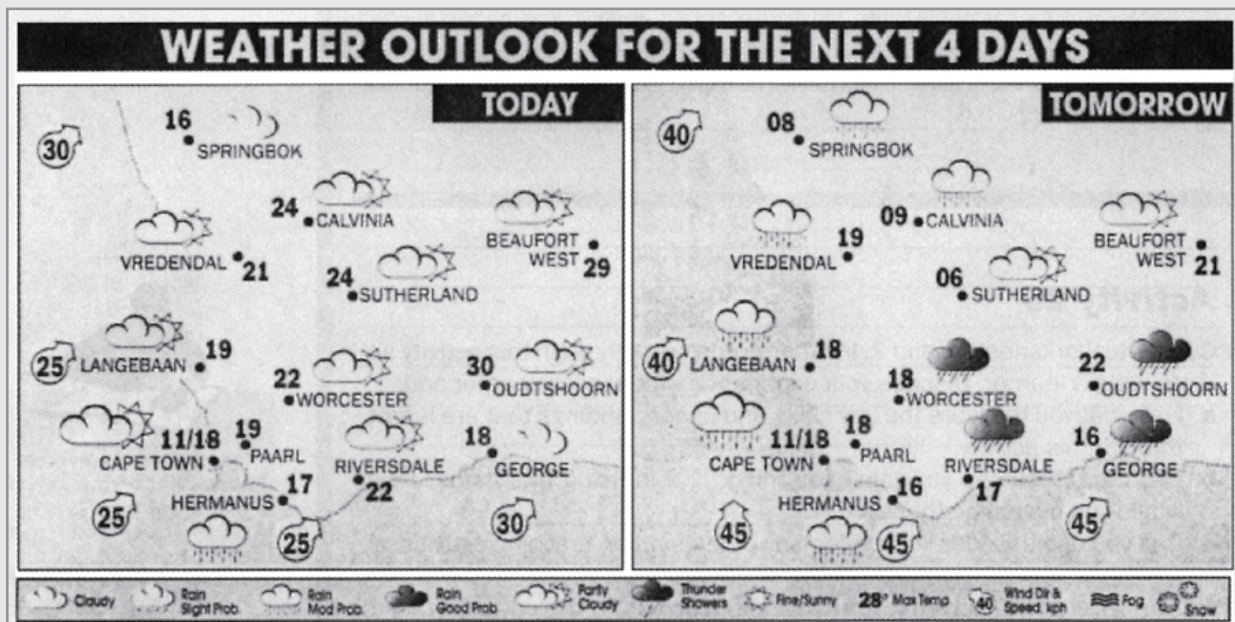
5   Check the symbols you drew. Are they similar to those used on the weather map?
6   What will the temperature be at Cape Point today? Is it colder or warmer than the temperature in the city? Why?
7   Look at the symbols used to describe the week's weather. Can you match the words below with the weather symbols for the week's weather?
    - windy, partly cloudy, sunny, rainy, cool, very cold, foggy

8 Who do you think would find information about the tides useful?
9 At what time is high tide?
10 Draw your own picture to tell the newspaper reader about the surfing conditions in Cape Town.

ACTIVITY 27

Watch the weather report after the main TV news broadcast in the evening. If you have a video recorder, record it. Scan through your local newspapers and cut out both that day's weather report and forecast, and the next day's weather report. (Look through a number of newspapers. Some provide detailed reports and forecasts, using synoptic maps and symbols, while other newspapers don't. You need the reports that include synoptic maps and symbols.)

Spend about one hour on this activity. Discuss your experience carefully and learn from it!

Now:
a Do the activity in the lesson above using the TV and newspaper resources you have found. How well does it work? What needs to be changed?
b Design a lesson to teach weather using these resources. Base it on the activity above, but adapt it to your region and circumstances.
c If possible, ask a fellow teacher to assess your activity.

A regular news and weather watch

Dale Honicot, a Grade 6 class teacher in Johannesburg, does something similar to bolster her teaching of environmental studies. She records the late night television news every Sunday, Tuesday and Thursday. She asks her learners to watch the news on each of these days, and integrates this activity into her teaching style throughout the year. This is how she describes her approach:

'We spend the first period of every Monday, Wednesday and Friday looking at the five-minute news summary from the day before to refresh the children's memory of the full news that they were asked to watch. They soon got into the idea of looking at the news three times a week. It's amazing what sort of issues watching the news brings up. The class take notes and record what they think is important. We sometimes complete a worksheet, and once every two weeks we have a news test.

'On the map at the front of the class, we:
• locate all the places that are mentioned in the news. The class soon developed a very sound knowledge of places in the world, just from watching the news programmes.
• cut out pictures of world leaders from newspapers and paste them on the world map. We have developed card games with countries, maps and leaders on the cards. These have proved to be very popular with the class.
• record temperatures and rainfall in four different cities world-wide (starting, of course, with our own city, Johannesburg). We use the weather report following the news three times a week, as well as The Star *newspaper.*

'Over the year, learners come to observe patterns and developments that have taken place in the news stories. They are able to accumulate evidence that supports a process or cycle. As the news unfolds, they piece together the bigger picture, making predictions of what might be the eventual outcomes of certain events. The process helps them to develop important skills, such as seeing relationships, relating cause

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and effect, forming opinions, predicting outcomes, evaluating actions and making judgements. These are all learned within the context of the real world.)

'Beware the small print .. .':
Using television food adverts and packaging to teach nutrition

Mrs Thompson teaches Grade 8 natural science. When she was teaching the topic of nutrition, she decided to look at the kinds of food that were advertised on television.

'I wanted the class to think critically about some of the adverts they watch on television. I asked them to note down the types of food adverts that were shown when their [avourite programmes were on. We realized that most food advertisements encouraged them (that is, young people) to buy sugary cereals, sweets, salty snacks, fatty fast foods or other junk food.

'I asked them to bring empty packets or boxes of these foods to the classroom. They examined the nutritional facts on each box or packet to see how healthy these foods were. Then they calculated what percentage of these 'unhealthy' foods made up their diet. I asked them to design adverts that advertised healthy eating habits. Some of these were really amazing. I think the activity helped them to think more seriously about the kinds of things they eat, and the role advertising plays in shaping their preferences.'

Using television documentaries:
Bringing the world into our classrooms

All the activities described so far use popular electronic media as a spur to learning, to evoke interest. But television also offers a rich source of more directly educative formats, such as short inserts in magazine programmes or longer documentaries. Traditionally, teachers have used these badly. In many cases they show entire documentaries, often without any guiding questions, and find that half the class is asleep by the end!

Mrs Maphangwe – whose teaching we videotaped – uses a television documentary to teach her class about volcanoes. She is able to use the advanced graphic techniques used in the video to show her class a moving model of how volcanoes are formed beneath the earth's crust. This is some- thing that no textbook can do. Turn to your videotape and watch how she uses this video to supplement her lesson.

ACTIVITY 28

In part 7 of the video. Watch Mrs Maphangwe teach the lesson on volcanoes. View it twice and make notes.

Spend 30 minutes on this activity.

Did you notice how Mrs Maphangwe *maintains control* of the medium throughout, pausing the video player when she needs to draw the learners' attention to a detail or to give an instruction? She also switches off the sound for a while, telling the learners to concentrate on what they see during one sequence. She does not simply play the tape through from beginning to end while the learners sit passively.

Most of these ideas were adapted from: *Teachers on Teaching with Video; A Resource Guide for Teachers*. 1994. San Francisco: KQED Centre for Education and Lifelong Learning.

USING TELEVISION AND VIDEO EFFECTIVELY

Strategies that work *before* viewing

- Preview the programme or video yourself, before you show it to your learners. Never be tempted to use such a resource 'blind'; and preferably don't use it 'live' either (i.e. as it is broadcast). Even most of the *School TV* broadcasts during school hours should rather be recorded for use later, when they can be fitted into your teaching programme.
- Be clear about what the learning outcomes for the lesson are.
- You do *not* have to show the whole video. Often it is more effective if you choose a specific part to show the learners.
- Design clear questions or activities that relate to the video extract.
- Make sure the television set and video playback/recorder are working, and that the tape is ready to play at the correct place.
- Stand next to the television screen so that you can pause and rewind when necessary. Be in *command* of the technology and the medium!
- Show learners that you are the facilitator of the process, and will not be settling down at the back of the room to 'relax'.
- Ask learners to discuss in groups what they already know about the subject, and what they think they know.
- Set the lighting in the room. If the room is too dark, learners will be inclined to watch passively. There should be enough light so that learners can jot down points and answer the questions that you have set them (see below).

Strategies that work *during* viewing

- Set the learners a task to do while watching. You could write some pointers on the board to focus their viewing, for example, 'Note the uniforms which the different armies are wearing – you'll be asked about these later'. But don't expect miracles – if you expect learners to answer questions while the video is on, they should require only short answers.
- Consider using one short segment at a time – *direct* the learning experience!
- Control the pace of the viewing experience and the amount of information imparted. Otherwise it is just the same as hearing a half-hour lecture on the topic.
- Be prepared to interrupt the video using the PAUSE button to clarify what learners are watching, explain new vocabulary, or ask a question. Remember to press the PAUSE button *before* you speak, so that you don't compete with the video sound. This is an important tool to help you remain in control of the medium, but beware of using it too much in some videos; it can break up the 'narrative flow' of the video to the extent that learners will lose a sense of what's unfolding on the screen - and find this irritating.
- You can also pause the video when the video itself poses a question - get learners to predict answers.
- Increase observation and listening skills by rewinding and watching a segment two or three times.
- Try viewing *without the sound* when appropriate (see tbe *Using Popular Media* video).
- If the narrator uses difficult words for the level of your learners, you can turn off the sound and provide your own commentary. Prepare this beforehand.
- Teachers often feel reluctant to screen a video a second time. This is understandable, but if you have adopted a 'businesslike' approach to the whole experience, and the learners don't see it as just an 'entertainment break', it makes perfect sense to get them to watch a video that conveys a lot of information a second time. For younger viewers especially, a second viewing can help them to focus on content that was missed. Consider introducing some more demanding questions before doing so.

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Strategies that work *after* viewing

- Leave enough time at the end of the video to discuss the questions that you set at the beginning.
- In pairs, learners can explain to one another or discuss aspects of what they viewed.
- Ask learners to write in two minutes their personal feelings about what they have just seen.
- In groups, learners can brainstorm ideas about any problems posed by the video.
- Set worksheets or integrated learning activities based on what the learners have viewed.

Using television to explore attitudes and values

One of the major issues confronting our society is violence. Parents and teachers often ask the question, 'How does watching violent acts on television affect children?' Literally dozens of research studies have investigated this very question. Unfortunately, it is extremely difficult to prove or disprove that television violence leads to an increase in violent behaviour, partly because of the many other factors in today's world that could also be contributing to real increases in violent behaviour. Rates of violent behaviour such as rape, muggings and murder have been known to increase in communities where television is non-existent, or a very minor factor. However, while a significant number of research studies cast doubt on any link between television violence and violent behaviour, many research studies do indicate such a link (one of the more telling of these found that after television was introduced to an isolated community in Canada in the early 1970s, violent acts between children increased by 160%).

How much violence is there on television? By the time he or she is 12 years old, the average American child will have watched approximately 100000 acts of television violence. Given the significant slice of broadcast time featuring American series on South African television, this figure is sobering.

An introductory lesson on television violence

Mrs Alice Moya teaches Grade 8 arts and culture at a school near King William's Town in the Eastern Cape. She is concerned about the amount of violence that children watch on television.

> *'I think it is really important for children to think about the violence which is shown on television, and not simply to take it for granted. Violent scenes in television programmes can affect how learners view themselves, their world and other people. TV characters who punch, kick or kill are harmful role models for learners.*
>
> *'I showed my class a short snippet of a programme with violence in it and asked them to think about why violence was used in this programme and how they felt about it. We discussed how TV often makes hurting or killing someone seem almost funny, or thrilling, and that real life isn't like this. We also discussed the consequences of a violent act. What sort of punishment was appropriate. How violence affects the victim, both physically and psychologically.'*

Spend about 60 minutes on the preparation part of this activity and the later reflection on ways of improving the lesson.

ACTIVITY 29

a How could Mrs Moya get her learners to think more critically about violence on television?
b Design an exercise which gets learners to collect information about the number of violent acts that they witness in one night of TV viewing.

> Learners should categorize the violence they observed into different types.
> **c** Try this exercise yourself. Then consider ways of improving the activity you devised.

The following questionnaire was devised by a group of teachers in America to find out what children felt about the violence they watched on television. We thought it could be used to stimulate discussion in South African classrooms.

Questions for young viewers

1 How is violence different in cartoons, the news, movies, sport?
2 Why do you think TV programmes show so much violence?
3 How do you feel when you see violent acts on TV?
4 Do you think you would feel the same if you saw the same violent acts in real life?
5 Do you think you would feel the same if you saw the same violent acts being committed in your own home?
6 Do you think there should be less violence on TV? Give reasons for your answer.

Adapted from KQED Center for Education and Lifelong Learning, San Francisco, 1997.

The second question in this questionnaire raises an issue that is worth pursuing with learners: what *kinds* of violence are we talking about when we refer to 'television violence', and how might they affect us? This is likely to get learners thinking about violence in a more sophisticated way. For instance, is a simple general increase in violent behaviour the only likely effect we should be thinking about?

Here is how you can use clips from television programmes to construct a useful teaching resource that will get learners thinking about violence in more complex and productive ways.

Violence on television: comparing formats

Assemble a series of sequences on videotape that depict violence in a variety of contexts. We would suggest recording the sequences in the following order (it would be best to insert a cassette in the video recorder ready to press the record button when a violent sequence seems about to start in the programme):

1 'Baddie' violence 1 (from a crime series – a criminal beats somebody up or shoots someone)
2 'Baddie' violence 2 (in a war story or video – this one is optional)
3 Violence on the news (here you will need patience – it may take a few days before you can capture a suitable sequence; you are more likely to see the results of violence, which will do, than an actual shot of a violent act, mainly because television crews usually reach a scene' of violence after it is over – an exception might be a public demonstration being 'covered by the media' that turns violent)
4 'Goodie' violence (the 'good guy' /hero/cop knocks out or shoots a 'baddy')
5 Cartoon violence (some programmes for children feature animated cartoons which show a cat, say, being blasted to pieces by a mouse pulling the trigger of a gun - though the cat will 'pull itself together' a few seconds later to chase the mouse again)
6 A campaign advertisement against domestic violence, such as wife- battering or rape (if there are no campaigns running on television when you compile this series, try recording off the radio, since such campaigns tend to be more numerous in that medium. Simply set your video recorder to a radio frequency. The

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suddenly blank screen with just the soundtrack will add to the power of such a sequence.)

Items 1 and 4 will be easy to capture on tape; the others may take a little patience, but the complete series will be a useful resource that you can use more than once.
  In class:

1 Introduce the topic of television and violence with a brief class discussion on the questions: 'What do you think about violence on TV? Do you think it can have a bad influence on people's behaviour?' This is just to get learners started.

2 Screen the series of television 'clips', after instructing the learners to try to identify the different *kinds* of 'television violence' in what they are about to see. Don't interrupt the series or comment while it is on.

3 Ask the class what *kinds* of violence they saw, and write two- or three- word descriptions on the chalkboard as they answer.

4 Ask the learners to discuss in groups of four or five what they think might be the possible *effects* of the different *kinds* of violence they have seen.

Here are some comments that we have heard on this issue. These opinions could be used as a worksheet before, or after, a class debate on the subject.

I don't think violent movies or TV lead to violent behaviour. We *know* it's just on tape or film. I can enjoy relaxing in front of a cop movie at the end of a hard day at work without ever resorting to violence. I think the idea that watching a lot of violence on TV leads to violent behaviour is just a convenient excuse that criminals come up with in court to get lighter sentences.

So *much* violence *must* 'rub off' on the people watching it. Maybe they won't rush out from watching a violent movie and beat up an old lady, but viewing so much violence in our homes can't be positive in its effect. It must increase people's tolerance of violent behaviour in themselves. They'll be that much more inclined to resort to violent behaviour when they're frustrated. Look at all the people who go berserk and shoot everyone around them because of some argument.

I think people would be less theoretical in their arguments if violence were to touch *their* lives. Then they'd want to do whatever they could to reduce the incentives for violent behaviour.

Some of the most violent people in South Africa probably don't see nearly as many violent videos or programmes as many 11 year olds.

Many things are contributing to increases in violent behaviour all over the world. All the violence we see on TV may, or may not, be one of them. We fail to socialize many of our young people to respect others' rights, to see the *wrongness* of violence. We neglect spiritual values, and we don't teach young people *alternative* values or ways to act when they're angry or frustrated. Many families are under strain. Poverty and increasing unemployment lead to frustration. Our society is awash with guns. Too many people are crowded into urban areas ...

Why is it that *most* violent crime, and violent behaviour in the home, is perpetrated by men – against women, against one another, against children? There must be many reasons, and today that may include uncertainty about their status. But one reason could be that even the *heroes* in the movies so often sort out problems with their fists or a gun.

It's too easy to call for banning or controlling violence on TV. Films and TV only reflect the violent society out there; they don't cause it. Don't most people *like* violence as a way to get back at 'baddies'? We enjoy it when the hero 'gets the criminal', and when we hear of awful crimes, we want to do the same to those who perpetrate them.

Yes, but the media do nothing to *temper* people's liking of violence in a world where violence is becoming a social disease. The media *feed* off violence. We live in a world where the fact that we know serious violence will be publicized *adds* to the temptation to give in to violent impulses.

I agree that movies and TV reflect largely what people want to see – film makers wouldn't continue making violent movies or TV series for long if people didn't want them. Hollywood has 'dropped' *many* of their popular 'formulas' for films over the years when they fell out of fashion, or when the public started to want something different.

I wonder whether showing so much violence on the screen doesn't lead to a lot of young people growing up to be quite *passive* in accepting violence as part of life. They get the idea that violence is what *other* people do to you, and you're just lucky if *you* can escape it.

Some people want to cut all violence from television, including cartoons. But this under-estimates children's ability to 'decode' television. Even young children are well aware that cartoon characters are not true to life – that people and animals don't really get shredded, gather themselves and come back to life. They know very well (though they couldn't say it) that these stories are about conventions of conflict, ingenuity and escape, not murder.

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4.4

Using radio and television to improve listening and understanding

You should, by now, have spent at least 48 hours on this module. Working to a 20-week schedule, this means you should now start Week 9.

All the activities in Section 4.3, while focused on developing content knowledge, also acted to improve the listening and speaking skills of learners. But popular electronic media can also be used to address these skills far more directly.

South Africa's new educational policy emphasizes that learning should enable learners to live and work more successfully in society. *Listening* and *understanding* are two critical skills needed to do this. As a consequence, teachers need to find effective ways of developing these skills, and doing so across the curriculum. The effect of work in these areas will be minimized if these skills are practised only in the language classroom:

Here are some ways in which teachers can use radio and television to improve the listening and comprehension skills of learners.

Using radio to develop listening skills and language competence

In part 4 of the video rewatch Olivia Mbi's lesson, which has some similarities to the 'Newspaper hunt 3' activity in Section Five, but is designed chiefly as a radio-based listening comprehension, and with less detailed questions. Notice the way she manages the use of the medium.
Do the' Listening to the news' activity. Spend about 40 minutes on the viewing and the activity.

What's in the news:
Developing listening skills

Olivia Mbi introduces her radio-based lesson by asking learners if they listen to the news on the radio, or watch it on television. She asks them if they think there are more' good news' stories or 'bad news' stories. She then asks them to listen to the recording of the news broadcast, which she plays once. Afterwards, she asks the learners if there were any difficult words that they did not understand.

Then she lets the learners listen to the broadcast a second time. But before they do, she gives them questions to respond to:

- How many news stories were there?
- Write down the names of people and places referred to in the news broadcast.
- What events happened in those places?

Later on in the lesson, she asks learners to complete the worksheet on the next page.

Listening to the news

1 Write your answers in the columns here:

Names of people	Places referred to	Event

2 What kinds of news stories did you hear? Tick the boxes below:

Politics .... Economics/business ....

Military/war .... Environment ....

Crime .... Sport ....

People .... Weather ....

Disasters .... Other ....

3 Go back to the list and write down the order in which the news stories were broadcast. For instance, were stories about sport broadcast first? Were stories about crime first?

4 How many stories were about local news?

5 What events were happening elsewhere in Africa and the world?

6 How do you think radio stations in a country choose which stories to broadcast as news? For instance, are people in South Africa interested in a local news story from Alaska? Why or why not?

Why do you think Olivia played the news broadcast twice to the class?

There are a number of reasons why this is a good practice. **First**, playing broadcasts twice allows learners to hear the language being spoken more often. **Second**, listening a second time allows learners to focus on information retrieval. There is a lot of evidence that we hear more the second time we listen. It would have been even better if Olivia had asked the learners to keep their eyes closed, as this would have made their hearing more acute than usual, and their concentration greater.

We also liked Olivia's worksheet. She limited the questions she gave the class before they listened a second time, but her worksheet asks for more detail, extending the learners. Some learners will be able to answer the additional questions, while others won't. It seems Olivia prioritizes the development of listening skills rather than media literacy in this lesson, but the activity does contribute to the latter. Question 6, for example, which rounds off the activity quite well, is an important newspaper literacy question that requires a higher-level response. Learners will not be able to answer it directly from listening to the radio broadcast, but will have to think about the answer and call to mind what they might know about radio news.

There are ways in which Olivia could extend the learning that comes out of an activity like this one. For instance, she could have moved on to map reading (looking up Jakarta in an atlas) or a discussion of human rights (the broadcast mentioned police moving in on protesting students). One interesting addition might have been the use of newspaper reports on some of the same events as those reported in the radio news. Did you notice the difficulty one of the learners experienced in saying the name 'Jakarta'? This illustrates the advantage of having a print medium available as an extra resource.

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ACTIVITY 30

Develop an activity along the same lines as the one above that can develop listening skills within a learning area which you teach.

a   Tape a news broadcast or a current affairs programme, such as *AM Live* or *PM Live (Safm)* from the radio. You may have to tape a few programmes before you get one that is suitable. Remember, you don't have to use the complete broadcast.

b   Design a set of questions or activities based on each of the items in the broadcast. Make sure that you have questions that can develop knowledge, skills, values and attitudes.

c   Tryout your worksheet with learners.

d   Think about ways in which you could improve this activity.

Speaking in many tongues:
Radio as a means of developing multi-lingual skills

While proficiency in English is an increasingly important skill in the work- place, the promotion in South African classrooms of multilingualism needs little justification. One of the obstacles to acquiring a second or third language is not hearing it spoken by a native speaker or a fully proficient speaker. In South Africa, the fact is that learners are seldom taught languages by mother-tongue users of that language. In historically black schools, for instance, English is taught mainly by people for whom it is a second or third language. In historically white schools, isiZulu, isiXhosa and Sesotho (and other indigenous languages) are also often taught by people who don't have these languages as a mother tongue.

Yet there are radio broadcasts in all official languages and these provide a rich source for learning other languages, and how to speak them with the correct pronunciation and emphasis. The range of formats is also large: from news through music to soap operas. Here are some tips about how to use these formats effectively:

- Short excerpts need to be recorded and played on a regular basis, preferably every day. Language is learnt best in conditions where it is heard often, and then practised.

- Excerpts should be played twice as we have described, and a few content questions set as a follow-up.

- Because of the value of this 'drip-feed' approach rather than infrequent 'banquets', the simpler the approach the better, so that time can be found for such activities without encroaching on other work.

- Variety of content is important, so it is best to record excerpts from an assortment of radio formats (talk shows, magazine programmes, news, drama, and so on).

- Back up the listening with activities in which spoken language is practised.

Using television to develop listening skills and competence in a second language

Television holds almost endless potential for stimulating intense discussion, so that the usual emotional barriers to using a second language (embarrassment, a sense of inferiority, possible resentment of the language) are quickly forgotten. Used in the normal way, television's strong visual element tends to distract learners from listening to the soundtrack. But, by switching off either the visuals or the sound, teachers can realize television's tremendous potential for stimulating learners to listen carefully to the target language and to use it themselves.

If the target second language is English, there is no shortage of suitable material for the activities we suggest below. Situation comedies (sitcoms) are often the best choice because the action tends to rely on dialogue, and because they involve

humour. However, if you want to provide models that approximate South African Standard English, select carefully. No South African English varieties have any historical roots in the American dialects that tend to dominate South African television programming. Thus, we suggest using (some) South African-made programmes or British-made ones.

Unfortunately, television programmes in South Africa's other languages are not nearly as common, thus it is good to record unusual material in these languages whenever you can.

In this section we will briefly describe five activities based on the idea of an 'information gap' of some sort creating the stimulus for both careful listening and engaged discussion.

Video minus sound

Version 1: Playa video sequence involving plenty of interaction for a few minutes with the sound switched *off*. Stop the video at an appropriate point, and ask the learners to discuss *in the target language* (in pairs, small groups, or as a whole class if the class is 20 or less) what they think was going on and/or what was being said. Rewind to the beginning of the sequence during the discussion. Then replay the sequence with the soundtrack *on*. Let the learners discuss where they were right and wrong in their earlier suggestions.

Version 2: Tell the learners to listen carefully to the dialogue in the scene they are about to see. Play a sequence involving plenty of interaction for a few minutes with the sound *on*. Stop the video at an appropriate point (about a minute or less before the end of the sequence), and tell the learners that they will have to supply the next few things that the characters say. Play the last part of the sequence with the sound switched *off*. Then instruct the learners to write down the dialogue they think would have accompanied the visuals they have just seen (again in the target language). They can write this in play form and, if the characters are not named in the first part, they should describe them simply, for example:

Man in suit: Don't just stand there…
Girl: I can't move.

Allow five to ten minutes for this, during which you may need to replay the last part again once or twice (without sound of course) so that the learners can check whether what they have written 'fits' the visuals. Then ask learners to read out their versions of the dialogue to their partner (in pairs), or in groups. Allow discussion of the various versions for up to ten minutes, then play the last minute of the video with the sound on. Further discussion is optional.

The first version above gives practice in listening and speaking, while the second version gives practice in listening, writing and speaking. Using video to create incomplete communication like this always generates lively interest and discussion and, provided that the learners have some competence in the target language, their reluctance to use this language for speaking will be temporarily overcome.

The 'Version 1' activities are designed to be completed within a single half hour school lesson (provided that the equipment is set up beforehand). The 'Version 2' activities should take between 45 and 60 minutes.

Video minus visuals

Version 1: Choose a sequence carefully – not only should it involve plenty of interaction, but the situation should not be immediately obvious from the soundtrack. A sequence of a minute should be long enough. Play the entire soundtrack of the sequence with the controls adjusted so that the screen is *blank* (or with the screen covered). Ask the learners to jot down, in the target language, what they think was going on, where the participants were, what sort of people were speaking (their social class, moral character, etc.). After about eight minutes, tell the learners to compare their descriptions (again in pairs or small groups) using the target language only. Before the discussion 'runs out of steam', replay the sequence *with the visuals only*, so that everyone can try out their versions against the visuals. Finally, replay the sequence with both the visuals and the sound switched on.

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Version 2: A more complex, but rewarding version of this activity involves arranging class seating so that all the learners face each other in pairs, but with only one partner (A) in each pair able to see the television screen - the other partner in each pair (B) should have his or her back to the screen, and only be able to hear the sound-track.

Play part of the video sequence that should involve a discussion among a few people. Stop the tape, and tell the Bs to describe, in as much detail as they can, their impression of the people talking. The As must listen without interrupting. When they have finished, the A partners give their own impressions, based on what they have seen as well as heard, then the pairs discuss their different ideas.

Continue the tape for another minute now that the Bs have heard their partners' impressions. Repeat the exchange of impressions between partners. Then continue the video, this time letting everyone turn to see the screen. Allow partners a last discussion of their impressions. Later, or in the next lesson, do a similar activity with the As and Bs reversing roles.

The first of these activities affords practice in listening, writing and speaking the target language. The second does not require writing, but the listening part of this activity includes making conscious the unconscious inferences which we all make from people's voices, tone, and so on - of particular significance in learning a second language.
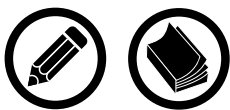
Spend about 30 to 40 minutes designing your own lesson. The book from which we drew some of these ideas describes a number of such activities. They can be used with any language, provided that you have video excerpts in the target language. The book is Cooper, R. et al. 1991. Video. Oxford University Press.

ACTIVITY 31

a If your school is equipped with a TV set and video player, attempt any one of the above video-based activities with a class.
b Take note of details during the activity which might lead to the lesson's improvement (i.e. its smoother running, improved choice of video sequence, etc.)
c If you teach a second language to more than one class, try the activity again, including the improvements. If possible, ask a colleague to observe the activity and give you feedback.
d Design another activity using video to stimulate learners to listen to and use their second language. Or just use the idea of an 'information gap' for the same purpose – for instance, cover a picture (not smaller than 30 cm x 40 cm, and preferably a fairly complicated image) with 'Post-it'™ slips of paper or small slips with blobs of Prestik™ on the back. The class may ask up to 15 questions requiring 'yes'- or 'no'-type answers about the image. Each time a learner guesses correctly (for example, 'Is it an animal?'), remove a slip of paper to reveal more of the picture, starting with the less 'informative' parts ofthe picture.

Finally, here is a video-based second language activity that requires you to prepare a worksheet.

Acting from a transcript

Transcribe about 15-20 lines of dialogue from a video sequence you have recorded. *Do not indicate who is talking, but start a new line every time the dialogue passes from one person to another.* Design a simple comprehension activity based on this, with questions like the following:

1 How many characters do you think are participating in this dialogue?
2 How would you describe some or all of them?
3 Do you notice any idiomatic or colloquial expressions?
4 What does the conversation refer to? etc.

- Give out copies of a worksheet containing both the transcription and these questions to all the learners. Ask them to read the dialogue and answer the questions.

- When they have completed this task, ask them to divide themselves up into groups consisting of the number of characters they think are featured in the dialogue. This will often not be completely clear, so different groups may vary in size. You will also need to allow time for some discussion, as individuals who attempt to form groups may not agree on the number of characters. Encourage this discussion, as long as the learners use the target language.

- Each group must then act out the dialogue, *paying attention to gesture and facial expression, as well as tone of voice* (one after another, with the class as audience, if the class is not too large, otherwise at the same time).

- Finally, play the video sequence once or twice to the class (sound and visuals). Extend the learning by rounding off the lesson with an informal discussion of the different interpretations and what led to them.

4.5 Learning by producing radio and television programmes

Radio interviews:
Developing questioning and speaking skills

One of the simplest production activities teachers can use to develop a range of language skills is the simulated radio interview. One of the best ways of finding out about a topic is to ask someone 'in the know' a lot of questions. So, at the same time as learners are researching content, they can have fun and learn an important communication skill, one that is required by increasing numbers of people today. A simulated radio interview provides the opportunity for learners to:

· develop basic research skills and some understanding of the topic being studied.

This is necessary preparation for the interview.

· ask questions in a focused manner. This forces learners to 'summarize' a long list of possible questions into a shorter list of 'essential' questions.

· improve their speaking and presentation skills. Both the interviewer and interviewee have to express themselves clearly during the interview.

In some instances, you could choose to drop the idea of interviewing real people. Instead, learners could be assigned roles. They research the role and are then interviewed as if they were a street hawker or a president. This introduces a more imaginative dimension to the activity. Do the activity that follows with fellow teachers. It is always useful to 'test' an activity before you try it with learners.

ACTIVITY 32

This is an activity you can do with your class. It should be done in pairs.

a Each pair chooses an interesting person to interview. They could choose someone from the following list: *a street hawker, an overseas musician, a Member of Parliament, a radio or TV personality, a tourist visiting South Africa, or a person of their choice.*

b Each pair prepares ten questions they would like to ask the person they have chosen.

c Each pair conducts his or her own interview, with one partner interviewing the other. Choose a few pairs to present their interviews in front of the class. Keep a record of those chosen (possibly with assessment comments), so that others can be selected on another occasion.

d After the interviews, discuss in a constructive way how the interviewers' questions could be improved.

What did we think of this activity?

Although the activity uses the 'interview' to entice learners into learning, it has a number of weaknesses.

First, the teacher provides no time or guidance for research. Learners simply have to use what they already know about these characters in their interview. They don't learn how to interview, nor do they learn anything more about the topic being taught. It is a useful idea to allow learners to listen to an interview in order to *learn how* interviews work and what good questioning technique is. There should also be some form of print-based consolidation work planned.

Second, the teacher doesn't attempt to make the activity realistic. It isn't difficult to get the basic equipment required to record the interviews. Real equipment makes the activity seem far more like a 'real' radio programme. Recording interviews on audiotape introduces an element of excitement, and may act as an incentive to put more effort into preparing for interviews and conducting them. Having an interview on tape also means that it can be played back, giving the interviewing pair a chance to listen to themselves critically and aim at improving their performance.

Another way of inserting some realism into the activity is by basing the interview format on something familiar to learners – maybe the TV talk show *Two Way,* or radio programme *The Inner Ear* – in order to evoke learner interest.

Learning to ask questions

Radio journalists are trained to ask questions that will get the maximum amount of information from an interview in the minimum amount of time. Before conducting any interview, good journalists will always prepare themselves by thinking about the person they will be meeting (and if the person is prominent, by familiarizing themselves with what that person has achieved). They will also put some thought into preparing most of the questions they need to ask.

Here are some guidelines that you could think about when conducting interviews or asking learners to interview people:

- Decide *what information* you want to get from the interview.
- Decide who will be the *best person/people* to interview.
- Think carefully about the *questions* that you will ask. Make sure that they are likely to produce the answers you are looking for. Write these questions down neatly so that you can read them at a glance.
- *Record the answers* that you get.

Here are some additional points to remember about conducting interviews:

- Ask questions that are clear and directly related to the subject matter.
- If a person doesn't answer your question sufficiently, then probe further. This is perhaps the most important part of interviewing, and it is worthwhile practising it with a fellow learner.
- Ask one question at a time, otherwise the person may get confused. Don't ask, 'Why did you decide to become a nurse, and what are the conditions like at the hospital?' at the same time.

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Start off with simple questions that supply you with basic factual information, e.g. the person's name, how long he or she has lived in the area.

Could you please tell me your name?

Cedric Baloi.

So why did you first become involved in the farmer's co-operative?

Move on to more general questions that allow the person to expand on certain issues.

Avoid questions that only require a 'yes' or 'no' answer. Rather ask questions that encourage the speaker to explain something in more detail.

I suppose it was the harsh laws of the land at that time which led to your involvement?

Yes.

Can you remember in what year the first drought came? How did this affect the community?

Try to find out details such as dates and what actually happened at that time.

Let one question lead to another. Don't let the person talk at length about something outside the topic.

So you say it was the strike that brought people together.

That's right. It was also the time we had a very good soccer side in the village.

I remember one game when I scored two goals . . .

'Err, coming back to the strike, if you don't mind . . .

You may need to bring the person back to the topic before he or she gets carried away.

Developing radio magazine programmes: Integrating speaking skills with other skills

Magazine programmes provide learners with the means to practise similar skills to those developed in interviews. But, because learners need to plan a longer programme around a theme using many different formats – interviews, songs, news, etc., they also develop social skills such as co-operative problem solving and planning, technical production skills, and an increased awareness of how such media presentations are put together.

Of course, activities that require learners to produce media need to be well planned and managed by the teacher. Look at the worksheet below which was designed by a group of teachers from the Northern Province. It was aimed at a class of Grade 9 learners. Then do the activity that follows.

ON THE AIR WITH RADIO NINE

1   You are required to produce a 15-minute radio programme. Your programme should focus on the theme 'the local community'.
2   Record this programme on a cassette tape and present it to the class.
3   Work in groups of six. Each group member must appear in the programme. You must all be involved in recording or producing the programme (i.e. not just as a speaker).
4   Include four of the following in your radio programme:
    – an environmental issue
    – a health issue
    – something about your school: past, present or future
    – an interview
    – a news item from the local community
    – a viewpoint or opinion section
    Some of these elements could be run together; e.g. an interview about an environmental issue.
5   All items need to be well researched. This research should include:
    – reading the information in your textbook to prepare you to ask intelligent questions in your interviews.
    – reading at least one other reference book or newspaper.
    – interviewing experts and local community members about issues relating to 'the local community'.
6   There must be voice or music links between all the items in the programme.
7   Watch the time. No item in the programme may be longer than three minutes. Marks will be deducted for programmes that are more than 30 seconds longer or shorter than the required 15 minutes.

Stay tuned!

ACTIVITY 33

a   List what a teacher would need to prepare before setting the class this activity.
b   List the skills that learners will develop or practise in doing this activity. Divide these into:
    • speaking skills
    • group skills
    • practical skills
    • knowledge-based skills
c   Explain how this activity could get learners to explore their values and attitudes.
d   What learning area or areas could the activity be used in?
e   Think about how you could adapt this activity for use in your classroom.

Spend about 90 minutes on this activity. Work with a fellow teacher if possible.

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What we thought about this activity

We thought this an excellent activity. The instructions are brief and straightfor-ward, and leave the learners in no doubt as to what is expected of them. 'Behind the scenes', a fair amount will need to be prepared and not left to chance. This can be done by the teacher, but it would be best if the teacher organized the learners to take responsibility for as much as possible. The teacher should sit down with the learners and go through all the practical requirements:

- Tape recorders and microphones. (How many are needed? How many are availa-ble? Do they all work? Are there conveniently situated power sockets, otherwise batteries will have to be bought?)

- Tape cassettes. (How many will be needed, i.e. how many groups, if they are going out to conduct interviews at the same time? Who pays for them? Don't be tempted to buy the cheapest – the tapes tend to jam up in the cassette player.)

