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INSTRUCTIONAL DESIGN

FOR

DISTANCE MUSIC EDUCATION

by

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SUMMARY

This study applies the parameters of instructional design and distance education to the field of Music Education. The outcome of this study is the development of an instructionally designed Distance Music Education Programme that can be used for the training of post-graduate Music Education students at a traditional contact teaching tertiary institution.

The increasing awareness, both internationally and nationally, of the importance of a need for distance education forms the background to this research. The paradigm shift towards more learner centred study, independent of time and place, necessitates the redesigning and development of learning material at tertiary institutions. The design of distance education material therefore needs to take cognisance of learners' educational backgrounds, demographics, age and access to learning material.

The challenge was to effectively facilitate the practical components of Music Education namely, singing, listening, playing on instruments, being creative, moving and reading notation, without having physical contact with the learners. To address this challenge, the design structure of planning, implementing, observing and reflecting was used. Relevant literature concerning instructional design and distance education were consulted, after which the programme was designed and evaluated.

Although the design is based on general instructional design principles, it is argued in this study that the successful facilitation of the practical skills involved in Music Education could best be handled by a Music Education subject specialist who takes the responsibility of the instructional design or works in collaboration with an instructional designer. By doing so, an effective distance Music Education programme can be facilitated.

Key words: Instructional design, systems approach, distance education, telematic learning, post-graduate, teacher training, lifelong learning, Music Education, delivery modes, multi-media.

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OPSOMMING

Hierdie studie pas die parameters van instruksionele ontwerp en afstandsonderrig toe op die gebied van musiekopvoeding. Dit het die ontwikkeling van 'n instruksioneelontwerpte afstandsonderrigprogram wat gebruik kan word in die opleiding van nagraadse musiekopvoedkundiges tot gevolg.

Die toenemende bewuswording, beide nasionaal en internasionaal, van die belangrikheid van afstandsonderrig vorm die agtergrond tot hierdie navorsing. Die paradigmaskuif, na meer leerder-gesentreerde studie, onafhanklik van tyd en plek, beklemtoon die noodsaaklikheid vir die herontwerp en ontwikkeling van studiemateriaal by tersiêre inrigtings. Dit is dus nodig om met die ontwerp van afstandsonderrigmateriaal aandag te skenk aan leerders se opvoedkundige en demografiese agtergrond, ouderdom en toegang tot studiemateriaal.

Die effektiewe fasilitering van die praktiese komponente van musiekopvoeding, naamlik sang, luister, instrumentale spel, kreatiwiteit, beweging en lees en skryf van notasie, sonder om fisiese kontak met die leerders te hê, is die vernaamste uitdaging. Ten einde hierdie uitdaging aan te spreek is die ontwerpstruktuur van beplan, implementeer, waarneem en bepeins, gebruik. Toepaslike literatuur oor instruksionele ontwerp en afstandsonderrig is geraadpleeg, waarna die program ontwerp en geëvalueer is.

Die ontwerp is op algemene instruksionele ontwerpsbeginsels gebaseer. Tog kan die suksesvolle fasilitering van praktiese vaardighede betrokke by musiekopvoeding ten beste deur 'n musiek vakspesialis gehanteer word. So 'n vakspesialis kan verantwoordelikheid vir die instruksionele ontwerp neem, of kan dit in samewerking met 'n instruksionele ontwerper hanteer. Sodoende kan 'n effektiewe musiek-opvoedkundeprogram vir afstandsonderrig daargestel word.

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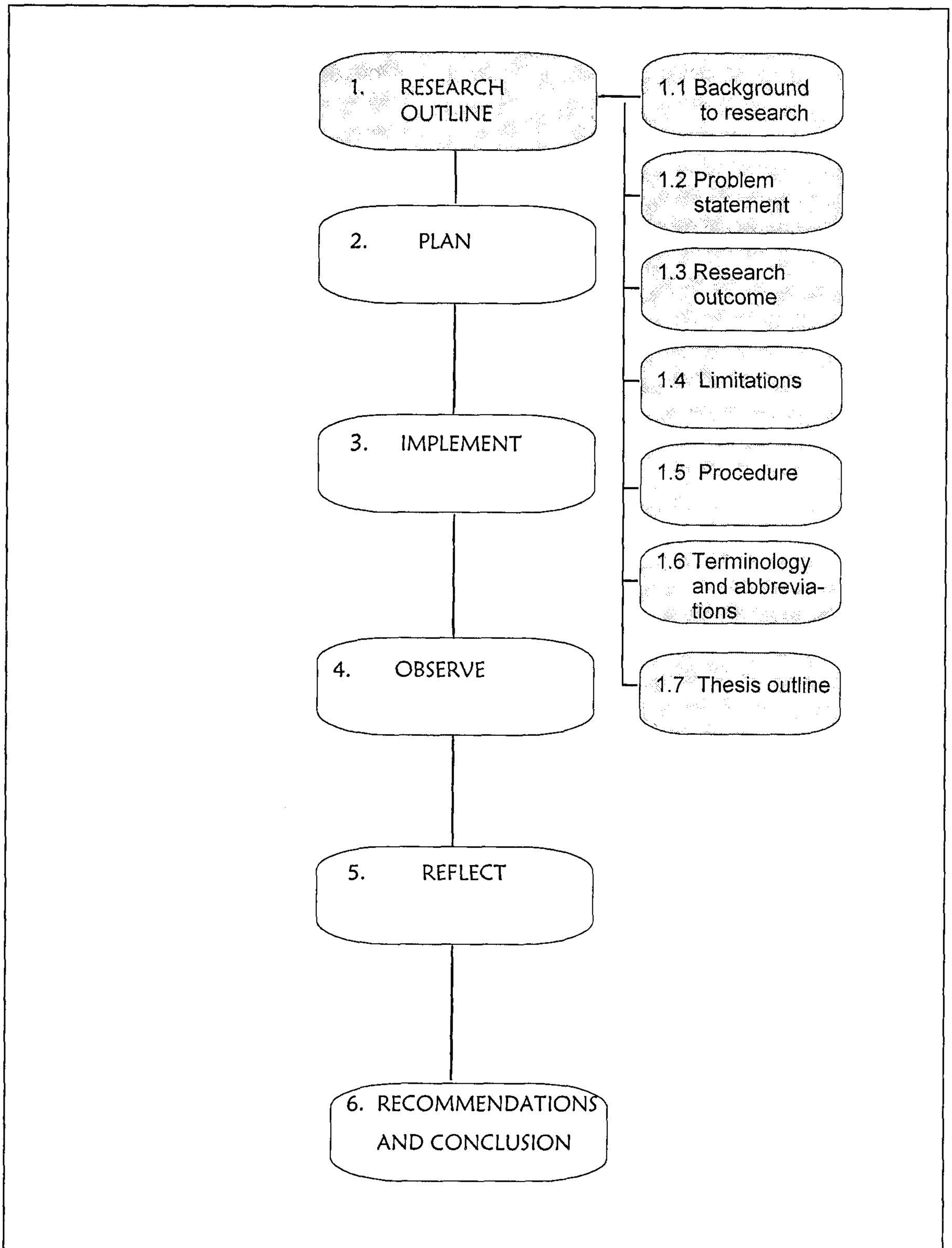
CHAPTER 1

RESEARCH OUTLINE



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INTRODUCTION

This thesis reports on action research aimed to develop an instructionally designed Distance Music Education Programme (DMEP) for post-graduate Music Education learners at a tertiary institution. The application of instructional design principles to Music Education is a relatively new field of research. The dual characteristic of Music Education, theoretical and practical, affects the design of learning material. The knowledge or concepts and practical skills of Music Education should be facilitated in the design. Conveying these skills over a distance further exacerbates the problem.

In order to solve this problem, the writer, a Music Education specialist, applied the parameters of instructional design to the field of Music Education. The programme designed is to be used for a distance Music Education course.

1.1 BACKGROUND TO RESEARCH

As a background to this research the application of instructional design and distance education will be viewed from an international and national perspective as well as from the perspective of the University of Pretoria, its Music Department and Music Education.

1.1.1 International perspective

Internationally, conventional education systems are reassessed for a number of reasons. New methods and policies are developed to accommodate:

- rising costs involved in contact teaching;
- the growing number of learners; and the
- lack of resources at tertiary institutions to develop distance education courses.

With the development of media and technology, learning has become independent of time and space. The increasing number of learners interested in furthering their education at their own pace and time places a high demand on demographic, social and economic structures. More and more universities are considering distance

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learning courses or a combination of distance and contact courses to deal with the ever increasing problems associated with conventional teaching.

> There may come a point at which there is no longer any significant distance between distance education and conventional education, when university education - as indeed that at other levels too - will be conducted by different means at different times and places according to the requirements of different groups of learners and the resources available to different institutions (Papo 1998:177).

As the concept of lifelong learning continues to grow and neither businesses or learners can afford full time study, increased flexibility is required in the educational system. The focus is therefore on the service that the educational institutions can provide in order for learning to take place.

1.1.2 National perspective

As international education systems are changing, South African education has also undergone significant changes, especially since the new political dispensation came into being in 1994. *The White Paper on Education and Training* (South Africa 1995a) propagates lifelong learning and equal learning opportunities for all South Africans. The result is that more learners will be studying at tertiary level than ever before. According to Steyn (1994:2), it is unlikely that these learners will be studying at contact education institutions. This is due to the lack of infrastructure at contact teaching institutes to accommodate large student numbers. In order to address this problem, tertiary institutions have to reconsider their methods and policies on teaching.

The National Commission on Higher Education: A Framework for Transformation (South Africa 1996) states that the key aspects of transformation on **tertiary level** should incorporate:

- the facilitation of equal study opportunities for all South Africans;
- the restructuring of learning strategies; and
- the development and expansion of programme presentations.

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All South Africans can be given access to education through distance learning. This is, however, not a new proposition. Distance education has been part of the South African teaching strategy for many years. In 1837 the University of the Cape of Good Hope was established and became the University of South Africa (UNISA) in 1916. Since 1945 UNISA has been positioned as a university that specialises in quality distance education.

UNISA's move towards quality and accessible education, at a reasonable price, resulted in other distance education institutions being established. These include technikons and colleges of education. With various distance education institutions in place, education at a distance has become a favoured form of study in South Africa. According to Fraser (1993:31), the reasons for the increase in distance education numbers include the:

- escalating costs of courses and accommodation fees;
- desire of adults to improve their qualifications;
- overcrowding of residential campuses;
- raising of academic standards and criteria for admission; and
- distances of learners from residential campuses.

By presenting distance courses, learning can be made accessible and affordable to large learner numbers without necessarily sacrificing the quality of education.

1.1.3 University of Pretoria

The University of Pretoria is primarily an institution where contact education is practised both on a full time and part time basis. The expected increase in student numbers and limited existing facilities underline the necessity to reconsider the University of Pretoria's methods of instruction. New instructional programmes including distance education need to be incorporated. To investigate and head the possible changes, telematic education was approved as part of the mainstream activities of the University. The functions of the Telematic Education Department are to:

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- promote the creation of teaching and learning opportunities, in co-operation with faculties and departments, for contact and distance education learners, using flexible delivery systems;
- create and maintain learner centred delivery systems, i.e. interactive and electronic education and televised teaching; and
- provide educational support for departments and faculties concerning telematic education.

Telematic education has been implemented from 1998. According to Brown (1997), the Telematic Education Department will be involved in:

- the development and designing of study materials;
- the provision of telematic facilities;
- client support and educational assistance; and
- research and development.

These services are presented through a number of diverse delivery systems which incorporate the whole spectrum of teaching modi. The modi include paper driven distance education programmes, web-sites, interactive multimedia and interactive television, as well as the facilitation of learning from virtual campuses. Through these systems the learning programmes of the University will be accessible to a number of educational environments: distance, contact or combination education on pre and post-graduate level. The University of Pretoria is therefore becoming a university which makes use of diverse delivery and educational systems.

1.1.4 Music Department

It was proposed that all the departments of the University of Pretoria should participate in the redesigning and restructuring of learning and learning programmes. The growing number of learners outside of Pretoria interested in furthering their Music Education studies, at post-graduate level, made distance teaching a reality.

The post-graduate, BMus Honours Music Education course is presented during three contact sessions per year. This is, however, not enough to ensure that learning takes place on a regular basis. Music Education lecturers needed to consider how they

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are going to facilitate continuous and meaningful learning over a distance. The solution included the design of new learning material.

1.1.5 Instructional design for distance Music Education

The planning and design of a curriculum and learning programme for distance teaching purposes was the responsibility of the Music Education lecturers. The minimum requirement for such a distance Music Education programme involved the design of learning material and multi-media structures according to the principles of instructional design.

1.2 PROBLEM STATEMENT

The question on which this study is based was:

> What are the instructional design principles guiding the development of a distance Music Education programme?

In formulating the principal problem the following sub-problems were identified:

- What are the *theoretical* principles of distance education and instructional design?
- What are the *design* principles for distance education?
- What are the *motivational* principles involved in a distance education programmes?
- What principles determine the selection of an appropriate *technological* delivery mode?

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1.3 RESEARCH OUTCOME

The outcome of this research is a distance Music Education programme compiled according to the parameters of instructional design and distance education.

This outcome will be reached by:

- discussing the parameters of instructional design and distance education;
- explaining the variables of Music Education;
- listing the design principles for instructionally designed Distance Music Education Programmes (DMEP);
- identifying the voids of the application of instructional design to the field of Music Education;
- designing a DMEP;
- assessing the success of the designed programme; and
- recognising the need for training of Music Educators in the application of instructional design to distance Music Education.

1.4 LIMITATIONS

The research took place with the following constraints:

- **The purpose of the package.** The DMEP was designed for the teaching of BMus Honours learners at the University of Pretoria's Music Department. The learner population, their needs and the facilitation of didactics as taught at this University were taken into consideration when the programme was designed. The DMEP can therefore not necessarily be used, as is, in another teaching environment.
- **The application of face-to-face modes and models of education to distance education.** The relatively recent combination of contact and distance education strategies at the University of Pretoria and the Music Department, resulted in

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lecturers having inadequate guidelines on the methods and strategies that need to be employed for distance learning. Learning and teaching strategies for effective distance teaching needed to be formulated.

- **The use of outdated distance and contact strategies**. The material used as basis for the designed DMEP was outdated and based on contact teaching approaches.
- **The poor and even non-existent in-service training of lecturers in distance teaching theory and philosophy.** In-service training for lecturers in the disciplines of distance education and instructional design did not exist at the University of Pretoria.
- **A lack of literature on the structuring of a distance Music Education teaching package according to the didactic principles which apply to distance education.** No resources could be found highlighting the design of Music Education programmes. The design therefore had to be based on general instructional strategies.
- **The cultural diversity of the learner population.** The learners enrolled for the BMus Honours course in Music Education are from diverse educational and cultural backgrounds. At the moment the enrolled learners are predominantly African. There are, however, learners from other cultural and educational backgrounds. All these learners' learning needs had to be taken into consideration in the design of the distance Music Education programme.
- **The lack of communication facilities of learners in rural areas and South Africa's neighbouring countries.** The fact that many of the learners enrolled for this programme stay in rural areas of South Africa influenced the selection of media for the Music Education programme. A video machine and cassette player were stipulated as a minimum technological requirement for enrolment.
- **The language diversity of the enrolled learners.** The Music Education programme was written in English. Many of the learners enrolled speak first languages other than English. The learners' lack of communication skills and understanding of course content influenced the design and style of the programme.

