

Introduction

Teaching requires careful planning based on the needs of students, but it is influenced by many other components as well. At a whole-school level, curriculum planning determines the focus taken in particular subjects; consideration is also given to the number of hours allocated to teaching specific content. This is then translated into units of work, with each unit broken down further into lessons and activities, within which there are specific teaching and learning strategies that will be used to develop students' knowledge and understanding of particular concepts, rules, facts or generalisations.

The planning for successful teaching and learning encompasses four major areas:

- content
- environment
- products
- processes.

Content is what is to be taught, determined by the mandates of Departments of Education, the school's requirements and the needs of students. The content used to structure a lesson may be selected by teachers, as it forms part of the curriculum within the syllabus documents of a particular education authority. Teachers often have choices about the areas they want to develop, and can select from a range of content. There are also mandatory areas of investigation for students at particular year levels that must be covered. Content that closely relates to a particular school may also be selected for learning and teaching activities, so that a unit of work can be developed to facilitate students' understanding of that area. There may be a closer focus on some content because it relates to the students' interests, and therefore will keep them motivated to learn.

Education is the ability to listen to almost anything without losing your temper or your self-confidence.

– Robert Frost (1960)

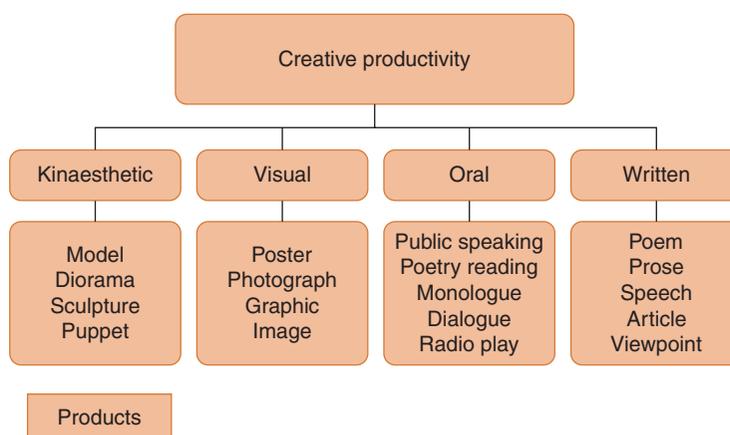


Figure 0.1 Types of products

The *environment* is where teaching and learning takes place, but it is important to note that it includes both the physical and psychological environments. The *physical* environment is the one we can see – the desks, chairs, wall displays and the light in the room. The physical space can easily be modified to make it more appealing and suitable for the different ages and stages of the students. The *psychological* environment is sometimes less evident. It relates to the ways in which the students interact in the classroom, their level of security, and the personal feelings they have in relation to their peers and being a member of the classroom. The strategy of grouping is part of the learning environment, and groups are set up by the teacher and students in the class.

Products are a demonstration by the students of the content that has been learned over a period of time and the learning strategies that were used. Products require a range of skills, and are classified as written, visual, oral, kinaesthetic or a combination of one or more types (see Figure 0.1). When planning, a teacher may determine the final product or, in consultation with the students, they may select how they would like to demonstrate the understanding that has been gained.

Processes develop the ways in which the teaching and learning occur. These teaching and learning strategies bring together the three other components of the lesson (content, environment and products) to ensure that understanding takes place (see Figure 0.2).

SYNONYMS FOR THE WORD 'TEACH'

- advise
- coach
- demonstrate
- develop
- explain
- educate
- instruct
- lecture
- prepare
- show
- train
- tutor

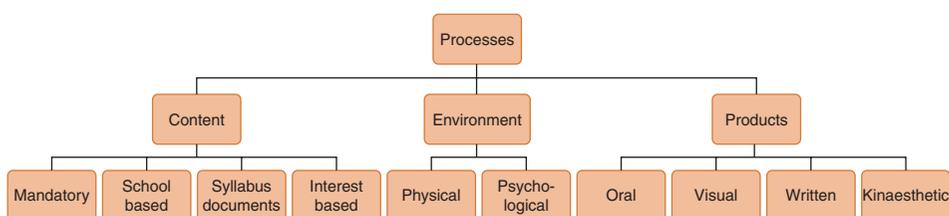


Figure 0.2 The links between content, products, environment and processes

As lessons are developed to meet the needs of the students by determining the most suitable content, processes, products and learning environment, a comprehensive knowledge and understanding of teaching and learning strategies are essential to ensure all lessons are effective and lead to successful outcomes. Teaching and learning strategies can be used individually or in combination in every lesson or activity that has been planned. Once a decision has been made about the content and objectives of a lesson, the most appropriate strategies should be selected.