- Timing. (If there are only one or two recorders, and five or more groups, a lot of learners may be left idle while waiting to use the equipment. In this case, the ideal would be to borrow more recorders; another solution might be to have other work for learners to do while they wait. Noise and venue are also factors to consider. Recording requires absolute silence in the background. Will groups be able to record their programmes in the afternoon when most learners have gone home?)

- Music links. (Someone needs to supply a music centre or hi-fi that can record from a CD player. The music needed should be on a CD. Some schools have tape record-ers equipped with simple 'fade' switches designed to record smooth transitions from voice recording to music and back but, with a little practice, a reasonable result can be obtained from using a hi-fi or music centre.)

This activity would develop a range of skills:

- *speaking for broadcast* (speakers would need to speak clearly, impart their message or information clearly, let their own personalities emerge in their speaking, and avoid spoiling everything by saying' Ahm' or 'you know' before every second word);

- *group skills* (group problem solving, subordinating one's own wishes for the sake of achieving consensus and a common goal);

- *practical skills* (using sound equipment to produce a reasonable presentation);

- *knowledge-based skills* (media literacy through actual radio production – one of the best ways to develop such literacy; also gathering information, finding out 'what's going on' and what's important in the way of issues, setting up interviews, identifying and approaching people to be interviewed, thinking up good inter-view questions).

In the area of values and attitudes, in addition to teaching the need for co-operation, the activity focuses on a range of topics which is likely to engender discussion and thought about health, environmental and community issues. This can be drawn on by the teacher as a follow-up to the presentations.

Finally, we can see an activity like this being adaptable to several learning areas, depending only on the topics set being relevant. The most obvious, however, are Communication, Literacy and Language; Human and Social Sciences; and Arts and Culture.

A dream of a project: Adapting a setwork for radio

Many language teachers have discovered the value of turning learners into radio producers as a way to bring literary setworks to life. Involving learners in translating

a short story, or a scene from a novel or play, into a radio production (even longer works can be radio-dramatized) generates a situation in which the learners themselves create a context in which the literature makes sense, both as entertainment and as a form of storytelling.

James Cupido, a Western Cape teacher, was having difficulty helping his Grade 10s relate to the strangeness of the story in Shakespeare's *A Midsummer Night's Dream*, not to mention the usual difficulty of the late- sixteenth century verse. Listening to a play on the radio one night, he had the idea of setting his class to produce a version of the central story of the four young lovers for 'radio', using the school's seldom-used tape recorder.

Once he had hit on this idea and thought about it for a few minutes, he became increasingly excited. The whole play is constructed by Shakespeare as a dream, with a central story being acted out in a forest, and interspersed with the appearance of strange beings and seemingly impossible switches of character (one person seems to become another in mid-story). All this seemed to put the learners off, but if they could be given the job of *producing* a version of it, they would surely come to see that the play was as up-to- date as last night's dream or last week's teenage love affair. In addition, because it was a dream, it was not tied too strongly to any particular period of history.

Turn to Part 2 of your audiotape. Listen to a group of teachers who have used this kind of technique in their teaching. Note down ideas you could use in your classroom.

A scene from the 1999 film version of *A Midsummer Night's Dream* starring Kevin Kline as Bottom and Michelle Pfeiffer as Titania.

A proper stage production seemed out of the question, but a radio play that condensed the central story into about 40 minutes seemed a reasonable undertaking. After delving into the play to get a sense of how the production could be scripted, and after some planning, James put his idea to the class. He told them that they could set the story in any period they wished, and use only the amount of dialogue from the play that would be necessary to carry the story. Although a few learners were sceptical or not very interested to begin with, the class very soon experienced James's own growing excitement.

One learner suggested setting the play in modern-day Cape Town, and another thought the popular 'Glen' on the slopes of Table Mountain would make a good imaginary setting that they could all relate to (this was greeted with much laughter). A third learner suggested recording the play in the class's own language. James saw a danger in this idea (that the learners would concentrate on the story only), so he suggested combining Shakespeare's dialogue (the best bits) with their own

Saide

This teacher is ambitious and was working with a strong and interested group of learners. For this reason, a 40.minute play was possible. However, we'd suggest you first try your class with a short play, especially if they are in Grades 6 - 9. Choose a single scene from a play or novel, or a suitable short story, and ask a small group to turn this into an eight-minute play. Later you can become more adventurous.

language – to which the class readily agreed. This strategy meant that the learners had to delve into the play very carefully to draw out the 'best' lines and speeches, and combine them constantly with their own language to express the 'bits' in between.

Before long, the entire class was deeply immersed in *A Midsummer Night's Dream* in a way which would never have happened if the class had not been given a manageable project of producing Shakespeare as entertainment which, after all, was what Shakespeare intended it to be. The end result on one C60 audiocassette would not have won an award on the BBC or the SABC, but it was not at all bad and, in the process of making it, the learners had found themselves interpreting the rather silly young lovers' confusion in a way that they could relate to completely.

HOW TO GO ABOUT PRODUCING A RADIO PLAY

Preparation

- Make sure you have a reasonably good portable tape recorder with a separate microphone, one 60-minute cassette tape, and a room that is free from outside noise to enable your class to produce a 'radio production'.
- Divide the class into small groups and get them to dramatize scenes or chapters from a setwork. Learners working in groups search the text for essential dialogue and narrative, and then begin writing the radio script. Each group works on one chapter or scene.
- Editing is not possible with the standard audiocassette, so careful scripting and reading are necessary.
  During this phase a good deal of peer and teacher comment on the script should take place in order to improve the script.
- Audition learners to play the main characters throughout this writing process. Others should be assigned to do sound effects or provide a 'studio audience'.
- Some dramatization is needed if voices are to sound convincing and not dull. The teacher may provide some guidance here, but usually the fact that the actors are focusing on speaking, and not on action or being seen, means that they quickly learn the need to speak 'with expression'.

Recording

- Actors need to stand around the microphone, so it's best to have one with a longish cable that will enable it to be suspended from the ceiling (such cables can be bought from shops supplying sound equipment). Tape recorders with built-in mikes are not much good as they tend to pick up the hum of the recorder's motor on tape.
- Actors will need to be reminded to remain alert and be careful not to rustle their scripts.
- Because it's irritating to re-record portions of the tape that sound bad, it's essential to do at least one 'dry run', reading through the whole script (with sound effects) before recording.
- Learners will have fun exercising their ingenuity to come up with sound effects that work. For instance, stamping suddenly on a small, empty fruit-juice carton produces a very convincing 'gunshot' on audiotape. Shaking a large piece of sheet metal can reproduce the sound of thunder on demand.

Projects like this can take up a fair amount of time, but the 'deep' understanding of a literary work that develops as a result of preparing a text for *presentation* is usually worth it. One of the writer's Grade 11 classes took four weeks of English lessons to produce a complete 'radio' version (on tape) of George Orwell's *Animal Farm*. By the end of the process, the learners had a very thorough 'firsthand' knowledge of the story of *Animal Farm*, its characters and its underlying ideas.

Collecting media resources

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4.6

</div>

Being organized about media-based learning resources

Generally, there are five important stages that you need to follow when you are making your own resources based on the media (the CAPES model). These are:

- Collecting material;
- Analysing this material;
- Producing your own resources based on this material;
- Evaluating the lesson based on media;
- Systematic storing/filing for easy retrieval when you need it.

> You are now halfway through the module; you should have spent 60 hours on it! Well done! Begin Week 11 now.
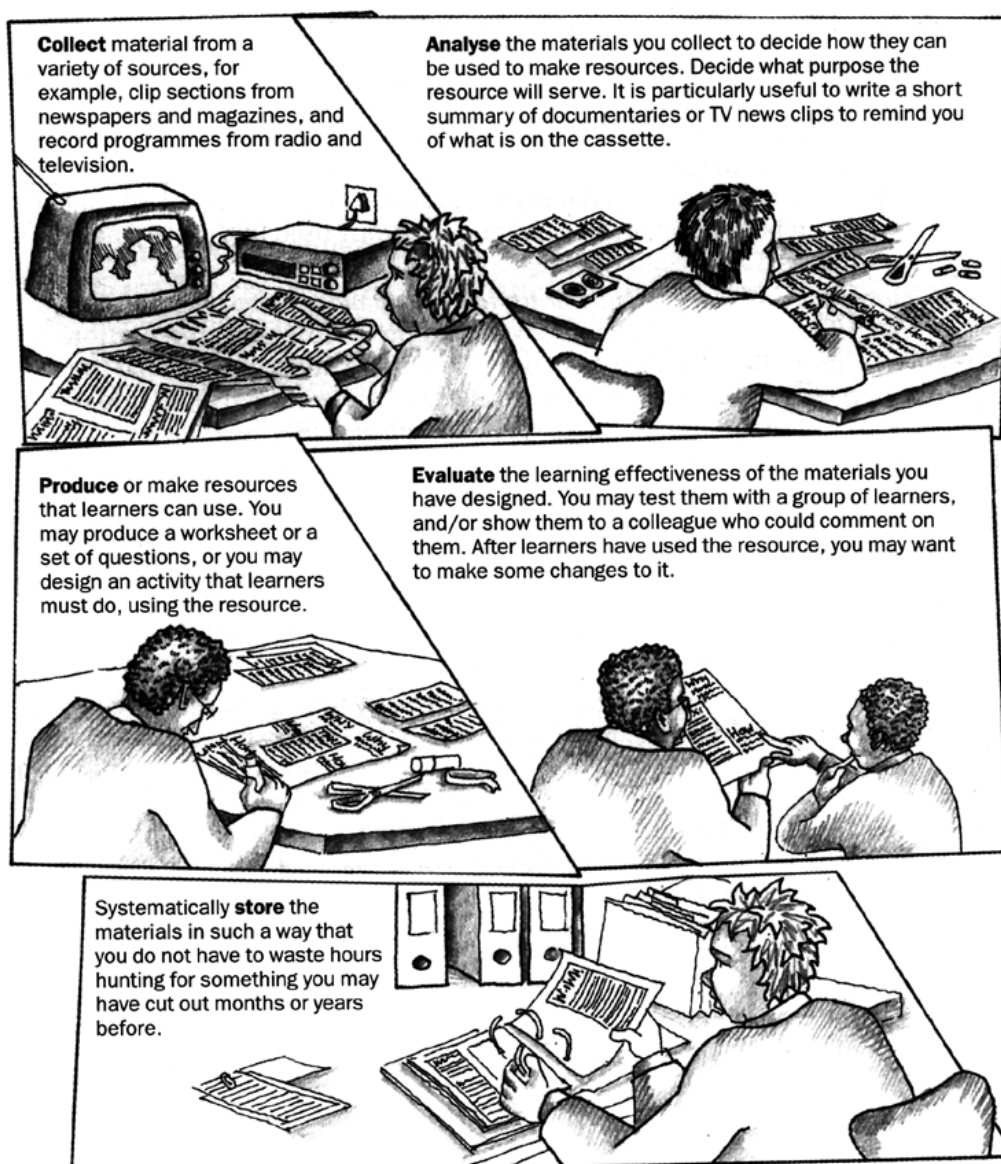
> Watch part 8 of the video. You will watch two teachers, Jayesh Nair and Mrs Mophangwe, prepare media- based lessons and then teach them. Notice how both follow a CAPES approach.

Collect material from a variety of sources, for example, clip sections from newspapers and magazines, and record programmes from radio and television.

Analyse the materials you collect to decide how they can be used to make resources. Decide what purpose the resource will serve. It is particularly useful to write a short summary of documentaries or TV news clips to remind you of what is on the cassette.

Produce or make resources that learners can use. You may produce a worksheet or a set of questions, or you may design an activity that learners must do, using the resource.

Evaluate the learning effectiveness of the materials you have designed. You may test them with a group of learners, and/or show them to a colleague who could comment on them. After learners have used the resource, you may want to make some changes to it.

Systematically **store** the materials in such a way that you do not have to waste hours hunting for something you may have cut out months or years before.

Saide

Some further practical tips

- *Be consistent in setting aside materials that you might find useful.*
  - Keep a box for storing promising materials until you have time to deal with them further.
  - Cut out such material as soon as you find it, or at least put the magazine or newspaper page in the box.
  - If possible, have a video cassette recorder and tape recorder set up (preferably with a blank tape available) for easy recording of programmes.

- *Make brief notes about possible uses, and attach these to the material.* When you have used the material, update these notes with comments on how to adapt it for future lessons.

- *Continually re-evaluate your resources.* Here are three questions we asked when we considered what to use in this learning guide – they make useful criteria for you to use in evaluating your material:
  - Does the material help learners demonstrate the learning outcomes we want them to achieve?
  - Did the learners experience any problems with the activities, such as lack of clarity and levels of difficulty?
  - How can we improve this resource?

- *Be sure always to write the name of the publication from which material was taken, and the date, on the material itself.*

- *Photocopy newspaper clippings and preferably store these in plastic covers.* (Newsprint quickly yellows with age, and this shows up badly as grey or black when photo-copied.) In fact, it is preferable to make two copies (and even to make a copy of material from magazines and elsewhere), so that one copy can be kept on file in case the other copy used in the classroom never finds its way back to the file.

- *If you have access to a computer, learn to use it to make professional-looking work-sheets and other materials.* Today's word-processing and presentation software allow the teacher a great deal of scope for adapting material (for instance, chang-ing the typeface to something more attractive, or updating questions without having to retype the entire worksheet).

- *If you are fortunate enough to have access to a scanner, consider scanning in pictures to be stored digitally.*

- *Use a colour laser photocopier to copy photographs or colourful diagrams onto over-head projector slides.* This is a relatively cheap way of making slides, with the added advantage that you can use a Koki™ pen to label particularly important aspects of the photographs or diagrams represented. This will allow you to show them to an entire class at the same time.

- *A word about maps.* Among the best are the large roll-up maps made for educa-tional use. Unfortunately, these are also the most expensive. World maps in lami-nated plastic are less expensive, and should last for many years (these are impervi-ous to Prestik™, and can be written on and wiped clean). Teachers should also look out for the free maps occasionally published as teaching aids by newspapers or magazines. Another option is to custom-make your own map with only the features you want to have on it, and to have this laminated – an excellent once-off investment.

What have we learnt about using popular media in teaching?

Key learning points in Sections Three and Four

What are popular media?

- 'Popular media' is a term that describes a variety of different formats. We can categorize these as either *print-based media* (magazines, newspapers, posters, flyers, etc.) or *electronic media* (radio, television, CDs, etc.).

- Within each broad category, there are differences: Magazines tend to carry longer stories, most often with a strong human interest focus, while newspapers carry shorter stories that focus on more immediate 'hard news'. Television is a strongly visual medium, which means it has both benefits and drawbacks as an educational medium, while radio is a strongly auditory medium. But even within magazines, newspapers, radio and television, a number of different formats are evident.

- These different formats provide a rich range of different resources that teachers can use in education.

- However, it is important to recognize that popular media – designed primarily to inform and entertain rather than educate – are not *designed* to educate in a conceptually sound manner. For this reason, teachers using them in the classroom need to playa strong *mediating* role.

Teaching with popular media

- In the end, the weakness or strength of an educational resource based on popular media is determined by the *degree of thought the teacher has put into the design* and, in particular, the link the teacher has made to educational media such as textbooks.

- Popular media are very effective in supplementing the learning of content knowledge by activating learner interest, contextualizing content knowledge, making abstract ideas more concrete and 'visible', updating textbooks and teaching values education.

- They are also useful in developing language skills. Print media are particularly powerful in developing reading and writing skills. Electronic media are particularly good at developing listening and speaking skills.

- The popular media are a source of many of the stereotypes and unquestioned assumptions that we take for granted in our day-to-day lives. However, precisely because of this, they also provide excellent resources for developing *critical thinking* and *media literacy* skills. Developing these skills is important for learners and teachers alike in order to become more familiar with the way in which the media work, and the effect they have on our thinking and behaviour. This familiarity is called 'media literacy', and it is regarded as an important learning outcome in the new South African curriculum.

Teaching with popular electronic media

- Follow a 'PSA' procedure to ensure the best use of television extracts:
  - *preview* (*preview* the programme yourself before showing it to learners);
  - *select* (*select parts* of the programme to help you achieve educational outcomes);
  - activity (*design an activity* to go with the programme).

Saide

- *Recordings* of radio and TV programmes usually work better than live broadcasts.
- Focus on a relevant *section* of a programme rather than the complete programme – select on the basis of what will best help to achieve the *learning outcome* you're after.
- Make sure you know what the *purpose* of using radio or TV is.
- Decide whether the activities you set will take place at home or in the classroom.
- To ensure *active* viewing or listening, introduce the recording or video, stay in control of the medium, and set questions or activities based on it.
- Consider ways in which radio or TV can help learners to explore *values, attitudes* and *knowledge,* as well as skills.
- Think about using other forms of media, such as newspapers, *in conjunction with* TV or radio.

Resourcing classrooms

- To use popular media successfully, teachers must collect and store popular media resources systematically (for instance, in an alphabetically-arranged file). You can't look for articles a day or two before you teach. You need to do so methodically over the entire length of your teaching career. Cut out articles you know you will use, and even those you think you *may* use. Work with other teachers so that you cover as many publications as possible.

A summative assessment activity

This is a long, time-consuming activity. But it is important. It will help you pull together the work done so far. So don't skip it! Spend about four hours on it.

Choose any three of the school lessons referred to in Sections Three and Four.

a Note down how popular media were used to develop a learning resource in the examples you chose.

b Try to identify the knowledge, skills, and values or attitudes (where applicable) that each resource tried to develop. Did the lessons develop sufficient *higher-order* conceptual learning? (You may want to refer back to Section Two to answer this question.)

c Think about how the use of popular media added to the teaching and learning experience. Do you think these lessons were able to achieve the intended learning outcomes more successfully than conventional methods would have? Give reasons.

d Develop your own teaching and learning resource which uses a popular media format. Using a mix of print and electronic media, develop a learning unit or a series of lessons, and make sure your lessons develop higher-order conceptual understanding. Spell out in detail how you want each lesson to proceed. The following headings may help you to structure your lessons:
  - Specific outcomes you are hoping learners will demonstrate
  - Teacher activities
  - What the learners will do
  - Resources you will develop and use
  - How you will assess learners

e Assess your work. Write a note on why you think it is a good piece of work (not more than a page). Think carefully about the criteria you used to arrive at your assessment.

f Ask a fellow teacher to assess your work, then discuss it together. Do you agree on your assessment? How and why do you differ?

SECTION FIVE

Understanding popular media

What will we learn in Section Five?

5.1

Remember that Zaki (pages 18 and 19, Section 2.3) spent at *least* six hours of her waking day being exposed to some form of media. This was the same length of time she spent at school! Almost all of this time was spent listening to, watching or reading *popular* media. In the whole day, she spent only *six minutes* developing her own media skills: one minute in independent reading, and five minutes working directly from her maths textbook.

Although learners are exposed to a good deal of popular media, much of it 'washes over them': it has simply become part of their natural environment. However, since Zaki isn't able to 'read' these media critically, this poses the danger that she will unknowingly and uncritically accept the hidden 'messages' they churn out. She then becomes the 'puppet' of advertisers, her thinking and habits shaped by the values and views embedded in advertisements, soap operas, videos and pop songs, rather than being able to weigh these up for herself.

How can we help learners to develop the ability to respond to media more critically? This section aims to enable you to do just that. In Section 5.1 we introduce you to two approaches teachers can use to teach media literacy. We will call these approaches – that, you will notice, have important overlaps – **a MAP approach** and a **Keys Concepts approach**.

> A 20-week study schedule would suggest you begin Week 12 now. You should have spent at least 66 hours on this module so far. The section is quite complex; work slowly and carefully. Don't continue *unless* you understand the concept discussed.

A MAP approach to analysing media

Media education involves examining the media in our lives and asking questions about the way they make sense of the world for us. For example: What is the purpose of the media? Who puts media messages together, and why? How are these messages constructed?

All media communicate messages. They are aimed at an audience and they are put together or produced in a particular way. So, when you are considering the media, you can ask these three questions:

1   What is the medium saying?   **Message**
2   Who is the message aimed at?   **Audience**
3   How is the message put across?   **Production**

We can call this the MAP approach – **m**essage, **a**udience, **p**roduction. Let's take a closer look at the elements of MAP.

Message

The popular media are in the business of conveying messages. Messages can take a lot of different forms, such as newspapers, magazine stories and pictures, advertisements, TV and radio programmes, billboards, or even balloons in the sky.

It is easy to forget that the messages we receive via the media are usually carefully planned. We saw in the video that whole teams of people are involved in putting together television advertising messages. Similarly, radio programmes, newspapers and magazines are also the product of an intense planning and production exercise on the part of a number of people, each with expertise in a particular field of communication. Under these circumstances, it would be surprising if there were not a lot more to media messages than 'meets the eye'.

Saide

ACTIVITY 34

a What is the main message the makers of this advert want to communicate?

b Is this message the 'truth'? What other messages could the makers of the advert have communicated? (One of the producers who is interviewed gives us some clues.)

c Who do you think paid for this message to be produced by this team of people?
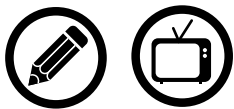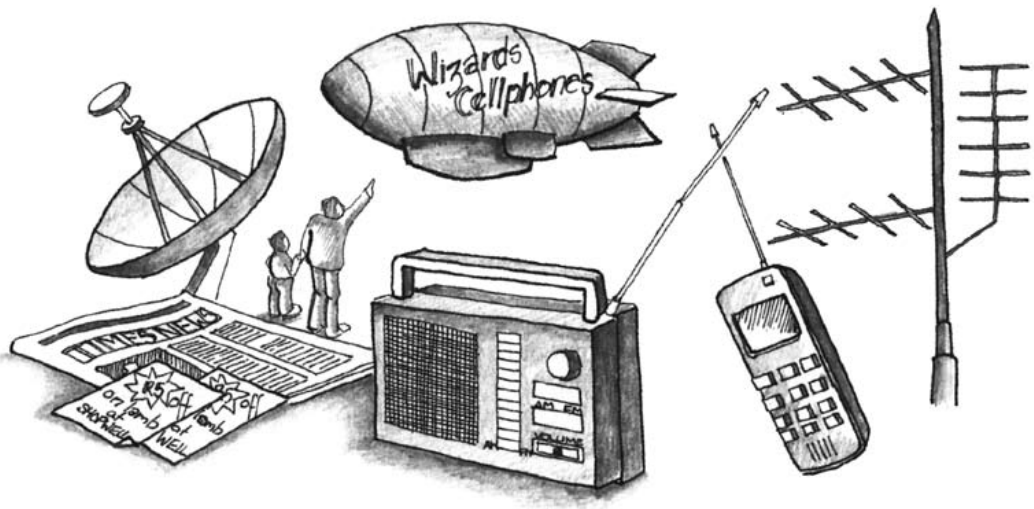
Watch part 5 of the video. You will see a film crew make an advert. Listen to how they construct the advert's message. Then spend 30 minutes doing the activity.

Audience

Media messages are aimed at an audience. We all experience a wide collection of media messages every day from a variety of media. This means we form part of a range of different audiences. For example, a television audience during one evening will be made up of people who watch different programmes on different channels. Some people may watch only news and sport, some may watch soap operas and sitcoms, others may just watch the movies, while others tune in for the documentaries and current affairs programmes. The same variety in the make-up of audiences can apply to newspapers, magazines and radio.

Not only are audiences different and varied - they also change over time.

For instance, television sitcoms may be built around social situations that would once have been taboo, such as unmarried couples living together. A soap opera may be 'killed' by its producers if it begins to seem 'dated' and ceases to attract the viewership it once used to. And, whereas some years ago, there would have been a very small audience receptive to the idea of a 'unisex' fragrance or scent for young men and women, there is now a growing one.

ACTIVITY 35

a Write down some of the different '*audiences*' that you regularly belong to (for instance, the TV soap opera audience, a community radio station in the taxi or your own car radio on the way to work).

b Think about and write down the size of each of these audiences (a TV soap opera such as *The Bold and the Beautiful* may run to many millions worldwide; a local radio station to a few hundred at anyone time).

c How do you think the makers of popular media think about their audiences? (For instance, as valued supporters? only in terms of 'ratings', i.e.

Spend about 30 minutes on this activity.

as sheer numbers that dictate the price which the series will fetch on the international television market?)

When the producers of media set out to make a piece of media such as a TV programme, a magazine article or a radio show, they think carefully about the characteristics of their audience. They may consider characteristics such as:

- the *age group* (for instance, teenagers or young professionals);
- the *gender* (for instance, there are magazines aimed at women and magazines mainly for men);
- the *income group* (for instance, advertising companies aim to target the people who can afford to buy their products, such as luxury cars);
- the *language group* (for instance, radio stations that broadcast in Sesotho have a particular audience in mind).

Using a MAP approach to analyse a magazine cover
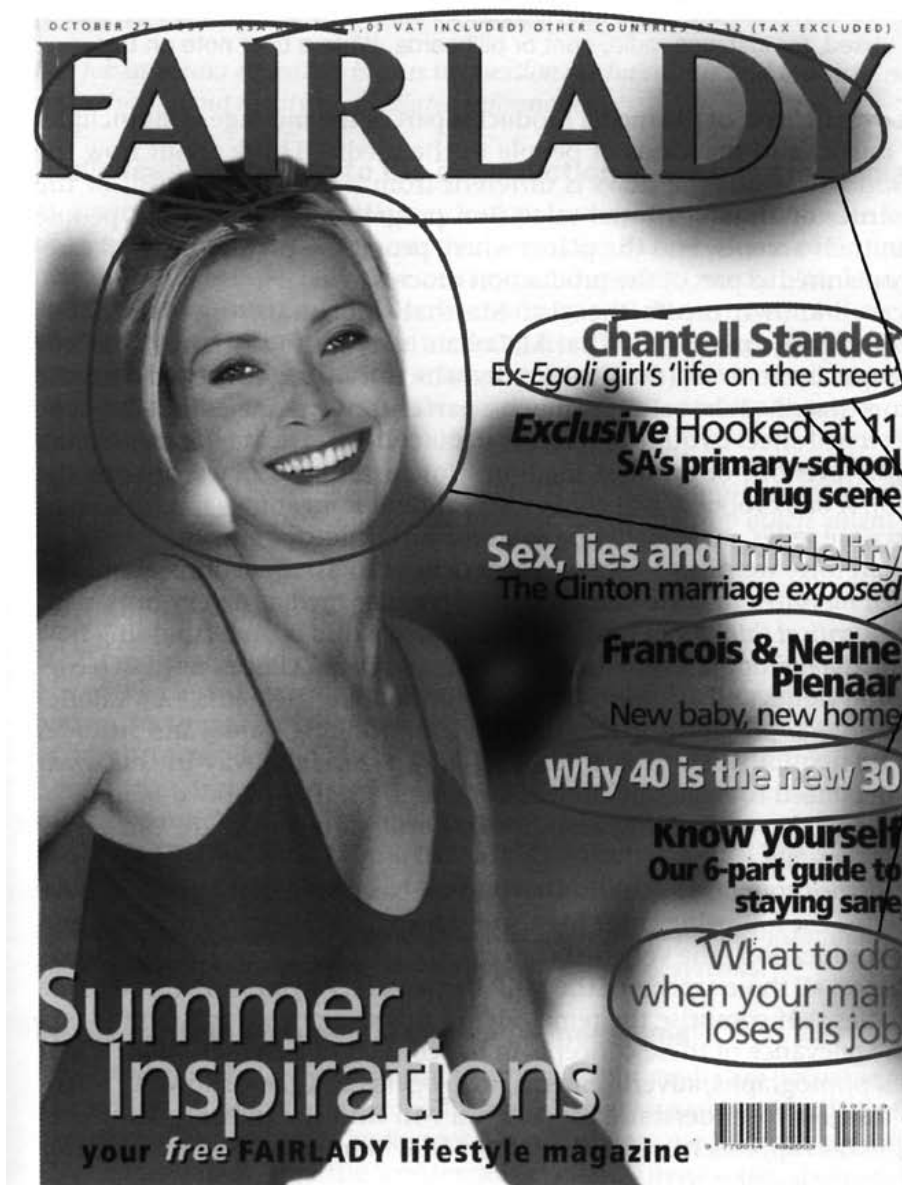
Production

Producing a piece of media is a deliberate activity. People put the production together using specialized techniques and methods.

In the video we saw a team of people producing a TV advertisement. They produced a slick, 30-second collection of images, sounds and words all designed to have a particular effect on the audience. The car company could have commissioned the advertising agency to make other kinds of advertisements, for instance, ones that appear in the print media, on radio or large billboards. Why do you think they chose to use the TV medium to advertise this model of car?

Spend about 30 minutes on this activity

ACTIVITY 36

a Choose a presentation within a particular television format, such as a TV advert, a game show or a documentary. Write down:
  - Why do you think this piece of media has been put together?
  - How many people appear in it?
  - How many different elements can you identify in the presentation (for instance, music, voices, characters, different scenes)?

b Try to identify the *message* and the *audience* it is aimed at.

c Consider how the presentation would be different if another medium was used, for instance radio, print or billboards. Write a brief note on this.

The overall *'look'* of the media product is part of the message. This includes the music, and the kinds of people in the media. Think about how the person who reads the news is different from a game show host, or the presenter of an educational television programme. The clothes people wear, their accents, and the places where people are pictured, are all carefully planned as part of the production process.

A well-known media theorist, Marshall McLuhan, once said: 'The medium is the message.' What McLuhan is trying to say is that the *way* messages come to us (the medium by which they are conveyed, and the factors described above) are so much a part of those messages that the same *content* will affect us quite differently if it is conveyed through one medium (say, television) or another medium (for instance, a newspaper or the radio). A bank robbery will convey very different meanings if it forms part of a crime series, an actuality programme on crime, or a sitcom.

Therefore, we need to show learners how to ask questions about the *hidden messages* that are carried by the popular media. A very important part of *critical thinking* in our media-saturated world is understanding how the media manipulate us. We, like the learners in our classes, need to recognize the values and assumptions that *underlie* advertisements, news stories and photographs. If we do not, their and our thinking, values and attitudes will be manipulated. And, if teachers are to show the way in this, then teachers need to make themselves aware of both the intended manipulations and the underlying assumptions and values that are carried by popular media.

To *deepen* your understanding beyond the basic MAP framework, we have included the following guide to the most important concepts in media and media education. The very first concept, that 'all media are constructions', builds on all three aspects of the MAP framework. As you work through the activities that comprise the remainder of this section, we will remind you of the relevance of these concepts in the context of news selection, magazines, photographs, advertisements, soap operas and game shows. In teaching learners to understand media, you will find the message-audience-production approach useful, though the MAP framework is more useful for *introducing* learners to this area.

Key concepts in media education

All media are constructions

Media are *mediated* communication: media messages are *not* direct representations of reality – they are *constructed* by the media makers (journalists, ad agencies, etc.) who 'mediate' or 'come between' reality and the audience. They are not 'slices of life', 'windows on the world' or 'mirrors of society'. They are carefully manufactured' constructions', with nothing left to chance. They are not, by definition, 'real', although they attempt to imitate reality. In fact, the success of these manufactured constructs lies in their apparent *naturalness*.

Our job as media educators is thus to remove the familiarity of media messages and make them 'strange' and problematic to learners to show that they are not 'natural'.

All media construct reality

Although media are not real, they can shape our attitudes, behaviour and ideas about the world. If we haven't had firsthand experience with a person, place or thing, and yet we feel that we know something about them based on media information, then the media have constructed a form of reality for us.

Our job as media educators is thus to question media culture and to teach learners to think about reality vs. mediated information.

Audiences contribute to the construction of meaning in media

Audiences are not passive. We may look passive as we sit motionless in front of a book or a TV set, but our minds are working to make sense of the information. This is especially true of fast-paced modern media. We learn to anticipate and interpret the conventions by which media communicate, and to somehow 'read' or make meaning from their message. We do this as individuals and, in predictable ways, as groups. Our taste in media content and forms changes as we age. Advertisers know this, and try to target us as individuals and as group' audiences'.

Our task as media educators is to help learners to become aware of the way they interact with media personally, and to think about the way others might use media.

Media have commercial implications

Media industries add billions of dollars to economies and are, for example, one of the United States' largest exports. Commercial factors, such as distribution, technical costs, labour costs and potential advertising sales (ultimately the need to make a profit), influence the content of media. Advertising drives media businesses. Magazines, newspapers and broadcasting channels guarantee advertisers a number of consumers who will see their ads. This audience is targeted to buy consumer goods. The commodity that media companies 'sell' to advertisers is the *audience*.

Our challenge as media educators is to educate learners about media industries and the way they are intertwined with modem economic systems.

Media contain ideological and value messages

Objectivity and balance are journalistic ideals, but media are not value free. The notion of 'objectivity' in media is a relatively new idea. Until the first part of the 20th century, audiences did not expect media to be objective. They knew which were the 'conservative' newspapers or the 'democratic' magazines, and generally bought them according to their own ideological persuasion. Media content that is presented as objective can hide *implicit* values and ideology. Most important, media content today does *not* support social transformation, and it 'sells' a consumer lifestyle.

Saide

The role of the media educator is to guide learners to uncover ideological messages by using media literacy techniques and values education strategies.

Media have social and political implications

Media have changed the landscape of modern political campaigning. Media not only seek to sell us products; they also sell us political candidates, ideas and public health messages, and seek to shape the political thinking of mass audiences. Media technologies have altered our culture, our families and the way we behave, and the way we use our leisure time. Although they may not directly affect the way we behave, media seek to legitimize and reinforce social and political behaviour.

The job of the media educator is to increase learners' awareness of the political and social messages in media, and of the way they shape political and social attitudes.

Media have unique form that is closely related to content

People derive great pleasure from their use of media, and media literacy skills can heighten that pleasure. We can appreciate the artistry with which texts are created, the technical expertise in media production, and the creative vision. Each medium has unique conventions, benefits and limitations that influence its content. We can also understand that form and content are closely related in media, so that the overall 'look' of a media product is in the end *part of its message*. Students can learn creative self- expression by producing *their own* media texts in the classroom, as they analyse the texts of others. They can also see how each medium reports the same event in a different way, owing to the constraints and limitations of the medium.

Hands-on production and critical analysis are two halves of a whole media studies programme.

Desired learning outcomes

When you reach the end of this section you should be able to:

· identify that media messages are aimed at specific audiences, for specific reasons;
· recognize that media messages are constructed by people, often with a great deal of careful preparation;
· recognize that implicit values and assumptions, as well as more obvious ideo-logical and political messages, are carried by popular media;
· critically evaluate these values, assumptions and ideological messages;
· produce media-based resources which encourage critical interpretations of media messages;
· relate the use of media in the classroom to those Curriculum 200S critical outcomes which focus on critical thinking and awareness.

Checking your learning:
How should you use these outcomes? You may find that they don't mean much before you study the section. That's *why* it is so important to check back regularly. Ask: 'Have I achieved any of these outcomes yet? What do I still need to learn in order to meet these outcomes?' Write down those things you still think you need to learn, and use them to focus your learning.

Finding critical media literacy sources in popular print media

From time to time, the media themselves set out to make us think more critically about various media, and teachers concerned with media education should be sure to keep and file such I gems'. We have used one already in the activity on statistics (pages 59-60), which was really an exercise in critical thinking. This came from *The New Internationalist* magazine that is often a good source of examples of critical thinking. On pages 155 and 156 we will feature another example, an excellent (adapted) article on the image of women in women's magazines by Anne McClintock, from a now-defunct arts magazine called *Speak*.

Here is a short feature from the magazine *SA Citylife* that raises interesting points about designer labels as media, and their influence among South African youth. How could you use this in class? Doesn't it address any of the media literacy questions raised in the two approaches we looked at in 5.1?

YOU ARE WHAT YOU WEAR

The 1990s haven't exactly been the decade of robust consumer activism. Remember the days when no one in a cold clime would even dare to wear their fur in public? Remember when pulling into a Shell garage was tantamount to treason because of the company's dealings with the Apartheid government? The 1990s clamour for hip visibility and designer label uniformity has all but drowned any attempt to raise the consciousness of greedy consumers guided by the dim lights of habits and impulse. Causes are passé and companies who exploit their workforce to bring designer labels to the world do so without fear of chastisement or boycott. At the opening of the Ikwezi Drama Festival at the Baxter Theatre in Cape Town recently, the vast majority of black youth in attendance were wearing an astonishing array of American labels, from Tommy Hilfiger to Nike to Kangol to Polo. **What then of the African Renaissance?**

In a recent issue of the popular culture magazine *Y*, the new editor (who goes by the moniker 'The Citizen') muses that the greatest consumers of designer labels such as Kangol, Tommy Hilfiger, Nike, etc, in South Africa are black urban youth. Kwaito stars, who are often dressed from head to toe in American designer labels, no doubt serve as role models.

Perhaps he should enlighten readers of Tommy Hilfiger's attitude towards consumers of colour. Oprah asked Hilfiger if he had said: 'If I'd known African-Americans, Hispanics, Jewish and Asians would buy my clothes, I would not have made them so nice. I wish these people would not buy my clothes, as they are made for upper-class white people.' Hilfiger's reply was a simple: 'Yes.' (Oprah threw him off the show.)

Nike too has dubious offshore employment policies. None of the brand's goods are manufactured in the US. Men and women in sweatshops in Indonesia do the work. The irony is they sell the products, at a huge mark-up, to youth in developing countries who regard the brand as a mark of the ultra cool. If there is one group that seems oblivious to Thabo Mbeki's concept of the African Renaissance it is the South African youth, who will probably be too busy out shopping to bother casting their votes on 2 June. For more on consumer activism check out the Adbusters site, on the Web at www.adbusters.org.