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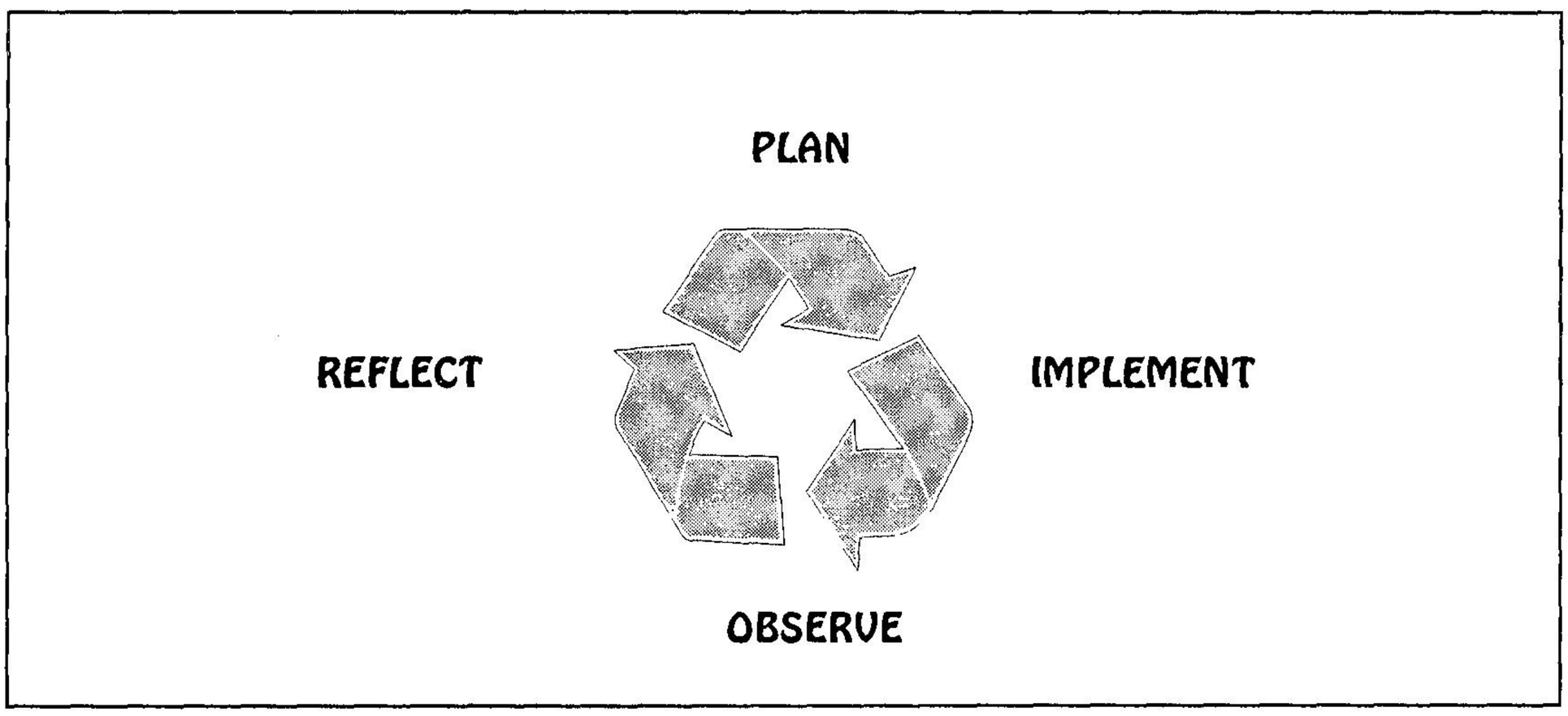
1.5 PROCEDURE

Action research was the main method followed in this study. Through action research in education the researcher tries to improve or change the educational situation. Kember & Gow (in Seels 1995:107) advocate an action research approach in which cycles of reflection, planning, action and observation contribute to interactive improvement. The work of action researchers can be summarised as an attempt to change conditions by improving:

- the rationality and justice of their own practices;
- their understanding of these practices; and
- the situations in which the practices are carried out.

Davidoff (1990:28) describes action research as a way of trying out ideas in action, understanding these actions, and then attempting to make some improvements. Action research facilitates a systematic planning of the action. The action is then taken, observed and reflected upon. This is known as the action research cycle. Figure 1.1 highlights the four steps of an action research cycle adopted from Davidoff (1990:46).

FIGURE 1.1: Action research cycle



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- **Step 1: Planning**

- Formulate the general plan.
- Do a reconnaissance exercise.
- Negotiate with the relevant people.
- Access physical resources required.
- Plan method of work in the given time.
- Plan how to gather data.

- **Step 2: Implementation**

- Take plan.
- Design the action you want to try out.
- Put plan into practice.
- Observe outcomes.

- **Step 3: Observation**

- Gather information about the action.
- Use observations to study data.

- **Step 4: Reflection**

- Sort data for meaning.
- Critically evaluate the consequences of the action plan.
- Start with new cycle.

Action research is thus prompted by the question *how to improve or change a situation or behaviour in an education institution or learning environment* (Hauptfleish 1997:159).

1.6 TERMINOLOGY AND ABBREVIATIONS

1.6.1 Distance education

Learning strategies can be divided into three categories, namely contact instruction, non-contact instruction and a combination of contact and non-contact instruction. Non-contact instruction is generally referred to as distance education and is implemented to give more learners the opportunity to study.

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Distance education is further characterised by the separation between the lecturers and their learners. The distance does not necessarily imply the actual physical distance between lecturers and learners, but refers to the absence of contact between them. When teaching from a distance, the lecturer has to convey the necessary information to learners without being able to discuss the work in person. The normal method of conveying didactic principles is therefore not possible.

Rowntree (1997:44) defines distance learning as being a technology (delivery mode). This technology enables learners to learn without being in the same place as their teacher. The technology of distance learning could involve prepared learning packages, conferencing and correspondence with the facilitator or tutor.

According to Mackintosh (1998:144), distance education refers to the planned form of education provision where the acts of teaching are separated from the acts of learning. Escotet (1992:89) explains distance education by separating the terms *distance* and *education.* The *distance* focuses on the learning procedure and the method or strategy of disseminating education. *Education,* on the other hand, is concerned with factors of cohesion and a continuity in cultural creation.

For the purpose of this study, distance education refers to a combination of contact and non-contact instruction at a tertiary institution.

1.6.2 Instructional design

Three books was found by the author who was particularly useful to the definition of Instructional Design.

Palmieri (1991:18) states that three aspects of instructional design are important:

- the process of design;
- the product designed; and the
- skills employed to present learning material.

When information is compiled in preparation for a lecture of any kind, instructional design has taken place. Palmieri (1991:18) continues by describing instructional design as: '... the art of presenting instructional material so that learners can learn

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from it as effectively as possible'. The instructional designer therefore has to consider who the clients are, what they are expected to learn and how they are supposed to come by this information.

Balestri et al (1992:e) define the process of design as being:

- *constructive* - where the product meets some set of more or less defined specifications;
- *creative* - where a novel response to open-ended problems or solutions is required;
- *sustained, sequential and recursive* - where trial and error are included;
- *analytical* - where several perspectives are taken into account.

> It is generally understood that instructional design is a process by which the best instructional methods are selected to teach given outcomes under set conditions. The knowledge and skills that the outcomes require learners to attain are clearly explicated through task analysis. The conditions under which instruction is to occur are likewise made explicit through analysis of learners' existing knowledge and skills (Seels 1995:160).

Instructional design can therefore be considered to be a constructive, recursive process involving creative skills to present effective learning based on learners' existing knowledge and skills.

1.6.3 Music Education

In order to define Music Education, three leading international music educators' opinions will be given.

Regelski (1981:33) defines Music Education as the invention and establishment of musical and pedagogical environments, situations, and events for the purpose of inducing fruitful music actions. These musical actions, commonly referred to as skills, involve *singing, listening to music, playing on instruments, being creative, moving to* and *reading music.* Knowledge is thus conveyed through active involvement in the learning process as learners gradually develop their skills.

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Elliot (1996:12-13) describes Music Education as having at least four basic meanings:

- education **in** music, involving the teaching and learning of music and music listening;
- education **about** music, involving the teaching and learning of formal knowledge about music making, music listening, music history, etc;
- education **for** music involving teaching and learning as preparation for making music, or becoming a performer, composer, music teacher, etc; and
- education **by means of** music, involving the teaching and learning of music in direct relation to goals such as improving one`s health, mind, soul, etc.

Reimer's (1989) opinion is the third to be considered. He states that the definition of Music Education is subject to the nature and value of the subject. In his opinion it is important to view Music Education philosophy as **a** philosophy and not **the** philosophy. 'A philosophy, then, must be conceived as being *of a time* and must also give recognition to the fact that it can only provide a point of departure for practitioners of that time' (Reimer 1989:2).

Reimer's philosophy can be thought of as being based on the following question: What is it about Music Education that really matters? He aims at answering this question by stating the values of Music Education in accordance with art. His philosophy of Music Education can therefore be described as being:

- Descriptive of human nature. 'The arts (music) may be conceived as being a means to self-understanding, a way by which a human's sense of nature can be explored, clarified and grasped' (1989:25).
- Related to feeling and communication. 'If all meanings could be adequately expressed by words, the arts of painting and music would not exist. There are values and meanings that can be expressed only by immediately visible and audible qualities' (1989:31).
- An aesthetically meaningful, educational experience. 'The experience of music as expressive form is the be-all and end-all of music education, for such experience is the only way of sharing music's aesthetic meaning' (1989:69).

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Each of these educators reflect on the meaning and value of Music Education as a subject. For the purpose of this study, a combination of these three definitions was selected.

Regelski's theory of imparting knowledge through skills underlines the problem statement of this research. The fact that knowledge is conveyed through skills is important because that underlines the practical component of Music Education. Secondly, education *for* and *about* music, as stated by Elliot, is selected. The education *about* music focuses on teaching and learning of music knowledge components. This gives the learner the opportunity to study the facts before they are applied. Education *for* music enables learners to develop their teaching and learning skills. This encourages learners to become performers, composers and/or music teachers. Reimer's more philosophical approach to describing Music Education brings a humanitarian centre to the definition of Music Education. Music and humans cannot be separated. It is therefore important to note that Music Education is helping humans toward becoming music teachers, composers and performers. These humans have a need for expressing their feelings and aesthetically valuing their experiences. Music Education as used in this study also incorporates *group music* and *class music* as these are terms which are generally used as synonyms of Music Education.

1.6.4 Abbreviations

The following abbreviations were used:

– CD-ROM	Compact Disc-Read Only Memory
– DE	Distance Education
– DMEP	Distance Music Education Programme
– e-mail	electronic mail
– FDE	Further Diploma in Education
– HED	Higher Education Diploma
– Hons	Honours
– ID	Instructional Design
– PTD	Primary Teachers Diploma
– SPD	Senior Primary Diploma

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– STD	Senior Teachers Diploma
– TED	Transvaal Education Department
– UED/UDE	University Education Diploma, University Diploma in Education
– URL	Uniform Resource Locator
– WWW	World Wide Web.

1.6.5 Notes to the reader

- At the beginning of each chapter a summary of the chapter content is given.
- The 'instructional designer', 'researcher' and 'facilitator' as used in this thesis refers to the same person responsible for the design of the DMEP.
- 'Learners' as used in this research refers to learners in general, including learners at tertiary institutions.
- The researcher experienced tension between academic and instructional design requirements regarding the page layout of the thesis. White space at the bottom of pages was therefore on occasion purposefully left, in order for tables to be placed on one page.
- Curriculum 2005 (South Africa 1997) refers to the new proposed curriculum for South Africa that should be in place in 2005. The curriculum is based on the principles of lifelong learning and Outcomes-Based Education.
- The Distance Music Education Programme (DMEP) designed for this research is attached as a condensed Addendum. When used as study material, it is in an A4 ring bound format with coloured cover, matching the cover of the accompanying video and audio cassette.
- The bibliography is left aligned in order for the electronic addresses to be written as they would be typed for an Internet search. All Internet addresses should be retyped without spaces including those given in the bibliography of this study, typed of necessity over two lines.
- A name and date given after a quotation without page numbers, implies that it is an Internet resource or notes that has no page markings.

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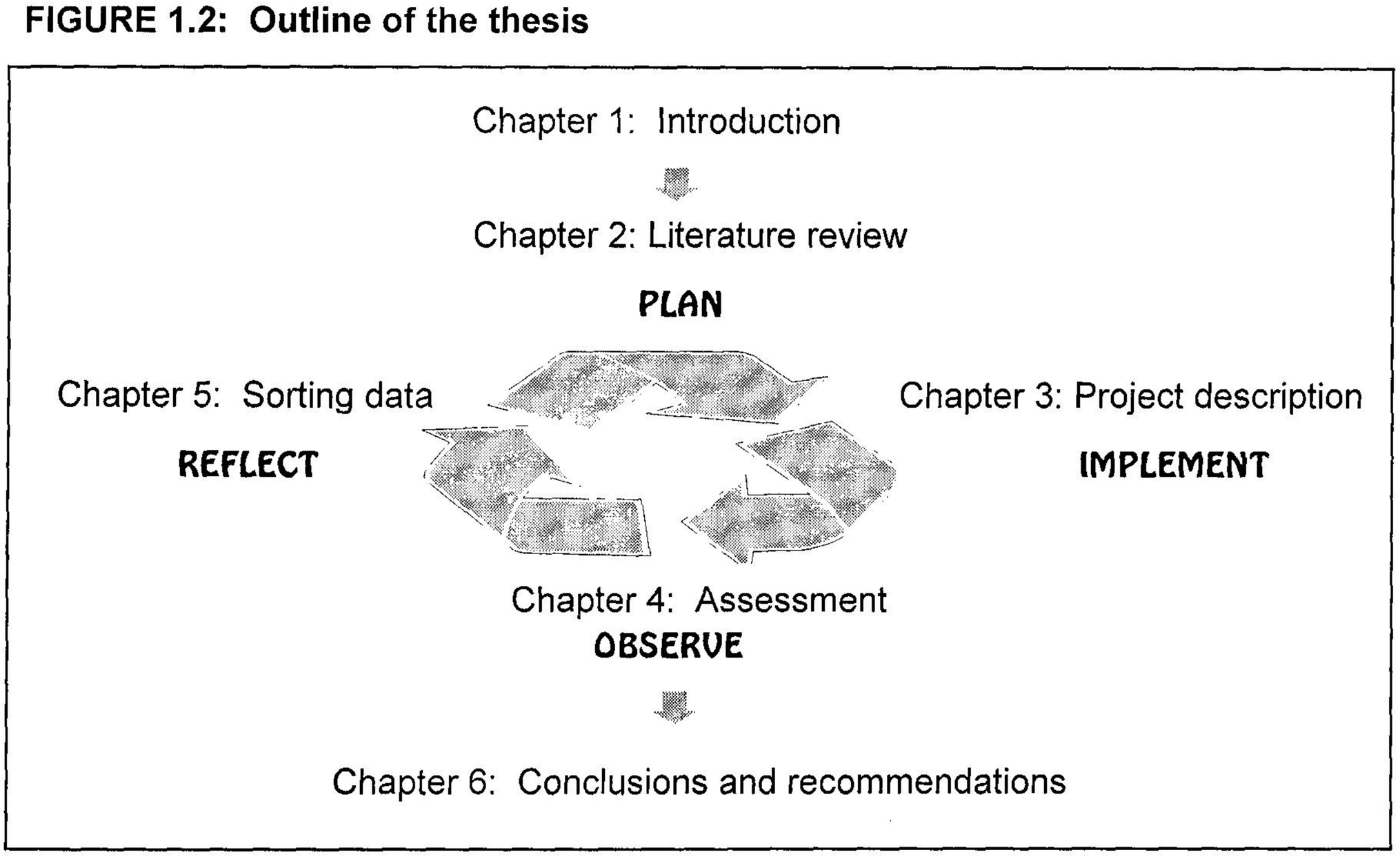
1.7 THESIS OUTLINE

The research methodology explained in Chapter 1 forms the basis of the research outline of this thesis. The action research steps: **planning, implementing, observing** and **reflecting** (Davidoff 1990:46), form the outline of the chapters.