The strategies discussed in this book relate to the processes that both the teacher and students will use to cover particular content, and to assist in the creation of products that will help students demonstrate their understanding through the development of a suitable learning environment. For successful teaching and learning to occur, it is imperative that both the students and the teacher are familiar with each of the strategies used. In this book, details are given about each strategy on three levels, as illustrated in Figure 0.3.

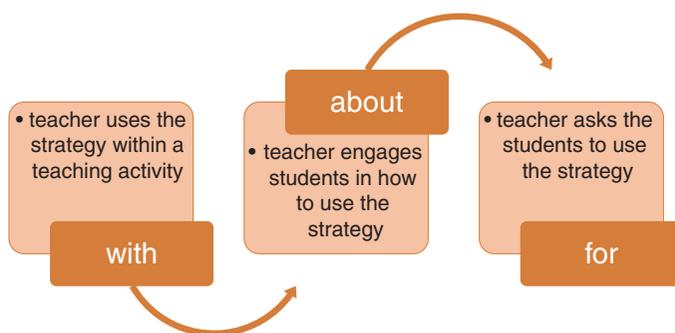


Figure 0.3 The links between *with*, *about* and *for* levels in using teaching and learning strategies

Teaching *with*, *about* and *for* strategies

The chapters in this book are presented in a way that will enable you to work through the activities and learn about each strategy by engaging in it, then considering how you could use the strategy in your teaching and learning. You are encouraged to add your own ideas as you use each strategy, and to record the

ways students work with the various strategies. This information forms the *about* components of teaching and learning strategy planning, but it also highlights the *with* and *for* aspects. The strategies are not presented in a hierarchical manner; however, the strategy of observation covered in Chapter 1 is the foundation upon which all the other strategies must be built. It is also important to note that the strategies should not be implemented one at a time, but rather woven into the overall planning of the curriculum. We will now examine each of these three components (illustrated in Figure 0.3) in more detail.

- *With*. Each day, in your teaching, you are using different strategies to present information to the students, to make your lessons interesting and to motivate them to learn. You might use storytelling, ask questions, share ideas and demonstrate. When using one of these strategies, you don't stop to explain how you will use it – you just go ahead and do it. For this to work, it is necessary to have an in-depth knowledge of the procedure that needs to be followed so that you can provide an excellent demonstration or explanation. So the first step in your learning is to know all about every possible teaching and learning strategy so that you can effectively implement the most appropriate strategy in any given learning situation.
- *About*. This level is concerned with knowing about the actual teaching and learning strategy. It involves understanding the components of the strategy, what the important aspects are and, in some cases, who uses the strategy. Once you have a comprehensive knowledge of the strategy, you can use it in your teaching and engage students by showing them how to use it in their learning. This involves identifying specific attributes of the strategy and ways to develop them. The students therefore need to be taught the stages of each strategy in order to effectively utilise it, and should develop a similar understanding of the strategy to that of the teacher. The *about* level is the most important, and it should come first in a teacher's understanding of teaching and learning strategies. It is vital to know as much as possible about the strategy before using it in teaching, to enable you to subsequently set up an effective learning situation for students.
- *For*. When a particular strategy is selected, the teacher then plans lessons that will ensure the students use the strategy in learning within a range of curriculum areas and types of activities. In the first instance, the strategy would be used with content that was familiar to the students, so they would be scaffolded in their learning before progressing to new and novel content.

A central challenge for the education system is to find ways of embedding learning in a range of meaningful contexts, where students can use their knowledge and skills creatively to make an impact on the world around them. (Seltzer & Bentley 1999, p. viii)

THE STRATEGIES

- observation
- narration
- discussion
- explanation
- questioning
- demonstration
- application
- experimenting
- discovery
- gaining feedback
- graphic organisers
- grouping
- checklists
- rubrics

Many people are involved in the process of planning teaching and learning, and it is carried out over different periods of time and for different purposes. As a result, a variety of learning experiences arise:

- *non-educational*: experiences that are simply undergone and have no significant effect on the individual in one way or another
- *mis-educational*: experiences that thwart or hamper the ability to have further experiences
- *educational*: experiences that contribute to the individual's growth – an extension of human intelligence (Eisner 1994, p. 37). We must aim to make the experiences educational at all times to encourage development of students' intelligence.