Reproduced from *SA Citylife*, May 1999

Saide

Other, more offbeat sources that are worth scanning are *Mad* magazine and *Nose Week*. Here is an example from *Mad* magazine. Notice how it parodies the lack of 'reality' in many mainstream American films and TV fare. How could you use this kind of media in class?

Romance

1. A female character shall resist the advances of a male hero only due to some compelling, life-or-death reason, and never simply because she finds the hero unappealing. This situation shall in all cases be resolved before the end of the program.

2. No matter how hard-won the love relationship between a hero and a newly introduced female character, she shall be completely forgotten by the next show.
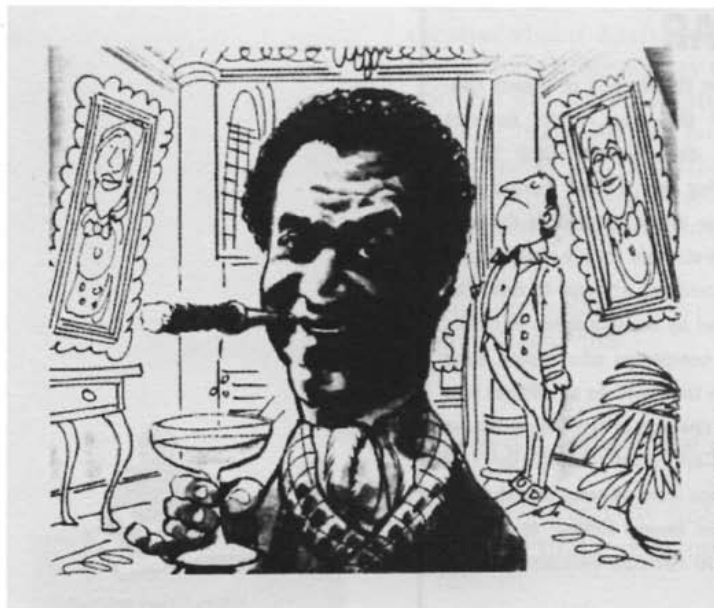
Houses and Apartments

1. No character shall be shown living in a house or apartment that is not at least 2½ times as expensive as what he can probably afford on his salary.

Finally, the weekly *Mail & Guardian* newspaper from time to time features articles on various media that illustrate critical thinking, or increase our media literacy. Here is an excellent example on maps, from the *Mail & Guardian* of 10 September 1999 – an article that could be used in a variety of Human and Social Sciences lessons:

Redrawing Africa's mind map

Bryan Rostron

Can South Africa's white tribe, the argument grumbles on, fit into the modern map of Africa? Before tempers fray and fights erupt, let's face it: it's a headache, this map. For a start, it was drawn by Europeans. This leads to all kinds of problems. Earlier this year, for example, the former and current presidents of Zambia used this colonial blueprint to declare each other unfit to run for office: Kenneth Kaunda pointed to Frederick Chiluba's birth in the former Zaire, Chiluba to the fact of Kaunda's Malawian descent.

Maps, frankly, have been a disaster for Africa. Europeans, to demarcate conquest and for administrative convenience, drew lines which frequently brushed aside underlying linguistic, kinship and migratory patterns. They imposed an order in their own minds; on such charts was Africa drawn and quartered.

But then, the picture of the entire world has actually been drawn up by the usual suspects: middle-aged white males.

Consider a world map. Chances are it shows Africa as about the same size as Greenland. Actually, it's 14 times larger. But you've almost certainly been looking at a traditional map, where the northern hemisphere occupies two-thirds; the southern hemisphere, twice the size, is squeezed into the remaining space.

This map, still in almost universal use, is based on the projections of 16th-century Flemish cartographer Gerhard Mercator. Given that two-dimensional illustration required some distortion, it is not surprising Mercator favoured Europe. Such inaccuracies have, however, inevitably skewered European attitudes. And such unthinking bias, rightly, rankles.

The problem is, as soon as someone charts something, you can be sure they are about to lay claim to it. It is also a way of ruthlessly excluding people. Think of the cliché: "wipe him off the map". The think of the old apartheid apologia: the colossal lie that much of the land was unoccupied anyway — and that whites and blacks just sort of met up at the same time, so whites had an equal historical claim.
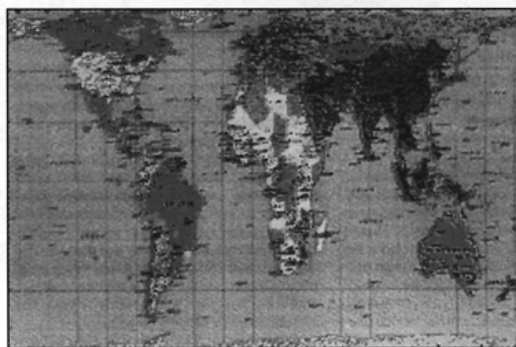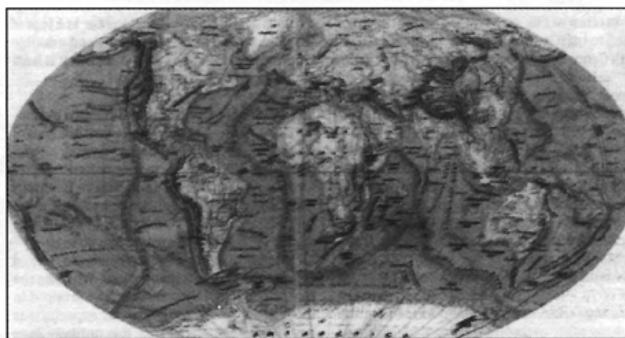
I have two maps of the Cape, dated 1710 and 1815; it is striking that in both the presence of indigenous people has virtually been obliterated from the landscape. These maps, marking white settlements and identifying rivers and mountains with European names, have almost eradicated evidence of other people, different customs. More recently, maps often blanked out black townships, whose population was sometimes larger than adjacent, named white towns.

Maps are power. The Portuguese and Spanish empires even considered them state secrets, revealed on the pain of death. In 1688, Heinrich Claudius was deported from the Cape for showing his sketch maps of the interior to passing French Jesuits.

The earliest surviving cartographic record of Bartolomeu Dias rounding the Cape was probably tampered with by the Columbus brothers. The exquisite Martellus map of 1489, now in the British Museum, shows the Cape as so exaggeratedly far south that it actually breaks through its frame — thus lending support to Christopher Columbus's contention that the way to the Indies was westward.

Ever since, maps have been used as instruments of propaganda, justifying occupation and invasion. The Martellus Atlas, subconsciously, still promotes imperious assumptions. The Peters Projection Map, created in 1974, tried to redress the balance. It restores Africa — with different distortions — to its rightful size. In the United States, the Peters Projection is widely used in training seminars, as a way of showing there is a radically different way of looking at the world. It helps people rethink assumptions.

In South Africa, whites still control most of the wealth — on a scale of Mercator-sized distortion. If this over-privileged minority began to think in terms of the Peters Projection, it may gain a desperately needed new perspective.

Maps, essentially, are mental constructs. They shape the way we think, outline the world we take for granted, and frame our cultural horizons. In short, they peg out our social boundaries.

In South Africa, our defining framework is very recent. My late father was born in 1908 — two years before the Act of Union, which created our present borders. My mother was born in 1912, the same year as the African National Congress. And I was born (in Hillbrow, *nogal*) in 1948, the year the Nats came to power.

Yet how soon we accept such outlines as immutable. Today, our (white-drawn) national boundaries define a new South African xenophobia. The French philosopher Jacques Derrida defined apartheid as "a system of mapped-out solitudes". The silhouette of that same map of solitudes and exclusion, it seems to me, continues to dominate the row over who is an African.

What map, then, can we use to find our way forward? The old one of rigid lines and arbitrary frontiers? Remember: the former regime, to keep the realities of Africa at bay, even made its perimeter along the Mozambican border a vast electrified fence.

Fact is, we are all, black and white, still trapped by these outdated co-ordinates. The question "does whitey have a place in the modern map of Africa?" might be answered better when Kaunda and Chiluba can agree where they fit in, too.

Let's face it: on the cusp of the millennium, spinning ever faster with globalisation, our mental map needs to be redrawn. But not along old racial contours; otherwise it will remain one of exclusion, ringed around with electrified fences.

Right-sizing the world: The Peters Projection Map (left) restores Africa to its rightful relevant size and helps people rethink assumptions created by distorted maps like the one above

Articles and features like those we have mentioned or presented above are not common. In general, it is up to teachers and texts such as this module to supply critical input. What the popular media supply in abundance is material on which we can exercise critical analysis, and it is on such activities that we focus in this section.

Reading newspapers more critically

Another newspaper 'hunt':
How different newspapers select news

News forms a large part of much of the media we experience every day. Most radio stations give hourly or half-hourly news bulletins or updates. Newspapers are available on nearly every street corner in cities. There are television stations dedicated entirely to supplying news stories (*CNN, BBC World*). Many of the search engines on the Internet display a news summary feature. News, like other media industries, is big business.

Banner
Focus on light
entertainment and
competitions vs.
more in-depth,
intellectual articles

Font used
Heavy, 'sensationalist'
font vs. smaller,
more restrained
'intellectual' font

Price

Lead articles
Focus on sensation
– deaths and
fraud/crime vs.
focus on politics

Main picture
'Black' victim of fire
vs. 'white' internation-
al figure of Bill Clinton

But can newspapers be relied on to tell the truth and nothing but the truth? Many people seem to believe this, yet, as the next activity will demonstrate, different newspapers do not report on 'what's happening out there' in the same way. While few reporters and editors will intentionally lie to their readers, every newspaper has to *select* information (and thus *leave out* information) because of limited space and the limited time readers would want to devote to a newspaper. But this selection is

usually influenced, often without journalists even being aware of it, by their values, their (or their newspaper's) bias in favour of particular groups and political parties, and their newspaper's need to increase its sales as much as possible.

Examining news from a *variety* of sources allows learners to discover the *different* 'truths' carried by different newspapers. It can also be a very worthwhile activity for developing enquiry and analytical skills. The following activity – from a Port Elizabeth teacher – requires learners to examine news items from the different points of view of three newspapers. To run this activity, make sure you have copies of *Business Day, The Sowetan* and *The Citizen* published on the same day (preferably on a day when they each carry a different main story). Here is a copy of the teacher's worksheet:

Any three newspapers *that cater for different readerships* may be used. However, try to select newspapers that you know cater for different groups so that the exercise works.

Don't just read through this activity! Instead, do the activity with a couple of other teachers before doing it in class. Then discuss your experience. In particular, discuss what this activity 'taught' you about media.

Spend about 45 minutes on the activity and discussion.

COMPARING NEWSPAPERS

Make sure your group has copies of **Business Day**, **The Sowetan** and **The Citizen**.

1. Draw a table similar to the following one in your book. Then scan the front, back and 'comment/opinion' pages of the three newspapers for the information indicated in the left-hand column.

	Business Day	**Sowetan**	**Citizen**
(a) Write down the headline of the main story on the front page			
(b) Identify the main sports story			
(c) Copy out three other headlines that appear on the front page			
(d) Identify the different types of people who appear, or are named, in the front page news items. (Are they business people, politicians, or from some other group? Men or women? Black or white?)			
(e) What topics are dealt with on the 'comment page'? (Scan the editorial column, the political cartoon, any feature, articles/essays, and readers'letters.)			
(f) How many pictures appear on the front page?			

2. Write a paragraph about the similarities and differences of your findings. Think about the following questions:
   - Are the main stories about the same event in all three newspapers?
   - What reasons might explain any differences in the three main news stories featured?
   - Who do you think decides what stories appear in these newspapers?
   - Why might the different newspapers see different stories as being important?

3. Can you identify the different types of reader the reports might appeal to? Give reasons for your answer.

4. What does the 'comment page' in general tell us about the *political viewpoint* of each newspaper? (Does there seem to be general support and sympathy for the actions of the government? Is there open or implied support for any political party? Is the overall

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> trend of the comment more favourable towards, say, trade unions or employers?)
>
> 5 How many pictures are there on each of the three front pages? Consider how much space the pictures take up, for example, a quarter of the page. Do the pictures add to our understanding of the news stories? Suggest why the pictures have been included.

The teacher followed this activity with a report-back and discussion of the findings.

What did this activity teach?

It developed media literacy skills further than the first news hunt (page 66). The activity allowed learners to discover that newspapers *differed* in the kinds of news covered and the prominence they gave that news. We found that, while the *Sowetan* that we looked at carried a main headline calling for the sacking of the South Africa soccer coach, *Business Day's* main story was about the Old Mutual company listing on the London stock exchange. *The Citizen* carried a story about the Democratic Party criticizing the government's lack of action on crime. In other words, each of the three newspapers appears to attach a different *news value* to the different events. (In most cases, the events not covered in the main story *were* mentioned elsewhere in the newspaper, but were given less prominence than in the other newspapers.)

The activity shed some light on *why* the newspapers differed. When we discussed this, some teachers suggested that the news differed because the three newspapers had *different target audiences*, each of which had different interests. They suggested that, in South Africa, target audiences are often still race-based, but are also linked to income. So newspapers such as *Business Day* carry exchange rates and stock market reports prominently, while newspapers aimed at working class audiences do not. Some newspapers, such as the *Saturday Star*, have developed specialist property advertising sections. One teacher suggested that this was because the people who bought them could afford to buy the more expensive type of house that would be advertised in a property supplement, and had the free time over weekends to go 'house-hunting'. Other teachers suggested that the news differed because the *political viewpoints* of the editors (and perhaps the owners) of the various newspapers were different.

While carrying out the above activity, you may have noticed the different 'angles' on - or even the contradictory versions of - news that can appear in the media. We often accept information as reliable and true just because it appears on television, or in a book, magazine or newspaper. We need to realize that the **selection** – by sub-editors and editors – of what is *featured* as 'news' is influenced by the aims of the news company. News media only give us a partial view of the world – and this may not be just because of a particular political bias.

The selection of what information is printed or broadcast is shaped by the following factors:

- fulfilling the economic objectives of the newspaper company, i.e. to sell the information to as many people as possible, thus maximizing the company's profits;
- reaching the audience which the *advertisers* are paying to target; expanding the size of the loyal audience;
- following the editorial policy of the company, for instance, with regard to political alignment (this is usually a matter of public knowledge and should not be seen as divorced from the other three factors).

These factors should warn us that, while newspapers need to maintain a reputation for well-presented, reliable information, *what is selected* for presentation, and the way it is presented, will be influenced by the editors' concern to keep the readership as happy with the product (the newspaper) as possible. Journalists develop a good

Spend some time in your local library familiarizing yourself with the different kinds of information carried by different newspapers. This activity can be done by comparing television, radio and newspaper news too. This could lead into debate about how the particular medium influences the kind of news covered.

sense of their readers' characteristic thought patterns, likes and dislikes, and this knowledge is underpinned by market research, and by strictly-monitored sales figures. A particular front-page headline or photograph may lead to an increase in sales of tens of thousands, and this is taken note of by editors.

While it would be unjust to claim that such considerations are the *first* priority in the minds of reporters and editors of most South African newspapers, there is always a tendency to write (and select) with an eye on mass appeal, and to avoid what the readership may find uncomfortable. This is bound to influence:

- what events are presented as 'news stories';

- what happenings are discarded as 'not newsworthy', and therefore *not* reported;

- what sort of people are approached for comment;

- whose opinions are quoted in a report;

- which details are regarded as relevant or not relevant;

- the words used to describe people, societies and events. (For instance, a quotation may be included, or a report may be worded in a way that perpetuates stereotypes. *The Star* recently carried a report on an international conference on AIDS. The reporter quoted a Western 'expert view' which referred to the 'huge sexual appetites' of Nigerian men, and mentioned as evidence the supposedly sensational statistic that more than two-thirds of the Nigerian men in the research sample had sex with more than one partner! The report did not mention that most cultures in Nigeria allow polygamy.)

Newspaper 'hunt' 3:
Developing an understanding of news values and stereotypes

This activity, which is suitable for Grades 10-12, will add further 'depth' to your critical media literacy if you attempt it yourself, particularly with fellow learners in a tutorial group. Note that this sort of activity lends itself to adaptation as a 'jigsaw' lesson. This approach uses co-operative learning strategies to ensure that *every* learner in the class contributes to the learning process. (See *Getting Practical*, another module in this series, for a description of this effective and enjoyable method which ensures that there are no 'passengers' in the class.)

ACTIVITY 37

Ensure that every pair of learners has copies of two editions (i.e. published on two different days) of the same *daily* newspaper (any daily will do).

Do this activity with your class. Prepare carefully. Ask a fellow teacher to sit in on your lesson and provide feedback.
   Preparation and the lesson should take about 90 minutes.

NEWS VALUES AND STEREOTYPES

Scan the non-sport news pages of both editions of the newspaper for the information required below (your totals should reflect the tally from both editions combined). If you encounter particular difficulty understanding any of the questions, read the article 'Making the news' on the reverse side of this worksheet. Otherwise, read it when you have finished answering the questions below (at home, if necessary).

Questions	Findings
1 How many reports feature 'bad' news, how many feature 'good' news', and how many don't readily fit into either category? (Discuss these with other members of your group.)	
2 What do you think made the front-page	

stories 'big' enough to merit 'front-page treatment'?

3   Look at the reports on the second, third and fourth pages. Can you think of any reasons why they *didn't* make it to the front page?

4   Find reports that deal with gradual, ongoing developments, such as housing projects, or with ongoing problems, such as decaying services in our hospitals.

5   Are there many stories which focus on news that isn't 'sensational', or that is about positive development? Why or why not?

6   How many reports deal with events in countries other than South Africa? What proportion of these international reports relate to the 'G7' countries: the USA, Britain, France, Germany, Italy, Canada or Japan? And what proportion relate to developing countries, such as Venezuela, Bangladesh, Mozambique, Vietnam or Nicaragua?

7   What were the stories from *developing countries* about? What sort of events taking place in the 'G7' countries got reported?

8   How many reports focus mainly on *individual* people?

9   What sort of individuals seem to be regarded as important enough to write about? (What kinds of positions do they hold in society?)

10 How many reports that focus on an individual are actually about government actions and policies, or some other organization, group or movement?

11 How many reports are about ordinary people, rather than prominent people? Are these reports of a similar size to those about more prominent people?

12 Try to find examples of expectations, assumptions or stereotypes that journalists may 'carry in their heads' - either in what they themselves write, or in the people they quote. For instance, race or gender stereo-concerning crime victims or criminals, corrupt officials, striking workers, youth subcultures, or pop stars.

13. What conclusions can you draw about how the newspaper makes selection decisions on what it will report, or how it will report

it? Consider what seems to be regarded as *newsworthy*, what *international* news is featured, and how the newspaper represents people (as distinct from events)?

In the subsequent lesson, ask a few pairs of learners to report on their findings (or a different pair to report on each question), then have a class discussion on the findings in the light of the article.

What did we learn from this activity?

News is not 'found' or 'gathered' so much as 'made'. It is the result of a journalistic process in which reporters and editors decide what will be reported on, the prominence it will be given (the day's 'top story', or a small story on page 3, for instance), and how it will be presented (a photograph and caption, or a reporter's description plus an eye-witness account, or quoting opinions from experts, etc.).

News is constructed, not a reflection of reality

Even if journalists consciously aim to be *balanced* and *objective*, and to avoid *bias* or political *propaganda*, newspapers and news programmes will almost certainly reflect the dominant *myths* and *stereotypes* of society, often without the journalists themselves realizing it. This is because journalists – like everybody else – have 'cultural maps' in their minds that they seldom think of questioning. These 'cultural maps', or assumptions, determine how they interpret the events they write about, and which events they will choose to write about in the first place.

Like the rest of us, journalists take many things for granted as being 'quite natural' when, in fact, they reflect the way we have come to see things in our culture – and, of course, that culture has itself been shaped to a considerable extent by media, including newspapers and news programmes. For instance, journalists tend to see – and project – an image of society as being led by *individual, elite persons* who are largely in control of their own lives and destinies in such a way that what happens around them is the result of their *personal intentions, motives* and *choices*. They are not seen as subject to the impersonal forces and circumstances that affect you and me: the rising cost of living, family problems (with the exception of the British Royal family), the need to pay bills and stand in 'queues. Their lives and actions are regarded as being of significance to us all. Events are often portrayed as being initiated by such elite individuals, even though in a democracy the reality is usually somewhat different – presidents of countries and companies, and other leaders, are not usually 'laws unto themselves'. Rather, they are the 'public face' of – and accountable to – political parties, boards of directors, shareholders, committees, movements and other formal bodies.

In addition, there are many unquestioned conventions that are regarded as 'routine' in the process of professional news-making. For instance, if something new or important comes up in a particular sphere, such as education, reporters will almost always approach *the same* well-known individuals for their responses, regardless of whether these individuals have even heard of the events yet, or had time to debate them with others.

The news media select events for reporting according to a complex set of criteria of 'newsworthiness'. Thus, news is not simply what happens out there in the world; it is what is regarded and presented as newsworthy. The 'news values' or criteria according to which events are selected for reporting, are partly shaped by the 'cultural maps' described above.

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These ideas come from Hartley, J. 1982. *Understanding News.*

Commonly accepted 'news values'

Here is a selection of news values that have been identified by the media researchers Galtung and Ruge:

- *Threshold:* This mainly refers to the 'size' of an event. There is a threshold below which an event will not be reported at all. But, once reported, there is a further threshold of drama: the bigger the story, the more added drama is needed to keep it going. For instance, coverage of a war – already 'big news' – is unlikely to be increased unless an especially sensational event occurs. However, this drama may not be part of the event itself. After the murder of John Lennon, the Beatles' singer and songwriter, events which would never have reached the 'newsworthy' threshold were made into dramatic stories to keep the 'pot boiling'. For instance, one newspaper reported:

> *Heartbroken John Lennon fans 'in America are getting a helping hand with 'grief therapy'. Special 'grief clinics' have been set up in New York to aid those who cannot accept the singer's death ...*

- *Stereotypes and predictability:* If the media expect something to happen, it probably will. Thus, if journalists expect a demonstration to result in violence, their reports may well emphasize whatever violence takes place, even if hardly any does and the demonstration is essentially peaceful. However, reporting often fails to 'notice' events shaped by people who do not fit journalists' expectations - especially people who are not 'prominent'.

- *Elite nations:* Wars, elections and disasters in other countries will be reported if those nations happen to be prominent on the 'world stage'. Small, developing countries such as East Timor experienced obscurity for decades, even though vicious oppression and bitter fighting had taken place there since 1975. News organizations turned their attention to East Timor in 1999 only when the United Nations involvement in an independence referendum led to embarrassment for the world organization and the 'prominent nations' supporting this involvement. Events in poorer, developing countries generally go unreported, unless they are disasters such as spectacular plane crashes, floods, earthquakes or tornadoes.

- *Elite persons:* The tendency to focus on prominent individuals, rather than organizations made up of many people, has already been highlighted.

- *Negativity:* Bad news is good news for the media. This phenomenon is well known, but still projects a skewed picture of human actions and society.

Because news values like these both shape, and are shaped by, assumptions that are common to us all, the impression that we gain of the world through the 'filter' of the media both feeds off and maintains stereotypes. We come to see individuals, groups and nations that are other than ourselves as 'strange', 'bizarre' and dangerous, and the idea takes root that it would be better to keep them at arm's length.

Why use this kind of teaching methodology?

The point of such an activity is to help learners discover for themselves that, without intending to indoctrinate readers with propaganda or without displaying an obvious bias, journalists nevertheless 'construct' news in clearly definable ways. This happens even when they think of themselves as writing 'objective' reports. The world as they present it is at least partly a media construction based on their assumptions and news values – the world according to the news desk.

In preparing for this lesson, teachers should preferably choose the actual newspaper and editions with some care, trying out some of the worksheet questions themselves – some editions will yield more interesting findings than others. If you rely on free surplus copies, you should go through these and keep a set when you find a suitable edition, only running this activity when you have found a second edition. This means starting to select some time in advance of the lesson. The idea

of using *two* editions is to provide a better sample to base findings on. Though we have not included questions relating to reportage over time, it is also instructive to notice how ongoing topics are 'covered' differently on different days as events play themselves out.

You will probably also find that learners may need help in understanding concepts such as 'stereotypes', or with practical problems relating to the layout of the particular newspaper you have chosen – so be prepared to offer support.

Using magazines to deepen media literacy

Here is an entire activity that encourages learners to raise critical questions about media they see every day. It features a role-play aimed at detaching learners for a short while from certain taken-for-granted assumptions most of us probably share, and picks up the theme of stereotypes that was raised in the activity above. The entire learning unit could take place over two consecutive days, with the role-play and collage-making taking about an hour on the first day, and the discussion and reading taking about an hour on the second day.

Magazine covers:
Developing an understanding of taken-for-granted assumptions

You should have spent about 72 hours on this module so far. Now you should begin Week 13.

TEACHER'S NOTES

Stage 1 (Role-play): Ask the learners to divide into groups of three, then introduce the role-play more or less as follows:

'Imagine an alien from another planet is visiting the Earth to study our culture. This alien possesses an advanced technology that detects and translates the impulses in our brains, enabling it to understand and converse with earthlings.

'The alien's spacecraft lands in a South African city. It notices that earthlings vary in size, colour and shape. It has not gone very far down a busy street when it comes across an earthling seated before a number of small, neat stacks of flat, rectangular coloured images set out on a board. Many of the images resemble the faces of some of the earthlings, though they seem to have a more 'prepared' look than the real ones walking about in the street. Some of the earthlings passing up and down the street stop and look at these stacks of images, and some pick the images up to look more closely at them. When they do, the alien researcher realizes that the images are not just single images, but *collections* of images and other symbols on many flimsy sheets, all the same size and all bound together along one edge.

'Every now and then, an earthling takes some small shiny metal discs from its clothing, and exchanges them with the seated earthling for one of the collections of images. These earthlings then move off, taking the collections with them. The alien is curious, and decides to find out what this behaviour means.

'After initial explanations, the alien asks about these 'bound collections of images and symbols', and learns that they are called 'magazines'. It also learns that most of the images of faces represent the faces of female earthlings.

'In your groups of three, play the parts of the magazine vendor, the alien and a passer-by. (You can stay seated if you like, and concentrate on what you say rather than on actions.) Remember, the alien has no idea what these 'magazines' mean to earthlings.

'You have about ten minutes for this role-play. Here's a piece of the conversation to get you started:
Alien: Do female earthlings buy these?

Do this activity with your class. Prepare carefully. Ask a fellow teacher to sit in on your lesson and provide feedback.
Preparation and the lesson should take about 90 minutes.

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Passer-by:	Yes.
Alien:	Not males?
Passer-by:	Not very often.
Alien:	Do males buy magazines for themselves?
Vendor:	*(pointing to a few magazines)*
	The males mostly buy these.
Alien:	I see. Why don't the males buy magazines with pictures of men? .. .'

Note to teacher: The point of this discussion is that learners realise that:
1 The fact that women are used to 'decorate' magazines is not natural; it is linked to the way in which our society perceives and treats women.
2 The images of women are not representative of real women. Instead, they are idealized, possibly sexist images that may impact negatively on women's ideals about themselves.

Stage 2 (Collage): 'Now we are going to use images from publications on sale at the vendor's stall to teach the alien more about "female earthlings".'

To half of the groups in the class, hand out a selection of women's magazines such as *Fair Lady, Femina, Cosmopolitan, Rooi Rose, Sarie, Ebony* and *Bona*. To the other half, hand out a selection of daily newspapers. Instruct the groups to cut out images from the periodicals they have been given, and to construct collages to reflect women and how they live (see the 'box' on collages, page 158). Allow 30 to 45 minutes for this activity. Get the groups to display their collages around the classroom walls.

The class should then discuss questions such as the following (these could be presented as a worksheet):
1 What difference do you see (if any) between the image of women that is built up from *magazines*, and that which is built up from *newspapers*?
2 What conclusions can you draw about the way women are represented in magazines and the way they are represented in newspapers?
3 Why do you think very few men's magazines similarly feature pictures of men on the covers? What is featured on magazines specifically produced for male readers (this does not refer to special-interest magazines such as hobby magazines)?
4 In what ways do the faces we see on magazine covers differ from most of the faces of women we are likely to see on the street?
5 What are the women on the covers of women's magazines *doing*? Why do you think women are hardly ever shown doing anything else on magazine covers? (See the covers on page 157.)
6 What do you think might be the long-term effect on women of seeing themselves continually depicted in the particular way they are shown on the covers of magazines? What might be the long-term effect on men of seeing such images so often?

Stage 3: (Reading and discussion) Hand out copies of the adapted extract from an article by Anne McClintock (on page 157). Give the learners ten minutes to read it, and then follow this with a discussion (whole class, or in groups) of the ideas in the article.

The covers of most women's magazines and many men's magazines carry pictures of 'model-like' women – beautiful, thin and made up. Invariably their only role is decorative (that is, they don't do anything but decorate the cover!) They also tend to look at the reader as if they had some relationship with the reader.

What did we learn from this activity?

This activity attempted, by getting learners involved in a media analysis, to understand that women's magazines *construct* a particular and idealized image of women. The final part of the activity – the reading by Anne McClintock – attempts to pull together the ideas that should have emerged from the activities. This is what McClintock says:

… One of the striking facts of women's magazines is that the average photographic image is almost without exception **that of a woman**. The average *Fair Lady* and *Femina* are roughly 150 to 180 pages long.

Over half of both is allocated to advertising (including fashion features), and almost all the advertisements feature women. This amounts to an impressive number of pictures of women in each issue .

. . . What is the significance of these pictures of women? There is obviously nothing natural about most of them, in the sense of depicting women as they are in life. The way the woman are arranged in picture after picture has nothing to do with the way women in reality behave, act, move, gesture, appear. The pictures are arranged to signify **an attitude towards women** – more specifically an attitude women are to have towards themselves. The central image is the face of a woman. Without exception, every issue of *Fair Lady* and *Femina* features on its cover this stereotype face.

What does it signify? There are a number of striking things about this face. First, the woman is not photographed in the act of engaging with another person besides herself. She is photographed looking out, most often smiling, often seductive, into the eyes of the reader. Her attention is directed towards the observer, not inwards. So the significance of her expression is that it conveys an awareness that she **is being looked at**. More important than this is the knowledge that it expresses the total assurance that her appearance is without flaw. This confidence is based on the requirements that, **as a visual spectacle**, her face fulfils the requirements imposed on it by the gaze of a man. Moreover, the range of emotions which each face expresses is so limited and so stereotyped that the photograph eventually comes to function not as the picture of a face expressing its inner emotions, but as a sign expressing those values desirable in the **face as spectacle, as visual object**. Finally, the face is made-up. The wearing of make-up is itself a sign, confirming the function of the face as a mask and the inadequacy of the female face without its disguise of beauty.

Look closely at the face of the photo-graphic model on any such typical magazine cover (whether of *Femina, Bona* or *Sarie*). What kind of experience is it for a woman who looks at this face? Its expression is the expression a woman wears **when she looks at a man**. It is a face fully expressive of its power and significance as the object of a man's gaze. For this

Saide

The McClintock reading is taken from *Speak*, (1) 5. 1978: 18-22. Another excellent description of a Similar kind of activity can be found in *Media Matters*, page 184. See 'Selected reading' for the references.

reason, it is essentially erotic and seductive. And yet there is a contradiction, for it is a women's magazine, and it is a woman, not a man, that the image is directed at. So the woman confronted by this picture, and the hundreds of thousands almost identical to it in so many magazines, is in fact being asked to do an extraordinary thing. She is being asked to look at every picture of a woman – face and body (for they all express the same intention) – **as though through the eyes of a man**. She is asked to temporarily assume a man's identity and to interpret and judge other women not firstly as expressive of emotions and attitudes, but as visual spectacles (primarily sexual) as they would appear to a man. Simply because of the way the picture is arranged, she internalizes in her response to it the imagined response of a man.

And because she simultaneously identifies with these women, she comes to see herself first and foremost in terms of the approval or disapproval (primarily sexual) that she imagines she would find in a man's eyes. She learns to envisage herself not as she would like to be, but as **someone else** would like her to appear, and because her relationship with herself draws first and foremost on the comparison of her own physical appearance with the unachievable and constantly fluctuating beauty of the photographic model, her self-esteem is constantly threatened.

– Anne McClintock

Using collages to teach media literacy

A well-tried activity that gives learners an opportunity to 'make meaning' themselves of abstract concepts is collage-making. Learners cut pictures and text, such as headlines or advertising copy, out of magazines and newspapers, and glue them on a blank sheet of paper (A3 or larger) in order to construct a visual expression of some aspect of their experience, or their idea of a particular concept. This can be done by individual learners (best done at home), but when produced as a group activity in class, the collage provides a rich source of purposeful interaction and discussion. The teacher should also allow time for the whole class to discuss the different collages when they have been completed. Here are two collages, produced for the previous activity:

For this activity, all that is needed is plenty of pairs of scissors, glue, blank sheets of paper (size would depend on whether the collage is to be produced by individuals or groups), and an abundant supply of old magazines and newspapers. An option is coloured pens, crayons or other materials to provide increased scope for learners to express themselves on the collage. These do not in fact usually add to the quality of the finished product, but it is important to keep in mind that, in this sort of activity, the *process* of production and discussion are far more important than the completed product. For this reason, it is not advisable to leave group collages on display for more than a week or two, unless the learners request this (individual collages should be returned to their producers).

'Junk sculptures', using all sorts of 'waste materials' from polystyrene foam to egg-boxes, are a three- dimensional form of collage which may be worth considering for exploring certain concepts. (The learners may need to provide an explanation, written or otherwise, of what some of the elements of their 'sculptures' represent.) You could, for instance, instruct groups of learners to construct junk sculptures to express their experience or idea of the family or local government.

Reading photographs critically

It is commonly thought that 'the camera does not lie', but do photographs always tell the truth? The activities that follow illustrate how images can be manipulated and edited to change their 'meaning'.

ACTIVITY 38

Do this activity yourself before you do it with learners. Discuss your experience with fellow teachers.

Spend 30 minutes on this activity. This is an award-winning photo by Kevin Carter.

a Describe fully what you can see in the picture.
b Where do you think the photograph was taken?

c Describe what you see in this photograph.
d What does the photograph make you feel?

Do not turn over the page until you have answered these questions.

Saide

    e Describe what you can see now.
    f What do you feel now?
    g What 'story' do you think the photographer is trying to tell with this picture? (What is the photograph's message?)

What did we think?

When the teacher showed a learner the different framings of Kevin Carter's photograph, this is what the learner said:

> 'At first I thought this was a wildlife photograph. I thought the vulture was quite ugly but interesting. I thought it could have been taken in the Kruger Park. I thought the second photograph was very sad. I thought it was probably taken in a township, or in the rural areas where there is a lot of poverty. But then I was very surprised when I realized that these were two parts of the same photograph. When they were put together, I felt sick. Clearly the vulture wanted to eat the boy. It seemed as if the world was upside down: animals aren't supposed to eat human beings.'

Kevin Carter's photograph completely changes when we see the vulture and the starving child pictured together. The image is shocking because we know that vultures eat dead flesh – and the child looks close to death. If the vulture and the child were not pictured together, the photograph would not have the same impact.

Photographers choose the subject matter of their photographs, then they consider the best way to show the people and objects in the scene. This may involve grouping them in a certain way, dressing people in a certain way, deciding on the angle of the camera, choosing close up or wide views, considering lighting and special effects. When this is done, the photographer clicks the button on the camera and 'freezes' this scene on film.

The teacher *framed* Kevin Carter's photograph in different ways simply by focusing on particular parts of it. All people who take pictures *frame* the scenes they want to take as they look through the camera lens. What the photographer chooses to frame, changes the meaning of the photograph.

Changing the meaning by changing the framing

Here is another activity to do with learners to impress on them the need to 'read' photos carefully.

ACTIVITY 39

Photo by Clint Zasman

> Do this activity with a group of teachers before you do it with learners. Discuss *why you* interpret the photo in the way you do.
> Spend about 30 minutes on this activity.

   a What do you see in this photo (reproduced from the *Natal Witness* news-paper, 8 October 1997)?
   b What do you think the relationship is between the man and the woman?
   c Why do you think this?

What did we think?

Our teachers interpreted the picture as telling a story about a distraught woman and a sympathetic man. This was particularly true among teachers who hadn't lived in one of South Africa's black townships. Interestingly, one African teacher asked, 'Is the man in the picture a policeman? If he is, then maybe he isn't sympathetic.' This caused the class to look at the man's body language. 'He seems to have an arrogant and uncaring posture,' said another teacher.

At this point, we moved to the second part of the activity. We gave the teachers a second photograph:

Saide
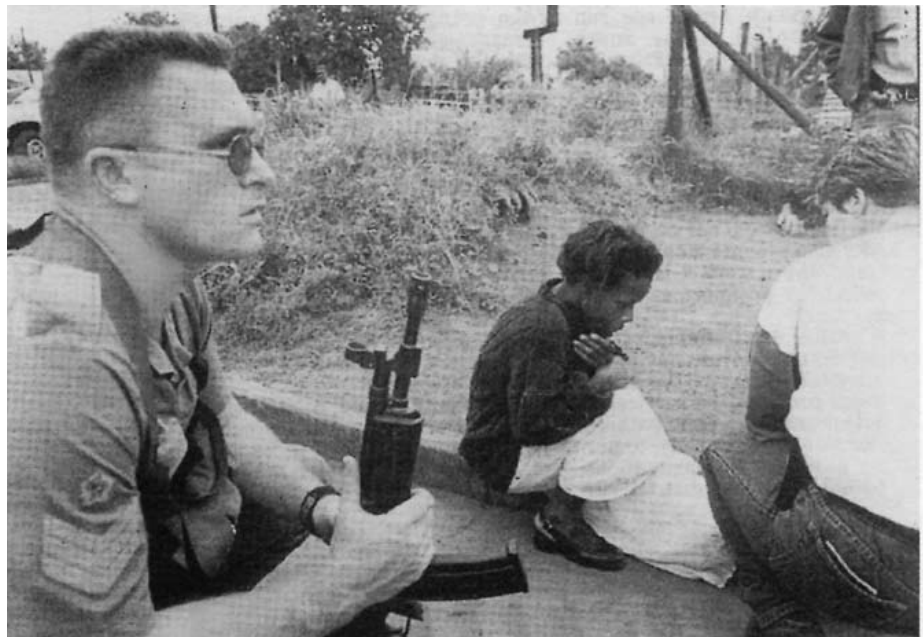
d What do you see in this photo (reproduced from *Echo*, 9 October 1997)?
e   What do you think the relationship is between the two men and the woman?
f Why do you think this?