Chapter 2 is a literature review based on the **planning** of an instructionally designed distance Music Education programme. In order for the planning to take place, the parameters of instructional design, distance education and Music Education were defined and placed in context. Chapter 3 **implements** the guidance structures described in Chapter 2 by designing a DMEP, the whole of which is then attached as an Addendum. In Chapter 4 the implementation phase is **observed** and the effectiveness of the programme assessed. This is followed by a reflection in Chapter 5 where the research findings are listed. Recommendations are made in Chapter 6. The outline of this study is summarised by Figure 1.2.

FIGURE 1.2: Outline of the thesis



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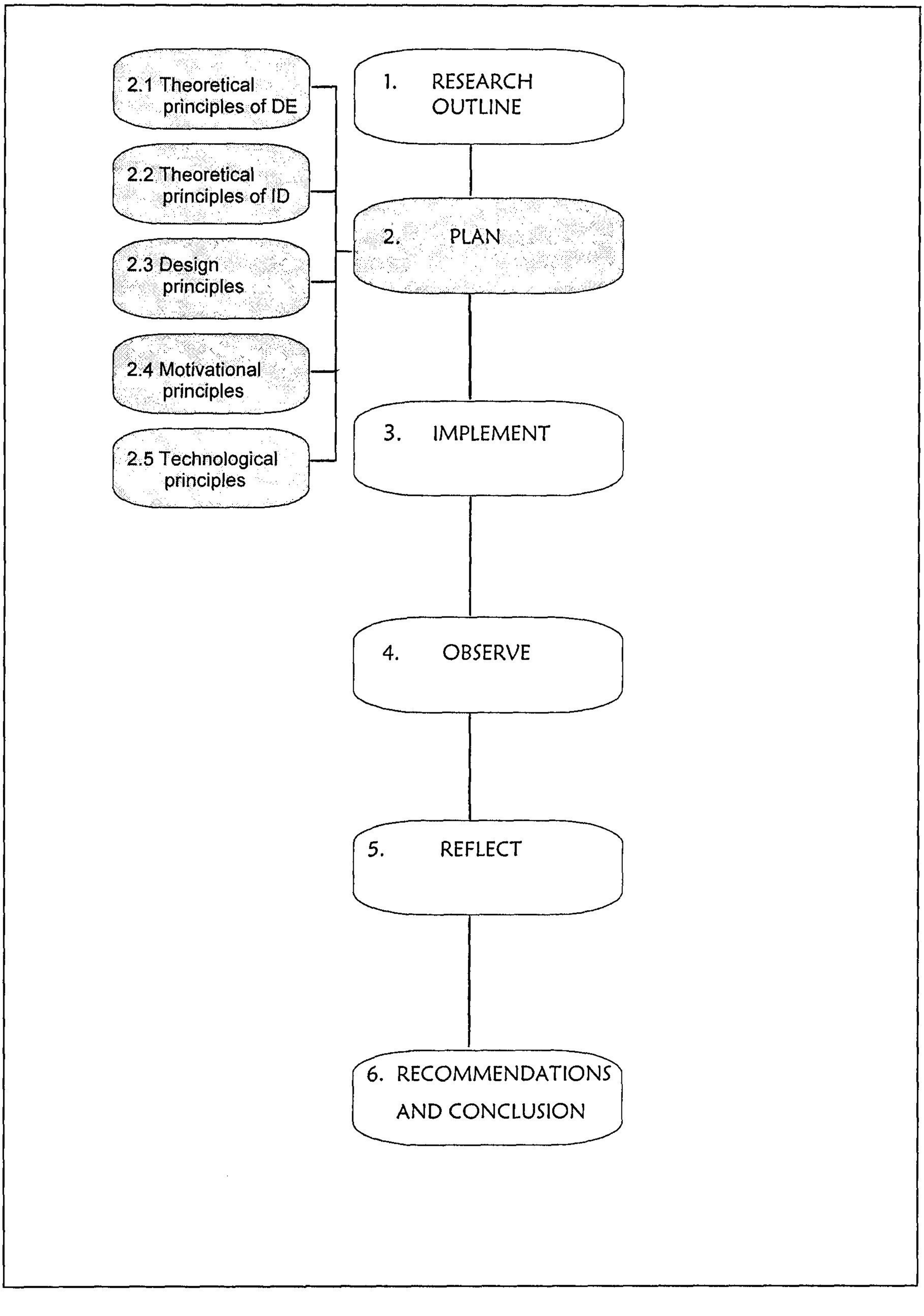
CHAPTER 2

PLAN



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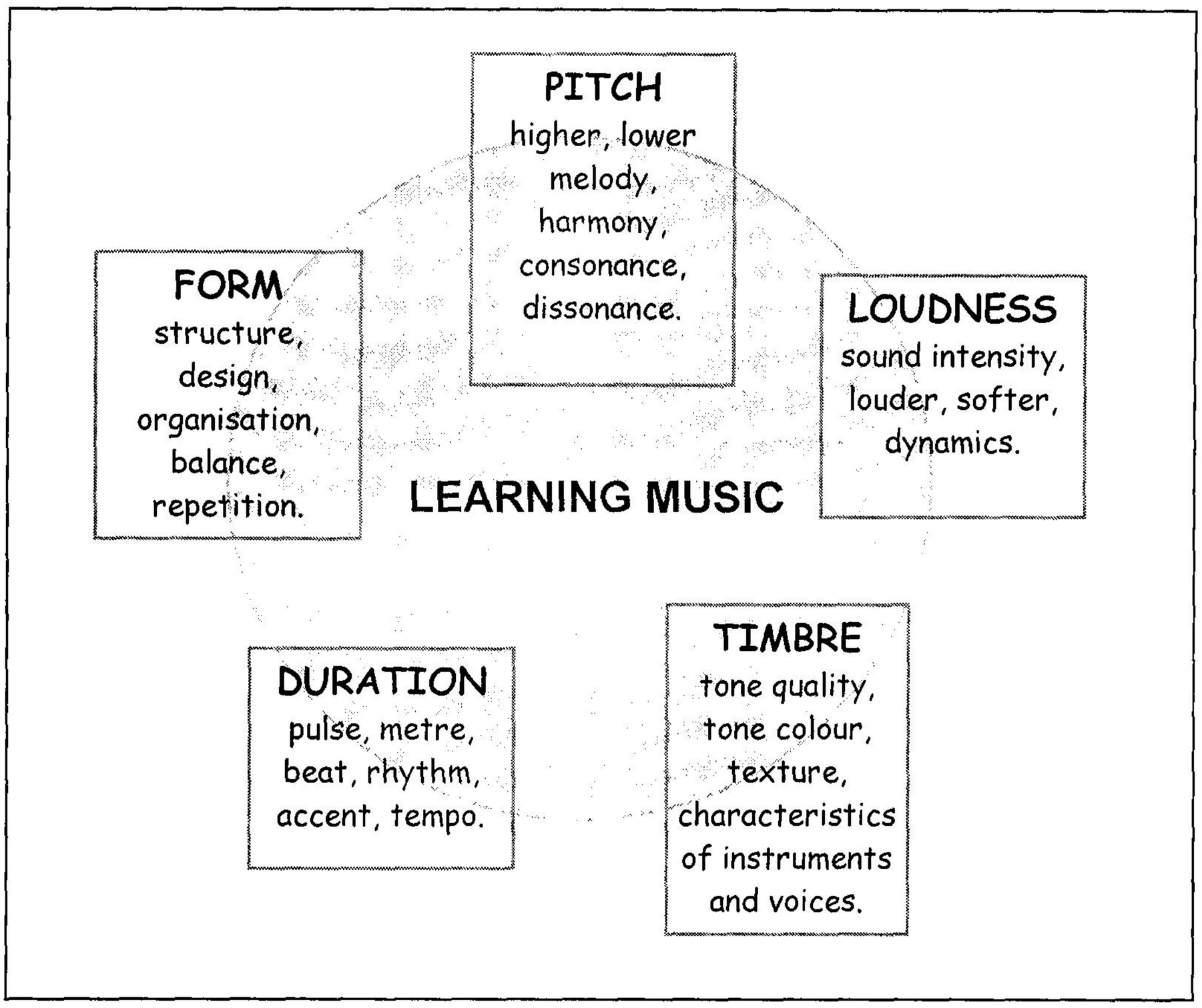
INTRODUCTION

This chapter explores the literature concerning the problem statement in Chapter 1 as:

What are the instructional design principles guiding the development of a distance Music Education programme?

Books and multimedia packages that deal with the history and theory of music and music appreciation are widely available. These books explain the historical and theoretical facts of music that can be learned off by heart. Learning takes place through reading and remembering. Music Education, however, is a subject that involves both factual and practical aspects. The factual aspects are referred to as music elements or concepts and the practical component as the skills used to demonstrate or experience them. Although much emphasis is placed upon the concepts and skills knowledge of world musics and the history of music is also considered to be important. The elements and concepts of music adapted from Andrews (1971:19-20) are highlighted in Figure 2.1.

FIGURE 2.1: Elements and concepts of music



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The bold writing in Figure 2.1 indicates the elements of music. The elements give a basic description of the various components of the music by indicating that all music has elements of pitch, loudness, timbre, duration and form. The concepts written under each element expand the description of the music. The concepts specify in more detail what the characteristics of a particular piece are. The music does therefore not only have a certain loudness but can be described by indicating the intensity of the sound, the loudness or softness of the sound or the dynamics involved. Both concepts and elements are therefore present in the theoretical component of Music Education.

In order to gain understanding of the importance and use of these elements and concepts, music skills are employed. Learning is facilitated through a cycle of hear, do and see. Knowledge of the elements of music is facilitated through practical experience. The assumption can thus be made that the practical and factual components of Music Education are equally important and should not be separated.

Rowntree (1997:12) suggests that the didactic principles, method of assessment and equipment or facilities needed to perform the skills be defined in the planning and design of the learning material. The facilitation of the practical skills of Music Education over a distance needs to be addressed. Through a literature review the

- theoretical principles;
- design principles;
- motivational aspects; and the
- principles determining a selection of technological delivery modes, as stated in Chapter 1, will be discussed.

2.1 WHAT ARE THE THEORETICAL PRINCIPLES OF DISTANCE LEARNING?

In order to facilitate effective distance learning, the instructional designer should be aware of different learning strategies. These strategies will enable the facilitator to design the learning material according to a heterogeneous learning population's needs and requirements.

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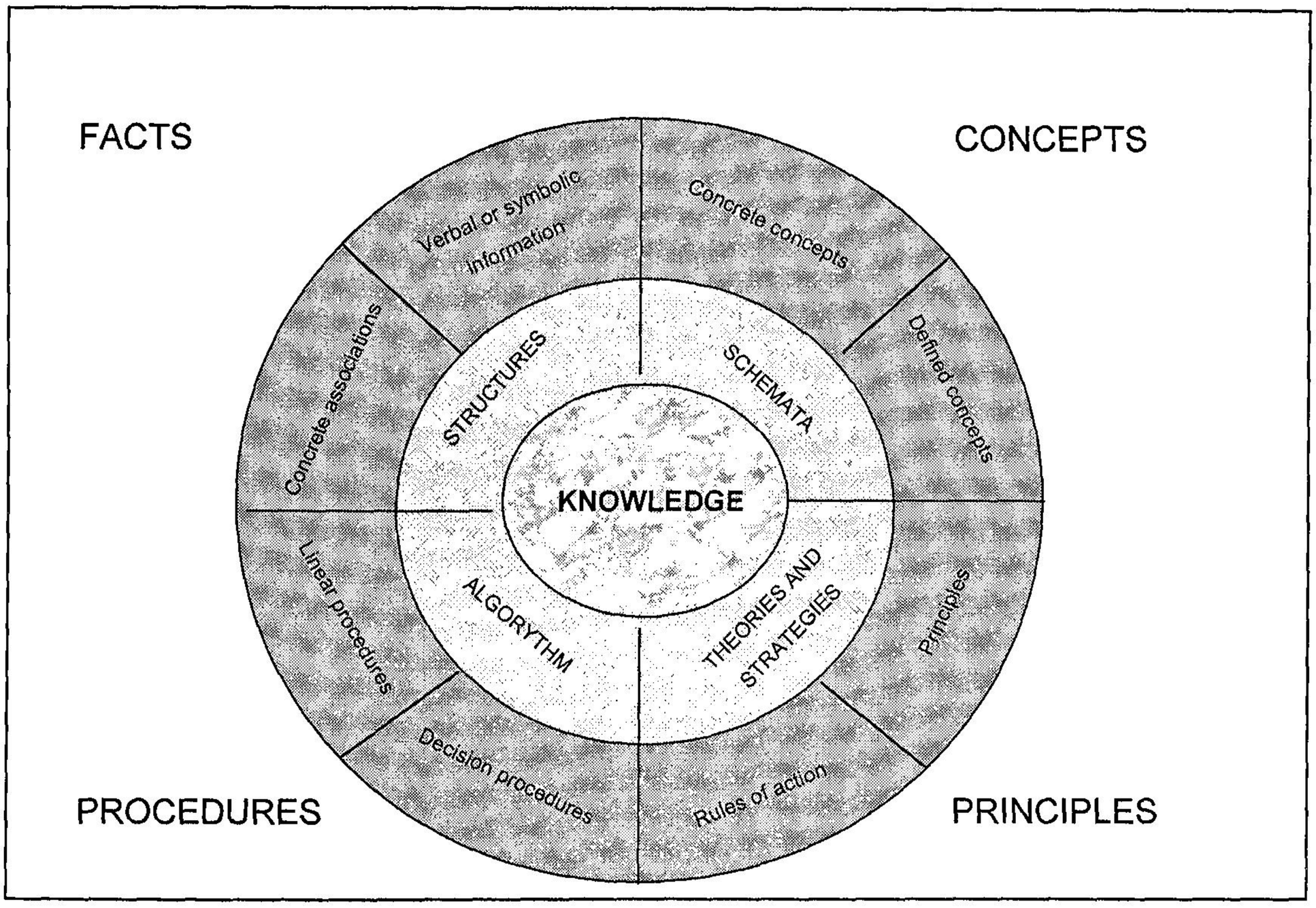
2.1.1 Learning theories

Spector et al (1993:69) define a complete learning theory as one that describes stimuli (inputs), responses (outputs), performance mechanisms (rules for generic inputs from outputs), and the laws of learning (rules that specify how the performance mechanisms change with experience). An analysis of the individual's behaviour in different learning situations will provide the parameters of the learning theory.

Romiszowski (1984:58) states that learning can be divided into four strategies namely, facts, concepts, procedures and principles. These strategies highlight the process through which learning is constructed. Figure 2.2 demonstrates the interconnectedness of these categories.

FIGURE 2.2: Schema of learning (Romiszowski 1984:45)



Learning usually incorporates a number of outcomes. According to Romiszowski's (1984:45) research on learning behaviour the reaching of these outcomes can be achieved through making use of facts, concepts, procedures and principles.

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- **Facts:** Most information is learned through facts. Facts are usually self-explanatory and do not need to be highlighted with examples. In the learning process, facts should be given so that learners can remember them.
- **Concepts:** To a large extent concepts can be experienced without verbal communication. Concepts are formed through repeated formulation and repetition of ideas and facts.
- **Procedures:** Procedures involve the methods through which associations and discriminations are formed. Through procedures learners can answer questions like: How do I do it?
- **Principles:** Like facts, principles can be learned through exploration and exposure. It is important that learners are given the opportunity to discover the principles.