Basics underpinning good teaching

All teaching has three areas that need to be considered:

- the presentation of the teaching
- the resources used, and
- how these are related to the knowledge of the content and processes (discussed in this book).

These components are illustrated in Figure 0.4.

The *presentation* relates to the sort of person you are in the classroom – your teaching personality. This encompasses your style, your voice, eye contact and body language – all of which contribute to how effective you are as a teacher. From your own experience in learning, you will recall some of your teachers easily for their particular attributes. Perhaps they were stern and kept a strict classroom, or they had a good sense of humour. These attributes contributed to the type of teacher they were and how well they taught so you could learn. Be aware of your capabilities

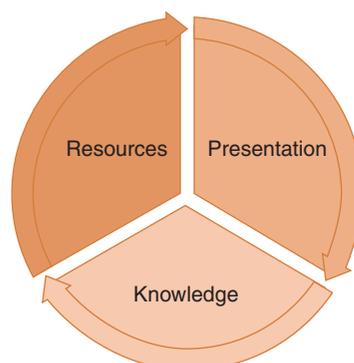


Figure 0.4 The basics underpinning good teaching

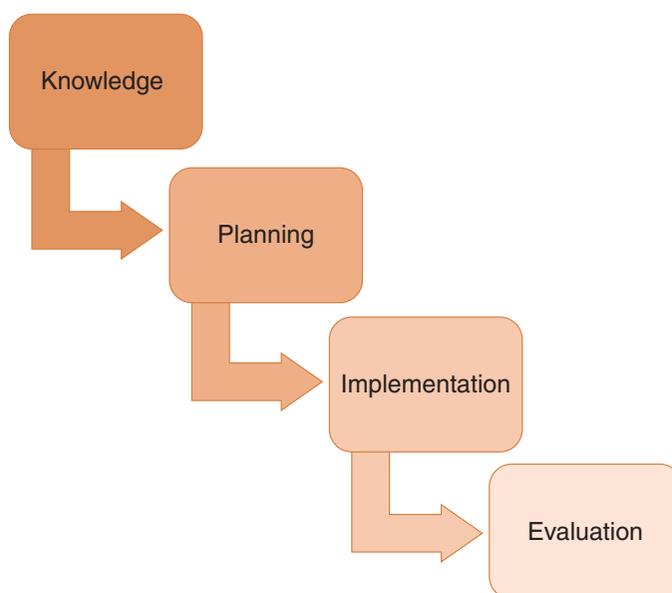


Figure 0.5 Knowledge informing the planning, implementation and evaluation of teaching

You can't teach people everything they need to know. The best you can do is position them where they can find what they need to know when they need to know it.
 – Seymour Papert

in teaching and know how you can use your 'teacher' personality to ensure your students are fully engaged in the learning process.

The types of *resources* you choose to use are also part of your personality. What do you feel comfortable using? Are you at home with new information technologies, or do you prefer face-to-face discussion with your students? Would you work with groups using different resources at different times, or utilise them simultaneously?

The availability of resources may also influence what happens in your classroom.

The third component is the *knowledge* you have of the content, processes, products and learning environment that will be used in the teaching and learning. The firmer your foundation of knowledge from which to plan and prepare for the students, the better. Also paramount is the pre-existing knowledge of each student in your class, so you can meet their educational needs in each discipline area. You

need to be able to challenge them individually as well as challenging the whole class. Knowledge informs the effective planning, implementation and evaluation of teaching and learning, as illustrated in Figure 0.5.

Teachers are never appreciated by parents until it rains all Saturday.

References and further reading

- Eisner, E. (1994). *The educational imagination*. New York: Macmillan.
 Frost, R. (1960). Untitled article in *Readers Digest*, April.
 Seltzer, K. & Bentley, T. (1999). *The creative age: Knowledge and skills for the new economy*. London: Demos.