What did we think now?

Clearly these two photographs were taken of the same incident, but from different angles. The 'framing out' of the uniformed policeman with the gun from the first photo would probably lead some learners to suggest that the man was comforting the woman. In the second, it is likely that they would see the man as part of the cause of the woman's misery. While different framing changes the meaning of what is depicted, it is also true that the audience's perception would influence their inter-pretation. As we pointed out on page 141, *audiences contribute* to the construction of meaning in media. In a society where white people are not often seen consoling black people, the idea of the white man comforting the woman might seem less likely than if the man were black, for instance. We noticed how white and black teachers even differed on the interpretation of the first photograph *because* of their different *histories*.

Framing is what you do when you look through the lens and decide what you want to include in the picture before clicking the button. If you don't like what comes out in your picture, you can *crop* it afterwards to make the picture more inter-esting or pleasing. The point to remember about *cropping* and framing is that these are deliberate activities that change the meaning of the images we see in the media. Being aware of these elements helps us to remember that all the images we experi-ence are *constructed by people*. This means that, to some extent, the meanings of these images are controlled by the producers of the images.

This point is crucial because it highlights the fact that media are *not neutral*. They do not simply reflect reality, as we mentioned in Section 5.l. The media present a 'constructed' version of reality. We have seen how news stories and images can present things in different ways. And we know that advertisers manipulate words and images to sell their products through the media (see Section 5.3). These 'angles' on the 'real world' may reflect the ideology or political position of the 'media maker', or deliberately convey a message aimed at arousing a desire to possess certain consumer goods.

If we are not aware of this tendency of media and media makers to construct

particular versions of reality, they will also influence the picture of the world that we – the viewers – hold, reinforcing (or sometimes disturbing) the assumptions that we have built up through being exposed to many media every day of our lives.

Fortunately, because audiences do not simply receive media messages passively, but themselves contribute to the construction of these messages' meaning, there is also scope for *aware viewers* to *'deconstruct'* such messages and meanings when they threaten to 'swamp' our ability to think for ourselves. Let's try to employ this idea of 'deconstructing' a media message in the case of photographs and words used together to construct a particular meaning.

Changing meaning by putting words and photographs together

Most photographs in newspapers and magazines have a caption (a short phrase or sentence) written under or next to them. These captions can completely change the meaning of a picture. Look at the photograph below. To many people, this is a familiar rural African scene. A German tourist brochure chose the following caption to go with the photograph:

This is another example of how *juxtaposition* tells a story. Earlier we looked at the *juxtaposition* of images; now we look at the juxtaposition of words and images.

Photo: David Goldblatt, from 'Reconstruct', 16 August 1998

Bringing home the water – a common sight in the rustic splendour of KwaZulu-Natal.

Saide

A local development agency had another idea for a caption to the same photograph:

Photo: David Goldblatt, from 'Reconstruct', 16 August 1998

Rural women waste up to four hours a day collecting water because there is no piped water in their area.

Do you see how the two captions encourage the viewer to look at the photograph in very different ways? This will affect the meaning that the viewer attributes to the picture. Now imagine how differently you would interpret these photos if the first photo was in colour (beautiful greens and browns), while the second photo was in black and white. *Colour* also influences how we *interpret* photographs.

ACTIVITY 40

Look at the photograph below.
a Think of a caption to go with the photograph. Your caption should inform the viewer about the meaning of the photograph.
b Give the photograph with the caption to another learner. Ask the learners how he or she *felt* about the photo. Compare how different combinations of the photograph and caption caused learners to feel differently about the photo.

Do this activity with your learners. Use any photograph. It is the discussion that follows from the captioning that is important.

Spend about 15 minutes on this activity.

The captions below were written by a group of students who did this activity. How do these captions compare with yours?

- *One of these people has AIDS. Guess who?*
- *Tobacco is addictive – so much more to enjoy!*

Activities like those above help learners to question the different ways in which images can be manipulated by simply adding a caption. This kind of activity encourages them to question media images, and to look for *interpretations* that are not necessarily the obvious or only meanings. It is not difficult to develop your own caption activities based on images from various print media.

Saide

5.3 Using popular electronic media to develop critical thinking

Using television and other advertisements

In advertising today, huge resources compete to persuade us to spend our money on this or that commodity. As we saw in the *Using Media* video, a lot of ingenuity, expertise and effort go into the making of many adverts – especially expensive television adverts. Advertising agencies and film producers make use of images, words, music and stereotypes with great skill and care to put forward a single idea that they hope will have the necessary impact to sell a particular product or service better than its competitors.

For these reasons, teachers find adverts both a necessary and a rich subject for learners to analyse. They are also a readily available resource for the development of critical thinking, media literacy and values.

On the video, Caroline Greer makes use of three concepts which are valuable in helping learners to understand how today's advertisements often exert their influence on people's behaviour. These are *denotation, connotation* and *stereotypes*.

Denotation, connotation and stereotypes

Watch part 5 of the video, then read pages 164 -167.
Notice how the teacher uses these concepts as a means of analysing images. Think back to your earlier experience of analysing photos. Did you go through the same process? You might want to redo your analysis of these photos using this new language.

Denotation refers to the most obvious basic meaning that a word or image presents to us, for instance, the simple connection we make between the word 'refrigerator', or a picture of a refrigerator, and the device that keeps food from going off. In thinking about what a word or picture denotes, we use a minimum of interpretation. Thus, a picture of a woman standing next to a dishwashing machine denotes just that: a woman next to a dishwasher. However, as we have seen in the discussion of photographs in Section 5.2, *combining* (or separating) different elements of a picture can convey a great deal of meaning.

Unlike the denotation of a picture or word, its **connotations** will require a fair amount of interpretation as they refer to the various meanings that can be *associated* with words or images, usually as a matter of *convention*. For example, in certain contexts, refrigerators can come to *stand for* middle-class domestic comfort, and be widely recognized as such. In addition to being a useful appliance, they were at one time – before many people came to own them – a 'symbol' of the owner's status (they still are among people who cannot afford to own them). They can even be a symbol of modern 'consumer culture' – as in the song 'Money for nothing' by the band Dire Straits, in which 'refrigerators, microwave ovens and colour TVs' are commodities that the home-appliance salesman has 'gotta *move*' (i.e. sell in large numbers).

Placing a woman next to a dishwasher in the context of an advertisement is also an example of an advertisement making use of the third concept we have mentioned – a **stereotype**. Stereotypes are conventional representations of people or things by associating them with characteristics that make them *completely predictable* to the viewer or listener. Thus, a stereotyped villain in a soap opera will always tend to *look* villainous (or the actor will be chosen for his or her appearance as someone untrustworthy), and will always act in a devious or evil way (even his or her' good' actions will always have an ulterior motive). Stereotypes have a negative moral effect when they are linked to a particular social group. For instance, this happens when women are depicted as a matter of course as home-makers and housewives, or when, as in years gone by in South Africa, black people were almost always depicted on TV in the roles of servants, labourers or criminals.

The image of a woman next to a dishwasher is thus associated with a 'housewife' role for women, but a late-twentieth century, middle-class role in which women are

'freed from drudgery' by a string of household appliances, although still in the conventional role. An image that positioned the same woman at the head of a boardroom table, for instance, would have very different connotations.

Analysing an advert

Caroline Greer wants to help the learners in her class move beyond their possibly superficial (surface) understandings of the *denotative* meaning of advertisements, and their possibly stereotyped assumptions. (One learner, for instance, seems to assume that the role of women is essentially a domestic one.) Thus she discusses an advert depicting a woman together with a dishwasher, and then she asks her class to analyse an advert for Tommy Hilfiger, a 'fragrance' (i.e. a perfume, in this case for the young male/female market).

tommy
the real american fragrance
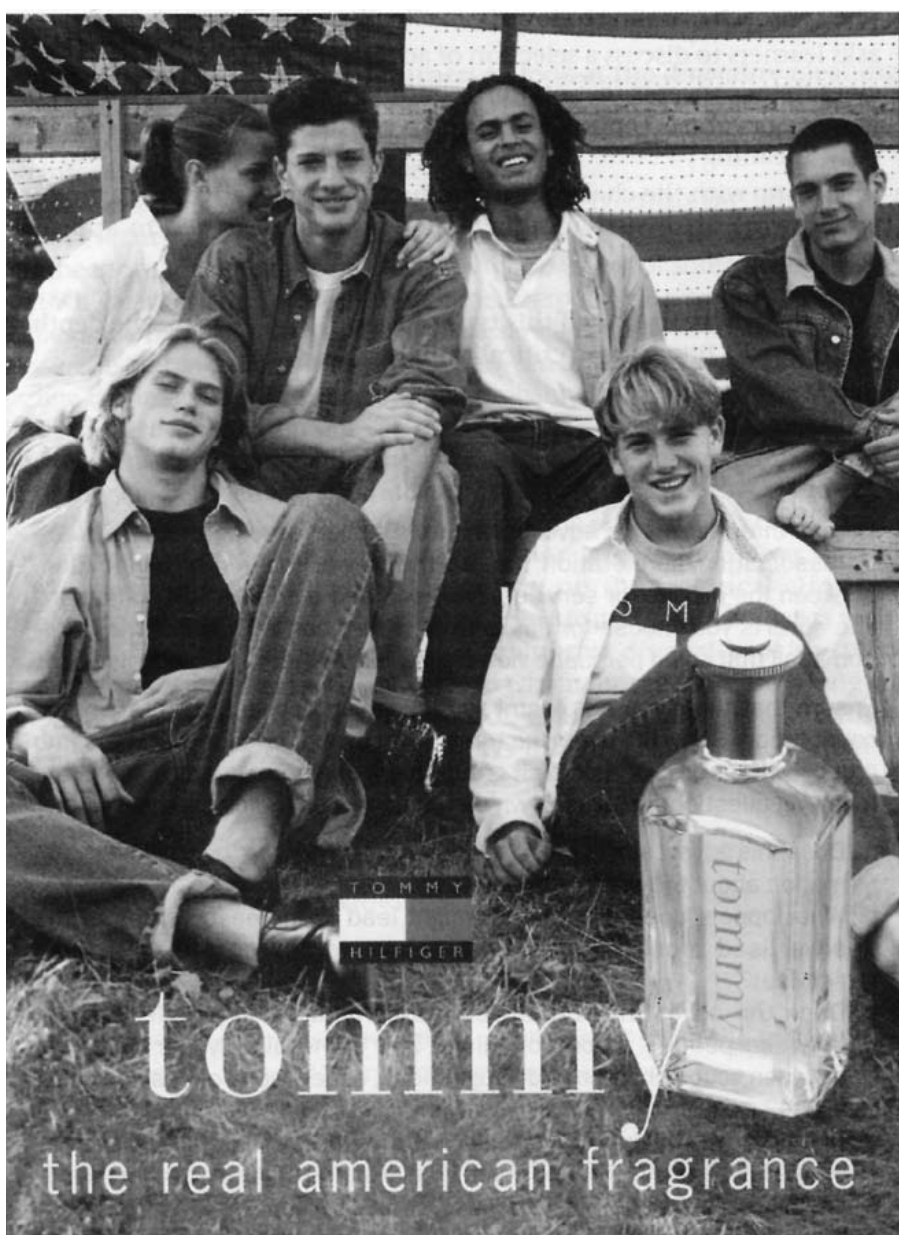
Teachers can use denotation, connotation and stereotype in this way.

1 Give learners an advert or picture. Ask them what it says.
2 Learners will automatically connote. In other words, they will 'tell a story' based on an interpretation of the picture.
3 Make them aware of this by forcing them *only* to describe what's in the picture (i.e. denote).
4 Then contrast what they *denote* and *connote*. Ask what caused them to interpret the picture in a particular way.
5 Finally, show how their interpretation (connotation) is based on their beliefs (often *stereotypes*) about society, about the place women have in that society, etc.
6 This should indicate to learners that most of what we see in photos is actually what we believe in our heads, that is, we *construct* meaning; photos don't *reveal* meaning.

Try this with a Tommy Hilfiger advert.

Saide

Tommy Hilfiger adverts are interesting in that they 'say' very little in words; instead, they rely on a subtle combination of visual images to get their message across. She points out that the Hilfiger advert leads the male reader to make the connection in his mind: wearing this fragrance will make you the guy that girls will want to 'be all over'. But there are other subtle elements in this advert – after all, the underlying message is not a new one. Notice how the United States of America flag in the background is 'picked up' in the Tommy Hilfiger brand colours. The fact that the flag appears in many Hilfiger adverts is interesting. It does not simply appeal to an old-fashioned patriotism (no young reader or likely buyer of this product would be 'persuaded' by the adverts to buy it out of a sense of simple patriotism). But it conveys to American youth, or those who like to adopt American styles, a feeling of' *'us-ness'*. As one of Caroline's students aptly says, 'If you use the product, you'll feel part of the whole culture' (18'20").

As an advertising executive once said (more or less): 'You're not selling a product; you're selling an *"image"*'. The image here is one of responsible young people from the comfortable middle class who enjoy the good things the 'consumer society' (especially American society) offers them, without wanting to 'rock any boats'. These young people aren't rebels.

The approach Caroline follows is an effective one. She:

· asks learners to discuss a selection of adverts in groups;
· gives them concepts (denotation, connotation, stereotypes) with which to move beyond accepting what the adverts depict on the surface as their only 'meaning';
· follows up with the challenge to produce their own adverts for products which work against stereotypes, such as a car designed to appeal to 'grannies'.

Here is an activity to extend this type of lesson, and increase the depth of learners' media literacy and critical thinking.

Tackle the questions below (for one advertisement) yourself. Allow 40 minutes for this. (Of course, this does not include actually *recording* the advertisements.)

ACTIVITY 41

Record three television advertisements. Choose adverts that rely purely on association/connotation, i.e. on the viewer making a 'connection' between the product or service advertised and an 'image' of some sort. The adverts you choose for this activity should convey *no* useful inforrnation at all that could persuade viewers to believe that the product is good.

Ensure that the class has learnt to distinguish between denotation and connotation. Show the class the three adverts and divide the learners into groups of four or five. Ask each group to choose one advert, discuss the following questions, and jot down their answers on their worksheets:

a Does this advert aim to persuade potential customers by providing information about the product or service?
b What appeal does it have that might lead to increased sales of the advertised product (or to more people relying on the advertised service)?
c Does the advert rely on any *conventional* links in people's minds between people, places or things and some quality (for example, between school-children and naughtiness, or between bosses and being stern)?
d Does the advert try to *create* a connection between people, places or things on the one hand, and some quality on the other that is *not* usually associated in people's minds? If so, what connection?
e What does the *viewer* have to contribute to the advert's effectiveness?
f What other challenges must the makers of this advert have faced in putting it together? (The learners will be able to gain more from this question ifthey have watched the sequence about making TV adverts on the *Using Media* video.)
g No-one seriously thinks of adverts as presenting a reliable picture of the world as it is (for instance, compared with an account in an encyclopae-

dia). Yet together, the many adverts that we see undoubtedly have some impact on our way of seeing the world. 'Step back' from the advert for a minute and think about the world it presents – imagine, and describe, what our world would be like if it *really* resembled the world in the advert.

Let the groups present their findings. Discuss as a whole class how different groups saw the same adverts, and compare the findings on the three different adverts. For instance, some might rely on *humour* rather than an 'image' such as sexiness, success, power, 'the good wife/mother', and so on. Very often, the underlying 'connection' in humorous adverts (especially if the humour is subtle) is the following: 'If you, the viewer, are intelligent enough to appreciate what makes this advert funny, then this is the sort of product that will appeal to you as the advert did.'

Our comments

The first question should lead learners to look at the *denotative* meanings present in the advert they are studying. If it *denotes* young people having fun while offering a brand of cigarettes around, the advert will be providing no information about the product at all.

Questions a, b and *c* lead the learners to delve into the advert's real appeal– through its *connotations*, i.e. through making *associations* or 'connections' between the product and 'good times' or some other 'image'.

It will be interesting to hear how learners respond to *question e*, but a point to be made here – by the teacher if necessary – is that viewers have to actually *'make the connection' for themselves* between image and product by *re-interpreting* the images and/or the product, probably in new ways. For instance, in the advert depicted on our video, the viewer has to grasp the connection between the car's appeal and the appeal of good-looking members of the opposite sex, between the car and youth, and between the car and the athletic performance track. These are suggested by the skill with which the advert is designed and made, but the final connection is up to the viewer.

Question f will focus learners' attention on the technical effort and expertise that goes into the making of sophisticated advertisements today. The final question should lead into an interesting discussion of 'the world according to advertisements' – a world in which most people are young and good-looking, life is lived at a rapid pace, things usually go right without hitches (and if they go wrong it's always funny), and in which 'what we have is how we're judged'.

Further activities with advertisements

Here are five follow-up activities that we recommend:

ACTIVITY 42

a Design an advert in which nothing at all is said about the product. In other words, tell your 'story' entirely through
  - the images you use;
  - the feeling 'connoted' by your juxtaposition of images.
b Design an 'anti-ad' or 'subvertisement'. Show the following mock- advertisements to the class, and get the learners to design their own 'anti-ad' that satirizes the lure oftoday's well-known adverts.

We recommend that you tackle at least one of the first three activities yourself. Spend about 60 minutes on this.

Saide
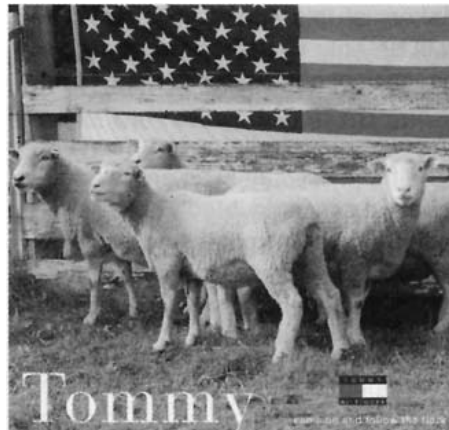
c Show your class the *Using Media* video sequence on the making of a television advert (24'50"), and set questions relating to it, such as:
  - What is the connection the audience is meant to make as a result of seeing the advert in which good-looking young men and women are distracted from good-looking members of the opposite sex by a car?
  - What does this video tell us about the *inappropriateness* of the phrase 'What you see is what you get' in talking about television advertisements? (Listen to what the producers have to say.)
  - Do you think this *matters*? Do modern viewers believe that adverts say important things about products? (For instance, that cars drive around athletics tracks?)

d Design a storyboard for a one-minute television advert. This, again, is an exercise where learners learn that messages are *constructed* through the juxtaposition of images, and of images and words. An example is given below:
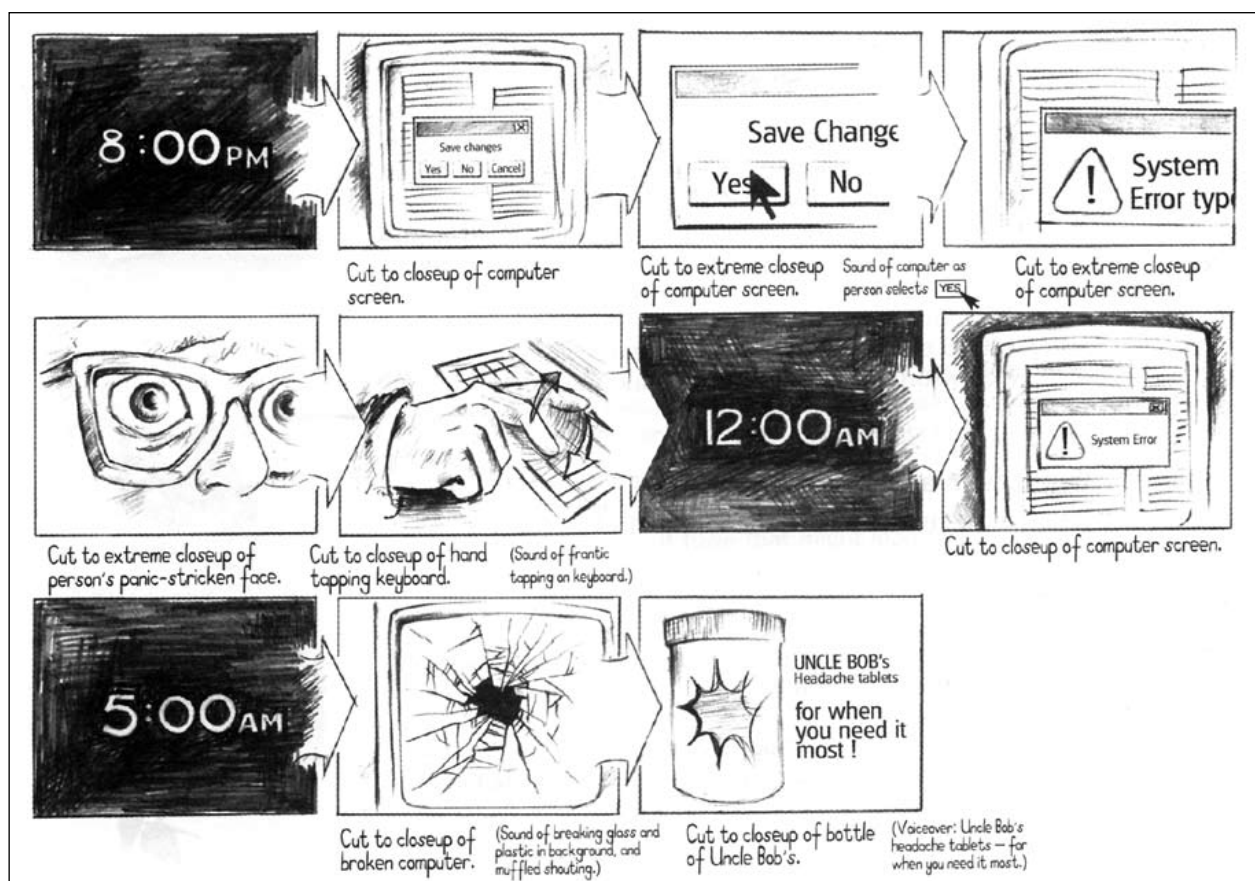
e Hold a discussion about whether, and how much, we might be influenced by the *values* conveyed by today's advertising. We suggest you make this a panel discussion rather than a debate, since the latter form may prevent speakers from changing their minds during the course of the discussion. You may need to provide topics that will help learners identify some of the possible values:

- Do we weigh up the acceptability of other people in the urban crowd according to whether they are wearing in-fashion designer label clothes?
- Is it true today that *getting* and *having* are more important than who we are?
- How does today's advertising make us feel about age and older people?
- What do advertisements tell us about the nature of adventure?

Using soap operas and game shows to teach critical thinking

Soap operas

As with violence on television (see pages 115-117) I the question of whether the hugely popular soap opera format influences the values of young viewers requires more than a simple answer. Substantial numbers of adolescents and even younger children in South Africa certainly watch this type of series, which was originally designed for the so-called 'housewife' audience (hence the name, derived from the product typically advertised during such programmes).

Soap operas vary from the 'grand' soaps in which the main characters are extremely wealthy, powerful, and impeccably dressed at all times, to the 'neighbourhood' soaps in which viewers can more easily identify with characters like themselves.

You should have spent about 81 hours on this module so far.

South Africa's most popular 'grand' soap is *Generations*. This is so popular that a divorce among characters becomes newspaper news! A 'neighbourhood' soap such as *Isidingo* reflects a mix of people, but also attempts to comment on social issues. *Soul City* is a version of a soap opera designed to educate people about health issues through an ongoing drama.

Will you marry me?

Love is in the air on SABC3's soap, and 'Isidingo' fans couldn't be happier for Pippa and Derek. But what about Seipati? And why is Cherel being so nice to Philippa?

Reproduced from *The Star*, 'Tonight' section

Reproduced from *The Sowetan*

At one level, virtually every regular viewer can tell you that they know the stories and characters are completely fictitious. However, no other television or radio programme earns the kind of loyalty among viewers, and the concern for what happens to the characters, that soap operas command. Regular viewers seem to get caught up in the lives of the characters in their favourite soaps, and to discuss them with friends almost as if they were 'members of the family' (here 'they' and 'the family' could refer to *either* the viewers and the soap opera families or the characters and the *viewers'* families). This is explicitly reinforced by the voice that introduces one afternoon soap: ' … these are the days of *our* lives'.

There are probably several reasons for this. There is the inevitable rambling plot which unfolds very slowly but ends every day on a note of suspense; the fact that the characters enter the viewer's life every weekday; the emphasis on the family as the core unit of the story (and of society); and the heavily-emphasized, meaning-laden looks (in close-up or in medium shot) which invite the viewer to think of the reason *why* this character is so angry, or why another character slammed the door.

But the fact remains that, although regular soap viewers may criticize characters whom they dislike, and never seriously envy the extremely wealthy lifestyles associated with some soaps, their lives are probably more closely touched by these series than by any other media format. Years ago, the 'Who shot JR (Ewing)?' episode of *Dallas* became an international event and a talking point in homes all over the globe – helped along, of course, by media publicity outside of the series itself.

It would be surprising if this kind of close, daily personal identification with the lives of the fictitious characters did not exert a subtle influence on viewers' values. For this reason alone, but also because of the strong *presence* of soap operas in our everyday world, they provide a fertile ground for planting 'seeds' of media literacy which will enable learners to be aware of the *connotations* of these slowly-unfolding stories – the *assumptions* and *values* that are just beneath the surface.

Here is an activity designed to do exactly that. It is suitable for group work in Grades 11 or 12.

We strongly recommend that you tackle this activity yourself, either in your tutorial group or on your own, *before* presenting it to learners. Spend about 90 minutes on this activity.

ACTIVITY 43

a Record a selection of brief scenes from a selection of soap operas of both South African and overseas origin.
b Start the lesson by asking the class whether they (or members of their families) watch any soap operas. Get them to talk informally about what their favourite soap operas are (if any), why they like them, and so on.
c Play the recorded selection to the class, and ask them to identify which soaps they come from while the worksheet is handed out.

Here is one way to set out the worksheet:

'BRAINWASHED'?

THE WORLD ACCORDING TO TELEVISION SOAP OPERAS

Discuss the following questions in your groups before writing down your own answers in the blocks provided:

Questions	Soap opera 1 Name *e.g. The Bold and the Beautiful*	Soap opera 2 Name	Soap opera 3 Name
1 What soap opera does this extract come from?			
2 What are the *relationships* between the characters in this scene?			
3 What is their *social class* status? Are they wealthy (or apparently wealthy) or working class, for instance?			
4 How many *children* appear in this scene? Do children appear elsewhere in this soap?			
5 Are the characters at *work* in this scene? How are work and the workplace generally depicted in this soap?			
6 Briefly, what gave rise to the situation depicted in this scene? If you don't know, can you work it out?			
7 What *drives* the main characters in this soap to act as they do? Towards what are their energies generally directed?			
8 If aliens out in space were to pick up our television signals while soap operas were being screened, describe the impression they would get of earthlings.			

With activities of this nature, it is Important that teachers playa *mediating* role, both in selecting 'typical' rather than atypical scenes for recording, and in helping learners to move from simple observation of a scene's 'denotative message' (the story as such) to a discussion of the scene's *connotations* (the assumptions and values that underlie the story). The questions above will help sortie of these connotative meanings to emerge.

What should emerge from a discussion of these questions?

• Most soap operas are centred around a family or a few families. Even work- based soaps tend to depict the main characters as a sort of 'family'. However, except for

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some 'neighbourhood' soaps, this does not mean they are characterized by homely 'family values' – the family is often divided by conflicting loyalties, jealousy and struggles for power or money .

- Many soaps depict a somewhat unreal world of wealth in which the working class, if they appear at all, are generally at odds with the wealthy main characters. The first TV soap screened in South Africa – *Rich Man, Poor Man* – typified this. One evil working class character, Falconetti, who is motivated by revenge and jealousy, makes life difficult for everyone in the story. In some South African soaps, such as Isidingo: the Need, a much wider social spectrum is depicted, with characters displaying a mixture of good and bad qualities. These seem to be aimed at a wider audience (in terms of age, gender, colour, language and social class) that wants to identify more closely with the characters on a more realistic level. Here alliances and personal influence regularly cross barriers of colour, language group, gender and social class, and no social 'group' is seen as being automatically the 'underdog'. The underlying 'message' in Isidingo seems to be one of 'normalizing' social relations and relationships in a newly-democratic South Africa.

- The relative unreality of most soaps is underlined by the general absence of children (especially children younger than adolescents). If a child is introduced into the plot, it is generally to serve the purpose of providing an object for adults to fight over, or some similar 'trigger' for plot action. Likewise, because the emphasis in all soaps is on interpersonal drama, work is generally not depicted as a situation in which things are produced and work is done (though the work-based soaps, such as those set in hospitals or high-powered businesses, are sometimes an exception to this).

- Thus, the world as it is presented in many soap operas is one in which adults are free from the demands of work and bringing up young children – free to pursue goals and relationships that are often characterized by family solidarity against the outside world at all costs, the lust for power or wealth, jealousy, revenge, or the (often misguided) desire to 'save' somebody from their own wrong-headedness – these are the typical 'plot-motivators' of most soap operas.

- All of these, when woven together in a series involving many characters and plots, create a 'world' in which the values may be quite severely skewed towards materialism and treating other people purely as a means to achieving one's own desires. And some of the worst 'carriers' of these values - the most manipulative and destructive characters, because they are the ones 'we love to hate' and are thus important to the commercial success of the series - are allowed by the plot to go on and on, month after month, destroying lives without much apparent suffering themselves.

Soaps tend to reflect a world filled with simplistic 'good' and 'bad'. This has strengths and weaknesses. It clarifies value positions clearly. However, it points to the need for teachers to get learners to think beyond this simplistic 'right or wrong' view of the world.

As with all education involving a strong element of values, avoid 'sermonizing' when dealing with such issues (it is always counter-productive in a democratic situation). But create the sort of situation in which the learners discover for themselves the often negative and one-sided assumptions that we come to take for granted in the 'world according to soap'.

Game shows

Game shows are very popular with South African audiences. There are long waiting lists for people to appear on local game show programmes. Cynthia Mniki, from Umtata, decided to get her Grade 9 learners to look a little more closely at some of the game shows currently showing on South African TV channels. Here is the exercise she devised:

ACTIVITY 44

a During the following week, watch three game shows which are broadcast on television.

b Complete the table below using information from the programme and a TV guide.

Questions	Game show 1 Name e.g. *Win 'n Spin*	Game show 2 Name	Game show 3 Name
1 TV channel, day and time			
2 How would you describe the *audience* at which the show is aimed?			
3 How would you describe the role taken by the presenters?			
4 Describe the relationship between the presenters and the contestants			
5 Were the contestants embarrassed in any way?			
6 Apart from displaying enthusiasm, how does the presenter generate excitement?			
7 What part does *luck* play in the game or contest, and how much scope is there for contestants' skill or other abilities?			
8 What does the *audience* (both the 'studio audience' and viewers at home) contribute to the show's effectiveness?			

Do this activity yourself before you try it with learners. Discuss your findings with other teachers. Spend about one hour *completing the table*. Think about how you would use it with your class.

An alternative to horne viewing and research would be for the teacher to pre-record a selection of game show excerpts, as for the soap opera activity above. The fact-finding should be followed by discussion, either in groups or in the class as a whole. The following questions could shape this discussion:

1 Why do you think people volunteer to go on game shows?
2 Would you ever go on a game show? Why or why not?
3 Do you think game shows have an influence on our values?
4 What do you think ofthe following ideas?

What did we think?

Game shows, like lotteries, scratch cards and slot machines in casinos, have become more popular and numerous as unemployment has increased and many people battle to make ends meet. Competitions and game shows with prizes most people would have found unthinkable became popular during the Great Depression, early in the 20th century. This was especially the case in the United States, where their promise of sudden wealth helped to sustain the 'American Dream', despite chronic unemployment. (The 'American Dream' was that anyone could become prosperous and happy in the United States if they just *worked hard* and used their initiative.)

Not only during the Great Depression, but even now, we find that initiative and hard work are not always enough, and are no guarantee of prosperity or happiness. Even if it were true that anyone can achieve prosperity, it is not possible for *everyone* to achieve prosperity. In a capitalist society like ours, everyone cannot be a company owner, or even an employed and well-paid worker.

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Game shows and gambles always involve a high level of risk ('The money, or the box?'). This emphasis on r*isk for the sake of a prize of cash or consumer goods* strongly reflects (and reinforces) the values of free-market capitalism. Free-market capitalism holds that those who are rewarded in life (with money, and an abundance of desirable consumer goods) are the ones who are willing to undertake risk in the 'marketplace'. It also tends to imply that those who remain *without* wealth and consumer goods are those of us who do not take entrepreneurial risks.

Game shows and gambles are also built on, and sustain, the myth that, if hard work is *not* in fact enough, all we need in life is a 'lucky break' for our 'dreams to come true' (even if the 'lucky break' involves some skill or other quality on our part). The 'dreams' may vary from a 'dream date and holiday with the partner of our dreams' to (more commonly) enough money to set us up for life, or at least for the next month. The fact is, of course, that the world doesn't work that way for the vast majority of people.

What have we learnt about media literacy?

Key learning points

- All media:
  - communicate *messages*;
  - are aimed at specific *audiences*;
  - are *produced* in a particular way, often with considerable planning and effort, to achieve these two ends.

Thus, there is usually a lot more to media messages than 'meets the eye'.

- Therefore, as media educators, we need to show learners:
  - how each medium reports the same event in a different way, and how form and content are closely related in media, so that the overall 'look' of a media product is in the end *part of its message*;
  - how to recognize the *hidden messages* that are carried by the popular media: both the *intended* manipulations and the underlying (often *unconscious*) assumptions and values that are carried by popular media – for instance, the 'news values' that govern the selection and presentation of news;
  - how to distinguish between the *denotation* of media messages, and their *connotations* – the meanings, sometimes stereotyped and sometimes 'engi-neered' by media producers – that we come to *associate* with the words, sounds and images in those messages;
  - that media messages are *not* direct representations of reality – they are *constructed* by the media makers who 'mediate' reality for the audience, but this is done in such a way that they will seem as natural as possible;
  - that partly because they seem so real and *natural*, and partly because their words and images often perpetuate stereotypes, media messages have considerable power to dull our thinking, and to shape our attitudes and values;
  - that audiences, however, are not entirely passive viewers or listeners – for media messages to 'work', viewers and listeners have to contribute to the construction of their meaning and, knowing this, media makers 'target' us in designing the messages they construct;
  - that the need to make a *profit*, and to influence audiences to buy consumer goods, influences the content and form of media messages-media companies essentially 'sell' an *audience* to advertisers;
  - that media contain *implicit* ideological and value messages, and that they can shape our social and political attitudes.

You should now start Week 15. You should have spent at least 84 hours on this module.

A summative assessment activity

Design a lesson or learning unit that develops learners' critical media literacy by focusing on a media format that we have not analysed in this module, for instance:

- men's magazines;
- the fashion or 'social' pages of lifestyle magazines;

This, again, is a time-consuming but important practical activity. It will help you revise what you have done in Section Five. Spend about six hours on it.

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- television sitcoms;
- popular music programmes;
- police or crime series;
- religious programmes;
- music videos.

a Clearly explain what learning outcomes you intend to achieve. Link these to at least two of the following:
  - the MAP framework with which we introduced this section (message, audience, production);
  - the set of Key Media Education concepts which added conceptual depth to the basic MAP idea; or
  - the distinction between denotation and connotation which we introduced on pages 164-167.

b Ensure that the unit is one that would:
  - arouse the interest of learners;
  - develop learners' *knowledge* (of critical and media concepts), *skills* (in analysing or 'deconstructing' media messages), and *values* (an awareness of the values underlying the media messages).

c Think of one further criterion – in addition to those mentioned in question b-by which you could judge the success of your lesson. *Either:*
  - teach the lesson or unit, and invite a colleague to observe it and help you assess it afterwards; *or*
  - assess your own plans for the lesson or unit, and discuss their likely effectiveness with a fellow learner.

d Write up the lesson or unit, and your assessment of it.

SECTION SIX

Using textbooks in teaching

Why are textbooks so important?

How are textbooks different from popular media resources?

'We must abandon textbooks,' a teacher told us recently. 'They are old-fashioned, biased, and boring.' He said 'modern' teachers should design their own 'learning materials'. He also said we should make far more use of newspapers and magazines, and of the 'experiences of our learners'. But when we visit schools we see many teachers *and* learners who are dependent on textbooks. Their work plans are copied directly from the textbook's contents pages. The notes they ask learners to copy from the chalkboard are summaries of textbook chapters. Often they read to their classes directly from the textbook.

These two extreme positions regarding textbooks will not help us to teach better. Textbooks are very useful educational resources. But they must be used well. In order to make the best use of textbooks within a media-rich teaching style, we need to understand how textbooks differ from the *popular* media resources we will use in our classroom.