Learning should not only focus on facts, but the learner should be guided to integrate the knowledge in different situations through well structured learning activities. 'Knowledge has to be abstracted and represented formally, in order to become generalised and therefore more generally useful' (Laurillard 1993:20).

Learners can only make knowledge their own when it is learned and applied. In order to understand the learning process, the methods by which learners study need to be stipulated. Learning involves the recognition as well as the self-discovery and/or application of facts. The ideal learning theory should therefore pay attention to the:

- **cognitive domain**: knowledge, thinking skills and understanding;
- **affective domain**: attitudes, values and personal qualities; as well as the
- **psychomotor domain**: experience, involvement and exploration of knowledge.

By incorporating these three domains learning can become holistic, involving the mind, body and soul of the learner. For the purpose of this research, the focus will be on the current most popular coexisting theories of learning, namely behaviourism and contructivism.

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■ Behaviourism

The basic ideas of behaviourism are that 'human behaviour is a product of the stimulus-response interaction and that behaviour is modifiable' (Black 1995). Important role players in the definition of behaviourism are Pavlov (1949-1936), Watson (1878-1958) and Thorndike (1847-1949). These three behavioural psychologists experimented with the conditioning of behaviour. Behavioural psychology was further developed by Skinner (1904-1990). Skinner believed that the study of behaviour must rest on what organisms do and do not do. He concentrated on the observation and manipulation of behaviour. 'Let not the strong be cozened by **is** and **isn't**, **was** and **wasn't**. Truth's to be sought in **does** and **doesn't**' (Skinner in Black 1995).

The key elements of behavioural learning psychology can be summarised as follows.

- Learning is considered to be a **strategic process** of encoding and organising information for later use. Learning is an association between observable stimuli and observable responses. Behaviourists assume that the behaviour of learners is a response to their past and present environment and that all behaviour is learned (Black 1995).
- Learning can be defined as a **change in behaviour** as a result of experience. The learner should engage in a behaviour in order to learn and to validate that learning has occurred (Burns et al 1991:49). This will, only be possible if learners can determine their own rate and tempo of learning.
- Learning is **structured by the facilitator**. Since learning is a form of behaviour modification, the facilitator's responsibility is to structure an environment in which the correct behaviour of the student is reinforced. The outcome is to reinforce the learning process through an immediate response and the reward of getting it right (Black 1995).
- Learning is **passive**. In the behaviouristic approach, active involvement in the learning process is not regarded as a prerequisite for understanding. Understanding is regarded as a matter of seeing existing patterns. The teacher is the main role player in directing the learning process (Burton et al 1996:49).

Although the learner is classified as a passive entity who merely reacts to environmental stimuli, the learner must still engage in a behaviour in order to learn

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and to validate that learning has occurred. Some activity or response is present (Burton et al 1996:49).

▪ Constructivism

The constructivist approach determines that learning occurs from the learners' perspective and educational background.

> The constructivist viewpoint emphasises that learning is the activity of the learner in interacting with alternative viewpoints and explanations, and with the surrounding reality. The process should be largely learner-driven and largely a process of collaboration and communication among learners. The role of the teacher, as teacher, is played down; the teacher's function is no longer the dissemination of information and the evaluation of students (Dills & Romiszowski 1997:xii).

Constructivism is based on Piaget's cognitive theory (Romiszowski 1986:37). Traditional constructivists emphasise individual thinking and the making of meaning. The new paradigm is that the learner is an active meaning maker. Knowledge is no longer 'out there' to be received but it is 'in here' in the mind and must be created anew by individuals for themselves (Nolte 1999b).

The key elements of constructivist learning psychology can be summarised as follows.

- Learning is a **strategic process**. The strategy indicates the method through which knowledge is acquired. Strategies are usually adaptable to a number of teaching environments. The learning strategy used can thus influence the outcome of the learning activity.
- Learning is focused on **motivation**. Through constructivism, learner enquiry, curiosity and initiative are modelled and developed. The learner gets the chance to discover information and to become involved in the learning process (Ashmul 1999).
- Learning is **holistic**. Constructivism is a holistic approach and less mechanical than original information-processing theories. 'Constructivist theories represent holistic approaches to education that see the process of acquiring new knowledge and understanding as firmly embedded in the social and emotional context in which learning takes place' (Seels 1995:179).

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- Learning is an **active** process. Linear thinking is replaced by multiple perspective and reasoning outlooks (Seels 1995:139). The learner is actively involved in the learning process. The learners' will and purpose in the learning process is recognised.
- Learning is **contextualised**. Learning within the constructivist approach is related to our living and working environment. Learning can integrate and apply the information that they have acquired (Ashmul 1999).
- Learning becomes **personalised**. The role of the subject-specialist is to facilitate knowledge so that it can be applied by the learner in various circumstances (Seels 1995:49). The teacher plays the role of facilitator and makes the learning experience available to learners.
- Learning is **constructed by the learner.** Learning should be considered to be a personalised activity where the learners control the learning process, reflect on knowledge from their own perspective and adapt the information to their specific environment. 'The constructivist perspective on learning emphasises the notion that knowledge is something that a student constructs, using his pre-existing knowledge. It is not something a teacher somehow transfers into the student's head' (Riesbeck 1996:49).
- Learning is **active**. It is assumed that learners will have a better understanding of their learning environment if they discover and apply their knowledge to their individual environments.
- Learning is a **social activity**. Through co-operative learning, learners get the opportunity to work together with other learners, seeking information and answers related to their learning. Dialogue is encouraged between learners; as well as the facilitator and learners (Ashmul 1999).
- Learning is **time consuming**. The principles of lifelong learning are embedded in the constructivist philosophy. Learners need to be given the time to reflect on their knowledge and to mature in the learning process (Ashmul 1999).

The principles of cognitive learning can be outlined as the gathering of information and its personalisation. 'Constructivism's general tenet is that learning is a creative process, that knowledge is a personally constructed act instead of an objectively received state' (Seels 1995:238).

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Learning theories therefore focus on the learner's perception of the learning experience and are based on the representation of information through the memory and cognitive activities (Spector et al 1993:47).

2.1.2 The learning experience

Both beginner and adult learners make use of obvious, linear thinking processes. They study information with a superficial vision without applying knowledge. In comparison, experts usually scan through information and use their prior knowledge to make interpretations. Both beginner and expert learners should be encouraged to involve meta-cognition processes in their learning. 'Meta-cognition is the ability to monitor one's own comprehension and control strategic processing' (Spector et al 1993:31). This includes distance education learners.

Marton & Säljö in Seels (1995:102) classify these learning approaches into surface and deep approaches. The approach refers to the way the learner sets out to tackle a particular learning task (Morgan 1995:55).

- **Surface approach learners**

Surface approach learners concentrate on the remembering of text and are characterised by a low interest in the course. Their intention is to complete the learning task requirements. They often experience high workloads and a lack of freedom in the learning environment. Biggs in Seels (1995:102-103) and Ramsden in Morgan (1995:56) summarise the characteristics of surface and deep approach learners as follows:

Surface approach learners

- see the task as a demand to be met, a necessary imposition if some other goal is to be reached (a qualification for instance);
- see the aspects or parts of the task as discrete and unrelated either to each other or other tasks;
- are worried about the time the task is taking;
- avoid personal or other meanings the task may have; and
- rely on memorisation, attempting to reproduce the surface aspects of the task (Biggs in Seels 1995:102-103).

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According to (Morgan 1995:56) surface approach learners

- focus on the signs (the text itself);
- focus on discrete elements;
- fail to distinguish principles for evidence, new information from old; and
- treat learning tasks as an external imposition.

- **Deep approach learners**

Deep learning, on the other hand, focuses on the learner's understanding of the subject content. It is difficult to facilitate deep learning at a distance. The problem lies partly in the difficulty of helping learners to grasp the abstract concepts which underpin their understanding, and partly in the difficulty of devising reliable ways of assessing the extent to which they have grasped these key concepts (Sparkes 1992:144).

Deep approach learners

- are interested in the academic task and derive enjoyment from it;
- search for the meaning inherent in the task (the intention of the author);
- personalise the task, making it meaningful to their own experience and the real world;
- integrate aspects or parts of the task into a whole, see relationships between the whole and previous knowledge;
- try to theorise about the task;
- focus on the author's arguments;
- relate and distinguish new ideas and previous knowledge; and
- organise and structure content (Biggs in Seels 1995:102-103).

Research has shown that the surface approach prevents learners from achieving deep learning outcomes (Morgan 1995:58). Learners should be encouraged to develop their deep learning skills. In order to achieve this, attention should be given to learning theories and specific learning techniques as for, e.g., meta-cognition.

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▪ Meta-cognition

When information is processed, both the working and long-term memory are employed. In order to store information the working memory, that has a limited capacity, requires active involvement in the learning process. The information is then stored in the long-term memory which has an unlimited capacity for information and does not require active knowledge intake (Polson 1993:7). When new information is learned, a mental structure is formed, elaborated and tested until a satisfactory structure of understanding is achieved (Perkins 1996:x).

This result is referred to as meta-cognition. 'Meta-cognition is a loosely defined concept that refers to the awareness and recognition of one's own cognitive processes. In other words, meta-cognitive awareness means that learners are thinking about the effectiveness of the learning strategies they are using during learning activities' (Flavell in Wilson 1996:71). Meta-cognitive methods are, applied to monitor understanding and problem-solving, to plan future processing and to focus attention on problem learning areas. 'By engaging learners in using knowledge, modelling problem-solving processes, and coaching learners in self-questioning and other meta-cognitive skills, the teacher helps the student to take control of the learning process' (Seels 1995:180). By involving these processes, the gap between beginner and expert learners can be narrowed (Spector et al 1993:31).

The focus of the learning process should be on the outcomes of the learning process. 'Learners use their existing knowledge to determine if a new conception is intelligible (knowing what it means), plausible (believing it is true), and fruitful (finding it is useful). If the new conceptions have these three qualities, then it is easily accepted by the learner' (Da Silva 1998:11).

From these learning strategies it can be assumed that the facilitator's focus should be shifted from learner performance to the various methods of learning that will enable the student to grasp and apply the knowledge recently acquired (Sparkes 1992:134). Figure 2.3 aims to summarise the learning experience.

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FIGURE 2.3: Key elements of learning (Morgan 1995:62)

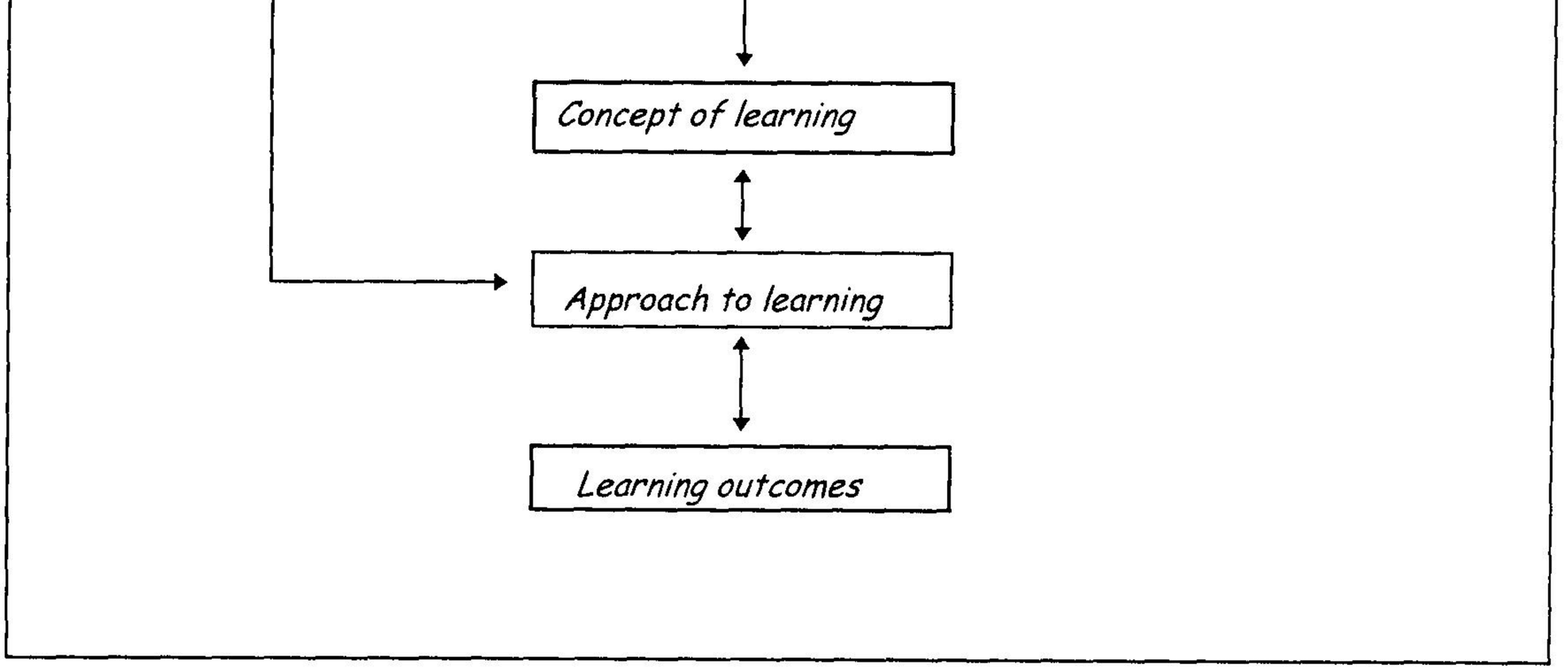

Figure 2.3 summarises the key elements of learning as an activity and draws together the key issues that influence the quality of learning outcomes. One such issue is the learning environment in which learning takes place.

> Distance education differs from conventional education in needs and structure. New forms of administration and management are needed to fulfil the needs of the new learner. Distance education learners are of different ages and at different stages of their lives. It can thus be assumed that these learners have diverse learning expectations and that the whole nature of learning changes (Ortner et al 1992:31).

For the purpose of this research the focus will be on distance learning. Distance learning can, however, best be understood if it is compared to contact or traditional teaching.

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2.1.3 Distance education compared to contact education

Peters (1992:33) describes the difference between contact and distance education as a number of structural shifts. The differences are highlighted in Table 2.1.

TABLE 2.1: Difference between contact and distance education

Parameter	Contact education	Distance education	Implications
Learners	Adolescent.	Adult.	Didactical change.
Learner population	Traditional learners.	New learners.	Increased learner numbers.
Academic institution	Local and regional framework.	National and international framework.	Decentralisation of learning institute.
Teaching strategy	Vocational and/or professional training.	Continuing education for various career prospects.	Life-long learning.
Learning strategy	Group learning.	Self-instruction.	Independent learners.
Media selection	Oral delivery.	Mediated delivery.	Multi-media / multi-sensory presentations.

Table 2.1 highlights the difference between contact and distance education in view of the parameters and implications it has on the learning process. According to Sewart et al (1983:14), these differences also impact on the teaching strategy employed in distance learning. New teaching strategies should therefore be considered. Sewart et al (1983:14) explains that in distance teaching the:

- facilitator cannot see the learner's reaction to the learning material;
- effectiveness of the teaching depends on the application of media;
- facilitator is not aware of the learners` experience of the learning material;
- motivation of learners is very important because of the lack of face-to-face contact;
- management systems are based on industrialised systems; and the
- teacher should facilitate active involvement in the learning process. The focus should be on interaction. Three types of interaction are present in distance learning:

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- learner-content interaction
- learner-instructor interaction and
- learner-learner interaction (Moore & Kearsley 1996:126).