CHAPTER 1

Observation

We are a visual community, and we rely on the use of sight to inform us in many ways. Walk down any street and you see amazing images, both in nature and created by humans. Some are there to help us stay safe – for example, traffic lights and signs to tell us when it is safe to cross a road. Some are in buildings, on billboards or in gardens. Then there are the actions of people around you and their behaviours with each other. Being able to observe is crucial, and should be regarded as the first learning strategy developed by both the teacher and their students. However, students need to be taught *how* to observe and how to use this skill in their learning.

How to observe

Observation is second nature to most of us, but in a teaching and learning situation both the teacher and students should develop a strategy of observation. The process of undertaking effective observation needs to be taught, and requires some preliminary knowledge from the observer. First, they need to know the purpose of the observation and what attributes are to be examined – something that requires prior knowledge. Students observing will then need to have some way of recording the information that they acquire.

Observation has to be taught
not caught. (Tilstone 2012, p. 2)

OBSERVING REQUIRES

- prior knowledge
- purpose
- knowledge of attributes to be observed
- a way to record information



Figure 1.1 Image found in nature



Figure 1.2 Image made by humans

Teachers observing

Teachers use observation to gather information about the students for whom they are planning. Initially, the information provides details such as which hand students write with, who they socialise with and what games they like to play – this general information is gathered through observation of students at different times of the day. It is valuable for ensuring that the teaching and learning strategies selected are relevant to the needs of each student.

One way to ensure you cover each aspect of your learners is to create a chart and complete details for each student (see Table 1.1). The notes should be brief and to the point, and need to be updated throughout the year. This information can inform you about the strengths and needs of the students in different curriculum areas, and how you may group them for particular activities. Observational records may be used for parent–teacher interviews and can also be used for recording student achievements.

To be a good observer, you need a reason to observe, an objective for the observation and a use for the information you have gained. The particular attributes that you wish to observe need to be determined in advance, so that the relevant data can be gathered. A knowledge of the content area would also be helpful. In the above example, knowledge of the four areas being observed would need to be understood. What do academic, social/emotional, physical and spiritual attributes mean?

Table 1.1 Recording observations in the classroom

Name	Academic	Social/ emotional	Physical	Spiritual

SYNONYMS FOR THE WORD 'OBSERVE'

- | | |
|---------------|-------------|
| • study | • note |
| • detect | • notice |
| • discern | • perceive |
| • discover | • recognise |
| • distinguish | • see |
| • examine | • study |
| • focus | • view |
| • look at | • watch |

Mason (2002) suggests that noticing is the most important attribute of the caring professions, particularly teaching. He points out that the difference between a novice teacher and an expert is that

the mark of an expert is that they are sensitised to notice things which novices overlook. They have finer discernment. They make things look easy, because they have a refined sensitivity to professional situations and a rich collection of responses on which to draw. (2002, p. 1)

Perhaps his idea of noticing is akin to observation.

For an opportunity to see one of the many really excellent visual representations of information about the world, watch the short film of 200 countries over 200 years in four minutes at <http://www.gapminder.org/videos/200-years-that-changed-the-world-bbc/#.U1R7RChOfTw>.

Ways to develop observation skills

Here are some planned practical classroom activities that can help students to develop observation skills:

- *Kim's game*. Set up 20 different objects on a tray and cover them. Explain to the students that they will be given a brief amount of time to observe the items and then list what they looked at. Or create a page of images and display them to students. Ask them to examine them for a minute and then record what they can remember (see Activity 1.1).
- *Optical illusions*. Gather a range of optical illusions and have students study them carefully. Ask students to explain what they can see.
- *Share picture books*. Create a display of picture books and share different books with the students. Draw their attention to the skills of the artist and the way the elements of design have been used.
- *Set up a jigsaw puzzle table*. Jigsaw puzzles come in various levels of difficulty, and can relate to a topic being studied. The students need to carefully examine the pieces in order to complete the puzzle.
- *Create a games centre*. Set up a corner in the classroom with numerous games – cards, pick-up sticks, marbles and so on.
- *Give students a camera*. Ask students to use a digital camera to record their activities and then use the images to reflect upon their learning and achievements.

ACTIVITY 1.1 OBSERVATION POWERS

Test your powers of observation.

Look at this group of images for a minute and then cover it up.

Now, at the bottom of the page, list all the images that you can remember.



LIST ALL THE IMAGES YOU CAN REMEMBER:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.