Textbooks are designed in order to help people *learn*. Generally they are only used in educational institutions, such as schools or universities. Popular media have a number of different purposes. Some, like advertising leaflets, are designed to *persuade*, while the main functions of newspapers, magazines and television are to *entertain* and *inform*. When we read a magazine or watch television or read a novel, we do so mainly for enjoyment. Sometimes we listen to the radio or watch television or read a newspaper to keep up-to-date about current affairs. This could be regarded as *educative*, but only in an informal sense.

However, sometimes novels *are* read for study purposes. They are used as 'setworks' in Literature courses. At times we also use advertising leaflets to *teach* learners how to analyse adverts as part of an English lesson. We may read an encyclopaedia for study purposes: we might use it in order to find information to supplement our learning of a particular topic. *But in all cases the teacher has to turn these into learning resources.* In other words, we give the non-educational media a *new educational purpose.* In order to do this successfully, we need to have a good understanding of how people learn.

In resource-based OBE, worksheets or activity sheets are the most common way in which we're-purpose' popular media in order that they become educational. Work*sheets* ate generally short (they may only be used for one lesson), contain some information, but consist mainly of activities designed for group or individual study. Work*books* are a collection of activities and worksheets used to structure a week-long, or term-long, sequence of work. Both are designed to enable learners to work independently of the teacher. They would replace a lot of the teacher talk and note-copying time in current classrooms.

But, while worksheets – and the popular media included in these – may trigger learner experience and interest, they seldom include the content knowledge or conceptual development needed for good learning. This is why the teachers that we have met in this module so far tend to refer learners to textbooks (and other reference books) at various points in a learning programme. And, while worksheets or workbooks based on popular media should provide some kind of logical learning sequence, they are unlikely to provide the overall organizing structure for the subject. Textbooks can do this.

So how is a textbook different from other media resources? The *Shorter Oxford Dictionary* gives two definitions of *textbook*:

In Section Two we discussed this issue briefly. Can you remember what we learnt?

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- a book used as the *standard work* for the study of a particular subject;
- a *manual of instruction* in a subject of study.

In other words, good textbooks are different from other media resources in three key ways.

Textbooks select knowledge appropriate to a learning area and at a particular level

Textbooks are selections of the content required to learn and teach a particular subject or learning area at a particular level of study. Teachers, for instance, often speak of *history* textbooks or *mathematics* textbooks. In Curriculum 2005, 'subjects' are replaced by 'learning areas' but it is likely that teachers will continue to use, for example, a history textbook for some of their work in the learning area of Human and Social Sciences.

Some teachers argue that textbooks 'restrict' their freedom. We would argue that they assist teachers and learners in that they provide a useful *framework* for learning. They sketch what needs to be learnt but do not dictate that teachers or learners restrict themselves to this learning. Good teachers and learners will experiment with this framework. (See the example of a contents page on page 192. Notice how it 'frames' what needs to be studied.)

Textbooks organize knowledge in a manner which encourages appropriate learning

Good textbooks organize this information in a manner that encourages learning. They don't simply present bits of fragmented information. Instead, relationships are drawn between different pieces of information so that learners develop an understanding of the bigger concept. This allows them to think better and use information to solve problems. Good text-books have a logical developmental structure appropriate to the grade being taught. Turn again to page 194 and look at the contents page of a new Grade 5 History textbook.

Do you notice how the writers have organized the content logically? What we really liked about this contents page was that it used a series of *questions* to guide learners (and teachers) in a logical way through the history being taught. The logical order encourages good, systematic learning that results in understanding historical concepts rather than memorizing historical facts. The questions create a mentally active approach within learners and teachers: they are being *asked,* not *told*.

But good textbooks do more than this. Have a look at how the same text- book introduces new chapters (see page 183). Do you notice how, through a cartoon, the textbook:

- *summarizes its key points?* This allows readers to begin reading with a focus: they know what is important in the chapter.
- *makes connections between one topic and the next.* It refers back to the previous chapter – which dealt with *hunter-gatherers* – and explains that this chapter will show how hunter-gatherers became *herders* and *farmers*. These connections assist learners in understanding subjects holistically rather than as bits of information.

Textbooks are used by learners with the conscious aim of/earning

We tend to read textbooks with the conscious aim of study, of learning. We seldom read textbooks to be entertained! Writers also write textbooks with this kind of use in mind. While this has benefits – particularly in the care with which both learners and writers approach the text – it can also pose problems.

Many of us have a narrow view of what learning is. This is also a view that suggests that learning and life (and having fun) are completely different phenomena. People then question the value of learning that is too entertaining. For instance, one of the writers was once told that if he *enjoyed* a novel, the novel wasn't good literature! A consequence of this kind of thinking – and many learners, teachers and textbook writers are guilty of it – is that we may be suspicious of textbooks that are too closely linked with real-life experience, or which teach in a 'playful' way.

So, while we need to write textbooks in educationally sound ways, and use them seriously, this should not stop us from:

- using popular media to draw learners into textbooks, and then to assist them in applying new textbook knowledge to the real world;
- selecting textbooks that are written in a lively manner. Many good new textbooks are written in a conversational tone, include good illustrations, and link learning to the real world.

Quickly, as a form of revision, write down the *different* roles that textbooks and popular media play in teaching. Think of what the implications of these are for your teaching. Discuss this with a fellow teacher if you wish.

Why are textbooks so central to good learning?

One of the most important shifts brought about by Curriculum 2005 is that our learning outcomes must include:

- enabling learners *to do* things. In other words, they need to have the **skills** to *apply* the content knowledge they have learnt to activities in the real world.

- understanding concepts at a *higher level*. We need to develop conceptual **knowledge** rather than more and more low-level facts without any real understanding.

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Do you remember the points made about conceptual learning in Section 2.4? You may want to page back and re-read this section now. You may find that it makes a great deal more sense to you since you read it last, now that you have worked through Sections Three and Four.

- developing a *more thoughtful and reflective* **attitude**. In other words, we need to develop an ability to make and defend value decisions.

We need to spend less time teaching fragmented facts and content knowledge and more time developing sustained abilities to think, reflect, argue and problem-solve. Many people have argued that, in order to achieve this, we have to develop the reading skills of our learners: we need to develop these skills so that our learners are able to read and understand complex arguments and do so critically.

Popular media tend to be short, punchy, and focused on facts and not argument. Although they are useful in developing interest in reading, can develop lower-order reading skills, and can be used to begin developing critical analytical skills, they do not develop these at a level that will enable learners to live and work in the complex information society that South Africa is becoming. Textbooks, because they are designed *educationally,* and because they can be used to encourage sustained reading by learners, enable teachers to develop these essential higher-order skills. Through text-book reading, learners will see how information is linked in order to develop concepts: good textbooks model sound conceptual learning.

Desired learning outcomes

By the end of this section, learners will be able to:

- use textbooks more appropriately. In order to do this, you will learn about some of the advantages and disadvantages of using textbooks in formal teaching.

- select good textbooks. In order to do this, you will learn about some of the gener-ally accepted features of 'good' and 'poor' textbooks.

- teach learners to use all textbooks more interactively and critically. In order to do this, you will learn about ways in which you can improve the reading skills of your learners.

Checking your learning: How should you use these outcomes? You may find that they don't mean much before you study the section. That's why it is so important to check back regularly. Ask: 'Have I achieved any of these outcomes yet? What do I still need to learn in order to meet these outcomes?' Write down those things you still think you need to learn, and use them to focus your learning.

The strengths and limitations of textbooks

Two teachers, Thandenani and Mbali, work at a school near Johannesburg. When we visited them we found them in the middle of a debate about the usefulness of textbooks. We recorded their conversation and would like you to read through it. Make notes in the margin whereyou agree or disagree with a point made by either teacher.

Mbali: *I don't have time to develop my own learning materials! And I can't develop materials as good as textbooks. I like making work-sheets and charts and using newspapers and magazines, but I need my textbook. The headings and sub-headings help me to plan my work. My learners like it because they can use it to work on their own …*

Thandenani: *Maybe. But you have a **good** textbook. I don't. My learners complain that my textbook is boring and difficult. When I give them homework from it, they do nothing.*

Mbali: *Yes, but is that the textbook's fault … or because they haven't been taught how to use textbooks?*

Thandenani: *I don't know. But asking my learners to read at home is just a waste of time. I think another problem is that my learners disagree with the apartheid bias in the textbook … it's very much out of date.*

Mbali: *Yes, but you teach history! Why don't you use this textbook to teach them about bias in history? It's ideal!*

Thandenani: *Hmnn … that's an idea.*

Mbali: *But you would have to help them read their textbooks critically. Show them how they can use the contents pages to find their way around the book. Or how they can scan a chapter for relevant information …*

Thandenani: *I thought that was the English teacher's job!*

Mbali: *Partly … But learners need to practise … and not just in their English classes. That's why I want textbooks, even if they aren't perfect. I ask learners to do activities from the book, or I can ask them to read ahead in preparation for the next lessons … text- books give them the opportunity to develop their reading skills.*

Thandenani: *Yes, but what about the bias in my book? You ignore that question. My learners simply refuse to read it. I refuse to read it!*

Mbali: *Well, that's a bad attitude! All textbooks have some bias. In fact, all teaching is biased. Do you mean to tell me that your own learning materials aren't biased? We need to teach our learners how to read critically …*

Thandenani: *Hmnn! This sounds like even more work!*

Mbali: *I don't think so. Teaching learners to recognize bias, to read critically, is one of the outcomes in Human and Social Studies. I get really worried about learners who think that because something has been written in a textbook it's 'the whole truth' …*

ACTIVITY 45

a How do Mbali and Thandenani differ in their attitudes to using textbooks as learning resources?

b What is your opinion about textbooks? Can you think of any other strengths or limitations textbooks may have?

Don't spend more than 30 minutes on this activity. When you have completed the activity, turn to your audiotape and listen to Part 5. A number of teachers and researchers discuss some of the strengths and weaknesses of textbook use.

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The strengths of textbooks as learning resources

First, Mbali says textbooks assist her in planning her work. If she works from a well-written textbook, the work to be learnt will be presented logically and links will be made between one chapter and the next. Obviously, this means that the textbook would also assist learners in planning their work. In other words, it could act as the beginning of a set of transparent 'outcomes' that could guide learning in her class.

Second, textbooks also allow Mbali to set independent work for her learners. This achieves an important learning outcome – developing autonomous and independent learners. It also has a practical benefit – it saves scarce class time for important and difficult parts of the syllabus. Learners use a textbook for homework tasks. This allows Mbali more class time to deal with difficult concepts that require her expertise as mediator.

Third, textbooks provide learners with reading material through which they can develop and practise their reading skills. Good textbooks present reading at a level appropriate for your class. They also provide lengthier pieces of writing that model ways of thinking and reasoning. This develops the more advanced reading skills learners require but would not get from short magazine or newspaper articles.

But, as Mbali suggested earlier, we also need to teach learners how to detect bias in textbooks. Reading is more than being able to recognize the words on a page. Good readers are able to recognize when information is presented from only one angle, and are able to propose another possible view. This is sometimes called critical literacy. *Critical* literacy is another outcome listed in South Africa's OBE cross-field outcomes.

Finally, when all learning area teachers encourage their learners to read textbooks, a much richer reading environment is created in school than that which would exist if reading were only practised in Language lessons.

Many of the points made about media literacy in Section Five can be applied to textbooks too. Think of using some of the analytical activities in Section Five to teach your learners how to analyse their textbooks. Towards the end of this section we provide ideas about how to read textbooks critically.

The limitations of textbooks as learning resources

First, we noticed that Thandenani's learners found textbooks difficult to read and understand. It seemed their difficulty stemmed from the learners' poor command of English. But many textbooks are also poorly written, or written without linking new and abstract knowledge with the life experiences of learners. This makes the text difficult, which often results in learner boredom. These are legitimate criticisms. But what do we do about them?

As Mbali suggested, we can't improve reading skills unless we get our learners to read. And our learners will only read if we teach them how to read, provide books through which they can practise their reading, and develop interesting reading tasks so that they are motivated to read. Mbali, although not a language teacher, taught her learners how to read. She showed them how to use contents pages, and how to scan for key points. She also often gave them questions to guide their reading. You will notice that good textbooks, like good teachers, provide this assistance too.

But Mbali didn't tackle the other problem: some textbooks are simply boring! Can you think of ways of addressing this problem? One reason why they seem boring is that learners cannot relate the new information to their lives. They cannot see why it is relevant. So perhaps one way of reducing boredom is by introducing learners to textbook reading through a class activity which enables them to see how their reading links up with real life. This is where other media, such as newspapers or television, may come in useful.

The second textbook limitation raised by Thandenani was that they become outdated. In some cases, the problem is extreme. In South Africa, for instance, we are moving from an apartheid education system into a non-racial, democratic system. Yet some texts, especially in subjects like History, still present a history biased towards white colonial settlement in South Africa.

Textbooks can be out of date in at least three ways:

- *They may present biased content.* For instance, in many old History text- books, the history of Indians in South Africa was titled 'The Indian *problem*'. White settlement was never regarded as a problem, although it clearly created many problems! As Mbali notes, even new textbooks that appear to be a neutral source of information, may present some people and some cultural practices in a favourable way and others in an unfavourable way.

- *They teach in a manner that is at odds with the main aims of new education policy.* Old South African textbooks present information in a didactic way that emphasizes the recall of facts. This is at odds with the new emphasis on a teaching style that develops critical thinking skills, a democratic and tolerant attitude, and an ability to use the knowledge learnt.

- *They may not meet all the requirements of a current learning programme.* South Africa's new syllabuses ask that teachers and learners cover content that wasn't covered in the past. This will become an ever-increasing problem in a world where important knowledge changes rapidly. As teachers, we need to be aware of this new information and supplement textbooks with information gathered from newspapers, magazines and other books.

The final problem about textbook use was raised by Mbali. She said that learners may accept a textbook as 'the gospel' on a topic. This leads them to memorize information rather than debate the ideas critically. It might also lead to lazy teachers simply reading from the textbook rather than teaching in an imaginative way. We weren't convinced that this was a serious problem. Thandenani's learners seemed to have no problem recognising the bias in old apartheid textbooks. Yet, in many cases, learners still rote learn this and reproduce it in exams. They do this because their teachers reward them for this kind of learning!

So, we think this problem can be overcome if teachers use textbooks imaginatively:

- Set activities and exams which encourage learning for *understanding* rather than rote learning.

- Supplement your textbook with other textbooks and other popular media in order to present alternative views on a particular subject.

- Teach learners how to read critically and how to analyse texts.

At this point we are simply listing the strengths and limitations of textbooks. Later in this section we provide a number of ideas about how you can use textbooks in learning.

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6.3 How do we select textbooks appropriately?

Some features of 'good' textbooks

One of the exciting but challenging features of South Africa's new schooling policy is the power teachers now have over the selection of textbooks. This offers good teachers the freedom to choose textbooks that best meet their teaching needs rather than having to manage with textbooks that aren't particularly appropriate. But it also poses a new problem: what criteria do we use to assess the quality of textbooks? What is a 'good' textbook?

ACTIVITY 46

Think about all the textbooks you have ever used as a learner and as a teacher.
a Which one have you liked best as a *learner*?
b Which one have you liked best as a *teacher*?
c Can you explain why have you chosen these two?
d Compare your ideas with those of a fellow student or teacher.

Spend no more than 30 minutes on this activity.

What did we find?

You may have noticed that opinion about what constitutes a good textbook varies widely. This is one of the big problems in selecting textbooks. Let's examine four South African attempts to develop a set of good textbook criteria. Read through the checklists on page 187. You will notice that we have started listing common criteria in the centre of the page. Can you identify the rest?

ACTIVITY 47

We'd like you to develop your own 'Textbook Selection Checklist'. In order to do this, we'd like you to:
a Complete the *'Good textbooks: Criteria common to most checklists'* list that we started. Check for other criteria that are accepted by at least three of the four checklists. Do this carefully. You may find that writers use different words to describe similar criteria.
b Then, re-read your answer to Activity 46. Can any of the reasons you mentioned for liking a textbook be added to this 'checklist'?
c Do you think any of the criteria mentioned by two or less of the check-lists are so important they should be included?
d Describe each criterion in more detail. We found many of these criteria so brief they were difficult to understand and thus to use when selecting textbooks.

Include your checklist in your workbook. You will use it later.

This is an important assignment. Spend at least 90 minutes on it. Once you have completed it, you should listen to Part 5 on your audiotape. Do these researchers add anything new to your ideas?

1 Langhan: 1993

a Is new information always linked to what learners already know?

b Do titles and headings clearly indicate the topics to be dealt with?

c Are vocabulary and sentence structures appropriate for the reading competence of my learners?

d Are the meanings of unknown or difficult words and concepts clearly explained?

e Is information presented in a logical manner?

f Does the textbook tell the reader 'everything'?

g Do passages 'point' clearly to the things they are talking about?

2 Media in Education Trust: 1998

Good educational texts should:

a build new knowledge on what learners already understand and know;

b use language that is easy for learners to understand;

c use examples that make the knowledge relevant to the learners' lives;

d ask questions which promote critical thinking and problem- solving;

e   encourage a 'hands-on' approach to learning;

f have activities that incorporate reading, writing, listening and speaking;

g have activities that go beyond the boundaries of the classroom;

h encourage learners to think about their own values and attitudes; acknowledge that there are diverse cultures and beliefs in our society;

j avoid gender and racial stereotypes;

k present different views on an issue and encourage learners to make an informed choice; present information in interesting ways that will encourage a love for learning;

m present information in the form of pictures, diagrams and tables, and not only in text form.

Good textbooks: criteria common to most 'checklists'

1 Must build on learner experience and knowledge (Langhan (a), Reed (a) and MIET (a))

2 Must be written at a level appropriate to the reading competence of my learners (Langhan (c), MIET (c), and maybe *The Teacher*(a))

3 Must be structured logically and in a manner that assists learning (Langhan (e), Reed (g), and maybe also Langhan (b)?)

4 …

5 …

6 …

3 Reed: 1997

Good textbooks should:

a engage learners, tap into their interests and immediate concerns, and extend their understanding in a creative and critical way;

b engage learners' attention;

c be lively and appealing to learners;

d be 'inclusive' rather than 'exclusive'; that is, they should reflect a diverse range of race, culture, gender, class, and geographic contexts;

e include visual materials;

f include a range of text types and vary the ways in which information is presented on the page;

g be pedagogically sound; they should demonstrate an understanding of how learners learn the particular subject, should teach in a logical and clear manner, and should provide educators with suggestions of how to deal with common learning difficulties in that subject area;

h support learners as they work through sequences of activities (i.e. provide scaffolding for learners); include helpful examples and a range of carefully developed activities.

4 The Teacher: 1996

a Is the textbook well-written and accessible?

b Does it cover the required content, concepts and skills in sufficient detail?

c Does it offer the language support my learners need?

d Does it include enough activities to build the required skills and assess learners' progress?

e Is the textbook written in a manner that will interest learners and encourage them to learn?

f Does it teach skills and understanding that will assist learners in other learning areas and in future studies?

g If I were a learner again, would I like to learn from this book?

Saide

- Langhan's checklist is based on learner difficulties with Grade 5 Geography textbooks. His research report was published in 1993 by the Human Sciences Research Council as 'The textbook as a source of difficulty in teaching and learning'.
- Reed's checklist is based on the opinions of textbook writers. The research was done for a 1997 distance education coursebook titled *Developing English Teaching and Learning Materials*, published by the University of the Witwatersrand.
- The checklist for The Teacher appeared in the June 1996 issue.
- The Media in Education Trust checklist is taken from *Ideas for Resourceful Teaching*, published in 1998.

Our 'good textbook' checklist

We found reading through other people's good textbook criteria interesting. Here is the checklist we came up with. We drew from all four checklists but organized our checklist into a key question and then a set of supporting criteria. In all cases we decided to be selective and to choose what we believed were the three most important criteria in support of each question. So, for instance, you will notice that our question is: 'Is the textbook written in a style and language that is accessible to my learners?' In order to answer this question systematically, we believe you need to explore criteria related to language level, structure, language support, etc. We have left space for you to add criteria that you feel should be included.

Textbook Selection Checklist

1. **Is the textbook written in a style and language that is accessible to my learners?**   Yes   No
   - Difficult and new words and concepts are explained when they are first used, and reinforced when used subsequently.   ☐   ☐
   - The textbook is written in a conversational style and uses short, active sentences.   ☐   ☐
   - The textbook provides the language support my learners need. It includes activities that develop reading, writing, listening and speaking skills.   ☐   ☐
   - …   ☐   ☐

2. **Is the textbook's structure and sequencing clear and logical?**   Yes   No
   - The textbook includes a clear and descriptive contents page.   ☐   ☐
   - Titles and headings clearly indicate what will be covered in different chapters or sections.   ☐   ☐
   - Paragraphs are well structured, with clear topic sentences that are followed by the logical development of ideas.   ☐   ☐
   - …   ☐   ☐

3. **Is the textbook written in a manner that links with the lives of my learners?**   Yes   No
   - New information is linked to what learners already know (to the learners' existing background knowledge) or it actively builds up the necessary background information.   ☐   ☐
   - While it taps into my learners' interests and immediate concerns, it also extends their understanding of familiar concepts in creative and critical ways.   ☐   ☐
   - The textbook demonstrates how knowledge can be used in life: it encourages a 'hands-on' approach to learning.   ☐   ☐
   - …   ☐   ☐

4   Is the textbook structured so as to develop higher·level conceptual knowledge in the subject! learning area?   **Yes**   **No**

· The textbook covers the required content, concepts and skills of my subject/learning area in sufficient detail.

· It is structured in a way that demonstrates an understanding of how learners learn in particular subjects. It teaches the subject in a logical and clear manner.

· The textbook includes enough activities to build the required skills of learners and not just their content knowledge. It also supports learners as they work through sequences of activities (i.e. it provides scaffolding for learners).

· …

5   Is the textbook designed in an attractive and user·friendly manner?   **Yes**   **No**

· The textbook includes a range of text types and varies the ways in which information is presented on the page.

· It presents information in the form of pictures, diagrams and tables, and not only in text form.

· It includes helpful examples and a range of carefully developed activities.

· …

6   Is the textbook committed to teaching in a non-discriminatory and critical way?   **Yes**   **No**

· The textbook reflects a diverse range of race, culture, gender, class and geographic contexts (and examples), and avoids using stereotypes.

· The textbook encourages learners to think about and question their own values and attitudes, and acknowledges the diverse beliefs in our society.

· It presents different views on an issue and encourages learners to make informed choices.

· …

7   If I were a learner again, would I like to learn from this book?   **Yes**   **No**

> You may want to evaluate textbooks that you are currently using. Use this checklist to do so. Try to do your evaluation with other teachers. Discuss your findings.

How does our list compare with your own? Did the textbook you liked best (go back to Activity 47) include these characteristics?

Textbooks written for use in countries that take an outcomes-based approach to teaching and learning usually state the possible learning outcomes associated with each unit or chapter in the book. This is beginning to happen in South Africa and so teachers and learners may consider clear statements of learning outcomes to be another characteristic of a good textbook. You will notice that we have included this idea using slightly different language under 2: *'Titles and headings clearly indicate what will be covered in different chapters or sections'.*

Saide

Some features of 'poor' textbooks

A quick and easy way of recognising poor textbooks would be the absence of some of the 'good textbook' criteria, In other words, if your evaluation leaves you with a list of 'No's', then you could conclude that you've lust looked through a poor textbook! We will demonstrate how you can use the criteria in order to analyse a few pages from a Geography textbook.

Textbook makes no attempt to link with learner background knowledge and skills. The first sentence defines a new concept, 'climate', in terms of another concept that learners probably don't understand, namely 'weather pattern'.

Headings and subheadings don't guide readers through the text. The topic is 'Climate' yet all the sub-headings refer to 'rain'. Rain is only a part of the concept 'Climate'. Sub-headings should develop an understanding of the key concept.

Logic of paragraphs Is poor, Poor use of topic sentences. Paragraph 1 begins with a topic sentence but the rest of the paragraph doesn't develop the 'topic'. Paragraph 2 begins talking about 'rain-bearing winds' but carries on this discussion in paragraph 7. The textbook is written in a fragmented way that makes understanding difficult.

The Climate of the RSA

Climate is the **weather pattern of a particular area**. For instance, in the south-western Cape Province, the climate in winter is spells of cool, rainy weather followed by lovely sunny days. In chapter 2 you learned about the weather. You should by now have started making your own weather chart (see p. 10). Study it and say what the weather pattern in your area has been lately.

RAIN-BEARING WINDS

As you probably already know, wind brings moisture to the land. As you remember from standard 2, hot air rises and cold air sinks. In the interior of the RSA the summers are hot, so the air rises. Warm, moist air from over the Indian Ocean flows in to take its place. This causes summer thunderstorms. When the moist air reaches the escarpment it is forced to rise and rain falls. There is also a lot of mist in this area. Thus, the air loses a lot of its moisture before crossing the mountains of the escarpment. This is why less rain falls on the western side of the mountains and the climate gets drier and drier the further west one goes. It gets so dry that there is a desert along the west coast of southern Africa (mainly in Namibia). *Find out what this desert is called.*

THE RAINFALL ZONES OF THE RSA

The following map (no. 1) indicates the

28

Map 1: The rainfall zones of the RSA

CAPE TOWN

Rainfall in Cape Town

MOSSEL BAY

Rainfall in Mossel Bay

29

Vocabulary and sentence structure are Inappropriate for Grade 5 learners.

Within the first two paragraphs, two difficult words – 'spells' and 'rain-bearing' – are introduced without explanation. A better way of structuring this chapter would be to talk first about daily and seasonal changes in the weather, something most learners would be familiar with and be able to relate to. The chapter could then conclude by drawing on this familiar knowledge to explain the concepts 'climate' and 'weather patterns'. The final sentences could be something far easier to understand, such as: 'Remember: the weather is changing all the time. The climate of a place is the story of the weather in winter or summer or for the whole year.'

Information is presented In a confusing way. This Is caused mainly by poor links between words and diagrams used,

Paragraph 2 explains the way in which rain is caused. This would have been far more easily understood if sketches had been used to illustrate the process.

References to Map 1 are also confusing. For instance, the map has three references to ram-bearing winds. The explanation refers to only one set of rain-bearing winds. The map makes no reference to an 'escarpment' while the paragraph does. In addition, the graphs and maps used are not particularly attractive and are sometimes confusing.

mm
130
120
110
100
90
80
70
60
50
40
30
20
10

J F M A M J J A S O N D
DURBAN
Rainfall in Durban

mm
130
120
110
100
90
80
70
60
50
40
30
20
10

J F M A M J J A S O N D
PRETORIA
Rainfall in Pretoria

125 mm to 250 mm — Very dry
250 mm to 375 mm — Dry
375 mm to 750 mm — Average rainfall
750 mm to 1 000 mm — Wet
More than 1 000 mm — Very wet

Map 2: Average annual rainfall

rain-bearing winds, the season when they blow and the rainfall zones of the RSA. *Study it carefully and then answer these questions:*

(a) *In which rainfall zone is your town or city situated?*

(b) *When does Cape Town get most of its rain?*

(c) *Does Cape Town or Port Nolloth get more rain?*

(d) *When does Mossel Bay get its rain?*

(e) *When do Durban and Bloemfontein get their rain?*

(f) *Does Durban or Bloemfontein get more rain?*

The diagrams above show how much rain usually falls each year in Cape Town, Mossel Bay, Pretoria and Durban. Each black line stands for a month. The longer the black line, the more rain usually falls in that month. The numbers up the side show how many mm rain usually fall. So, 130 mm rain usually falls in Pretoria during the month of January and 30 mm rain usually falls in Mossel Bay during the month of June.

Study the diagrams and decide in which rainfall zone each town or city falls. Now find the places on the map and see whether you were right.

30

HOW MUCH RAIN FALLS IN THE RSA

Map no. 2 shows how much rain usually falls in the RSA every year. *Study it carefully and then answer the following questions:*

(a) (i) *Name three regions which have more than 1 000 mm rain per year.*

(ii) *Think about what you learned about rain-bearing winds. Now try to explain why these areas have so much rain.*

(b) *Which area of the RSA has the lowest rainfall per year? Why?*

(c) *Does East London or Cape Town usually have more rain each year?*

(d) *How much rain usually falls in Johannesburg each year?*

(e) *Work out where your home town or city is on the map. Now say how much rain usually falls each year where you live.*

RELIABILITY OF THE RAINFALL

When we learnt about rain-bearing winds (p. 28) we saw that when the moist air from the Indian Ocean is forced to rise against the slopes of the escarpment, it loses most of its moisture, so the areas west of the

escarpment are dry. Look at a map and you will see that this means that most of the RSA is dry. In other words, it has a low rainfall which mostly falls in the form of scattered thunderstorms. These areas often suffer from **drought**. A drought is when far less rain than normal falls in an area. Often in these areas the rain falls in strips. This means that while one farm gets a good fall of rain during a thunderstorm, its neighbour gets none.

Logic of paragraphs Is poor.

Poor use of topic sentences. The 'rain-bearing winds' mentioned in paragraph 2 on page 28 are only discussed in paragraph 7. The textbook is written in a fragmented way that makes understanding difficult.

Headings and subheadings don't guide readers through the text.

The topic is 'Climate' yet all the sub-headings refer to 'rain'. Rain is only a part of the concept 'Climate'. Sub-headings should develop an understanding of the key concept.

We have only focused on some weaknesses in this textbook. You may want to focus on a few more. It is important to evaluate textbooks in relation to your learners' interests and background knowledge *and* the textbook's ability to develop new understandings of the subject (learning area). Next we will evaluate what we regard as a 'good' textbook. You might want to compare the way it is written with this example.

These sample texts are taken from Hattingh et at. 1981. *Our New World 3.* Cape Town: Maskew Miller Longman.

Evaluating the quality of textbooks

There will probably never be a 'perfect' textbook. For one thing, writers have to try to write for teachers and learners who work in a wide range of contexts, and it is very difficult to meet the interests and needs of everyone. For another, publishing text-books is expensive and sometimes publishing companies put limits on the number of photographs or illustrations or the amount of colour that writers can include because these add to the cost of producing the books. However, some textbooks are definitely much better than others. Let's have a look at the contents page from a Grade 5 History textbook and see to what extent this demonstrates some of the characteristics of a 'good' textbook.

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You should now begin Week 17. You have completed 96 hours of work on the module.

Saide

It begins with information for teachers about how they might use the book.

Chapter 1 'sets the scene' by explaining what the book is about and how the information is organized.

The book asks the kinds of questions that might arouse learners' interest.

Contents

Several of the chapters end with a summary (What have you learned in this chapter?), and there is a summary of the whole book at the end of the final chapter.

There is a glossary (a word list with explanations) of difficult words at the end of the book. These are explained in English, Sesotho, Setswana, Sepedi, isiXhosa and isiZulu.

These contents pages as well as the pages that follow are taken from Clacherty, G. & Ludlow, H. 1995. *Looking into the Past, Grade 5*. Cape Town: Maskew Miller Longman.

We believe that's a pretty good start for this textbook. But obviously we can't end our evaluation at the contents pages! So we pulled out two other pages from Chapter 5 of this textbook. Let's have a look at them.

The speech bubbles at the beginning of the chapter summarize what the chapter will be about.

Learners see drawings of other learners like themselves who 'speak' to them. This may encourage them to read the text.

The most important new concept (domesticated) is printed in bold type and is carefully explained. The process of domestication is explained in both words and pictures.

Key words that contribute to the explanation are printed in italic script.

The two maps help learners to compare where hunter-gatherers lived 10 000 years ago with where they live today.

The writers do not claim to know 'everything'. Notice that the boy says: 'We are not sure how or why people began to domesticate plants and animals. It could have happened like this.'

Saide

When you thought about any features that you might wish to change, you may have noticed that it is not clear in which order learners should read the speech bubbles in the introduction. You may also have noticed that the 'Did you know?' block mentions hunter-gatherers in only three places in the world, but the map shows many others. None of the places are named on the map and so the teacher would need to guide learners here.

Now we'd like you to do your own evaluation of excerpts from another textbook. We will not tell you whether we believe this to be a good textbook or not: you make your decision before we tell you what we think.

This is an important activity. Spend about an hour carefully evaluating these excerpts. You may want to re-read this unit to guide your evaluation. You might also want to use the checklist you developed earlier to evaluate this textbook.

These pages are taken from Wenman, J. & Viljoen, S. 1998. On Track with English, Grade 7. Cape Town: Phumelela Books.
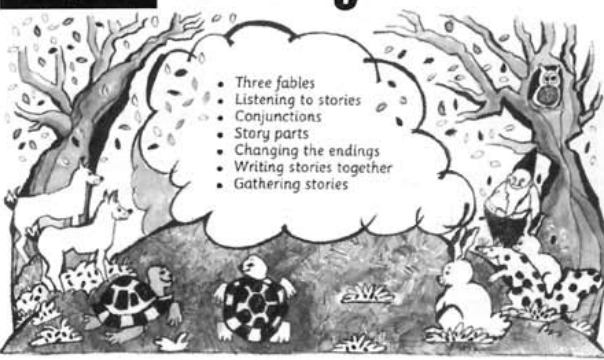
ACTIVITY 48

Read the extracts from a unit from *On Track with English*, a Grade 7 text-book.
a Decide which of the features of a good textbook are demonstrated in these pages.
b Suggest any changes that you think would improve these pages.

Fable 2:
The Crocodile and the Cat

Cat wanted to cross a wide river. There was no bridge and Cat was scared of water. While Cat was sitting on the river bank deciding what to do, Crocodile, who was as sly as a thief, swam up to Cat.

5 Crocodile said in his sweetest voice, 'Good day to you, Mr Cat. You look lost. Can I help you?'
Cat, who always trusted everybody, told Crocodile his problem.
'I need to cross the river, but I can't swim,' said Cat.
10 'No problem,' said Crocodile, 'I can swim. I will give you a ride on my back.' Innocent Cat did not realise that Crocodile was sly and that Crocodile had not eaten for days. Crocodile was starving hungry and would do anything to get food.
15 'What do I have to pay you for the favour?' asked Cat.
'Just sing me a song while we cross the river, that's all I ask,' said sly Crocodile.
Cat had a feeling something was wrong, but had no
20 other way of getting to the other side of the river. So he hopped onto the back of Crocodile and started to sing as they went across the river. When they reached the middle where the river was deepest, Crocodile turned his head, opened his huge jaws and, like a
25 bird swallowing a worm, Crocodile swallowed Cat.
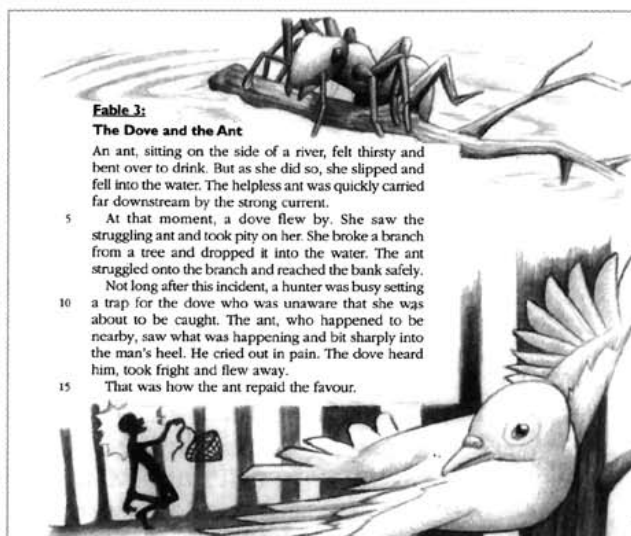Never ever, dear friends, cross the river on the back of a crocodile.

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Fable 3:
The Dove and the Ant

An ant, sitting on the side of a river, felt thirsty and bent over to drink. But as she did so, she slipped and fell into the water. The helpless ant was quickly carried far downstream by the strong current.
5 At that moment, a dove flew by. She saw the struggling ant and took pity on her. She broke a branch from a tree and dropped it into the water. The ant struggled onto the branch and reached the bank safely.
Not long after this incident, a hunter was busy setting
10 a trap for the dove who was unaware that she was about to be caught. The ant, who happened to be nearby, saw what was happening and bit sharply into the man's heel. He cried out in pain. The dove heard him, took fright and flew away.
15 That was how the ant repaid the favour.

Making sense

Below are two questions on each of fables 1, 2 and 3. The person who read the fable should ask the questions and the others should answer them.

Fable 1
1. Why is the shell of the tortoise cracked in so many places?
2. Do you think the tortoise deserved to hurt himself like he did? Give a reason for your answer.

Fable 2
1. How did the crocodile trick the cat?
2. What lesson do you think this fable teaches?

Fable 3
1. How does the ant save the dove's life?
2. What lesson, if any, does this fable teach?
Which fable did you like best? Was this because of the story or because of the way it was told?

59

What did we think of On Track with English?

We think the excerpts included a number of features of a good textbook.
For instance:

- The chapter begins with a list of the main topics and learning activities to be addressed in the chapter. They appear in a bubble in the cartoon below the title 'Story time'.
- The introduction – 'Looking at Texts' – 'sets the scene' for the learning and explains the meaning of the key word 'fable' (which is in bold).
- Clear instructions about how to use individual and group work are provided before the fables begin (The Story Circle).
- Illustrations that support each of the fables and that are likely to add to learners' enjoyment of the reading are included.
- Stimulating and challenging learning activities and questions are provided both at the beginning and end of the chapter.

Did you have any other ideas? Would you use this textbook in your teaching? Remember, it isn't necessary that your checklist be filled with 'Yes's in order to select a textbook for use. If you wait for this, you may never select a textbook! Rather use your checklist to assess where a textbook is strong and where its limitations are. Then decide:

- whether the textbook is strong in the areas that you regard as important if you are to achieve the learning you desire;
- whether you have the means – access to other materials, for instance – to minimize the textbook's weaknesses.