The drafting of self-instructional learning material, usually for distance teaching, encourages the learner to be actively involved in the learning process. Regular communication between facilitator and learner is therefore facilitated. The flexibility concerning time and place of study enables learners to become lifelong participants in the learning process. These principles of distance education are embedded in the theories of distance education.

2.1.4 Distance education theories

In formulating a distance education theory, the philosophy of education and theories of communication need to be taken into consideration (Peraton 1983:34). The theories under discussion are the:

- theory of industrialisation;
- theory of independent study; and the
- guided didactic conversation theory.

- **Theory of industrialisation**

Peters (1983:95-113) compares distance education to the industrial and technological changes of the early Seventies. He found that the principles of industrial production could be applied in the design of distance education programmes. These principles include design, division of labour, mass production, automation, standardisation and quality control.

The principles of industrialised production can be successfully facilitated to help with the planning and maintenance of distance education programmes. The application of the principles of a production process can be adapted to distance teaching by dividing labour and by automating the design process.

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> Distance study is a rationalised method - involving the definition of labour - of providing knowledge which as a result of applying the principles of industrial organisation as well as the extensive use of technology, thus facilitating the reproduction of objective teaching activity in any numbers, allows a large number of learners to participate in university study simultaneously, regardless of their place of residence and occupation (Moore 1983:111).

- **Theory of independent study**

Wedemeyer in Moore & Kearsley (1996:199) defines distance education as being learner-centred where interactivity with a tutor plays an important role. Wedemeyer`s research is referred to as *transactional distance education*. The principles of the transactional theory are as follows:

- All learners experience the learning process differently and should be regarded as individuals within the learning process.
- Effective learning is an experimental process. Knowledge is gained through experience.
- In order to keep up with the technological and educational changes, lifelong learning should be facilitated (Moore 1983:69).

This transactional theory is similar to the theory of Dewey which describes it in more detail.

> The transaction that we call distance education is the interplay between people who are teachers and learners, in environments that have the special characteristic of being separated from one another, and a consequent set of special teaching and learning behaviours (Moore & Kearsley 1996:200).

Whenever a teacher and learner are interacting from a distance, a lack of communication might be present. This communication gap is referred to as a transactional distance.

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> The role of the teacher in the new learner centred educational universe, at its simplest, is not so much to *instruct* as to provide an environment in which each individual learner is able to identify what he is ready to learn, and in which he has access to a large variety of resources for learning. Author's italics. (Moore 1983:69).

In a distance learning programme the teacher becomes a facilitator who leads the learner through the learning process. Although the facilitator is absent, the learner can be motivated to become independent. Another form of communication should be found.

- **Guided didactic conversation theory**

Holmberg (1983:114) formulated the guided didactic *conversation* or *communication* theory. 'Education is based on communication'. The conversation is conducted by the learning material which should be compiled in such a manner that active participation from the learner is facilitated. The learner should be given the opportunity to study information and to apply this information to his/her environment and educational background. 'Effective internalisation of the complete learning conversation produces the self-organised learner and the fully functioning man or woman. Such people learn from experience and continue to learn from life' (Holmberg 1983:115). The communication referred to includes two-way communication between the learner and facilitator. Holmberg (1983:115-116) explains how two-way communication can be facilitated.

- Study pleasure and motivation is promoted by sharing personal relations. The facilitator should build a personal relationship with the learner.
- The facilitator should explain self-instructional material and the use thereof. Learners will then be confident to use the designed distance programme.
- Learners should be introduced and motivated to use the proper study methods and to reach learning outcomes.
- The selecting of the correct media is an important consideration in distance education. One should remember that the media is the facilitator's conversation support.
- Thorough planning of the learning process will promote study success (Holmberg 1983:115-116).

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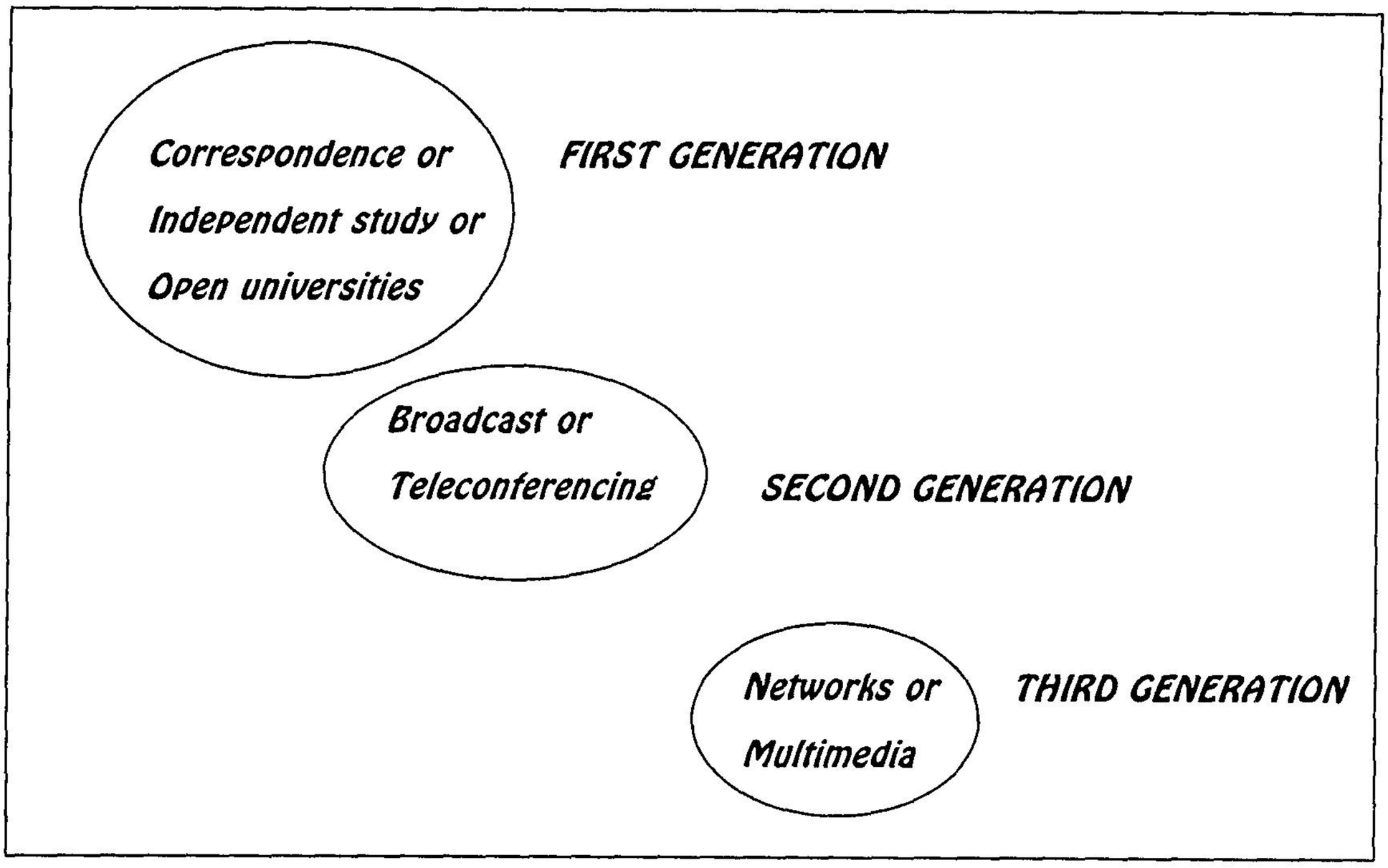
In currently used distance education models a combination of the above mentioned theories could be employed. These three theories can be considered to be a chain, of which each is a link in the learning process and are facilitated through a selection of distance education models.

2.1.5 Distance education models

Distance education is classified according to the delivery mode used in the presentation of the learning materials. These delivery modes are referred to as three generations of distance education. Figure 2.4 illustrates these three generations as they are given by Moore & Kearsley (1996:20).

FIGURE 2.4: The evolution of distance education (Moore & Kearsley 1996:20)



- **First generation distance education**

This is generally referred to as correspondence or single media education. Originally text, sound recordings and supplementary readings were used to complete questionnaires. This developed into the use of printed learning materials in the form of study guides with written assignments.

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- **Second generation distance education**

Second generation distance education developed with the establishment of open universities. A total systems or multimedia approach was established as a mode of delivery. Correspondence material is used in combination with recorded media, for example sound and video cassettes. This generation is characterised by high implementation costs concerning the design and compilation of materials.

- **Third generation distance education**

This generation is also referred to as tele-education. Interactive television, telephones and computers and multimedia work stations are used as delivery mode. The inclusion of computers in the learning process makes increased two-way communication between learner and facilitator possible. These courses do not have high implementation costs and money can thus be spent on the designing of products to fulfil individual learners` requirements (Bates 1991:10).

In later development the focus shifted from the mode of delivery to the influence the distance has on the instruction, learners, communication and the interaction between the curriculum and its management. This resulted in different levels and models for distance learning.

In order to understand the principles of distance learning, Mark in Moore & Kearsley (1996:2-4) distinguishes between four levels of distance learning namely:

- distance learning programmes;
- distance learning units;
- distance learning institutions; and
- distance learning consortia.

- **Distance learning programmes**

This term is used to indicate activities taking place in a conventional university, college or school. Teaching is done through traditional classroom methods. Video-conferencing is used to involve learners, who are not on campus, in the classroom. The learning process is usually co-ordinated by one facilitator.

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- **Distance learning units**

A distance learning unit is a separate department within a conventional college, university or school. Such a unit's key focus is on distance education and incorporates a separate administrative function.

- **Distance learning institutions**

These institutions specialise in distance education. The administrative and faculty functions differ from traditional institutions.

- **Distance learning consortia**

A consortium is a collaboration of two or more distance education institutions involved in the same delivery programme.

A variety of education models exists, enabling facilitators to design the learning material so as to fit in with learner and curricula needs.

> The potential and actual variety in possible teaching approaches and educational models is one of the major advantages of many conventional educational institutions, allowing teachers to flexibly adjust their methods to the particular context in which they are working, and to the changing characteristics of learners and their needs (Rumble 1986:25).

The focus is thereby shifted from the developed structure or model to the student and his/her learning environment. This enables the facilitator to design a learning programme to cater for learners' specific needs. The distance education models can be used as a guidance structure by the facilitator. Bertrand in Rumble (1986:24) divides distance education models into three basic categories:

- **Institution-centred models**

These models were compiled to enhance the efficiency of educational systems in order to be able to cope with mass education. Behavioural learning approaches that involve the processing, storage and retrieval of information are classified under this model. Many distance education projects in the formal education sector make use of the instruction centred model.

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- **Person-centred models**

Such models analyse education from a humanitarian point of view. The focus is on individual growth and personal significance of the learning experience. The learner is considered to be an individual consumer. Learner requirements are handled personally by a mentor. The learning content is predetermined but the learner decides on the tempo and sequence of learning. Because of the use of tutors to monitor and evaluate individual performance, this model can only be applied where small numbers of learners are involved.

- **Society-centred models**

These models aim to bring changes to social structures. With this mode, the institution takes responsibility for the compiling of learning outcomes, learning content and assignments. The compilation of the learning material is done by academics who have little or no interest in the learners` needs. The learners are considered to be passive recipients of knowledge. The minimum communication between learner and facilitator is present because the model is compiled for mass education. Escotet in Rumble (1986:32) has argued that such a system is primarily a means of instruction and not of education.

In a successful distance education programme learners are viewed as independent and responsible for their own learning. The design of a distance education programme should therefore be based on a selection or combination of distance education models.

2.1.6 Planning of distance education models

The outcome of a distance education design is to facilitate quality teaching over a distance. In quality distance education the different components are planned in conjunction with one another. According to Sibanda (1995:129), quality distance education depends on:

- an institution preparing material and support;
- learners who want to study;
- two-way communication between learner and facilitator;
- flexibility in time frames for completing the course;

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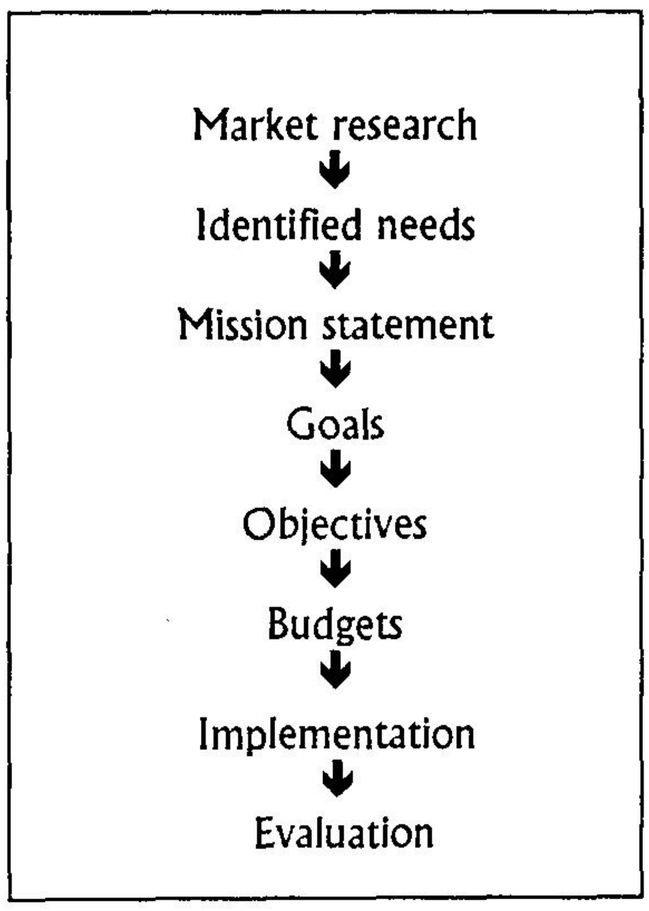
- interactive and relevant learning material; and
- the encouraged use of a number of media.

By making use of industrialised planning and management principles, learning materials can be compiled to suit the needs of the individual or independent learner. The management of distance education programmes includes a number of evaluation phases. These phases include the formulation of a vision and mission and the compiling of learning outcomes and learning programmes. This includes an evaluation of expectations and available resources, learner demands, availability of technologies and projecting future resource and financial needs. Budgeting, scheduling and quality assessment should be planned and managed according to the information recorded in the evaluation phase (Moore & Kearsley 1996:172).

Market research is the first step of the planning process. The research should involve a study determining who your clients are and the identification of their needs. With these needs in mind, a mission statement should be compiled, underlining the outcomes of the instruction and learning programme. Before implementation, a budget should be drawn up to determine if these goals can be achieved. After implementation, the process should be evaluated and the necessary changes made. Figure 2.5 represents the planning process of a distance education model.

FIGURE 2.5: Planning a distance education model (Rumble 1986:86)



Only if all these phases are planned and successfully managed can a successful distance education system be established. The facilitator needs to be knowledgeable

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about management skills when a distance course is being planned. This will enable the facilitator to set the administrative structures in place as the course is developing. This could result in a less troublesome implementation phase.

From the given information, one can deduce that the facilitator of a distance education course needs to be skilled in many aspects of the design and planning phases. Apart from these skills the facilitator also needs to be aware of instructional design theory so that a meaningfully designed course can be structured.

2.2 WHAT ARE THE THEORETICAL PRINCIPLES OF INSTRUCTIONAL DESIGN?

The principles involved in the design of instruction includes the selection of instructional design theories, models and the application of instructional design to distance education.

2.2.1 Instructional design theories

'Instructional theory, as a "linking science" between learning theory and educational practice, provides the growing but still incomplete knowledge base for prescribing the most appropriate instructional strategies and tactics' (Spector 1993:56). Greer (1980:22) describes theories of instruction as being directly or indirectly associated with learning principles and can be achieved through a systematic application of learning principles. Therefore, in order to formulate an instructional design theory, the instructional designer should be knowledgeable about the learning process.

Instructional design practices are usually divided into four generations. The content, pros and cons of each generation will be explained in order to select the most appropriate system for the design of a distance Music Education programme.

First generation instructional design organises the learning process according to known learning behaviours. In first generation instructional design, a step-by-step linear sequence is followed. Four step-by-step components can be identified:

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- preparing behavioural objectives;
- preparing a pre-test;
- producing an instructional product; and
- preparing a post-test (Seels 1995:117).

First generation instructional design is evaluated through a formative evaluation system derived from action research methodology. A number of limitations were recognised in first generation instructional design. According to Spector et al (1993:149) these limitations include:

- the fragmentation of learning content;
- a lack of integration between concepts and skills;
- the facilitation of passive rather than active learning processes; and
- modular learning sequences rather than a spiral of learning.

The general development in the field of technology had an impact on the variables and conditions of instructional design. As a result a **second generation** instructional strategy was compiled. The pedagogical prescriptions of the second generation approach include the:

- establishment of learning outcomes;
- analyses of the target population;
- review and selection of existing materials;
- selection of instructional delivery system;
- solving of issues associated with implementation (Seels 1995:117);
- integration of knowledge and skills associated with the learning process; and
- organisation and evaluation of a learning sequence (Spector et al 1993:171).

These pedagogical prescriptions include the identification of instructional outcomes. In second generation instructional design, behavioural learning paradigms are still present. The focus is, however, directed upon the development of instruction independent of a subject expert. In this generation, the subject-expert and technician are considered to be a team. To document effectiveness, summative evaluation was added. This instructional system still needed to be revised because the second generation principles were not adaptable to specific problem situations.

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In **third generation** instructional design, the subject-specialist and technician are replaced by an instructional designer. The reason for doing so is that instructional designers can control information and systems to scrutinise specific application needs. A linear system between the four basic phases of assessment, design, production and implementation is maintained. Feasibility and formative evaluation are added to improve front-end analyses and the shelf-life of developed products (Seels 1995:119). In the third generation of instructional design the design process is dependent on the instructional designer. As learning strategies continue to influence instructional design, the need for yet another generation arises.

In **fourth generation** instructional design, a problem-solving procedure is followed. The author or subject-specialist becomes an instructional designer. Situational evaluation is utilised and performs the function of diagnosing problem situations. Fourth generation instructional design can thus be adjusted as conditions over time change. The fourth generation model identifies two components (Seels 1995:121):

- a situational evaluation component; and
- a knowledge base component.

- **Situational evaluation component**

Fourth generation instructional design is based on a situational evaluation or diagnosis of prescribed activities. The learning environment or situation is diagnosed and authoring activities are then assembled. The furtherance of the authoring activities depends on the author's knowledge of instructional design. In Table 2.2 the instructional tasks at hand are indicated as concepts while the actions to complete the concepts are given as authoring activities. By completing the activities the outcomes or concepts of the instructional design process can be reached.

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TABLE 2.2: Situational evaluation components (Seels 1995:122)

CONCEPTS	AUTHORING ACTIVITIES
1. Analyse needs and problems	• Identify discrepancies between desired and actual learning. • Determine consequences of learning discrepancies.
2. Analyse constraints and resources	• Identify the scope of the problem. • Define the constraints restricting resolution of need/problem. This includes variables or risk management.
3. Analyse target population	• Determine learner characteristics: educational background, age, ability, need for motivation, present skill level, number of learners, geographical location and culture. • Determine learner differences: cognitive style, learning style, affective factors, motivation and perception.
4. Propose solution plan	• Validate the situational diagnosis. Consider whether to: buy or use existing materials, modify materials, or develop new materials. • Estimate costs and resource requirements for each alternative.

In contrast to the previous generations, the authoring activities of fourth generation instructional design are described as areas of concepts neutral to any predetermined instructional sequence. The concepts are consequently represented as clusters. The five domains of the knowledge base component use the same labels as the other three generations. These labels as indicated by Seels (1995:125) include:

- analysis;
- design;
- production;
- implementation; and
- maintenance.

The instructional implications of these five domains to the design process are:

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- **Analysis domain**

In the analysis domain, the foundational aspects of the learning environment are established. The aspects identified in the analysis influence each aspect of the instructional design process. The following aspects need to be analysed and/or determined:

- learning environment;
- learner characteristics;
- available resources;
- learning outcomes;
- delivery system;
- macro and micro information structures;
- entry requirements; and the
- sequence of information.

- **Design domain**

The design domain involves the:

- definition of the task to be learned at curriculum level;
- sequencing and organisation of information according to course, module and lesson;
- identification of instructional strategies;
- selection and display of characters, colour and graphics used;
- selection of human factors such as menus, function keys and prompts; and
- establishment of learning assessment criteria.

- **Production domain**

The production domain incorporates the activities directly associated with the actual development of the learning environment. In most instructional design situations, this domain would require the most time, effort and money to develop. The production activities include the:

- revision of subject content for accuracy and completeness;
- packaging of all necessary media so as to be implemented in the learning environment;

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- preparation of management systems including the drafting of letters and documentation; and
- preparation of the product prototype. This prototype should be evaluated on a try-out basis and should then be revised according to the feedback received.

- **Implementation domain**

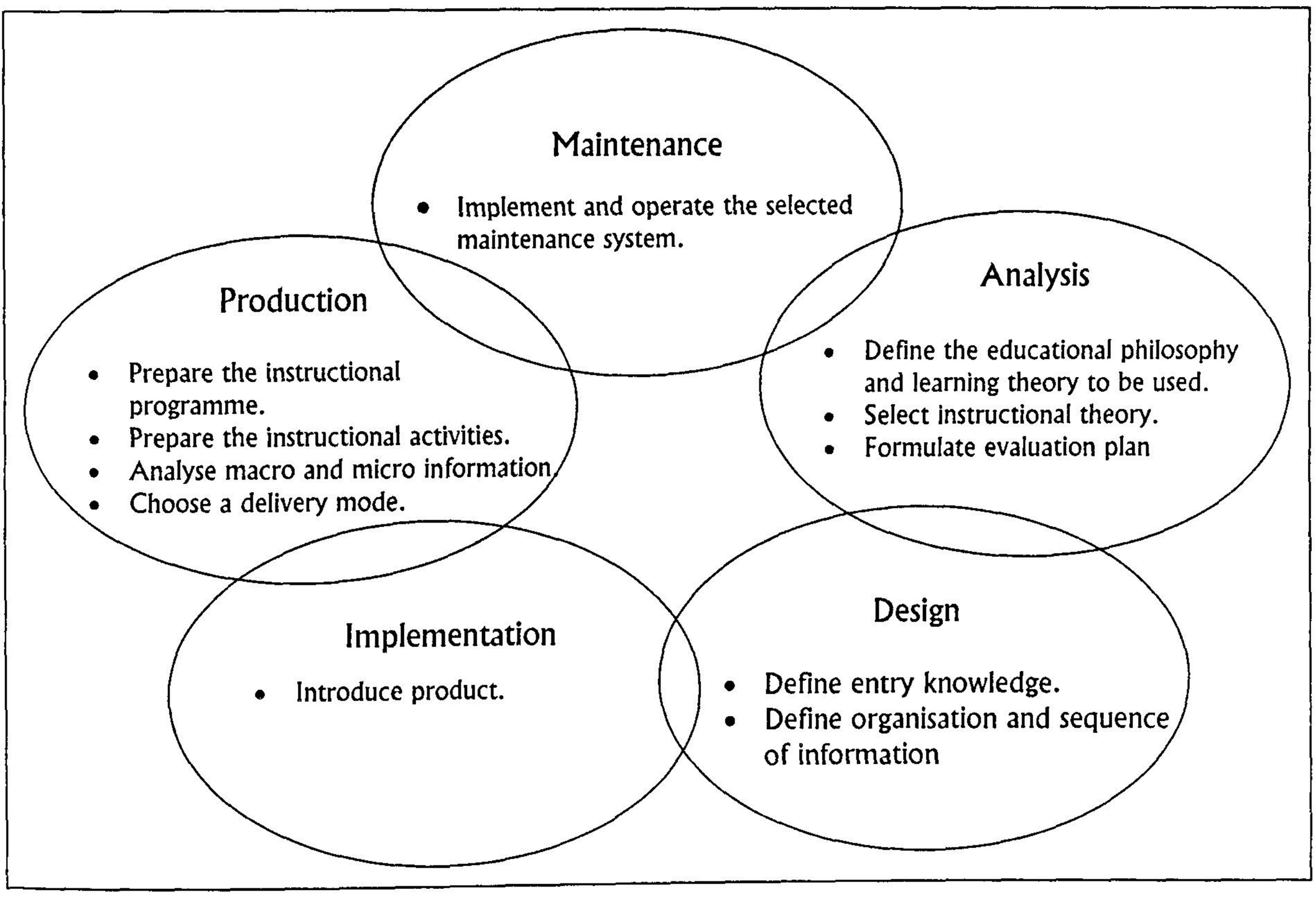
This domain provides the means for the instructional products to be put into operation. The implementation involves the:

- establishment of support services; and
- evaluation of the product according to cost and time.

- **Maintenance domain**

The maintenance domain provides the means for quality control of the entire learning environment. The outcome is to keep the product at the same level of effectiveness as when it was implemented. Figure 2.6 adapted from Seels (1995:122) illustrates the interrelationship between the various parameters of the knowledge base component.

FIGURE 2.6: Knowledge base component



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These five domains are inter-linked so as to highlight their cumulative importance. Each circle or link to the design approach is equally important. Successful design will only be possible if all domains are handled uniformly.

At present all four levels of instructional design could be utilised in design. A collaboration of the different generations is often used to ensure that the best possible design is selected. These selected strategies are then compiled to form models of instructional design.

2.2.2 Instructional design models

Distance education requires special course design and instructional techniques, special methods of communication by electronic or other means and special organisational and administrative arrangements (Moore & Kearsley 1996:146). Facilitators should remember that they have no direct contact with the learner and should be very clear in their directions. The design of detailed, quality learning material is a prerequisite for successful learning to take place. Evans (1995:131) highlights the importance of quality study material by referring to the impact the learning material has on the learning process of the individual, often isolated learner.

> Open and distance learners have to make complex educational decisions, if not exactly in the dark, certainly in the gloom of speculation, interpretation, extrapolation and guesswork! Then, if these decisions are in error in some way, this often can only be discovered when it is too late as assignments come in or evaluation sheets are returned (Evans 1995:131).

In order to determine the composition of quality instructional design, the parameters of quality control should be evaluated. According to Spector et al (1993:ix), instructional design models are usually based on the:

- learner characteristics;
- project analysis;
- instructional design requirements;
- formulation of learning outcomes;
- selection of instructional strategies;

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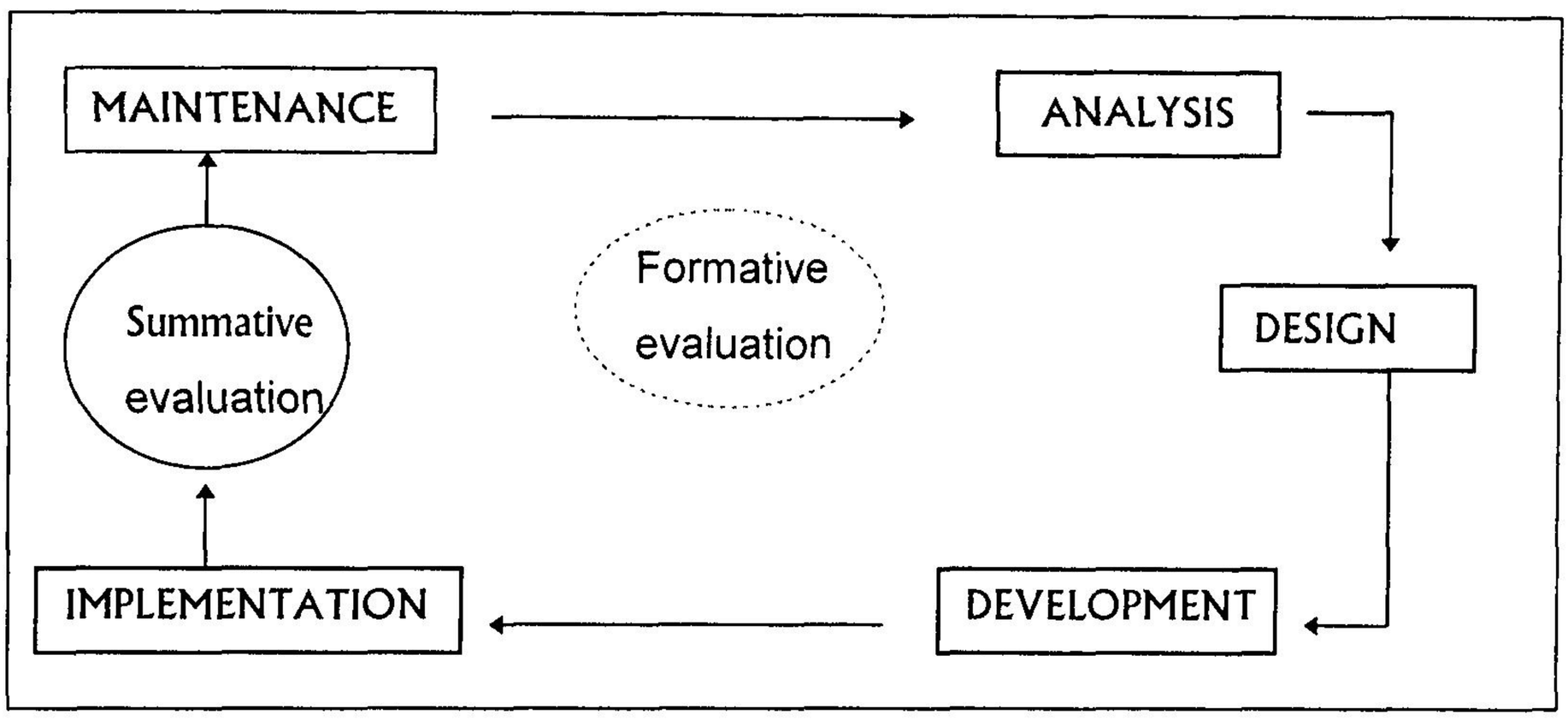
- design and development of the project;
- conducted formative analysis; and
- maintenance of the instructional material.

Instructional design principles are applied through the systems approach to ensure quality distance education. Figure 2.7 explains the instructional process of the systems approach.

FIGURE 2.7: Systems approach (Moller 1999:4)



In the systems approach the different components of the design process are inter-linked but at the same time independent. This is the same principle as highlighted in the knowledge component of fourth generation instructional design. The systems approach describes a continuous design approach. Each aspect of the design cycle can recur. The formative evaluation circle has a dotted line to indicate that it is not a fixed structure at a specific time in the design. Formative evaluation is found at any stage of the design. The systems approach can therefore be effectively utilised in the design of distance education programmes.

2.2.3 Application of instructional design to distance education

Through the systems approach the role of the facilitator, instructional designer and use of media are defined. The instructional designer's role is to apply the theory of instructional design to the different aspects of the learning process. Table 2.3 illustrates the application of the principles of instructional design to a distance learning programme.

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TABLE 2.3: Application of instructional design to distance education (Moore & Kearsley 1996:9)

Sources	*Design*	*Delivery*	*Interaction*	*Learning environment*
· Student needs	*· Instructional design*	*· Print*	*· Instructors*	*· Workplace*
· Organisations	*· Media*	*· Audio/Visual recordings*	*· Tutors*	*· Home*
· Theory/history	*· Programme*	*· Radio/TV*	*· Counsellors*	*· Classroom*
· Philosophy	*· Evaluation*	*· Audio conferencing*	*· Administrative staff*	*· Learning centre*
		· Video conferencing	*· Other learners*	
		· Computer networks		

- **Sources**

The sources include the knowledge and skills that need to be taught. Decisions are made according to the educational outcomes and learning philosophy of the learning programme.