If you say 'Yes' to both, then you should probably use this textbook in teaching.

Saide

6.4 Using textbooks effectively

How do South African teachers (ab)use textbooks?

Having a good textbook doesn't guarantee good teaching or learning. In fact, recent South African research has shown that poor teaching often destroys the educational potential of good textbooks!

How do South African educators use textbooks? Obviously the answer to this question varies. But we all have our stories about teachers who wander into a class, pick up a battered book, scrabble around till they find the correct page, and then read slowly and boringly from the textbook until the bell rings! Many of us have done exactly that ourselves! Recent research provides some other interesting insights into educator use of textbooks and other learning materials. Before we get you to read from the research report, we'd like you to turn to your audiotape and listen to a couple of researchers and teachers talk about good and bad use of textbooks.

Spend about 20 minutes on this activity.

ACTIVITY 49

Turn to Part 5 on your audiotape. Listen again to Sharman Wickham and Ruth Versfeld. Make notes of their key points before you read the classroom example of textbook use that we describe later.

An example of textbook use in a Cape Town classroom

The teacher is a secondary school English and Biology teacher. Her lesson is based on a comprehension passage in a textbook used in the English class. This is the researcher's description of the lesson:

Teacher 3 wrote the objectives for her lesson as being:
- *Sentence construction*
- *Reading with understanding*
- *Quick thinking*
- *Ability to select facts from a long speech*
- *Reporting in the same tense*

The teacher began the lesson by reading the comprehension passage aloud and then asked the question: 'vvhat is a life cycle?' There was no discussion whatsoever about frogs and what learners knew about them, or whether they had learnt about frogs at school before. The abstract nature of the question (What is a life cycle?') and the lack of contextualization seems strange, given that this teacher is also a Biology teacher (and thus does have an understanding of this content).

The teacher worked laboriously through the text (the comprehension passage), stopping to explain words - both those high-lighted in the text and others. The teacher asked learners questions that they found difficult to answer. So she provided the answers herself Some examples of these questions include the following: IWhat is hibernate?', IWhat is fertilization?', 'vvhat. is fertilize the eggs?' Only one question did not relate directly to the meaning of the text; instead it dealt with punctuation conventions: IWhat is the use of the apostrophe?'

Learners were then asked to summarize the passage in ten points and in not more than 45 words. Other instructions given at this point included instructions not to be vague, to use full sentences and to use

This extract (and the ideas that follow) are taken from research done in 1998 by Sharman Wickham and Ruth Versfeld in four under-resourced schools in the greater Cape Town area. They presented their research in a paper titled 'What is the relationship between classroom materials and good teaching practices?' to the Tenth World Congress of Comparative Education in 1998.

the same tense. Learners did this task individually and in silence.
   Although the learners were seated in groups, no group work was done in this lesson. The picture of the tadpole and the frog next to the comprehension passage were not referred to in explanations of terms such as {external gills '. One of the exercises below the text was a guided summary of the passage, but that was also ignored by the teacher.

What do you think of this lesson? The researcher does not provide information about whether the textbook used was' good' or 'bad'. But that is not the point. We want to evaluate how well the teacher used the textbook.

ACTIVITY 50

Re-read the researcher's description of the lesson carefully. Then suggest how this teacher could have used the textbook more effectively. Think about:
a   *The stated purpose of her lesson (the objectives that she listed).* Was it clear? Was it appropriate? (Note: This was an English lesson.)
b   *Her introduction.* Did she draw on learners' background knowledge? Did she develop this knowledge?
c   *The activities used during the lesson.* Were they likely to assist the teacher in achieving her purpose? Did they encourage independent and critical thinking? Did they assist learners to read better?
d   *The way in which the teacher concluded the lesson.* Did learners leave with a clear sense of what they had learnt and why it was useful?

In particular, examine the way the teacher *used* the textbook to develop all of the phases of her lesson listed above.

Spend about 40 minutes on this activity. You may want to discuss your impressions with a fellow student or teacher.

Using a textbook to achieve a clear educational purpose

The teacher wrote down five 'objectives' for her lesson, but none of these is specific enough to provide a clear focus for her teaching. She needs to be more specific. Her purpose should be more clearly stated. You may have asked questions such as:
- What aspect of sentence construction does she intend to focus on?
- What does it mean 'to read with understanding' and what skills, knowledge and attitudes will learners need in order to achieve such 'understanding'?
- What does the teacher mean by 'quick thinking' and how does she expect learners to develop this ability?
- Is the passage that learners will read actually a speech? Does the teacher intend to make a distinction between 'facts' and 'opinions'?
- What does she mean by 'reporting in the same tense'? Perhaps learners can choose any verb tense and then use it consistently in their writing, but this is not clear.
- Are there connections between one 'objective' and another and, if so, what are these connections?

The list of the teacher's objectives and the description of what happened during her lesson suggest that she did not have a clear purpose in mind. To use the language of outcomes-based education, she seems to have been unclear about the intended learning outcomes and about what learners should do in order to demonstrate their achievement of these outcomes.
   A' good' textbook can assist a teacher to decide on the purpose or purposes of a lesson. For example, the instructions for 'The Story Circle' in the extract from *On Track with English, Grade 7* (see page 194) indicate the purpose far more precisely. They suggest that the purposes of the reading passages and the activities are to give

learners opportunities to develop their skills in the following:
- silent reading (with understanding);
- summarizing in order to re-tell the story;
- telling the story to classmates;
- listening (with understanding) to classmates' stories;
- answering questions based on the stories.

Furthermore, in a 'good' textbook the information and the learning activities are presented in a coherent sequence: teachers and learners can see how one piece of the text and one activity link to the next. This is what happens in *Story time* (page 194). After reading and discussing examples of animal fables, the next section of the textbook introduces information and activities about how to work in groups to write a story about animals. Teacher 3's lesson seemed to wander aimlessly and was largely driven by the teacher's explanation of words in the text. There was little logical development.

If teachers are going to use a textbook in a lesson, it is important to think about how to use it when planning the lesson. 'Teacher 3' did not do this. For instance, she asked learners to write a summary of the passage on the life cycle of the frog without referring them to the guided summary printed in the textbook. The textbook summary could have been used to 'teach' learners about how to summarize: they could have assessed their summaries against the summary in the textbook. She also explained difficult abstract concepts related to frogs without using the textbook pictures to make these concepts more concrete.

'Poor' textbooks do not always give a clear indication of the purpose of the information and of the activities that have been included in the book. This makes teachers' work more challenging as we have to decide why we are going to use a particular section of a book and how we are going to use it. For example, we may choose to use a textbook because it provides learners with some useful information. But we may also recognize that the questions asked in the book are very limited because they do not give learners any opportunities to express their own points of view, or to critically evaluate the information. If our purpose is to assist learners to do one or both of these, then we need to construct our own questions for learners to use while reading the passage in the textbook.

Using learners' existing knowledge to understand textbooks

The extract from the researcher's notes begins with these observations:

> *The teacher began the lesson by reading the comprehension passage aloud and then asked the question: 'What is a life cycle?' There was no discussion whatsoever about frogs and what learners knew about them or whether they had learnt about frogs at school before.*

In other words, the teacher did not introduce the topic or theme of the comprehension passage from an English textbook. She also did not attempt to find out what learners already knew about frogs. If she had done this she could have:
- worked from their knowledge of frogs towards the more abstract knowledge in the textbook;
- used learners who had a good knowledge of frogs as a learning resource for other learners.

If you are able to read this module, you already have many reading skills. But it is likely that there are some kinds of texts that you still find difficult to read. What makes it easy or difficult for you to read particular kinds of texts, but not others?

If a text deals with a subject with which you are unfamiliar and that has its own

specialist vocabulary, then you may struggle to read and understand this text. However, texts written on a subject that you know well will be much easier to read. For example, I find I am unable to read a university newsletter with information about how to use my computer more effectively because I don't understand how computers 'work', and I also get confused by all the specialist 'computer' vocabulary in the newsletter!

Background knowledge (or, as some call it, a *mental schema*) assists us to understand what we read. One of a teacher's most important tasks is to *activate* or 'bring alive' this background knowledge so that learners can use it as the starting point for reading a new text. For example, the teacher described in the extract could have begun the lesson by asking the learners in each group to tell each other what they already know about frogs: what they look like, where they have seen frogs, and so on. She could have used colourful pictures from a magazine, or video clips she'd recorded from television, to introduce the topic. Then she could have asked for a report from two or three of the groups and used the learners' responses to prepare the whole class for what they were about to read.

It is very likely that the learners did know something about frogs. However, one of our challenges as teachers is to introduce learners to *unfamiliar subject matter*. This requires us to think carefully about how to do this. Sometimes we can use photographs or drawings from newspapers and magazines as well as from textbooks, or we can make our own drawings on the chalkboard. You will have noticed that the researcher commented that the teacher she observed did not even use the illustrations of the tadpole and the frog that were in the textbook!

Sometimes we can introduce the unknown by making comparisons with the known. Here is my favourite example of how a creative teacher did this in a poorly resourced school in a rural area in the Northern Province. The teacher, working with Grade 9 learners in a rural school, faced the challenge of providing the class with the background knowledge they would need to read a play that was set in a castle in Europe, hundreds of years ago, and in which the characters included a king, a queen, a chancellor and a jester. How did he do this?

First, he drew a castle on the chalkboard and included details from the text of the play (such as the moat that surrounded the castle). He then asked the class questions to find out what they knew about the structure of the kraal of the local chief Some learners were able to tell the class that around the chief's home there was a thick, thorn-bush fence. He asked them why they thought this fence had been built and they suggested that it was to protect the chief by making it difficult for either people or animals to reach his home without being noticed.

The teacher then explained that the water-filled channel around the castle (i.e. the moat) fulfilled the same function for the king and his family: it protected them. To introduce the new vocabulary item, 'jester', he asked learners to talk about which of their classmates make them laugh and what it is these classmates do that is amusing. He explained that this person could be called the 'class jester' ...

ACTIVITY 51

Think about your experiences as a student reading textbooks.
  a If any of your teachers or lecturers activated your existing background knowledge or provided you with background knowledge on an unfamiliar topic, how did they do this?
  b If they did not, what do you think they could have done to help you when you found a particular textbook difficult to read?
  c On the basis of your answers, what strategies do you think you would like to try out when you are using a textbook in your own teaching?

As we suggested in Sections Three and Four, popular media are particularly good at activating learner interest. The trick is to know how to move learners from popular media into a more meaningful reading of their textbooks.
  Spend about 30 minutes on this activity.

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These ideas and the quoted passages are taken from Carol McDonald and Elizabeth Burrough's 1991 book, *Eager to Talk and Learn and Think*, published by Maskew Miller Longman.

Using activities to improve textbook reading skills

The two strategies mentioned above – making the purpose of your lesson clear to learners, and building your lesson by activating learners' background knowledge – will both assist learners in reading their textbooks more effectively. Reading is the foundation of all learning and is necessary in order that learners are able to read textbooks. But how can we integrate reading as an activity in all learning areas?

Learning to read textbooks involves learning how to 'make meaning' from printed symbols – at the most basic level, being able to interpret a+n+d as the word 'and' – as well as from illustrations. We could divide the process of learning to read into three stages:

- *Thinking about reading as a 'whole system of communicating'.* This involves recognising shapes (letters like 'a'), and then associating these shapes with sounds ('a' sounds like ay), etc.

- *Reading to confirm what one already knows.* In other words, practising our new reading skills. This is achieved by reading familiar stories and other texts in which commonly used words appear.

- *Reading to gain new information.* This reading moves away from familiar stories and begins opening up new ideas, new stories and whole new worlds to the reader. It allows us to learn about what is beyond our own experience.

There is a lot of debate about how people learn to read. We won't go into that debate here. Our interest is in *improving* the reading skills of our learners (not teaching them the basics of reading). How do we do this?

Teachers can assist them to make meaning from texts by developing:

- *'pre-reading'* activities;
- *'while-reading'* activities; and
- *'post-reading'* activities.

The following example of such activities is based on this passage from a Grade 5 Geography textbook:

> *Pollution is caused mainly by big factories, industries and the mines which use water. This water passes through various machines and becomes poisoned and dirty. Many of the chemicals used by farmers are washed by rain into the rivers, making them impure. Even mud from our lands makes our rivers brown, spoils the water for our use and, in time, fills up our dams.*

This may seem a simple passage. But imagine yourself as a Grade 5 learner who has English as an additional language rather than as a mother tongue language. What difficulties do you think these learners would have with this text? And what could we, as teachers, do to assist learners in their reading?

There are several possible sources of difficulty for learners attempting to read this text. Did you notice that the word 'pollution' is not explained? The reader has to work out its meaning from the examples which the writer gives. This will be difficult for a Grade 5 learner to do if he or she does not know the meaning of words such as 'chemicals' and 'impure'. It may not be clear to learners that the whole text is about one kind of pollution, namely *water* pollution. There are at least two kinds of difficulties:

- words that learners may not know (vocabulary difficulties); and

- insufficient or unclear links between one point and another in the text.

So, what could be done?

Developing 'pre-reading' activities

Several *pre-reading activities* could be used. These might focus on pollution in general or be directed to the topic of 'clean and dirty water'. Most importantly, these activities would draw on the likely background knowledge learners bring to the class. Here is an example:

POLLUTION: POSSIBLE PRE-READING ACTIVITIES

1   *Ask learner to work in groups to make a list of all the dirty and untidy areas in the local community. Depending on where the school is situated, these could include streets and roadsides where rubbish has been dumped, rivers or dams into which factory or mine waste has been pumped, or areas which are grimy and smoke-filled because of smoke from factory chimneys. Ask a spokesperson from each group to report to the class.*

2   *Bring some photographs from newspapers and magazines to class that illustrate various kinds of pollution. Ask learners to work in groups to discuss what they see in the photographs. Some questions to guide their discussion might be helpful.*

3   *Ask learners to explain the meaning of words such as "chemicals", 'poisoned', 'impure' in English or any language that they know. If no-one is able to explain fully, offer explanations using as many as possible of the learners' ideas, and use photographs to illustrate the concept.*

The teacher could then use the examples given by the learners to build up the idea of pollution as a term to describe damage to the environment. Otherwise, you could use learners' responses to the photographs to build an understanding of pollution.

We could also begin by drawing on learners' understandings of a related concept, 'clean and dirty water', and then build from this to an understanding of 'pollution'. For instance:

> *Ask a learner to work in small groups to make a list of all the 'things' they can think of which change water from being clean and pure and safe to drink to being dirty and impure and unsafe to drink. Ask a spokesperson from each group to report to the class.*

You could then use the learners' ideas to introduce the reading text. Tell them that when they read it, they should notice how many of their ideas are in the text. Ask them to write down any extra information they have thought of, and to note what information in the text they had not thought of. Photographs and discussion of particular words as in 1 and 2 above could be introduced before learners read the pollution text.

Building in 'while-reading' activities

While-reading activities motivate learners to continue reading. This is achieved most easily by ensuring that your learners understand why they are reading. What will they get from the textbook that is useful to them?

We have already mentioned one technique for achieving this, namely the 'match-ing' of learners' ideas on a topic with those found in the printed text (see the last paragraph under 'pre-reading'). Learners feel encouraged when they find that they actually know more than they thought they did.

Another technique is to ask learners to 'play detective'. Ask them to write down questions they would like to ask about the topic under discussion, such as pollution. Then ask them to read to find answers to these questions.

Here is another idea. As a teacher you could create an interesting 'real- life' problem linked to the topic under discussion. For instance, you could set the follow-ing problem for the pollution text:

> *You are a local councillor. A large new fertilizer company asks the local council for permission to open up a factory in your region. They say*

The ideas about the use of 'activities' to assist learners in reading the 'pollution' passage originally appeared in Reed, Y. 1996. *Theory and Practice of English Language Teaching*. Johannesburg: University of the Witwatersrand.

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that this will bring many jobs to your town and that they would also offer local farmers a special deal on fertilizer. What would be your response? In order to make an informed decision:

Read pages 35 to 42 of your textbook. As you read:
1   *Work out how a fertilizer factory might impact on pollution in your area.*
2   *Suggest precautions that you might ask the factory to take if you were to allow them in.*
3   *Provide evidence for whatever decision you take.*

A 'post-reading' activity

You will notice that the ideas here are similar to those first mentioned in Section Three. As you read through this, think of ways in which you could integrate popular media in order to assist textbook reading and make learning more relevant to everyday events.

If learners seem particularly interested in a local pollution issue, a *post- reading activity* could involve writing to a relevant authority such as the local council (e.g. if rubbish is not being collected), or a factory or a mine manager to express their views and ask that action be taken. If there is rubbish in or near the school grounds, a class could collect all of it and sort it into categories (e.g. bottles, cans, paper, plastic bags). In some parts of the country, glass, cans and paper can be sold to recycling companies as a way of tidying up the environment and of raising money for the school at the same time.

Some textbooks, particularly the more recently published ones, include pre-reading, while-reading and post-reading activities, but if you are using books that do not have these, then you need to think about what will help learners to understand and respond to the information in the book and to prepare one or more activities for them. Even if a textbook does include activities that are designed to help learners to make meaning from a passage, these may not always be suitable for all learners, so teachers may need to adapt activities to suit their classroom context. Magazines, newspapers, advertising leaflets or radio programmes on tape could provide useful materials for these activities.

Using questions to improve reading and learning

Questions are a powerful means of improving learners' reading skills and their learning. But teachers need to think carefully about the purposes of the questions we ask. The following are just a few examples of questions we could ask ourselves about the purpose of the questions we ask learners:

· Do we want to provide a starting point for new learning by activating learners' background knowledge?
· Do we want learners to find a particular piece of information in a passage?
· Do we want learners to give their own response to something they have read?
· Do we want learners to read a text critically and ask their own questions?

The researcher who described the reading comprehension lesson on the life cycle of the frog commented that learners found the teacher's questions difficult to answer, so she answered most of them herself.

Imagine being a learner in this teacher's class. The lesson began with the teacher reading the comprehension passage. When she had finished, she asked 'What is a life cycle?' At this point in the lesson, all you have done as a learner is to follow the words in the textbook while listening to the teacher. You have not had any opportunity to interact with the text and to make your own meaning from it, so this is a very difficult question and not appropriate for this stage of the lesson. As mentioned earlier, introductory questions should help learners to 'tune in' to the text, remind them of what they already know about a topic and provide a starting point for new learning.

If we want to find out whether learners can locate a particular piece of information in a text, our questions should make this clear. For example, we might ask: 'According to the passage, how many days does it take for frogs' eggs to hatch into tadpoles?' One of the reasons why learners sometimes do not respond to teachers' questions is that the questions are unclear and learners do not know what answer the teacher expects. In the lesson about the life cycle of the frog, the question '*What is fertilize the eggs?*' is an example of an unclear question. What kind of answer do you think the teacher expects? It could be either:

· to find out if learners *understand the meaning of the term 'fertilize';* or
· to find out if *learners understand how the eggs are fertilized.*

Some of our questions should encourage learners to think, to solve problems and to express their own points of view. For example, if we were using the extract from *Looking into the Past, Grade 5* with a class, we could ask questions like these:

> *Hunter-gatherers, herders and farmers often met and traded with each other. What do you think members of each group brought to trade with the others? What do you think they talked about with each other?*

We could follow these questions with an activity such as this one that the writers include in the book:

> *Work in a group of three. Imagine that one of you is a hunter- gatherer, one a herder and one a farmer. Decide what you have brought to trade. Then act out your meeting.*

We could also ask learners whether they would like to be a hunter-gatherer, a herder or a farmer and to give reasons for their answer.

Reading textbooks critically

In the lists of characteristics of 'good' and 'poor' textbooks, you read that one of the weaknesses of poor textbooks is that they present information as though it cannot be challenged or thought about in other ways. Another weakness of some textbooks is that information about some individuals or groups is presented in a biased or prejudiced way. This may happen as a result of the way in which they are described, or because they are left out of the text altogether. One of our responsibilities as teachers is to demonstrate to learners that they can ask critical questions of texts, and to assist them to develop skills in doing this.

The example below demonstrates the kinds of *critical questions* teachers and learners can ask about a passage from a textbook.

HOW A WRITER OF HISTORY USES LANGUAGE TO POSITION READERS

In this description of the battle of Vegkop, from a history textbook used in South African primary schools until 1980, decide who are portrayed as the goodies and who are portrayed as the baddies. Answer the following questions to see how this is done.

You should now begin Week 18 of your studies. You should have spent at least 102 hours on this module.

This page is taken from Janks, H. 1993. *Language and Position.* Johannesburg: Witwatersrand University Press and Hodder & Stoughton. You will notice that the ideas presented link strongly with the media literacy activities we presented in Section Five.

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Is any explanation given for this behaviour? What is this behaviour likely to make the reader think of the Matabele?

Matabele is the name white people made up for the Ndebele tribe.

What are the effects of these words?

How does the writer convey the impression that the trekkers are civilised?

The trekkers hurried into the laäger and closed the entrance. All around were the Matabele hordes sharpening their assegaais, killing animals and drinking the raw blood. Sarel Celliers offered up a prayer.

When the enemy made a savage attack, the defenders fired volley upon volley into their ranks. All helped. The women and children, including Paul Kruger, loaded extra guns and handed them to the men. After a fierce battle the Matabele fled. The voortrekkers gave thanks to God for their deliverance.

Why is this information placed at this point in the passage: before the onset of the battle and before Celliers prays?

Why not the word 'withdrew' or 'retreated'?

Give reasons other than God's intervention to account for the trekker victory. Use information in the passage. Why is this information kept in the background? How is it kept in the background?

How does the writer give the impression that God is on the side of the trekkers? Why is this important?

The information and the questions in the bubbles help learners to under- stand that, in this textbook (one that is no longer used in schools), the Ndebele people are portrayed as savage and bloodthirsty, and the trekkers as civilized and courageous. In the passage, there is no mention of the fact that it is the trekkers which is the group that has moved into an area in which African people had long been living.

Teachers can assist even very young learners to ask critical questions. For example, if a Reader used in Grade 1 has pictures of men and women in stereotyped roles (mother washing dishes in the kitchen, father washing the car, for example), teachers can ask learners questions such as:

- *What are these people doing?*
- *Who does this work in your home?*
- *Does the same person always do this work?*
- *Why do you think the person who drew this picture drew it like this?*

Such questions can help learners to think about the possible differences between 'real life' and what is illustrated in a book.

A practical way in which teachers could ensure that more than one view of an issue is aired is by buying *different* textbooks. Instead of buying all your Grade 9 History texts from one publisher, buy half from another. Check beforehand that both are good textbooks and that they offer different views on issues. Allow learners to share these textbooks.

A process for developing better textbook reading skills

Nana Mthimkhulu has suggested an interesting process that teachers can use to get learners to read textbooks more effectively and more critically. She suggests that teachers begin by asking learners what 'comprehension' means and then use learners' answers to emphasize that to comprehend means to *understand and to be able to respond to what you have read.* She then outlines the steps that a teacher and groups of learners could follow. Here is her lesson plan.

Nana Mthimkulu develops her ideas further in Mthimkhulu, N. & Reed, Y.1997. *Exploring Alternatives in the Language Classroom.* Manzini: Macmillan Boleswa.

LESSON PLAN: READING TEXTBOOKS

1 *Divide the class into groups into no more than four people each. Make sure each group has a textbook.*

2 *Ask each group to develop five questions on the section in the textbook that is to be studied (15 minutes). Remind learners to:*
   - *ask questions that give their classmates an opportunity to show that they understand the whole article. An example of such a question could be, 'What other title or headline could you give this article?*
   - *ask at least one question that gives learners an opportunity to give their own opinion on the article as a whole or on a particular issue raised within it.*

3 *As soon as groups have completed the writing of their questions, ask them to swap their questions with those in the group next to them.*

4 *Each group should then:*
   - *write an answer to each of the other group's questions. Group members should work out these answers together.*
   - *suggest any changes that they believe would improve these questions. The group must give reasons for those changes. (15 minutes)*

5 *When groups have had an opportunity to respond to each other's questions, they should submit their answers to the group that asked those questions.*

6 *End this activity with a whole-class discussion on what learners have learned from participating in the activity.*

Try this lesson out with a class. Ask another teacher to observe, then discuss the lesson with him or her. Spend about an hour on this activity.

An activity of this kind is likely to encourage learners to read an article or a passage from a textbook very carefully in order to develop their questions. It also provides valuable language practice as learners work together to write questions that other learners can understand.

Developing a culture of reading at your school

Many of these suggestions focus on developing the skills of reading. They also focus on strategies you can use in your class and with particular texts. But, as we emphasized in Sections Three and Four, in order to have a big impact on the quality of reading, we need to change the current *attitude* to reading.

As we noted earlier, many teachers don't read. Very often, when we read we do so because we *have* to rather than because of the fun it gives us. And often we delegate all responsibility for reading to the Language teacher! This kind of atmosphere is unlikely to improve the reading skills of our learners. We need to develop a culture of reading at our schools and this requires teacher collaboration.

The teacher we criticised earlier provides an example of one way we can begin to work together to improve reading. Instead of choosing some arbitrary comprehension exercise, she used a passage from the Biology text her learners were studying.

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This action has a number of benefits:

· Learners use their English time to study Biology. But they don't lose out on developing their language skills. Both teachers and learners maximize the limited time they have for the teaching of their respective subjects.

· The comprehension exercise has meaning for the learners. They under- stand that the skills they are learning will benefit them in other areas of study and life. It is likely that learners will now 'transfer' their learning to other subjects.

This co-operation could be extended. Language teachers could work with other learning area teachers to ensure that they build good reading strategies into their teaching, and that they maximize the time learners have to read. Joint planning around particular themes could assist this process.

In addition, all teachers could work together to develop a reading/ resource centre and then could build time into the timetable in which learners concentrate on reading. In addition, teachers should develop box libraries in their own classrooms in which they keep useful reading material that they actively encourage learners to use.

What have we learnt about using textbooks?

Key learning points

- Textbooks are an absolutely essential part of any good teaching process. They are particularly important in:
  - developing the higher-order reading skills and analytical skills that popular media can't develop;
  - structuring learning in an educationally sound manner which is not built into popular media design;
  - providing means for developing independent learning.

- The limitations of textbooks include:
  - the often abstract nature of the content knowledge they carry and the difficult language used;
  - the fact that the information in them may be out of date;
  - the fact that they often provide only one point of view;
  - the tendency for teachers and learners to become dependent on them.

  These limitations don't point to the need to abandon textbooks. Instead, they simply emphasize the need to use a wide variety of media in our teaching.

- But some textbooks are very poor. Their weaknesses include:
  - ideological bias: many are racist and sexist and out of tune with democratic values;
  - poor design: many do not provide the educational scaffolding necessary in developing conceptual understanding.

- Teachers need the skills to select textbooks appropriately. There are at least seven questions you should ask of textbooks:
  - Is the textbook written in a style and language that is accessible to my learners?
  - Is the textbook's structure and sequencing clear and logical?
  - Is the textbook written in a manner that links with the lives of my learners?
  - Is the textbook structured so as to develop higher-level conceptual knowledge in their subject/learning area?
  - Is the textbook designed in an attractive and user-friendly manner?
  - Is the textbook committed to teaching in a non-discriminatory and critical way?
  - If I were a learner again, would I like to learn from this book?

- Textbooks don't need to satisfy all criteria. Rather teachers should ensure that:
  - the textbook satisfies the important criteria;
  - they can use other media to minimize the weaknesses.

- Another big problem is the poor use of textbooks by teachers and learners. This includes:
  - an unhealthy and uncritical dependence on textbooks;
  - no attempt by teachers to teach learners how to read effectively and critically;
  - too much poor reading of textbooks by the teacher;
  - no use of alternative materials to supplement the textbook and to provide a different point of view.

- Teachers need to learn to use textbooks better. This would include:
  - using textbooks to develop a clear educational purpose;

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– using learners' existing knowledge to improve their reading abilities;
– using other media to bridge the gap between learner understandings and the more abstract understandings in textbooks;
– using questions, activities, and structured reading processes to develop learners' higher-order reading skills;
– working on developing the critical reading skills of learners;
– developing a culture of reading at your school.

A summative assessment activity

This is a major summative exercise that attempts to integrate all learning achieved so far. Spend about three hours on this activity. Then get together with other teachers and discuss your effort.

Design a series of lessons in which you use both popular media and textbooks to teach a concept in a sound manner. In other words:

a Clearly explain what your learning outcomes are.

b Demonstrate how you would use popular media to activate learner interest (see Sections Three and Four).

c Then take the textbook you are planning to use. Choose the appropriate passage and show how you will:
– link this with the ideas raised through popular media;
– develop learners' abilities to read and understand the textbook.

d In order to answer the second part of (c), write one example of each of the following kinds of questions that you could ask on this passage (see this section):
– a question to activate your own background knowledge or the background knowledge of your learners;
– a question to find out whether you or your learners have understood the passage;
– a question that encourages you or your learners to express an opinion on the views expressed in the passage;
– a critical question that encourages you or your learners to think about the information in the passage in different ways.

e Demonstrate how you develop conceptual depth as you move your learners through these lessons. (You may want to make reference to Section Two to check this.)

SECTION SEVEN

Using computer technologies in schools

What will we do in Section Seven?

'What I remember of computers at school was when we were once called out of class to a mobile truck that had about ten computers in it. The computers were on and this guy explained some stuff, but we weren't allowed to touch because the next class was already waiting.' (Grade 12 learner, Mitchells Plain)

'My Grade 2 class sends e-mail messages to learners in the United Kingdom. They all have pen pals and practise reading and writing through their letters.' (Teacher, Johannesburg)

'With a computer and Internet in every home, who needs schools or teachers?' (Parent, Durban)

> You should now begin Week 19 of your studies. This means you have spent at least 108 hours on this module. This final module will probably take you more than the remaining 12 hours if you spend time playing the CD-Rom. However, we strongly recommend that you do this!

Computers in schools: hype or help?

Computers have rapidly become a familiar part of our lives. In many cases, computers (and the Internet) are spoken of as a new miracle cure to our educational problems. If only it were that simple.

Throughout history, new technologies have been hailed as miracle cures.

When television was first introduced, many people believed it would take education to the masses and solve problems of illiteracy, and so on. It didn't. After an initial period of optimism about its educational potential, educationists started criticising television for being educationally restrictive because it did not allow for two-way communication. Today we have a more sophisticated understanding of what television can and cannot do. We recognise that television won't solve all our educational problems, but that it is a useful resource on which teachers can draw.

The current optimism about computers makes it easier to find funding for projects that involve computers than it is to find sources willing to contribute to teacher development or basic infrastructure, such as toilets, chairs or chalk. Computers and the Internet are 'cool' and easy to generate enthusiasm about. As with television, though, we need to view such enthusiasm for computers critically: we can't ignore the impact that computer technologies are having on our society, but we shouldn't believe they will solve all our problems.

ACTIVITY 52

Turn to part 6 on your audio tape. Listen to some teachers and educational technology experts talk about the educational potential offered by computer technologies, as well as the pitfalls. Make notes as you listen.

Why use computers in schools?

How are computer technologies currently used in South African schools? And why is it important for all teachers to consider their use?

Computer literacy is basic to out survival in modern society

Computer technologies are increasingly an essential component of any office or work environment. Even where we do not need to know how to use computers, it is useful to know how they work. For instance, cashiers at supermarkets ring up our purchases using computer technology; when we draw our money from ATMs we use computer technology; our microwave ovens measure their cooking time using

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computers: we live in a computerized world. In order to live **socially useful lives**, we need to become computer literate. Even where learners don't actually learn to operate computers, they need to *understand* the role and functions of computers. In many ways it could be argued that *computer literacy* is becoming as important as the ability to read and write.

Employment opportunities increase for those who are computer literate

As computers become so widespread, so more and more of us will be directly employed in computer-related work. In this case, learning to operate computers is an important competency for all school leavers. In some cases the level of skills will need to be fairly advanced, but in other cases we may just need the skills to do basic word-processing. For instance, the writers of this module are not computer experts, but have learnt to write this module using a computer. So, there is a good **vocational reason** to learn about computers and how to use computers: it will offer better opportunities for employment.

Computer technologies provide a powerful resource for educating

We can learn from computers. Computers function as a source of information, and can be used to expose learners to topics and experiences beyond the classroom walls. Many people have argued that computers will replace teachers in classrooms because they can provide access to so much more *information* than any ordinary teacher can ever know. They can also be programmed to respond to every individual learner's answers, so their *teaching* is also superior – at least in some ways – to that which most ordinary teachers could provide. However, we will show that although computers are an important educational resource and will change the ways in which teachers need to be able to teach, they are unlikely to replace good teachers.

Computer technologies are facilitators of change in other areas

We said earlier that computer technologies are likely to change the ways in which teachers teach and schools function. Computer technologies are **catalysing change** (bringing it about in other spheres) in many parts of our society. For instance, banks have changed because of computers. ATMs would not be possible without computer technology. Computers are symbols of change. More importantly, they are driving massive changes in schooling. For instance, the growth in home schooling is a direct result of the availability of educational resources online. Teachers' roles as conveyors of information are also being challenged by computers, which do this far more effectively than we can ever do!

Arguments against using computers educationally

There is still opposition to using computers educationally in a country like South Africa. The substance of the opposition relates to issues of access and equality. Teachers say that there are more urgent things to be addressed in schools than getting computers. 'How can we think about computers in our schools when we do not have running water, toilets, textbooks or chalk?'

According to the 1996 Survey of School Needs, only 8% of schools reported having two or more computers. Only 38% of schools have grid electricity and exchange line telephones – the minimum necessary infrastructure to run computers. This makes the widespread use of computers difficult. It certainly puts into doubt the idea that computers can be some kind of miracle cure!

These are powerful arguments. The stark reality is that few teachers or learners have computers in their homes or their schools. Nevertheless, it is also the reality that some schools and homes do have them, and that new educational and communications policies prioritize the provision of computers and the Internet to historically marginalized communities.

These inequalities, though, do raise important questions that we need to ask ourselves as we consider the use of computer technologies in schools:

- What does this unequal access to computers do to our society?

This categorization of 'rationales' for computer use – social, vocational, pedagogic and catalytic reasons – was introduced in 1993 by Ely, D. 'Computers in schools and universities in the United States of America', in *Educational Technology*. Vol 33(9): 53-57. This is a fascinating journal to read if you are interested in theoretical perspectives on using technologies in education, although most of its papers and case studies are based on experiences in the USA.

- How does access to computers privilege some learners and disadvantage others?
- How does the introduction of computer technologies change power and knowledge dynamics?
- Is it possible that a new societal divide – not only between 'the haves and the have nots' but between 'the knows and the don't knows' – will emerge?

These are not easy questions to answer. Implications of computer- or technology-related changes in society are complex. People concerned with equity push to increase public access to computers (at libraries, multi-purpose community centres, and at schools). These concerns have led our government to create an enabling policy environment that encourages projects that increase public access to computers. Nevertheless, implementing policy is a slow and difficult process – we can expect public access to computers to increase, but inequalities in access are likely to persist for the foreseeable future.

With this reality in mind, we have included a short unit on assisting your school to get computers. We know that this is not adequate. Nevertheless, we also realise that it would be futile to throw up our hands in despair and wait until all schools have access to computers before focusing on them in a module such as this. We must look to the future and begin to prepare for an environment where we can assume that every South African learner will have access to a computer.

ACTIVITY 53

Imagine you are at a school that does not have any computers. A Grade 10 parent comes to you at a parents' meeting saying: 'What is happening at this school? My sister's child is using computers at her school and knows a lot of things. My child is embarrassed to say that she has never switched one on. What is happening here - when are things going to change?' How would you respond?

Do this activity with a couple of other teachers. Spend about 30 minutes on it. Brainstorm! Try and think as imaginatively as possible. This parent is 'difficult' and won't accept simple answers suggesting that investing in computers is 'simply impossible'. You will need to provide convincing reasons why it is impossible – if this is so!

We don't respond to this question immediately. But you may want to return to it when you have completed this section; you should have more answers then.

Desired learning outcomes

By the end of this section, you should be able to:
- explain why computer technologies have educational and social significance, but also what their educational limitations are in a country like South Africa;
- explain the different ways in which computers are used in society;
- explain what it means to be computer literate;
- assess your own literacy and that of your learners, and devise ways in which you can improve your own and your learners' computer literacy;
- integrate the teaching of basic computer literacy into the teaching and learning of all subjects;
- use computer technologies to improve your administrative efficiency;
- explain the benefits and limitations of using CD- Roms in your teaching;
- use a CD-Rom programme to teach, and develop lesson plans around these;
- explain how the Internet works;
- access educational resources on the Internet (or World Wide Web);
- use the Internet in teaching, and design lesson plans to do so;
- explain howe-mail works;
- use e-mail as a teaching, communication and administrative tool

Checking your learning: How should you use these outcomes? You may find that they don't mean much *before* you study the section. That's why it is so important to check back regularly. Ask: 'Have I achieved any of these outcomes yet? What do I still need to learn in order to meet these outcomes?' Write down those things you still think you need to learn, and use them to focus your learning.

Saide

7.2 Ways of using computers

ACTIVITY 54

Someone donates ten computers to your school. From what you know about computers, describe three or four ways in which you would use these computers (i.e. what would you use them for?).

Each person doing the above activity would respond differently. There are so many ways in which computers can be used. It may help you to organize your suggestions by grouping them. One way of grouping them would be to go back to the reasons mentioned on pages 209 and 210 – social, vocational, pedagogical and catalytic. For instance, if a reason for computer use is *pedagogical*, then a way in which a computer could be used is as a teacher. We have grouped uses in a slightly different way, but one that overlaps with the earlier 'rationales'.