- **Design**

A spectrum of design expertise is needed when incorporating technology and media into the learning process. The most efficient medium of instruction and method of evaluation should be selected and adapted to the learner's requirements.

- **Delivery**

Two-way communication should be facilitated throughout the learning process. This should involve the selection of media and technologies. Media is the information that is being sent by means of technology. Media, thus, includes printed text and pictures whilst technology refers to the machines used to make information accessible.

- **Interaction - the role of the instructor**

For learning to take place, sufficient communication and interaction between learner and facilitator are necessary. The nature and extent of the interaction is determined by the organisation's teaching philosophy, the age and skills of learners as well as the media employed in the course.

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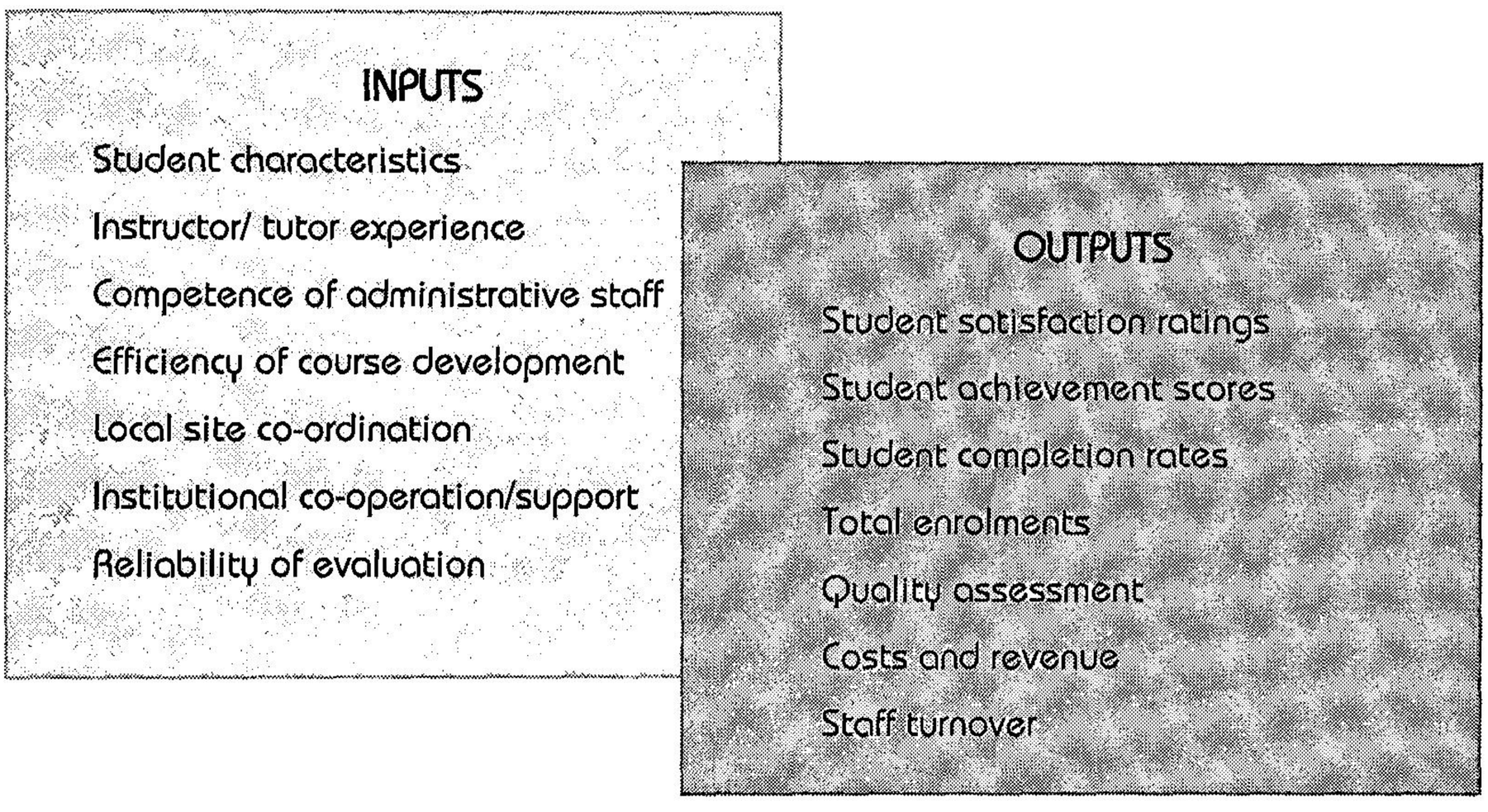
- **Learning environment**

This involves the place where and time in which learners are involved in the learning process. The learner must accept the responsibility of acting as a distance learner.

These aspects are important for a designed system to function as a distance education programme. An efficient system would require these aspects to be interrelated and independent. The success of an instructionally developed system is thus determined by the inputs and outputs of distance education learning as illustrated in Figure 2.8.

FIGURE 2.8: Inputs and outputs of distance education (Moore & Kearsley 1996:15)



By matching the inputs with the required outputs, a satisfying system and thus a productive distance education course can be compiled. The planning of a distance education system is of the utmost importance to ensure that the outputs are reached. The inputs and outputs should be predetermined by the course designer.

When the design sequence is planned the instructional designer should aim to answer the following questions (Romiszowski 1984:53):

- *When* should unit sequences occur?
- *How* the strategies, methods and tactics should be applied?

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- *Who* is going to use the structure?
- *With what* media is the information going to be portrayed?
- *How well* are the test and control mechanisms designed?

For a design project to be successful the facilitator and designer should combine their knowledge and expertise. Traditionally the facilitator is considered to be less important than the instructional designer. However, it is in fact imperative that they are partners in a joint venture of design. For this joint venture to be successful, the subject specialist and designer should both be facilitators of the course. The key to success in this area lies, not in a grand design born out of ideology and self-interest, but in a personal, low-key, small scale approach, which is situation-specific and adaptive to context (Meacham 1993:60).

Parer (1993:45) suggests that the principles of instructional design should be applied to the specific needs of the course. Each course should be analysed in order to determine what the best instructional model is. A completed design model cannot easily be applied to another course seeing that the teaching environment, learner population and content of the course may differ. The facilitator should remember that existing instructional design models were compiled for specific subjects and teaching environments. These models can, however, be used as examples. 'What is apparent is that new models need to be developed or existing models need to be adapted to better meet the needs of today's teachers and learners' (Olson 1995:52).

According to Seels (1995:144), an instructional model can only be effective if two critical functions are combined to form a workable methodology. These functions are: **effective creative design** and **efficient management**. The measurement of these two parameters might not be easily identifiable. Formative and summative evaluation is used to determine the effectiveness of the instructional strategies.

The two phases of evaluation, as suggested by the systems approach, are common to instructional strategies. Formative evaluation occurs throughout the design process. This enables the facilitator to test and revise the programme whilst it is still being developed. Summative evaluation is used after the programme is implemented. The results from the summative and formative evaluation are used to maintain the standard of the designed programme.

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Apart from these two evaluative systems, other forms of assessment are used to determine the success of a designed programme. Kamau (1993:200-201) suggests the following checklist for assessing the learning programme. The programme should be assessed according to the given criteria.

- **Outcomes:** Will the stated outcomes facilitate the correct behaviour from learners?
- **Motivational devices:** Is the difficulty of the self-assessment tasks in line with the learners` capabilities?
- **Language:** Is the language used understandable?
- **Assessment:** Are the assessment activities clearly defined? and
- **Content outline:** Is the sequence of information logical? Are there adequate examples to explain the theory?

The outcomes of the evaluation process are to identify and solve problems. When suggestions of improvement are given, they should be clearly documented for later reference. Each section of the learning programme should be evaluated. By doing so, a developmental spiral plan can be followed.

> Instructional design refers to a set of procedures to guide authors on the evaluation, analysis, design, production and implementation of learning environments. Attributes defined in instructional development models are supported by a diverse set of characteristics; system structure, evaluation activities, learning theory, instructional development process, author content and instructional design expertise and authoring activities. Foundations for instructional design models are offered by descriptive theories of learning and prescriptive theories of instruction (Seels 1995:113).

By evaluating each section of the designed programme, the instructional designer is aware of the necessary changes that should be made in order to facilitate effective learning within a particular field of study.

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2.3 WHAT ARE THE INSTRUCTIONAL DESIGN PRINCIPLES FOR DISTANCE MUSIC EDUCATION PROGRAMMES?

The two most prominent groups of role players in the design process are the learners and instructional designer(s). The instructional designer has to have some background information concerning the distance learner in order to facilitate successful learning strategies.

2.3.1 Distance learners

The target receivers of distance education are traditionally adult learners with social, work and family responsibilities who strive to further themselves personally in their spare time. A second group of learners are beginning to enrol at distance education institutions. These learners are interested in individual courses as part of a degree or curricula-based conventional studies (Holmberg 1995:50).

Learning from a distance usually takes place in isolation. The learner decides on the time and place for studying. This is referred to as independent or individual study.

> Independent study consists of various forms of teaching-learning in which teachers and learners carry out their essential tasks and responsibilities apart from one another, communicating in a variety of ways for the purpose of freeing internal learners from inappropriate class pacing or patterns, or providing external learners with opportunities to continue learning in their own environments, and of developing in all learners the capacity of carrying on self-directed learning (Moore & Kearsley 1996:24).

Moore & Kearsley (1996:154) give the following three reasons why adults embark on a distance education course. Adult learners:

- have a desire to expand their knowledge and expertise;
- volunteer to further their education; and
- need practical experience and application of knowledge.

The difference between contact and distance education has been discussed in this chapter. From Table 2.1 it can be deduced that not only a structural change but also

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a didactical change becomes apparent in distance learning. In order to facilitate a successful learning sequence, the facilitator should be knowledgeable about distance learners' requirements. Table 2.4 compares on- and off-campus learners' characteristics, the importance of learning stimuli and the identifiable learning distracters. The comparison will guide the designer in the design of a successful distance learning programme.

TABLE 2.4: Learning requirements of contact and distance learners (adapted from Oosthuizen 1997:70 and Hamilton 1994:123)

Parameters	On-campus	Off-campus
Learning stimuli	• tutorials. • seminars. • assignments. • personal motivation. • textbooks. • library resources. • lectures.	• study materials. • study schools. • assignments. • personal motivation. • textbooks. • library resources.
Learning distracters	• family. • friends. • finances.	• family. • friends. • work committees. • lack of contact with fellow learners.
Learner characteristics	• learning full time. • learner continues membership of learning institution. • learner is young. • learners have easy contact with fellow learners. • learner has access to institution's resources. • learner is in full-time contact with institution. • learner residence in close proximity to the institution.	• learning part-time. • learner returns to institution after absence. • adult learner. • learners don't have contact with fellow learners. • institution's resources not necessarily easily accessible. • infrequent contact with institution. • learning takes place across a distance.

From Table 2.4 one can reason that there are a number of resemblances between contact and distance learners. However, the differences should be specifically taken into consideration when a distance education programme is compiled.

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Distance learners are expected to take full responsibility for their studying. By being actively involved in the learning process, adult learners get the opportunity to develop their organisational and decision making skills (Dills & Romiszowski 1997:393). Dills & Romiszowski (1997:396) further note a number of assumptions regarding the nature of adult learners, their principles of learning and the organisation of instruction. The assumptions are:

- Adults can and do learn significant things throughout their lives.
- Educational interventions ought to be organised so that growth and development are the ultimate outcomes.
- The potential of humans as learners can only be maximised when there is a deliberate interaction between three elements: the learning process, learning needs and interests, and available instructional resources.
- When given the opportunity, adults prefer to be in charge of their own learning and actually thrive under such conditions.
- Adults are capable of self-directed involvement in terms of personal commitment to and responsibility for learning, choice of learning approach, choice of learning resource, and choice of evaluation or validation techniques.
- An instructor's role is multi-dimensional, including being a facilitator, manager, resource guide, expert, friend, advocate, authority, coach and mentor.
- Empowering learners to take responsibility for their learning is the ultimate aim of education.
- Educational interventions ought to promote a match between the needs of each learner and the needs of the instructor.
- Teaching and learning excellence is the result of subject matter expertise, careful planning, a good deal of patience and flexibility, and a commitment to helping learners reach their full potential.
- The individualised instructional process can be utilised in nearly every educational endeavour with commensurate success.

The hypothesis can be made that learners experience learning diversely. The learning experience should thus be facilitated to fulfil the requirements of the individual learner.

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2.3.2 Individualised instruction

The adult distance learner is involved in studying for the first time or often after a long absence. This results in a lack of confidence because of study skills becoming inadequate and also unfamiliarity with the study environment. The lack of confidence is enhanced by the degree of isolation in which the study takes place. The isolation is the result of the distance learner not having regular contact with other learners and/or the facilitator of the course. The learner therefore becomes an individual in the distance learning process.

The task of the instructional designer is to organise and structure the learning process so that the individual learner understands the material and becomes an active participant in the learning process. Successful distance learning can, however, only be facilitated if the degree of individualisation of the learning process and learner is determined. Four questions can be asked to determine if learning is individualised:

- What is to be individualised?
- When will the course adapt to the individual?
- Who decides?
- How does the system adapt to the individual?

- **What is to be individualised?**

Most individualised learning programmes direct the learner to take responsibility for at least part of the learning process. The learner should be given the opportunity to make important decisions concerning the learning process. By doing so, learning becomes individualised. The characteristics which may be individualised include:

- preferred pace of study;
- choice of media and materials;
- learning methods;
- alternative and supplementary learning materials;
- proposed learning outcomes; and
- preferred time of study.

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- **When does individualisation take place?**

Individualisation can occur on many different levels within the learning process. These levels comprise the course, modules, learning outcomes and achievement of learning outcomes.

- **Who decides?**

The decision to individualise may be taken by:

- the learner when choosing a particular course option;
- the facilitator prescribing individual learning outcomes;
- the system which is designed to adapt to the needs of the individual learner; and
- the above mentioned parties as a joint conclusion.

- **How does the system adapt to the individual?**

The system adapts to the individual through the:

- style and format of the instructional material;
- media used;
- method of access as determined by the learner;
- role of the facilitator and tutor as medium of instruction; and
- medium used as management control (Romiszowski 1986:21-22).

Table 2.5 is a useful method of analysing and comparing existing systems of individualised instruction. It has also proved to be a useful planning tool when deciding which aspects of a course ought to be individualised.

If this table is used as a guideline when designing learning material, independent learning can be facilitated. The role of the facilitator in the system, both as a medium of instruction and as a medium for management control, is indicated. An indication of the style and type of instructional materials employed in the system, and the way in which learners select and have access to learning materials, are also specified.

Individualised instruction refers to the facilitation of learning responsibility. The learner should be encouraged to take control over the learning process. The

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facilitator should stimulate active participation through learning activities, the evaluation of learning activities and two-way communication (Romiszowski 1984:10).

Since one grows educationally only when one's particular needs are met, and since the customary mass instruction cannot possibly furnish the variety of methods and materials necessary to meet the varying abilities represented in any group of individuals, it is imperative that a form of instruction be used that will, to the largest degree, permit each child (learner) to work according to his/her needs (Romiszowski 1984:4).