We will explore how computers can be used as:

- an *administrative tool* that makes all sorts of work processes more efficient;
- a *teacher (or tutor)* that provides us with new ways of educating learners; and
- a *learner (or tutee)* – software that we can programme to do things.

Computers as administrative tools

Human beings have manufactured tools throughout history to help them do their work. We have simple tools such as hammers, sewing needles, wheelbarrows and pens, through to more complex machines such as cars, video recorders and newspaper printers.

Computers are simply the most recently developed tool. Like all other tools, they were developed by human beings in order to assist us with our work. They can do some things well, and other things not so well. They can, for instance, be used to assist in tasks such as typing and bookkeeping that would otherwise be done manually. But in order to help us with various tasks, computers need to be *instructed* as to what they must do for us. Computers only work according to these instructions that, in computer language, are called *software programmes*.

As with other tools, it was not long after they had been invented that computers and various software packages were manufactured in large numbers by numerous companies. Thus, in the same way as a *transporting tool* such as a motorcar comes in a number of different brands – Ford, Toyota, Mazda, BMW – so similar software programmes manufactured by different companies have different names. For example, if we want assistance with typing, we need to buy word-processing software. But we have a choice: while one company – Microsoft – manufactures a word-processing package called MS Word, its competitor, WordPerfect, will try and sell us WordPerfect 6. Both are similar *tools* – they assist us with word-processing – but, as with motorcars, each company's brand adds a few features that would make its software slightly different from that of its competitors.

Have a look at this table to see some of the different types of computer products that can be used to help with different tasks:

Task/Purpose	Tool	Brands
Type notes, newsletters, correspondence, worksheets, tests, examinations	Word-processor software package	MS Word, WordPerfect, Word Pad
Bookkeeping, records, budgets	Spreadsheet software package	Quattro Pro, Excel

Draw pictures and diagrams	Graphics package	Paint, MS Image Composer, Paintbrush, Corel Draw
Keep records and catalogues of contact details, library books, or sales	Data base package	Access
Give a speech, lecture or slide show	Presentations package	PowerPoint or Presentations

ACTIVITY 55

There are lots of these software packages. Perhaps you can think of other 'brands' or 'tools'? We suggest you visit a computer store next time you go shopping. Examine what kinds of programmes they have on their shelves. Speak to an assistant and ask:

a What kinds of computer 'tools' (or software) do you have available? Suggest what kinds of things you would like the computer to help you with, such as recording students' marks, teaching reading, or something else.

b How many different brands of each tool do you carry (or know about)? List these.

c What are the differences between the different brands? What do you recommend, and why?

> Spend about an hour on this activity. The main aim is to start to familiarize yourself with the computer software available to you.

All these packages are designed to help with tasks. They do not give you information or content on what to write about, how to budget or what to put into your slide show. As such, they are sometimes referred to as *'content free'*. They can be used by teachers and learners as tools to assist with school tasks. They can also be used to create mark schedules, reports, tests, work-sheets, assignments, notes, and general correspondence (for example, letters to parents or confirmation of sporting fixtures).

These functions are not new additions to teachers' workloads because they are done manually or by an administrator in the absence of computers. The advantages of using a computer is that teachers are able to:

- *automate some of the processes*, for example, working out averages or percentages using a spreadsheet rather than a calculator, thereby making their work more efficient;
- *improve presentation*, for example, by typing handouts or correspondence in order to look better and more professional than hand-written ones;
- file outputs electronically, *thereby allowing for easy retrieval and minor changes to be made* without substantial additional effort.

Word processing (or 'typing') worksheets is probably the administrative function most frequently used by teachers. By typing a worksheet – like this one on insects – on a computer and saving it on a disk, a teacher saves an enormous amount of time. For instance, this teacher could simply go back to this worksheet in 1997, change the date, add or remove a question, and then print out the 'new' and updated worksheet for her class!

Saide

Indicates the 'brand' of software used. This is Microsoft Word, but it could be WordPerfect (or something else).

This gives the writer the ability to design a page in different ways by changing fonts, underlining, etc.

This is your screen. It allows you to see exactly what you are typing.

This indicates what page of your document you are on.

1996
Grade 7
General Science
NR

Assignment 3: Insects

Use what you have learnt in class about insects as well as any other resources to complete the following tasks.

TASKS
1. Choose an insect. Write down its name.
2. Describe its habitat (where does it live?)
3. Describe its appearance (what does it look like?)
3. Draw a pencil diagram (at least half a page) of you insect. Label as many body parts as you can.
4. Describe its life cycle.
5. Write down at least three interesting facts about your insect.

Using computers as an efficiency tool is the most common use, even in schools with a good computer infrastructure. Kearsney College has a staff workroom with nine networked computers, together with CD-Roms, printers, a scanner, a digital camera and direct Internet access. These computers are used only by the staff. An extra teacher has been appointed to offer technical assistance. With all of this infrastructure and support in place, a study found that the computers were used mostly for word-processing of notes, tests and examination papers. Internet browsing and e-mail correspondence were the next most common uses.

Often, new users of computers find that the difficulty of using a computer or new application does not seem to justify the added effort. Learning a new computer programme can be frustrating and difficult but, as you become more computer competent, you will find many advantages. For example:

- If you keep the contact details of your learners and their parents, and a record of all correspondence electronically (in other words, on computer), the tracking of student progress and dealing with parents can be handled far more efficiently.
- Worksheets, tests and assignments stored electronically can easily be changed to suit different classes or be updated across years.
- Marksheets stored electronically allow the quick and easy recording of marks and progress, as well as the conversion of marks to percentages.

Not surprisingly, using a computer as a *tool* to support these management and administrative functions of a teacher's role is the most common use of computers in schools.

Computers as teachers or tutors

'My teacher showed us the extra science notes on computer. I read all the notes and then answered the tutorial questions. It's like having a textbook on computer, but less boring.' (Matric science learner)

'I don't mind the multiple-choice questions in the exams. I have practised so many questions on the computer. What is nice is that I know right away whether I got it right or wrong.' (Grade 7 learner)

These learners are talking about computers operating as *tutor* or *teacher*. Computers can do this in two ways:

- They can operate as new 'teachers' or textbooks where a great deal of methodo-logical design skill is involved in the development of software.
- They can operate as a giant 'resource centre' that both teachers and learners can access and learn enormous amounts from.

Using programmed educational texts

Obviously the computer cannot think. *People* have designed software applications – computer programmes – that are taught to present content (such as notes and diagrams) to learners in a particular manner. Learners then move through the mate-rial on the computer screen by using a mouse and clicking on different parts of the screen.

ACTIVITY 56

> ***NOTE:** The references in this activity are out of date and the CD-Rom is not avaliable. But the activity has been kept as an example.

Click on Educational Resources on your CD-Rom. You will find a list of samples of programmed educational resources here. Click into the two multimedia education group tutorials (on race and racism, and numeracy). Imagine that your learners have access to these programmes.
  a How would they respond?
  b What would stand in the way of them learning?
  c What strengths does this kind of teaching have? What are its weaknesses?
  d How would you integrate this into your teaching? In other words, how would your teaching style change if your learners had access to compu-ter technologies such as these?

Re-read the list of software packages you compiled during your visit to the computer store. How many of these could be classified as *teaching programmes* rather than '*content-tree*' applications?

The screen captures on the next page are taken from the *learn.co.za* site and the *cyberschool.co.za* site. (You may want to surf the Internet to find these!) Notice how learners can:

- interact with the screen (the vectors example);
- move through a textbook in whatever order they want (the history example).

Saide

The topic being studied

Buttons learners can push to manipulate vectors

For instance, learners can read through Physics notes on 'vectors and scalors' in this *Learning Online* programme. They can click on the navigation buttons to see the arrow change direction.

Topics learners can move to when they are interested.

Services offered by cyberschool. For instance, you can click on *Tutor* to get teaching assistance.

History learners, likewise, can click on the hyperlinks on this page to find more information about Italy or Japan in the Second World War.

Often these types of computer programmes are designed to break down the syllabus and to write textbook-like content for each section. This is followed by a series of tutorials or exercises. The computer environment mirrors many traditional textbooks, but has the advantages of allowing each learner to proceed at his/her own pace and of giving immediate feed-back on responses to questions.

Teachers have expressed fear that these kinds of programmes will replace them. It is true that these programmes carry huge amounts of information – including video and photographs. In many ways they offer opportunities that teachers simply cannot. So it is true that they pose a threat to teachers who see their job purely as one of information transfer. Computers are much better at this.

But computers are *programmed*: they can't respond flexibly to individual learner difficulties. As a consequence, many learners can begin to feel lost in the huge amount of information they receive. This suggests that teachers do have a role to play, but not simply as information deliverer. Instead, they must increase their skills in teaching learners how to select and make sense of all the information they now have access to. They must assist them in engaging with learning. With this approach, computers and the Internet simply become another resource, like textbooks or the popular media, that teachers can use in their classrooms to enrich the learning process. Before we proceed, we'd like you to experience a programmed learning site aimed at teachers.

ACTIVITY 57

> ***NOTE:*** The references in this activity are out of date and the CD-Rom is not avaliable. But the activity has been kept as an example.

Turn to your CD-Rom, click on *Educational Resources* and then on 'Shoma'. This will take you into a teacher development programme. Work on this for about an hour (or longer).
- **a** Notice how it is programmed. In other words, you must do activities and get them right before you move on.
- **b** Notice how it integrates text, video and audio, and how it asks for your typed responses.
- **c** Did you enjoy the learning experience? What were its strengths and its weaknesses?
- **d** If this was to be used as part of a teacher development workshop, how would the workshop facilitator's (or college lecturer's) role have to change?

The programme does provide a massive amount of information, and is able to do so through a range of media. Lecturers and teachers simply cannot compete with computers at this level.

But you may have found that you wanted to ask questions relating either to content or to the technical process. Computers cannot provide this kind of assistance as well as teachers can. Learners still need guidance and assistance. While learners often find using computer programmes fun, especially where regular drill and practice of procedures are needed to meet the intended outcomes of a particular learning area, there is still a need to talk about their learning. Likewise, learners enjoy programmes of this sort because they let them know immediately whether their answer is correct or not. But, again, this response is programmed and, because of this, it is either:
- not particularly in-depth; or
- not geared to your particular needs.

This suggests a particular kind of role for teachers and lecturers using computer technologies.

Saide

'Programmed' learning packages have been criticised as unimaginative and educationally restrictive. Nevertheless, such programmes can be very useful for certain outcomes. Powerful developments in these programmes now allow for tracking of learner progress and for offering various pathways and dynamic testing routes to be followed. For instance, if a learner answers a set of questions in a certain way, the learner is directed to additional content. These programmes are better suited to learning areas with hierarchical and structured content in which single solutions are expected.

Computers as learners

You should begin Week 20 now. You will have spent at least 114 hours on this module so far.

As we said earlier, computers can't think. Computers follow the instructions that other human beings – computer programmers – programme into them. In other words, computers are 'taught' by human beings, and so can be thought of as 'learners'.

In order to 'teach' (programme) computers, you need to learn a language that computers understand. One such language is HTML, which stands for *Hypertext Mark-Up Language*. This is the language used to design sites on the World Wide Web (or the Internet), and on your CD-Rom. Do you want to see this? Click on *Go to the Online Chapter*. Then click on *View* (at the top left of your screen). A drop-down menu will appear. At the bottom of this you will see *Source*. Click on this. A very untidy page will appear. These are the instructions given to the computer by the designer to make the computer produce the kinds of pages you see on this CD-Rom.

Have a look at the 'screen captures' on the next page. They demonstrate a similar point about how computers are taught to do things.

This is the page you would see on the Internet.

But the design of the page – for instance, the bold capitals used for the heading – only appear because the programmer has instructed the computer to do this.
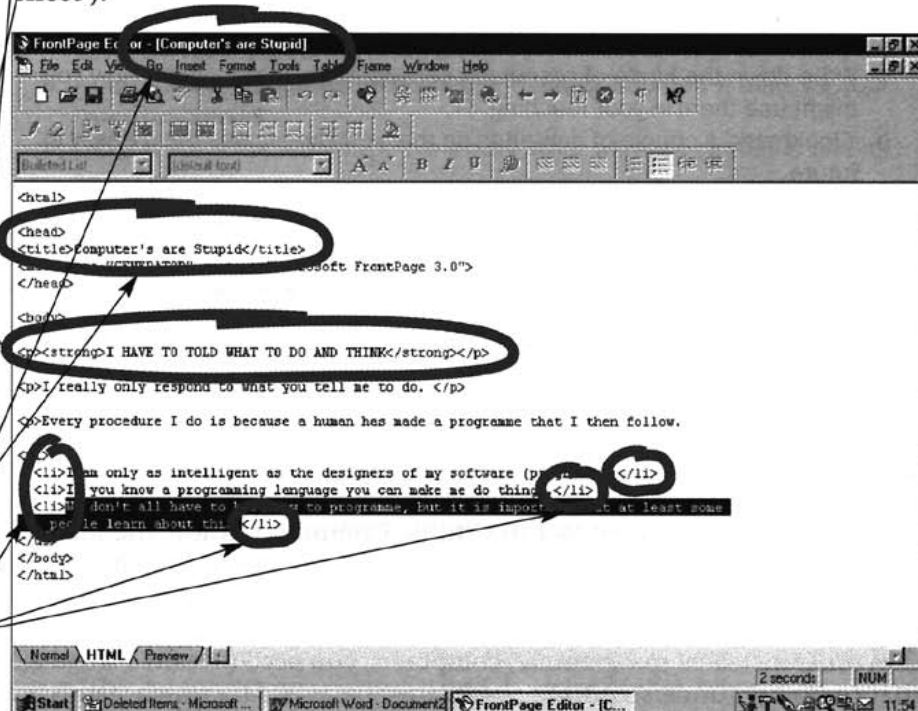
I HAVE TO TOLD WHAT TO DO AND THINK

I really only respond to what you tell me to do.

Every procedure I do is because a human has made a programme that I then follow.

- am only as intelligent as the designers of my software (programmes)
- you know a programming language you can make me do things.
- We don't all have to know how to programme, but it is important that at least some people learn about this.

You will notice, for instance, that the instructions for the bold capital style heading appear as <pe-cstrong>. Then, at the end, another instruction appears cancelling the earlier instruction, </p>. If this cancellation did not appear, the entire document would appear in bold capitals!

This is a very simple page. HTML is a language that allows you to design pages that are far more complex and can include photographs, graphics and even music. But, in all cases, it only works on the basis of instructions from a computer programmer. It can only do what it is 'taught' to do.

The programmer wrote <head><title> in order for the computer to understand that 'Computers are stupid' had to appear in the title line at the top of the computer page.

The instructions on the HTML page – and – are the reason why the Internet page has bullet points on it.

This is the HTML page (the computer programmer's 'instruction sheet').

```
<html>
<head>
<title>Computer's are Stupid</title>
<meta name="GENERATOR" content="Microsoft FrontPage 3.0">
</head>

<body>

<p><strong>I HAVE TO TOLD WHAT TO DO AND THINK</strong></p>
<p>I really only respond to what you tell me to do. </p>

<p>Every procedure I do is because a human has made a programme that I then follow.

<li>I am only as intelligent as the designers of my software (p      </li>
<li>I  you know a programming language you can make me do thing </li>
<li>  don't all have to       to programme, but it is import      at at least some
     peo  le learn about thi  </li>
</    >
</body>
</html>
```

When computers were first introduced to schools in Europe and the United States, their most common use was to teach learners programming skills. Learners were taught how to programme computers and learnt various computer languages (such as *Cobol, Basic or Logo*). They were expected to write simple computer programmes.

Saide

Today very few schools offer computer programming courses. Instead, computer programming is regarded as a specialized skill that can be taught in senior and further education phases to those who choose computer studies as a subject or learning area.

However, schools do sometimes teach simple programming languages in order to develop skills such as logical thinking or problem-solving, rather than computer programming. *Logo* is one language that is used quite often for this purpose. It is a simple command-based language that is popular with young children. The language consists of simple commands that are given to a turtle (the cursor) to move in various directions. As the turtle moves, it leaves a trail behind it, thereby enabling users to draw pictures by writing simple programmes.

Conclusion

Computers can be used in a number of ways by teachers. **First**, they can assist with many administrative tasks such as typing, record keeping, book-keeping, and so on. This enables teachers to spend more time on educational functions rather than time-consuming administrative matters. Computer applications – such as word-processing, spreadsheets and graphics software – have been designed to help with these tasks. While many operate in very similar ways, such as WordPerfect and MS Word, different companies have made different brands of these applications.

Second, computers can be used as a source of information or curriculum content. These can be of two kinds. Some programmes are structured to guide learners through their learning. Learners can go at their own pace through the work and get immediate feedback from questions. However, too many of these programmes work only when the learning to be achieved is 'information-thick' and has predefined answers. Learning that requires critical discussion still needs teachers.

Third, computers can only do what we tell them to do: they must be programmed to do any task. This is a growing field of employment, and South Africa needs many more people who are able to programme educational programmes or administrative tools. Some schools provide learners with the opportunity to learn simple programming languages, but often this only becomes a choice later in schooling, or at universities or technikons.

What can teachers do in this new computer world? Probably the first step they need to take is to become computer literate.

Developing computer literacy

Computers only make work more efficient if you know how to use them and can easily find one to use. Where this is impossible, it may well be better for teachers to focus on improving their manual procedures and systems. For instance, if there is only one computer in a school and it is used mainly by administrative staff, and made available for limited periods in the afternoon for teachers, then it might be difficult to make all your work electronic.

But computers are relatively cheap and becoming increasingly so. Most teachers do not require a high-powered expensive computer all the time. Typing out and storing worksheets, or keeping a record of marks, for instance, requires a relatively simple and cheap computer. Even where schools do not have computers, we believe the first step to computer literacy for a teacher should be beginning to use a computer in his or her professional life. It is very unlikely that you would feel comfortable introducing computer use into your classroom teaching if you have not used a computer regularly yourself.

Teachers at the Bellingham School District in the United States of America have compiled a useful self-assessment matrix for computer competence. Let's use this matrix to assess your computer competence.

What is your current level of computer competence?

> You should be in Week 20 now; you will have done at least 115 hours of work on this module.

ACTIVITY 59

a Judge your level of achievement in each of the following competencies. Circle the number which best reflects your current level of skill attainment. (Be honest, but be kind.) This tool is designed to help understand your current level of skills with computer technologies and to plan for professional development.

b How would you go about improving your computer literacy? Discuss this with fellow teachers.

> Spend about an hour doing this activity. Discuss your results with fellow teachers.

USING COMPUTERS AS A BASIC ADMINISTRATIVE TOOL

→ **Basic Computer Operation**

1: I do not use a computer.
2: I use the computer to run a few specific, pre-loaded programmes.
3: I run two programmes simultaneously, and have several windows open at the same time.
4: I troubleshoot successfully when basic problems with my computer or printer occur. I learn new programmes on my own. I teach other basic operations to my students.

→ **File Management**

1: I do not save any documents I create using the computer.
2: I select, open and save documents on different drives.
3: I create my own folders to keep my files organized and understand the importance of a back-up system.
4: I move files between folders and drives, and I maintain my network storage size within acceptable limits. I teach students how to save and organize their files.

→ **Word Processing**

1: I do not use a word-processing programme.

Saide

2: I occasionally use a word-processing programme for simple documents. I generally find it easier to handwrite most written work I do.

3: I use a word-processing programme for nearly all my written professional work: memos, tests, worksheets, and home communication. I edit, spell-check, and change the format of a document.

4: I teach students to use word-processing programmes for their written communication.

USING THE COMPUTER FOR SLIGHTLY MORE ADVANCED ADMINSTRATIVE USE

→ Spreadsheet Use

1: I do not use a spreadsheet.

2: I understand the use of a spreadsheet and can navigate within one. I create simple spreadsheets and charts.

3: I use spreadsheets for a variety of record-keeping tasks. I use labels, formulas, cell references and formatting tools in my spreadsheets. I choose charts that best represent my data.

4: I teach students to use spreadsheets to improve their own data-keeping and analysis skills.

....

→ Database Use

1: I do not use a database.

2: I understand the use of a database and locate information from a pre-made database such as Library Search.

3: I create my own databases. I define the fields and choose a layout to organize information I have gathered. I use my database to answer questions about my information.

4: I teach students to create and use databases to organize and analyse data.

....

→ Graphics Use

1: I do not use graphics in my word processing or presentations.

2: I open, create, and place simple pictures into documents using drawing programmes or clipart.

3: I edit and create graphics, placing them into documents in orderto help clarify or amplify my message.

4: I promote student interpretation and display of visual data using a variety of tools and programmes.

....

→ Presentation Skills

1: I do not use computer presentation programmes.

2: I present my information to classes or groups in a single application programme such as a word processor, a spreadsheet, or a publishing programme.

3: I present my information and teach my class using presentation programmes such as Powerpoint or SuperLink, incorporating various multimedia elements such as sound, video clips, and graphics.

4: I teach my students how to use presentation software. I facilitate my students' use of a variety of applications to persuasively present their research concerning a problem or area of focus in their learning.

USING COMPUTERS AS RESOURCE AND COMMUNICATIONS TECHNOLOGY

→ Internet Use

1: I do not use the Internet.

2: I access school and district websites to find information. I follow links from these sites to various Internet resources.

3: I use lists of Internet resources and make profitable use of Web search engines to explore educational resources.

4: I contribute to my school or district websites. I teach students how to use the resources available on the Internet effectively.

....

→ **Telecommunications Use (E-mail)**

1: I have an e-mail account but I rarely use it.

2: I send messages using e-mail – mostly to district colleagues, friends, and family. I check my e-mail account on a regular basis and maintain my mail folders in an organized manner.

3: I incorporate e-mail use into classroom activities. I use e-mail to access information from outside sources.

4: I involve my students in using e-mail to communicate with other students and various kinds of experts from other countries.

....

→ **Information Searching**

1: I am unlikely to seek information when it is in electronic formats.

2: I conduct simple searches with the electronic encyclopaedia and library software for major topics.

3: I have learned how to use a variety of search strategies on several information programmes, including the use of Boolean (and, or, not) searches to help target the search.

4: I have incorporated logical search strategies into my work with students, showing them the power of such searches with various electronic sources to locate information that relates to their questions.

MORE ADVANCED USES AND UNDERSTANDINGS OF COMPUTER USE

→ **Ethical Use Understanding**

1: I am not aware of any ethical issues surrounding computer use.

2: I know that some copyright restrictions apply to computer software.

3: I understand school rules concerning student and adult use of e-mail and the Internet. I know the programmes for which my school holds a site license. I understand the school policy on the use of copyrighted materials.

4: I model ethical usage of all software and let my students know my personal stand on this issue.

....

→ **Video Production**

1: I do not use a video camera.

2: I create original video tapes for home or school projects.

3: I create original video tapes using editing equipment.

4: I use computer programmes to edit video tape presentations and I teach my students to create and edit video tapes.

....

→ **Technology Integration**

1: I do not blend the use of computer-based technologies into my classroom learning activities.

2: I understand the Department of Education's technology plan supports integration of technology into classroom activities, but I am still learning about what strategies will work and how to do it. I accept student work produced electronically, but do not require it.

3: From time to time, I encourage my students to employ computer-based technologies to support communicating, data analysis and problem-solving.

4: I frequently model and teach my students to employ computer-based technologies for communication, data analysis, and problem-solving.

Developing your computer competence

If most of your responses were level 1, you probably do not have access to a computer and therefore have a low level of computer literacy. Obviously, if the majority of your responses are 3s or 4s, it is likely that your level of computer competence is good. It is likely that many teachers will demonstrate a higher level of competence in the first two categories.

You obviously need to find ways to get to use a computer in order to develop your computer skills. The above self-assessment form gives you an idea of how computer competent you are, and shows where you need to start to focus for your development. In order to develop your own computer competence, you may want to consider taking some of these actions:

- *Consider buying your own computer for use at home.* Some schools have decided to negotiate package deals with computer suppliers, which reduce the costs of personal purchases by staff when these are made by a number of staff or when the school is buying a number of computers. Others have negotiated computer loans for staff that can be paid off over several months. You may want to explore similar options with colleagues and your principal.

- *Try to ensure that a computer is available at school for teaching staff use.* Such a computer may be placed in a staffroom, library or staff work space. You should use a booking procedure to avoid unnecessary disputes. You may want to use the argument to convince senior staff and governing bodies that, unless teachers have meaningful access to computers for their use, learners are unlikely to get the necessary exposure to computers as they will not be integrated into classroom teaching.

- In the absence of a computer being available for your use, *try to make the best administrative use of computers in the school.* For example, where a secretary is available to type out tests, worksheets or correspondence, ensure that you collect an electronic copy of these (on a disk) for future reference and amendments - to avoid having to duplicate work the next time these are needed.

- If you have a computer available for your use, *consider going on courses designed for teaching specific applications to develop your competence.* These courses are widely available commercially, or through NGOs or teacher centres, and could form part of your professional development.

But you should be careful about who you register with to do your course. Because computer training is in such demand at the moment, there are many 'fly-by-night' computer schools in operation.

Be careful about where you study

Before you register for a course, ask potential providers the following questions:

- *Are the software programmes you teach the programmes I want to use or have access to?* (There is no point studying a word-processing programme that you have no access to!)

- *How many computers do you have? Will I have access to my own computer most of the time?* (Computer literacy requires hands-on training. Good institutions will ensure that most of your time is spent at a computer.)

- *Who teaches your courses? Are they qualified professionals? Or do you rely on a computer-based programme to do the teaching?* (Some institutions rely entirely on packaged online courses. While many of these are good, you should check that the staff running these courses have enough expertise to offer good support.)

- *What kind of support do you offer?* If it's a lecture-based course, do you offer supporting notes? Are staff available after hours for queries? (Ideally, courses should offer both good course materials – so you can learn on your own – and

ORT LEAP trust offers teacher training in the subject area of technology. These courses include modules on Information Technology. Professor Cronje at the University of Pretoria co-ordinates a Masters in Education programme on using computers in Education. His courses and students' work are available on the Internet at *http://hagar.up.ac.za/catts/abc home.html*. You may want to browse through them out of interest or to consider enrolling for the programme for your later professional development.

Alternatively, contact School Net *(www.schoolnet.org.za)* or Netdays SA (*www.netdays.co.za*). These are both South African organizations committed to improving school access to computer technologies.

access to a help-line or staff member so that you can get assistance when you get stuck. This support should be offered for a period after the face-to-face training has ended.)

- *Does the course offer some form of accreditation?* (This is not vital, but useful. However, beware of' attendance certificates' – they mean nothing. If you want accreditation, go for a course that has some reliable form of assessment.)

Without being able to practise and use what is taught in such courses, they are generally recognized to be ineffective. For example, a one-week course on using a word processor is likely to be of little value unless you are able to start to use a word processor on a regular basis to support your daily work.

Developing your learners' computer competence

There is currently a strong push to ensure that learners are computer literate and able to use basic computer applications. Computer literacy is fast becoming a core competence for many work and learning environments. In fact, Curriculum 200S lists it among the critical cross-field outcomes (CCFOs), as well as among specific outcomes in learning areas such as Technology, and Language and Communications. As teachers in schools, how can we contribute to realizing this outcome?

Obviously you could begin by measuring the computer literacy of your learners by using the Bellingham form or, preferably, an adaptation of this form. Then you could do the following:

Establish special computer literacy classes

One way to develop computer skills is to timetable special computer literacy classes. Each class spends a certain amount of time in a computer room or laboratory 'learning computers'. Like the above-mentioned courses on computer applications, this is likely to have little impact on learners unless use of these applications is integrated into their daily routine through other learning areas. In other words, as a CCFO, all teachers should:
- integrate computer use into (at least some) of their lessons;
- provide assignments that encourage computer use;
- assist learners to get access to computers (at school, at home, or through local community centres).

There are also many commercially available programmes that teachers can use to teach computer literacy. These KeeBee and Mouse Tutorial screens are taken from a 'Computer Literacy' computer-based training course that is locally produced and designed specifically for the South African market.

Beginners, intermediate and advanced levels take learners through various levels of basic computer competence, from using a mouse and the keyboard to topics such as viruses and Basic Input Output Systems (BIOS). They include graphics, video and audio, and users can proceed at their own pace as they learn about computers.

Multimedia Scapes is a South African distributor of educational software, and has some interesting products, though most have been designed for the corporate and higher education markets. LearnKey and DiscoveryWare products focus on teaching how to use basic computer applications such as Word and Excel. Visit *www. mmscapes.co.za* to see their range.

Developing computer literacy through learning area lessons

Instead of having a separate subject for 'learning computers', we should also introduce computer use into all our lessons. In this way, we can extend what is done in special classes - but we can also encourage learners to see computers as a tool for assisting with their normal school tasks. How we do this depends on the age of our

KeeBee
Keyboard

Mouse Tutorial

Saide
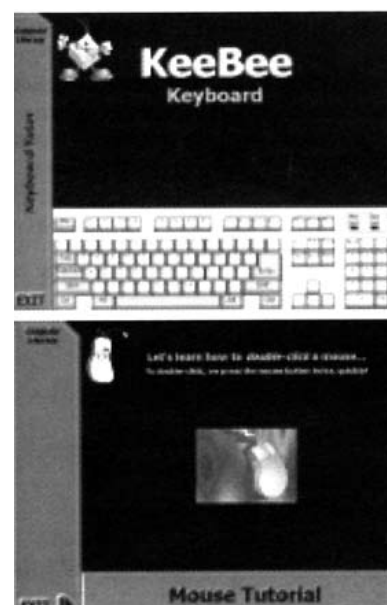
learners, the number and availability of computers in the school, and the subject area, but here are some examples of integrating computer use into lessons.

Get learners to word process normal assignments

Here is straightforward addition to a written task that can be done at almost any age and for any subject area:

> For your assignment on birds, I expect at least two typed pages using the sub-headings we have discussed. Your presentation is important, and will form 5% of the assessment of the task.

It does, however, require extra attention from the teacher. Before doing this, ask yourself:

- How can I make sure my learners can easily get access to a computer? (Arrange with a computer support teacher, book the computer room for a specific number of lessons, make sure the computers are available after hours and, if necessary, book them for your learners.)
- Can my learners use a word processor? What type of support do they need?
- Why am I making this requirement? What computer competence outcomes are expected? How will these be assessed, if at all?

Get learners to use programmes for time-consuming mathematical tasks

Here is an example where a mathematics teacher uses the computer as a tool to help learners draw graphs quickly:

> In this activity we are going to use Graph-It to draw the five equations I have written on the board. I know all of you can draw graphs, but I want us to use the computer today to see what happens to the graph when we change the equation.
>
> Start by entering $y = x^2$, then $y = 2x^2$, $y = 3x^2$, and so on. When you have the five graphs on your screen, make up your own similar equation to draw. Then press 'printscreen' to get a printout of these graphs, and label each graph with its equation.

The mathematics teacher is not wanting to see if the class can draw graphs, but rather whether they can notice patterns. Using a computer enables students to see the effect of changing a number in the equation very quickly. You may want to turn to your CD-Rom and to look again at the multimedia education group's programmed educational resource on numeracy. *(Click on Educational Resources.)*

Getting learners to use word processing in a 'process' writing exercise

This English teacher uses the fact that making changes on a computer is quick and easy to help her class develop writing skills:

Today we are carrying on with our creative writing exercise. Please take out your disks and hard copy with the first draft of your essay. Give the hard copy to me and give your disk to your partner. I would like each of you to edit your partner's work carefully. You can make appropriate comments. Please make sure you save the changed version with a new file name so we still have a digital copy of the first draft.

hard copy: a printed-out version (on paper) of a computer document (so called because the digital version electronically saved in the computer or on a disk would be a 'soft' version)

Instead of having to re-write their essays, the learners can make changes and corrections using a word processor. The teacher also introduces peer review and teamwork to get a better piece of writing.

How any computer application is integrated into a lesson depends entirely on you as the teacher, and on the learning outcomes of the lesson. Many teachers design worksheets to guide learners through activities using a computer. This lets learners work at their own pace through the tasks, and means that you can help individuals without holding up the entire class.

Like all lessons, lessons using computers need to be carefully planned to be successful.

ACTIVITY 60

a Can you think of any other ways in which computer work can be integrated into day-to-day schoolwork? Are there any other tedious or time-consuming tasks (such as drawing graphs) that your learners are required to do where a computer can be used to speed them up?

b What constraints do you see in your particular situation? How could you begin overcoming them?

Spend about 20 minutes on this activity. Don't ignore the activity if you have no computers at your school. Think, instead, of how you could work round this problem. For instance. do learners have access to computers at home, or through an Internet cafe or local business?

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7.4 Using computer technologies in teaching

Using CD-Roms

CD-Roms (Compact Disk-Read Only Memory) are similar to commercial audio CD-disks (music CDs) but can store audio (sound), video, text (typed words) and graphics (pictures). This mix of media in a single technology is referred to as 'multi-media',

Multimedia resources can either be distributed or accessed using CD- Roms or the World Wide Web (WWW). The text that appears on your computer screen when you open a site on the WWW, or open a CD-Rom programme, will look much like what you are used to finding in books. But it has at least one important difference: the existence of what are called 'hyperlinks'. You may notice that some words in the text appear in a different colour, or are underlined. This generally indicates that they are *hyper-links* – which indicate that you can move directly from this word to linked ideas elsewhere on the CD-Rom, or anywhere on the WWW.

Hyperlinks have made navigation through multimedia materials much easier since, with the click of a mouse button, a user can bring up different screens, play a video or audio clip, or switch to a standard computer application.

As CD-Roms store and play back huge amounts of data, they are commonly used for storing any type of computer files (for example, for archiving files), as an alternative way of publishing books, for storing and distributing computer software, games and educational materials. The data can either be plain text (such as a dictionary or thesaurus, or word document) or include pictures, photographs, audio or video clips (such as a multimedia encyclopaedia).

CD-Roms as a reference or source of information

CD-Roms are often used as reference sources and therefore have been introduced into a number of libraries and resource centres. CD-Rom encyclopaedias best illustrate this type of use.

There are many CD-Roms available for this type of reference material. Some focus on a range of topics (such as an encyclopaedia), while others focus on a specific topic (such as World War II, musical instruments, endangered animals, the human body). Most of these types of CD-Roms are not made in South Africa and are usually produced in the United States of America or the United Kingdom.

'Talking books' or interactive stories

Another common use of CD-Roms, particularly in primary schools, is for 'talking-books'. These are used for teaching and encouraging reading, and have the potential to:

- develop reading skills by giving children an overview of the story before reading it;
- encourage independent reading through the audio clips that sound out words;
- encourage collaborative reading when a small group of children (3-4) work on one computer.

Whether these potentials are realized or not depends on the way the teacher interacts with the learners before, during and after the computer session. For learners to benefit fully from CD-Rom talking books, they need to be coaxed and encouraged to talk to one another.

These types of multimedia resources are also available on the Internet. While the Internet offers a much wider range of materials than a CD-Rom does, the best materials or parts of materials can often only be downloaded and used at a cost. Downloading video (especially) and even audio takes time, and requires a high-powered computer. Images can be retrieved and viewed much more quickly on CD-Rom. However, the Internet does offer the ability to communicate – something the CD-Rom doesn't offer. So it is possible to 'converse' with a fellow learner or teacher 'online'. But this also comes at a cost: to remain online means that you are logging up telephone bills. However, the cost of each 'conversation' will be that of a local telephone call.

This information about 'talking books' has been taken from a book called *Teaching and Learning with Multimedia* by Collins, Hammond and Wellington, 1997, London: Routledge. It is worth reading as, although it focuses on British schools, it has many examples of the ways that multimedia resources have been used in primary and secondary schools, and interesting commentary on both successes and failures.

At Rivonia Primary School in Johannesburg, 'talking books' or 'interactive stories' are used with most junior classes. The CD-Roms are used when the whole class comes into the computer room, or by individual learners after school. Living Books, Dr Seuss, Fisher Price and the Darling Kindersley range of topic-focused CD-Roms are used most often.

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This screen shows a typical illustrated children's story taken from *Candle-light Stories* at: http://www.candlelightstories.com.
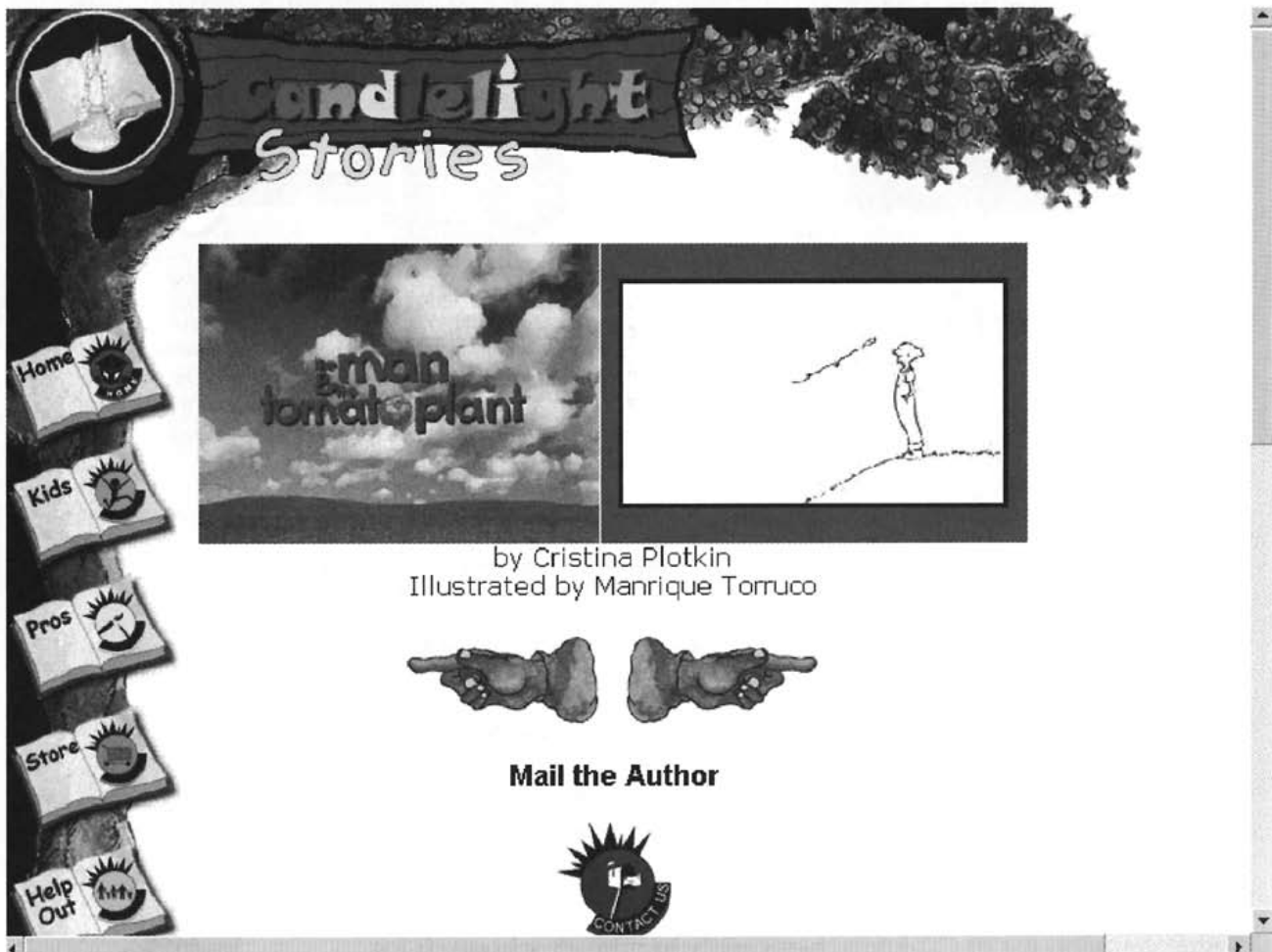
Children can click on the icons to 'turn the pages' and can listen to the story by playing the audio track. There is little other interaction. Using the Internet with a dial-up connection makes downloading these stories very slow. On a CD-Rom there is little or no waiting. You can access pages from this site on your CD-Rom. Do you want to try this now?

Designing lessons using CD-Roms

Again, the way in which this type of CD-Rom is integrated into lessons depends on the way you set the task. Learners can easily be swamped by the volume of information available to them. They need to be guided in how to use the product, and to navigate through the CD-Rom using search facilities. When using CD-Roms (and the Internet) we often ask:

- How do we discourage or stop learners printing out reams and reams of information?
- How do we know when learners are learning or just casually browsing and looking at irrelevant (or inappropriate) stuff?

These are not really new questions to teachers. We have always been concerned about the mindless copying out of books, or by exactly how much actual 'work' goes on when learners are set loose in a library or resource centre. It is no different with multimedia resources, although perhaps the scale and likelihood of the

problem is different as multimedia resources now have the potential to present much more information in more appealing ways. We need to guide our learners through focused tasks to be able to select appropriate pieces of information and present these in a coherent and sensible manner. This means we have to design tasks that we know will build information management skills.

A task such as 'Use the CD-Rom to find out something about Nelson Mandela and write it down' will test whether a learner can use a CD-Rom and run a search, but it is unlikely to achieve anything else - it is in fact likely to encourage poor information-processing habits. In order to make these types of activities more meaningful, you need to answer several questions:

- Do you – as the teacher – know what type of information is available on the topic you set? In other words, is it possible for your learners to find the information you asked for, given the available resources?
- What do you want learners to do with the information?
- How structured or open-ended will you make your task and questions?
- Will the task be mainly teacher-directed or learner-directed (both have important uses)?
- Is the task aiming to encourage casual browsing or purposeful browsing (both have merits)?

Again, these are not new questions that have been introduced because you are using a new technology. But they are important questions that are often forgotten in the excitement of using a new technology. When using CD- Roms as a reference, you should set structured but open-ended tasks that require using a few sources and some organizing of information. These types of tasks are generally more engaging and meaningful for learners.
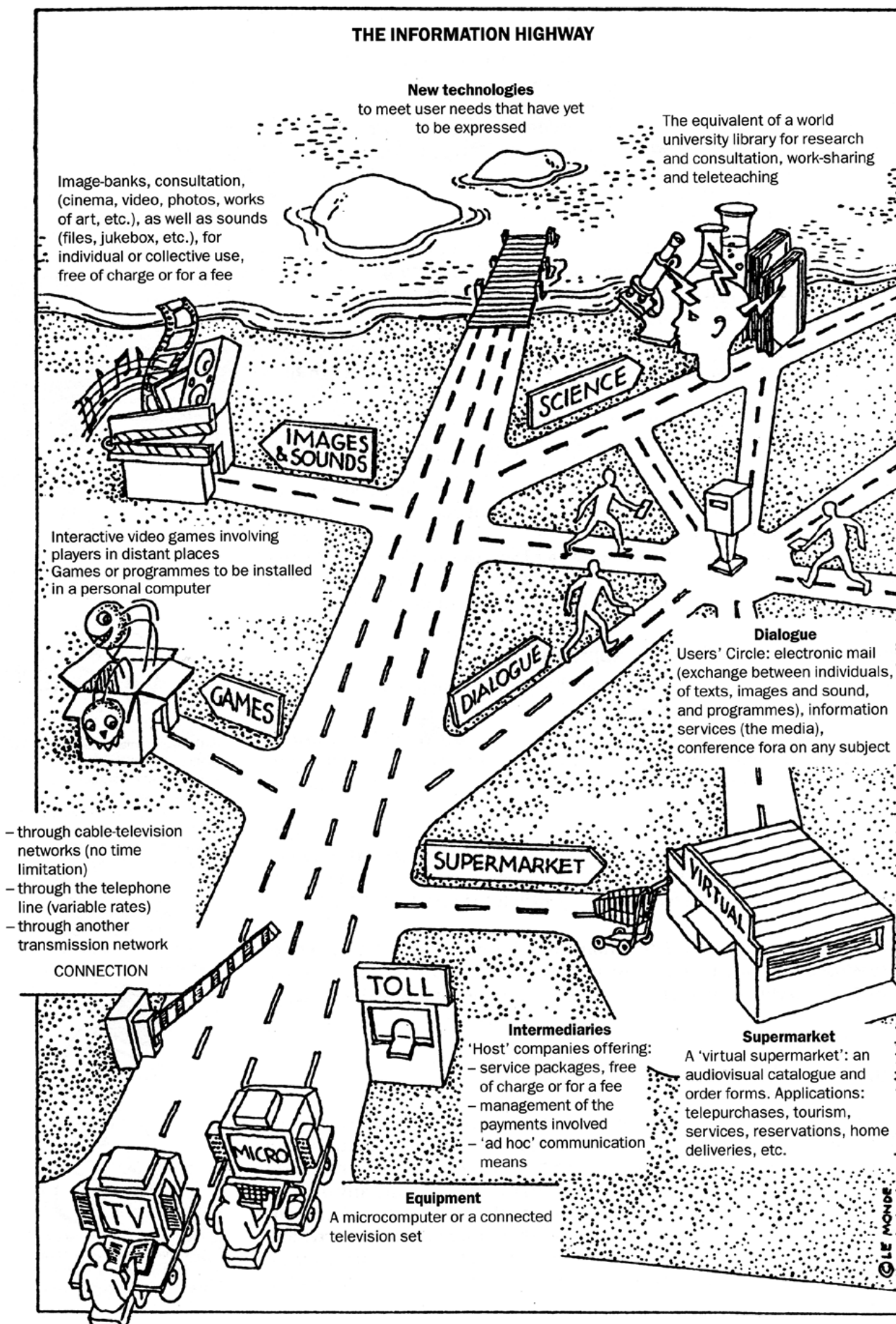
How do we select CD-Roms appropriately?

How we select from the range of available products is important. Here are some initial criteria for evaluating CD-Roms:

- *How has information presented on the disk been selected and presented?* Is there a clear bias or prejudice towards the northern hemisphere, race, gender or anything else? How current and accurate is the information? Is the source of information acknowledged?

- *Does the software design encourage interaction?* Is there a search facility? Can users get to information through a range of pathways (through an alphabetical list, an atlas, a timeline, and so on)? Is there a built-in 'notepad' or calculator? Can learners easily switch to use 'content-free' applications'?

- *How are the multimedia data organized?* Are the information categories sensible and easy to use? Is it easy to view a video, read an article and listen to an audio clip about a single topic, or is each medium stored separately?

Open questions: 'What was Mandela's childhood like?' is an open question, as there are many ways to respond to it. But 'What is Mandela's clan name?' is a closed question as it has only one answer.

Using the Internet

The Internet is a global web of computers that are connected to each other. This connection enables computer users to share information and , resources. In simple terms, the Internet has two main parts - the World. Wide Web (WWW) and e-mail. No one owns the Internet, and anyone can use it. You can put your own information onto the Internet by making your own website, or you can visit the web sites that other people have created. You can also send and receive e-mail as long as you have an e-mail address. In this section, we look at the ways you can use the WWW and e-mail to support your teaching.

Saide

THE INFORMATION HIGHWAY

New technologies
to meet user needs that have yet
to be expressed

The equivalent of a world
university library for research
and consultation, work-sharing
and teleteaching

Image-banks, consultation,
(cinema, video, photos, works
of art, etc.), as well as sounds
(files, jukebox, etc.), for
individual or collective use,
free of charge or for a fee

IMAGES & SOUNDS

SCIENCE

Interactive video games involving
players in distant places
Games or programmes to be installed
in a personal computer

GAMES

Dialogue
Users' Circle: electronic mail
(exchange between individuals,
of texts, images and sound,
and programmes), information
services (the media),
conference fora on any subject

DIALOGUE

– through cable-television
networks (no time
limitation)
– through the telephone
line (variable rates)
– through another
transmission network

CONNECTION

SUPERMARKET

VIRTUAL

TOLL

Intermediaries
'Host' companies offering:
– service packages, free
of charge or for a fee
– management of the
payments involved
– 'ad hoc' communication
means

Supermarket
A 'virtual supermarket': an
audiovisual catalogue and
order forms. Applications:
telepurchases, tourism,
services, reservations, home
deliveries, etc.

MICRO

TV

Equipment
A microcomputer or a connected
television set

© LE MONDE

The World Wide Web

The World Wide Web (WWW) allows computer users to view multimedia materials (like those on CD-Roms) through a computer software programme called a 'browser' (such as Netscape Navigator, Internet Explorer or Mosaic). This means that you can visit web sites that have been created by other users, or you can create your own websites. You can use the WWW in a number of ways for your teaching, as the following teachers' reports illustrate.

General news and information

> *'I use the WWW to get the cricket score and latest news. I also find it useful for printing out topical newspaper articles to discuss in class. I once needed to know the population of India and didn't have up-to-date statistics about the country. I found the most recent census figures on the WWw.'* (Geography teacher)

The WWW can be used as a source of information – you could think of it as being like a very big library. As the Geography teacher mentioned above, you may want to use it for finding general information (such as current affairs, sport, the weather, entertainment, travel plans, or for buying things). To do this, you need to know where to look for the type of information you or your learners require. On the WWW there is a wide range of websites that aim to be a one-stop shop for your information needs. These types of sites often focus specifically on current affairs and news, and have lots of links and categories to enable you to find the information you are looking for. Many of them are linked to a *'search engine'* (which we will discuss later) and some offer free e-mail services.

This general news information can help you to find up-to-date and relevant information to use in your lessons. As it is easy to print out information from the WWW, you may bring interesting articles and reports into your class. You can also encourage your learners to browse the WWW to find information about topics that interest them. Using the WWW, you will soon realise that there is a huge amount of irrelevant information or 'junk' on it. Remember, however, that what may be junk to you could be useful to someone else (at least one person – the person who created the website – thinks that each website is useful!). Both you and your learners can spend hours browsing the WWW to find relevant content. You need to decide what educational value this has, and how much time you and your learners should be spending on 'mindless' browsing. To save time, it is useful to start collecting the web addresses or URLs (Uniform Resource Locators) for interesting and useful sites.

Educational news and information

> *'I use the Internet to get information about educational issues, debates and policy. I don't have to wait for the government gazette or newspapers - I access the latest developments directly.'* (District officer)

It is possible to find useful educational information on the WWW – you just need to know where to look. There are basically two ways to get such information – start collecting URLs, or use search engines or directories to find relevant sites for you. Here are some starting points for your URL collection of websites about South African education:

- The *Weekly Mail & Guardian* newspaper has a well-established online daily version of its newspaper *(http://www.mg.co.za)*. This includes an archive of articles and an online version of The Teacher, as follows:

http:j jwww.24.com is a South African 24-hours news service and *http://www.mweb.co.za* offers similar services and links. International examples of similar current affairs and news sites include: *http://www.bbc.co.uk* and *http://www.ccn.com*.

URLs: These are the addresses of websites. You will use these if you want to go directly to a particular site. They will all begin with http://www.

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The title of the publication

The name of the host site on the WWW

Hyperlinks to linked stories

The Teacher
DAILY MAIL & GUARDIAN
M·WEB

► WHO WE ARE
► E-MAIL US
► SUBSCRIBE
► ADVERTISE

Schools awash with drugs

Schools are increasingly a haven for drug abuse, with gullible and curious youngsters easy targets for dealers in many narcotic substances.

*Drugs and drink at the heart of the Cape
*A world full of difficult choices

Ghost teachers busted

Rooting out phantom teachers has saved KwaZulu-Natal millions of rands, now to be used to train principals, educators and governing bodies in the skills of financial management.

FULL STORY

New hope for the Eastern Cape

That was then, this is now

On the twenty-third anniversary of the 1976 soweto uprisings, the youth live in a totally different reality - and have very different dreams

*Twenty years on
*The youth today can dream
*The colour of money

► MAIN INDEX
► LATEST NEWS
► FEATURES
► EDITORIAL
► RESOURCES
► CHALKDUST
► CHATTERBOX
► LETTERS
► BACKCHAT

Prizes to be won

Safety in the home ... art and colouring in competition.
*Enter the Emergency Services art competition!

European history 'unwanted' in African schools

Visit *http://www.teacher.co.za* to see the latest issue of *The Teacher* and an archive of earlier editions.

- The *Sunday Times* Education site at *http://www.suntimes.co.za/edu* is an online version of the Read/Write education supplement that comes with this Sunday newspaper. Both the newspaper and online versions have a regular Internet Connection column with reviews of education websites of interest.

- For information about South Africa (particularly on policy, politics and statistics), the African National Congress (ANC) site *www.anc.org.za* is regularly updated and very comprehensive.

- The South African Government Communication and Information Services (GCIS) is also a good starting point for government information: *http://www.gcis.gov.za*.

Teaching and learning resources

> *'I use the WWW to find lesson ideas for specific topics. I visit educational resource link sites and print out suitable lesson plans. I have found lots of children's stories which I have printed out and filed in my classroom library corner.'* (Foundation Phase teacher)

The WWW has various archives and databases on lesson ideas, lesson plans and case studies designed for parents and teachers. Most of these allow for searches using the subject area and age or grade of students as criteria. Most of these databases have been created in and for North America or Europe, and have grown through contributions from teachers.

Some websites have been specifically designed for educational content. These take users through carefully designed content, in much the same way as was discussed under *Using the computer as a tutor*. The biggest difficulty here (besides the expense of being online) is that there is very little relevant content for South African learners at this stage. Some tertiary education courses are now being offered online, but there is currently very little available for South African school learners. Increasingly, though, learner sites are being developed. Here are some useful sites:

- **The Learning Channel** at *www.learn.co.za* has materials based on Science, English, Business Economics and Geography for Grade 12 and some additional materials for Grades 9, 10 and ll.
- **Cyberschool Africa** *(www.cyberschool.co.za)* has developed online materials for matriculants in mathematics, science and biology.
- **The Mathematics Learning and Teaching Initiative** (MALATI) at *www.wcape. school.za/malati* is an excellent resource site for mathematics teachers.
- The University of the Western Cape has created an online South African **Grade 10 Biology textbook** at *http://www.botany.uwc.ac.za/scCed/index.htm*. It is text-based and content driven, and has links to other resources on each topic of the Grade 10 Biology syllabus.

Navigating the Internet: using search engines

Search engines or directory websites enable you to enter key words and phrases, and scour the WWW for websites on any topic you wish to explore. They perform roughly the same function as a catalogue cabinet (or computer search programme) in a library.

In a library, though, there is a librarian in charge and only a finite number of resources. So, if what you are looking for is not in the catalogue, you know it's not in the library. No one is in charge of the Internet, and anyone can contribute information. As a result, there is no central catalogue of websites, so finding what we are looking for would be much more difficult without search engines and directories. One of the main difficulties is that information comes from all over the world. It is therefore often helpful to limit your search to websites from a specific place (like South Africa). There are two main ways in which we can search the WWW:

- **Search engines** use computer programmes to wander through the WWW and follow links collecting details from these websites to catalogue and index.
- **Directories** look like search engines and perform the same functions, but finding and cataloguing the web sites is done by human researchers, not through programmes.

Here are a number of South African search engines you can use to search the WWW:

- Max *(www.ntax.co.za)*. a newcomer from M-Web, combines a search facility with a web directory. With more than a thousand subsections, Max catalogues more than 10000 South African websites, It has clear descriptions, an easy-to-use navigational structure, and very few dud links. You may want to tryout the sample of *Edumax* on your CD at this point.
- Ananzi *(www.ananzi.co.za)* is the oldest South African search engine.It indexes more than 87 000 Web pages, and offers a free Web-based mail service, chatlines, news and weather updates.

For an overview of South African online content, have a look at *http://www.school.za/ overview/tlr.htm. T*his was created by Stephen Marquard at Schoolnet SA in November 1998 and shows some interesting examples and categories of online educational content produced in South Africa.

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Search line: type the name of the subject you're searching for here, then click Find.

Advertising: Most search engines earn money from advertising

Hyperlinks to linked services

- Aardvark *(www.aardvark.co.za)* provides percentages for its search results, giving a good idea of how relevant they are.
- Voted best search engine of 1998 by The Sunday Times, Zebra, *(www.zebra.co_za)* currently indexes more than 100000 pages.
- Gogga *(www.gogga.ru.ac.za)* indexes articles from the local online media. It searches the major online newspaper publishers.
- Fanagalo *(www.fanagalo.co.za)* is also dedicated to scouring South African news sites, allowing searches to be narrowed down to the past 24 hours.

One of the best research directories/search engines is *www.northern light.com*. This engine keeps a large number of academic articles and good newspaper and journal clippings.

Getting learners to produce their own websites

> *'My afternoon computer club students have all learnt to design websites. They have entered the Think Quest competition, and are really working hard at it.'* (Computer Club supervisor)

Both you and your students can design websites. The basics are relatively easy to learn, and there are a number of software programmes that make web design very similar to word processing (for example, FrontPage or HotDog Express). Several Hyper Text Mark-Up Language web sites (HTML-the coding language for web sites) are available online, as are several sites on the latest web developments and developers' tips. If this becomes a personal interest for you, there is certainly sufficient information on the Internet and various short courses on offer to get you started.

Using e-mail

 The other major component of the Internet is e-mail that allows computer users to send messages to each other. Text messages and computer files (such as Word documents) can be sent from one computer to another. It is possible for computer users to have e-mail but not to be connected to the WWW.

   This type of arrangement is quite common in schools that use dial-up networking. While each teacher or learner has an e-mail address and can send and receive e-mail from any computer in the Local Area Network (LAN), only one computer is actually connected to the Internet. It is through this computer (the LAN server) that e-mail messages are collected and distributed. E-mail can be used for virtually any correspondence that would probably otherwise have been done using the postal system or facsimile.

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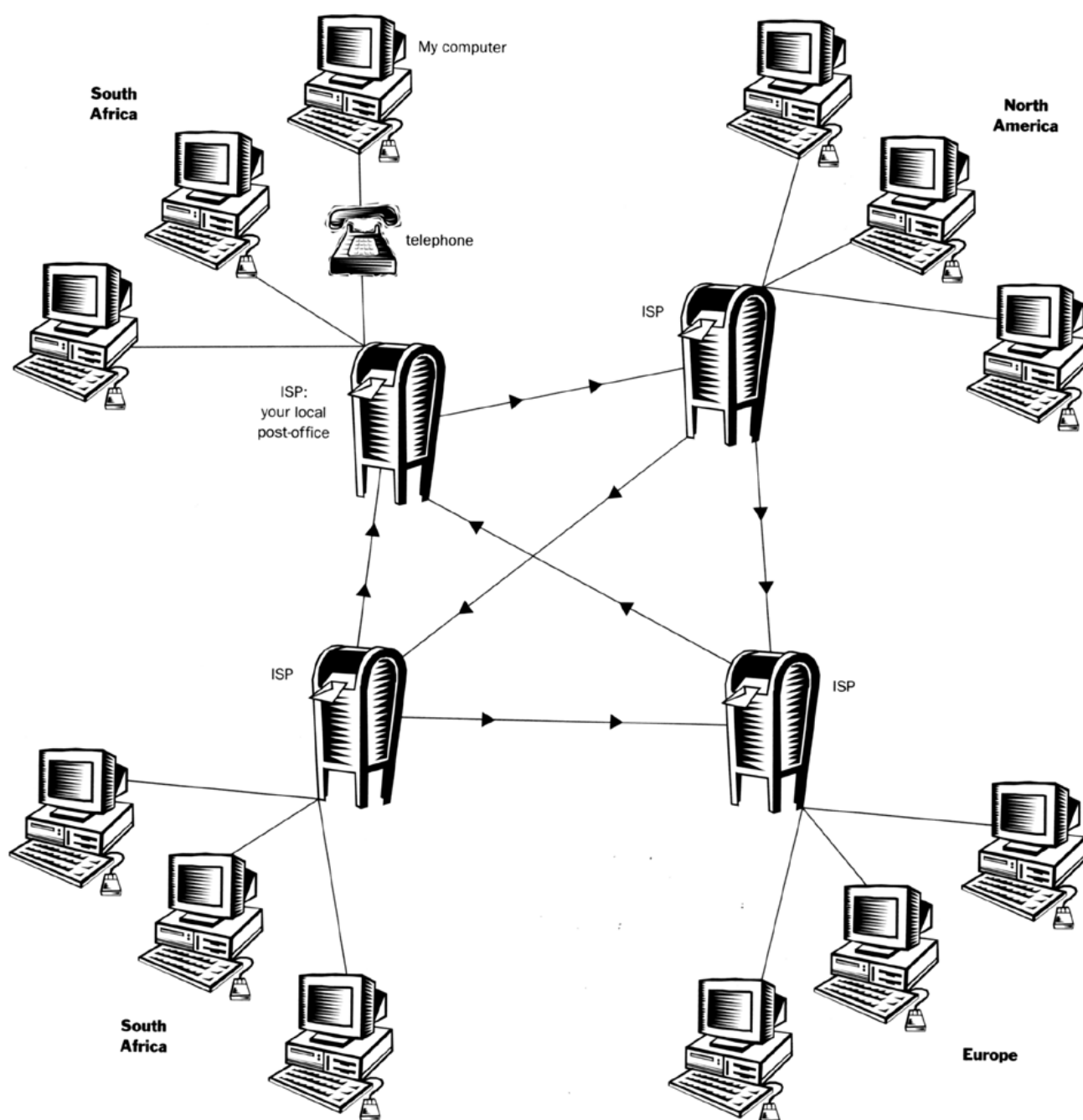
The major advantage of e-mail is that messages reach their destination very quickly and cheaply. Sending an e-mail message anywhere in the world takes seconds or minutes rather than days and weeks and costs, at most, the charge of a telephone call to your Internet service provider (ISP). You can also check whether someone has received and/or read you message using a tracking programme. E-mail can be used for all types of administrative communication (such as organizing a sporting event, writing a note to a parent, receiving a district newsletter), as long as the recipient has an e-mail address.

Nicky sends message from her 'post box'

Nicky's message as John sees it on his screen

Nicky's message highlighted in John's 'mailbox'

An additional advantage of using e-mail is that you can send the same message to a group of people with very little additional effort. By typing in several addresses, you can set up a *distribution list* that will send the same message to a whole group. This may be useful for sending invitations to a function, for example, or sharing progress on a project. This function also allows you to receive e-mails on topics of interest by subscribing to distribution lists.

If you have e-mail, you may want to subscribe and/or contribute to these South African e-mail information services:

- *Edufax:* A weekly newsletter directed at South African educators. It includes announcements, job offers and training workshops and courses.

- *Telematics for African Development (TAD) Consortium:* A regular information service (sent out about 2-3 times monthly), it deals with the use of technologies for education and development. It includes the latest snippets from the Internet on technology trends, recommended online resources, and news articles and announcements of new products and events.

You can subscribe to Edufax by e-mail (*john@edufax.co.za*) or fax (0126546757),orTelematics for African Development (TAD) by e-mail (*neilshel@icon.co.za*). including a line stating that you would like to subscribe to TAD.

You can also subscribe to discussion groups where every message sent by any of the group members is received by the whole group. This means that the content is not monitored and, depending on the group, you may be inundated by many irrelevant messages.

Learners can use e-mail to communicate with people outside of their school and community. Collaborative Internet projects can be established between groups of learners in very different contexts. The learning process is greatly enriched by both groups working through similar content, or on joint projects, and sharing their findings.

Through the Dialogues Project, for example, learners at a few schools in the Western Cape have been working collaboratively with schools in the United Kingdom. Each class teacher set his or her class a project on their school and community. The children wrote about and took photographs of their environment. These were sent to the children on the other continent, who commented on and asked questions about the project. By working on similar topics, teachers were able to plan together and support one another, while the children made new 'friends' and learnt about their own and other contexts.

One of the greatest strengths of the Internet is that it integrates the WWW and e-mail communication. This means that, when visiting a website, you can 'interact with it' by responding to questions, filling in forms or writing comments that are delivered using e-mail.

Getting connected

Any individual or school can 'get connected' to the Internet if they can afford it. How you choose to connect to the Internet is very relevant. Either you can use a telephone connection (dial-up networking) through a modem, or you can have a dedicated line that permanently connects you to Internet through an ISDN line. With a dial-up connection, the user pays for a monthly subscription to an Internet Service Provider (ISP), and the costs of the local telephone calls to the ISP. A dedicated connection is much more expensive, but downloading information from the Internet is much faster. Users are charged a monthly subscription for the line, as well as a specified amount for traffic (how much it is used).

7.5 Resourcing your school

We know that the majority of South African schools do not have any computers, making it impossible for teachers to make use of the ideas in this section. We hope, however, that this will not always be the case, and in this sub-section we offer a few ideas on how you might contribute to changing this situation.

You will probably have spent about 124 hours on this module so far.

Involve and consult the school principal and school governing body

Without the support and active involvement of the school principal, the governing body and a core of staff, and without the enthusiasm of learners, attempts to introduce computers will be severely frustrated and likely to fail You may want to introduce discussion about computers and their importance into staff meetings and school-planning sessions. While you may not be responsible for this planning or any decision-making, you can initiate the thinking process and offer support and encouragement to decision-makers who may feel intimidated by the technology developments, or overwhelmed by the enormity of the task.

Microsoft has developed a *Technology Road Map* for schools. This is a step- by-step guide designed for schools in the United States that are planning to introduce computers. It is available from Microsoft South Africa at *www.microsoft.com/southafrica/education.* (To receive a copy of this document, e-mail saed@microsoft.com and they can post or e-mail it to you.)

The National Business Initiative has launched a project called EQUIP for South African Schools. It has developed guides for governing bodies on how to plan for school development and improvement, and includes skills such as writing funding proposals and forming agreements with businesses. (Contact them at (011) 485 5100 or *www.nbi.org.za.*)

Draw on existing support and draw up technology plans

Only your school community can understand your context and what its priorities are. You and your colleagues need to make sure that you under- stand your current situation and agree upon a common vision for the future. This obviously involves careful and ongoing planning. It may be best to consider a five-year plan within a whole-school context. Is it appropriate to be considering buying computers if your school does not have a photocopy machine, chalkboards or chalk? Rather than focus on computers in isolation, consider the technology needs of your school as a whole. Put simply, you need to understand what you have, and what you would like. Prioritize this wish list and work on realistically achievable goals and the means of meeting these.

Approach business for donations

A number of businesses are keen to donate used technology equipment to schools, and there are various small-scale initiatives to equip schools. Schools that have shown initiative and have started to develop technology plans are well placed to make use of these donations and initiatives.

Don't focus solely on technology requirements and neglect other key issues

Often when planning to introduce computers, we focus only on the technologies: What type of computer should we get? How many do we need? What software? and so on. We neglect key considerations such as security, insurance, repair and maintenance, teacher training and ongoing technical support. These are important considerations, and require not only time and consideration but also funding. In many cases, these incur ongoing costs. They are an integral component of planning the successful introduction and use of computers.

SchoolNet is an NGO offering support to schools that are starting to use computers and the Internet. It has a national office in Johannesburg and regional affiliates. It is a very useful starting point for considering all these inter-related issues. It has provincial affiliate NGOs made up of volunteer teachers in the region. (Visit *http://www.schoolnet.org.za* for more information.)

7.6

What have I learnt?

Key learning points

Why are computers important?

- Computers are used in almost all offices and workplaces. They are an important part of society and cannot be ignored.
- People who know how to use computers have more chance of getting a job.
- Computers can improve the quality of teaching. They can be used as an educational resource.
- Learners like using computers and are motivated by them..
- But most South African schools do not have computers. This is a problem as computers can make the gap between the well-resourced and under-resourced schools and communities even wider.

First steps

- For you to use computers in your teaching, you need to be computer literate.
- To do this you can go on a course, buy your own computer or try to get a computer for staff use at your school.
- Computer competence is one of the critical cross-field outcomes of Curriculum 200S. All learners must become computer literate.
- Learners can be taught how to use computers in a special computer literacy period in a computer laboratory.
- But computer literacy classes are not enough. Teachers must also introduce computers into their subject area lessons.

Tips about using CD-Roms in education

- CD-Roms can have written text, pictures, video clips and sound on them.

They are called multimedia resources.

- CD-Roms can be used as a source of information like a reference book in a library.
- CD-Roms are often used for interactive stories, or talking books for primary school children.
- When you set tasks on using a CD-Rom, plan your tasks carefully so that questions are open but structured.
- When evaluating a CD-Rom or deciding whether to buy it, consider:
  - how the information has been selected;
  - what it looks like and how easy it is to use;
  - how the information has been organized;
  - the quality of information or content.

Tips about using the WWW

- The WWW can be used to find information of general interest on almost any topic.
- It also contains news about education (such as policy developments, research reports, news and journal articles), as well as lesson ideas, work-sheets and notes from education sites.
- Teachers can use it to set class activities on a specific website or a number of websites.
- They can also get learners involved in designing their own website.

E-mail can be used:

- for personal and administrative communication;
- for sharing computer files;
- to send or receive distribution list messages;
- to subscribe to or initiate discussion groups;
- for collaborative projects between geographically separated learning groups.

A summative assessment activity

a What computer programmes do you have at your school community centre or library for learners to use (Word, WordPerfect, Excel, Quattro Pro, FrontPage, Presentations, Corel Draw, Paint, Image Composer, etc.)?

b What computer programmes do you know about that you would like your school to buy? Have you compared them with other similar products (for price and quality)?

c If your learners have achieved some computer literacy, what programmes do they already know how to use?

d Which programme(s) could you use with your learners? (Do you know how to use them? Would they be suitable for your learners' abilities?)

e Design two lessons in which you use these programmes with your learners.

This is your final summative assessment. It should take you about four hours.

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Selected reading

On using media in practical classroom activities

Ranby, P. 1993. *Get the Picture! An Integrated Approach to English and the Media*.
Johannesburg: Heinemann-Centaur,

> This is a good 'hands-on' text that teachers can use to teach media literacy in an activity-based manner. It is filled with imaginative activities and, by getting learners to produce media, teaches them about the media. It is South African, practical, and most appropriate for the Intermediate Phase.

Potenza, E. 1993. *Get the Message? An Integrated Approach to English and the Media*.
Johannesburg: Heinemann-Centaur,

> Potenza's text is, in some ways, a companion text to Get the Message: it was also produced as part of the Sacred Heart school's integrated studies programme. It is a practical text that includes some very useful ideas about using media in different learning areas. It is recommended for the Intermediate Phase.

Media in Education Trust. 1999.

> *Ideas for Resourceful Teaching.*
> *A Teacher's Guide to Using Newspapers and Magazines in the Foundation Phase.*
> *A Teacher's Guide to Using Newspapers and Magazines in the Intermediate Phase.*
> (All published by the Media in Education Trust, Durban.)

> These South African guides were written for use by teachers in Foundation, Intermediate and Senior Phases. They comprise a range of media resources to enhance teaching and learning. The guides are simple and practical 'how to' guides; they don't provide any in-depth media or educational analysis.

Cooper, R. and Rinvolucri, M. 1991. *Video*. Oxford: Oxford University Press.

> A rich source of video-based activities for teaching second languages (many can be adapted for languages other than English). Also includes a section on how learners can be involved in making videos themselves. This British text is also a practical 'how- to' text rather than a theoretical examination of media.

On understanding media and developing media literacy

Prinsloo, J. and Criticos, C. (Eds) 1991. *Media Matters* in South Africa.
Durban: Media Resource Centre, University of Natal, Department of Education.

> An excellent, South African collection of articles (some illustrated) on a wide variety of media education topics. Most of the articles are written by practising teachers who explain how they have used media in their own teaching. It also includes some very accessible theoretical articles on media literacy.

McMahon, B. and Quin, R. 1986. *Real Images: Film and Television*. Melbourne: MacMillan Australia.

> This Australian text teaches learners about media literacy by building a series of key concepts systematically throughout the book. The text is filled with helpful diagrams charting the way. It is most appropriate for Senior and Further Education Phases and includes a good blend of practical activities and theoretical explanation.

Young, D. and Regnart, C. 1992. *Media and Meaning*. Cape Town: Oxford University Press.

> Another South African text for use in class, this book includes chapters on architecture, art, clothes and comics, as well as the more obvious popular media. Well-illustrated, and with some useful activities, it is an accessible theoretical engagement with media literacy.

O'Sullivan, T., Dutton, B. and Rayner, P. 1994. *Studying the Media: An Introduction*. London: Edward Arnold.

> A good introduction to media theory, with interesting chapters on media production and audiences.

Hartley, J. 1982. *Understanding News*. London: Routledge.

> Although this book analyses the press and electronic media in Britain, it is a useful study of how, both consciously and unconsciously, the media in general, and the journalists and editors who work for them, present the world in ways that are not simply 'transparent'.

De Beer, A. (Ed.) 1995. *Mass Media for the Nineties: The South African Handbook of Mass Communication*. Pretoria: Van Schaik.

> Intended mainly for South African students of Communications or Media Studies, this quite comprehensive illustrated book provides all sorts of useful information and theoretical comment on all aspects of the popular media (even Public Relations). Draws specifically on local media, or on what is or has been available to South African audiences.

On developing critical reading skills

The Critical Language Awareness Series (ed: Hillary Tanks):

> Granville, S. and Sandham, M. 1993. Language, *Advertising and Power*.
> Jancks, H. 1993. *Language, Identity and Power*.
> Jancks, H. and Sandham, M. 1993. *Language and Position*.
> Rule, P., Sandham, M. and Iancks, H. 1993. *Language and the News*.
> All published by Hodder & Stoughton/Witwatersrand University Press, Johannesburg.

> This *Critical Language Awareness Series* of slim A4-format books is an excellent source of locally-relevant material and activities, specifically written and compiled for teachers of critical media literacy in South Africa.

Eltie. 1997. *Multilingual Learning – Working in Multilingual Classrooms*. Cape Town: Maskew Miller Longman.

> An accessible and interactive text that aims to instruct teachers how to teach reading, writing and speaking in South African classrooms. It is an excellent text that covers theoretical issues, such as power and language, as well as provides useful practical advice about how to assess language learning.

On understanding computers and developing computer literacy

Collins,]., Hammond, M. and Wellington, J. 1997. *Teaching and Learning with Multimedia*. London: Routledge.

> An accessible and interesting introduction to teaching skills, for example, reading, information handling and media literacy, through the use of multimedia such as various kinds of CD-Roms (talking books, encyclopaedias, etc) and the Internet. It is a British text, so many of the discussions about the potential of technology in teaching need to be tempered by South African realities.

de Cicco, E., Farmer, M. and Hargrave, C. 1999. *Activities for Using the Internet in Primary Schools*. London: Kogan Page.

> As the text suggests, this is a very practical, hands-on guide (it commits itself to not using jargon!) on how teachers can use the Internet to teach. It is a British text but is outcomes-based. It is primarily aimed at Foundation, Intermediate and Senior Phases, but many of the ideas could also be used at a Further Education Phase. It has reference to many very useful websites.

Tiffin,]. and Rajasingham, L. 1995. *In Search of the Virtual Class – Education in an Information Society*. London: Routledge.

> A fascinating study of how computer technologies are changing society, learning and thus schools. It doesn't explain how computers can be used in teaching but does provide an interesting and accessible introduction to the changing context in which this kind of teaching will occur.

Lundall, P. and Howell, C. 2000. 'Computers in Schools - A national survey of information communication technology in South African Schools'. Cape Town: Education Policy Unit, University of the Western Cape.

> If you are interested in how many schools in South Africa are connected to the Internet, how they use the Internet and what is being done in South Africa to increase access, this report will be useful. It doesn't explain anything about how to use computers but does contextualize computer use in South African schools.

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