TABLE 2.5: Individualised instruction (Romiszowski 1984:9)

WHO makes the decisions?		WHAT course parameters are individualised?				
		Time and rate of learning	Materials and media	Sequence and methods	Content and examples	Objectives
Frequency of decision to individualise WHEN?	1. Total course	Student			←	System (diagnostic test)
	2. Every unit	→ Tutor and student ←				
	3. Every lesson	Student and system			System	
	4. Every learning step	Student			System	System

The designer should ensure that the learning material facilitates an interactive learning approach. Dialogue should be promoted between the learner and learning material so as to guide the learner towards constructed meaning. Most open and distance learning occurs independently of the teachers` presence, but dependent on the course materials they have prepared. The instructional designer plays a vital role in the facilitation of high quality learning.

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2.3.3 The instructional designer

Instructional designers are sometimes referred to as educational developers. Because of a lack of funds the instructional designer, in practice, is often the subject-specialist or lecturer. Unfortunately, the subject-specialist does not necessarily have the skills, knowledge and time to act as instructional designer. It is, in fact, possible for a subject-specialist to act as an instructional designer, if the specialist is able to perform the following tasks as listed by Kamau (1993:194). The instructional designer should be able to:

- facilitate the requirements of the distance education learner;
- write topic outlines;
- include activities and provide feedback in the text;
- formulate outcomes;
- write clearly and precisely; and
- handle course administration issues.

There are a number of specific roles that instructors must undertake to facilitate quality, individualised instruction. Himstra & Sisco in Dills (1997:396) identify eight such goals. The facilitator should:

- serve as a content resource for learners;
- take responsibility for managing the assessment of learner's needs;
- employ the resources necessary for achieving personal goals;
- make use of a variety of instructional techniques;
- stimulate and motivate learners so that each learner can reach his or her full potential;
- help learners to develop positive attitudes about their abilities;
- evaluate if learners can reflect what they have learned based on each learner's personal experience; and
- evaluate learners` progress by making use of a number of evaluation systems (Dills & Romiszowski 1997:396).

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Dills & Romiszowski (1997:817) describe the learning activity further as:

- analysing competencies to be taught;
- setting learning outcomes;
- selecting modes and media of instruction;
- determining learning methodologies;
- developing learning materials; and
- specifying the dimensions and methods for evaluating the learning progress.

By incorporating these design tasks learning and its theories can be facilitated.

2.3.4 Learning theories in relation to design

According to Seels (1995:237), constructivism dominates the field of instructional design. Learning theory developed into a more constructed environment, and facilitators became aware of the importance of the learners' performance. Instructional theory is thus deduced from constructivism.

Constructivism in instructional design emphasises individual thinking and the creation of meaning. Learning is considered to be a personal involvement in the education process. In order to understand the principles of constructivism in relation to design, Merrill & Twitchell (1994:141) defined constructivism as follows:

- Knowledge is constructed from experience. Learning is a personal interpretation of the individual.
- Learning is an active process of meaning-making based on experience.
- Learning is collaborative with meaning negotiated from multiple perspectives.
- Learning should occur in realistic settings.
- Testing should be integrated as a task, not a separated activity.
- Like instruction, assessment should be based on multiple perspectives.

The following instructional principles can be deduced from constructivism theory as compiled by Savery et al (1996:138-140):

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- Anchor all learning activities to a larger task or problem.
- The learning outcome of each task should be clear to the learner.
- Support the learner in developing ownership for the overall problem or task. Learners should be encouraged to succeed in reaching the set learning outcomes and to develop a deep approach toward learning.
- Design an authentic task - the learning activities should be applicable to the learners' every day environment. Learners should be guided to apply their knowledge in order to solve problems.
- Design the task and the learning environment to reflect the complexity of the environment they should be able to function in after the learning task is completed.
- Give the learner ownership over the learning process - the facilitator should challenge the learners` thinking.
- Encourage the testing of ideas against alternative views and alternative contexts.
- Provide opportunity for and support reflection on both the content learned and the learning process.

According to Seels (1995:154), the consequences of the above instructional principles for instructional design can be described as a set of possible advantages and disadvantages. The possible risks and benefits are highlighted in Table 2.6.

TABLE 2.6: Advantages and disadvantages of constructivism

ADVANTAGES	DISADVANTAGES
Possible benefits include	Possible risks include
• meaningful learning outcomes that are likely to be used in relevant context.	• more costly instruction.
• meaningful participation of the learner in the learning process.	• greater need for instructional resources and information management.
• developing independent problem-solving capability in learners.	• less coverage of material.
• flexibility in design activities.	• less demonstration of specific skill mastery.

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(Table 2.6 continued

ADVANTAGES	DISADVANTAGES
Possible benefits include	Possible risks include
• flexibility in instructional activities.	• chaos and confusion if poorly implemented.
• acknowledgement of social and motivational factors in learning.	

Knowledge or learning is thus considered to be a personal rather than an objective involvement. 'Constructivists are far less interested in the learner's ability to simply acquire knowledge and to produce the *right* answers than with the learner's ability to apply and manipulate knowledge within an authentic task environment' (Seels 1995:184).

The role of constructivism in instructional design is summarised by Seels (1995:237) with three principles:

- Learning should be designed so that learners study information at their own pace and time.
- The learning process is just as important as the learning outcomes.
- The context of learning and assessment is co-joined in authentic learning contexts.

It could be assumed that the constructivist approach is best suited for quality distance education. 'It follows that learning is greatly enhanced when knowledge is learned in a specific context, in the service of a problem that needs to be solved, or in order to attain a specific cognitive goal, rather than a de-contextualised and abstract body of knowledge' (Polson 1993:30).

Through following the suggested constructivism design steps, the learner will be motivated to act as an individual in the learning process. Learners will also be able to apply their knowledge to solve problems they might come across in their work situations.

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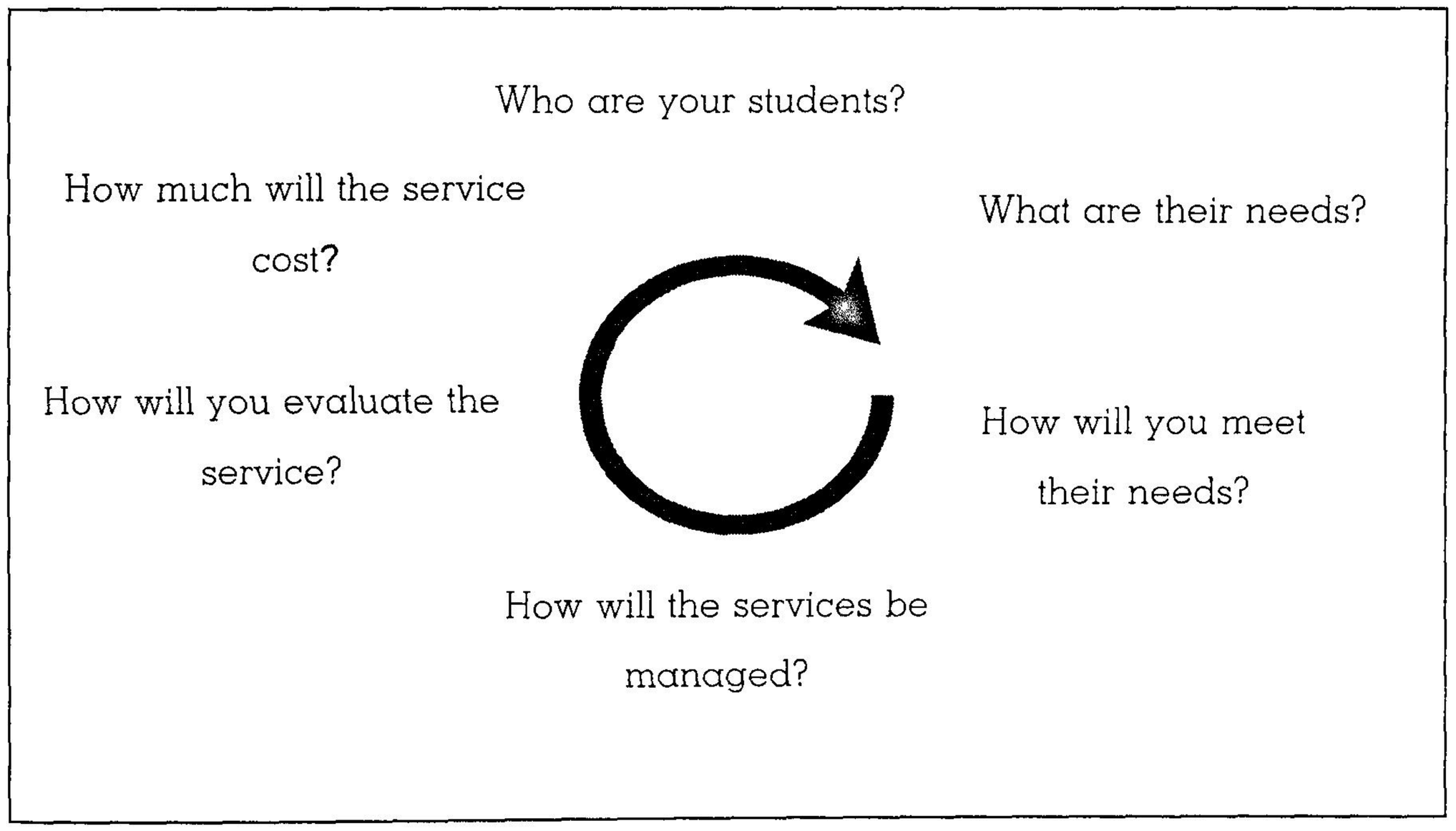
2.4 WHAT ARE THE MOTIVATIONAL PRINCIPLES INVOLVED IN A DISTANCE EDUCATION PROGRAMME?

Apart from guiding learners to take responsibility for the learning process, the facilitator should also structure other motivational devices. This could be achieved by providing learning support services.

In order to support the learning process the facilitator should know and understand the learner. Learning support services aim at providing the often isolated learner with learning and didactical feedback. These support services can be provided via a wide range of media, for example, by telephone, face-to-face contact or correspondence. The support services should include total service provision for learners and should take learner perspective into consideration. Figure 2.9 suggests a number of questions to be looked at when planning student support services.

FIGURE 2.9: Planning student support services (Lockwood 1995:233)



The instruction should guide the learner through the learning process by means of various support systems. It is the task of the facilitator to motivate and encourage the learner (Oosthuizen 1997:71).

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> The challenge is to develop and maintain approaches which enable learners to have their voices heard and for the open and distance educators and their institutions to be able to listen and understand the practical implications of what is being said. Learners should also recognise that they are a part of a diverse body of people whose interests need to be voiced and whose stories need to be told (Evans 1995:234).

Distance learners have a need for frequent communication between themselves and the facilitator. Because of the distance, this is not always possible. A back-up system in the form of tutors needs to be established. Even by making use of tutors, effective communication may still be a problem. A tutor and group learning projects can be employed to solve the possible communication problems.

2.4.1 Tutors

The tutor can be trained to act as a mediator between learner and facilitator. The selection of tutors is extremely important. Tutors should possess a number of qualities. The distinctive qualities of a tutor as summarised by Moore & Kearsley (1996:148) are as follows:

- excellent subject matter knowledge;
- good general teaching skills;
- good communication and social skills;
- well organised, flexible, and patient;
- ability to motivate and encourage learners; and
- committed to learners and programme.

A tutor having these personal and professional characteristics could be employed to:

- discuss course content;
- provide feedback on progress;
- grade assignments and tests;
- help learners to plan work;
- motivate learners;
- answer administrative questions;

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- supervise projects;
- teach at face-to-face seminars;
- keep student records;
- intervene on behalf of learners with the administration; and
- evaluate course effectiveness (Moore & Kearsley 1996:148).

A tutor system will, however, only be successful if the distance learning institution, its lecturers and the tutor treat the student's learning success and the total development of the distance learner as a top priority and regard the achievement as a team effort. 'This provision should ideally be available whenever and as often as the student needs it and is part of the richness and variety of a system that can adapt to the needs of individualised, independent study' (Sewart et al 1983:36). Group learning activities can also be facilitated to ameliorate the isolation of the distance learner.

2.4.2 Collaborative learning

Learners should be encouraged to make contact with others in the form of group learning or discussions. It is suggested that distance learners should be involved in formative learning or group learning activities. According to Escotet (1992:96), such group activities could involve:

- **Study circles:** Groups of learners who analyse and discuss learning content by themselves.
- **Group Academic Tutorials**: A group of learners meeting with tutors discussing perceptions of learning material.
- **Didactic groups:** Applying knowledge in the working environment. This could include discussing, developing and the exploration of case studies.
- **Socio-cultural activities:** These activities should form an obligatory part of the curriculum, be it as an extra-curricular or a co-curricular activity.
- **Activities of belonging:** Activities which tend to make the learners identify with the university in order to heighten their sense of belonging.
- **Two-way communication:** By means of guided didactic conversation.

By being involved in a study group, learners can communicate their problems and ideas. The isolation linked with studying at a distance can therefore easily be

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ameliorated. Further communication can also be facilitated through the selection of an appropriate delivery mode.

2.5 WHAT PRINCIPLES DETERMINE THE SELECTION OF AN APPROPRIATE TECHNOLOGICAL DELIVERY MODE?

A question that is commonly asked by facilitators is whether media selection influences learning. In order to answer this question two opposing opinions will be given.

According to Lamsdale & Mielke in Clarke (1994:21), media have definite economic benefits but no learning benefits. 'If categories of media can be related to the types of learning that they are particularly suited to, then learning classifications may offer a way to integrate media selection, with philosophical approaches and objectives' (Seels 1995:205). One can thus assume that it is the method of learning employed that influences learning. Media is only the method of delivering the information. Clarke further claims that any necessary teaching method could be designed into a variety of media presentations. 'Media and their attributes have important influences on the cost and speed of learning but only the use of adequate instructional methods will influence learning' (Clarke 1994:27). According to Clarke media, therefore, does not influence learning.

Kozma (1994:7-8) refers to the same argument by rephrasing the question as not *do* but *will* media influence learning. He states further that if there is no relation between media and learning, it may be because we have not yet formulated one. In Kozma's opinion this lack of a relation between media and instruction stems from the surface learning, behaviouristic approach to instructional design. The behaviouristic approach does not incorporate the cognitive, affective and social process present when learning. 'The medium is considered an inert conveyer of an active stimulus to which the learner makes a behavioural response' (Kozma 1994:8).

Kozma emphasises that with the shift towards constructivism, learning is rather perceived as an active, constructive, physical and social resource that creates new knowledge by interacting with information in the environment and integrating with

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information already stored in memory. Knowledge and learning are neither a property of the individual or of the learning environment.

Kozma suggests that media can influence learning by facilitating an interaction between internal and external resources. 'Consequently, we will understand the potential for a relationship between media and learning when we consider it as an interaction between cognitive processes and characteristics of the environment, so mediated' (Kozma 1994:8).

The hypothesis can be formulated that media selection is an important part of the learning experience. By incorporating media, learning can be made interactive and interesting while at the same time it helps the learner to understand and apply the knowledge learned. The media are used as a tool to deliver instruction. The selection of media is therefore key in the facilitation of affective and meaningful learning.

2.5.1 Media selection

The importance of two-way communication in distance education has already been referred to under the guided didactic conversation theory. In order for two-way communication to take place between the facilitator and the distance learner, media are employed. 'Distance education is sometimes called *mediated instruction* in order to stress the decisive importance of technical media which have to be used in order to bridge the distance between teacher and student. In fact, in distance education teaching and learning cannot take place without them' (Peters 1992:32). Media selection is therefore referred to as a delivery system.

Two categories of delivery systems can be identified, namely instructional and informational media. *Instructional media* facilitate two-way communication between the learner and the facilitator. In comparison, *informational media* present the information but do not facilitate communication.

Thomas in Parer (1994:92) lists the following factors as being important when selecting the delivery system. The outcome is to select the most appropriate media for a given learning environment by:

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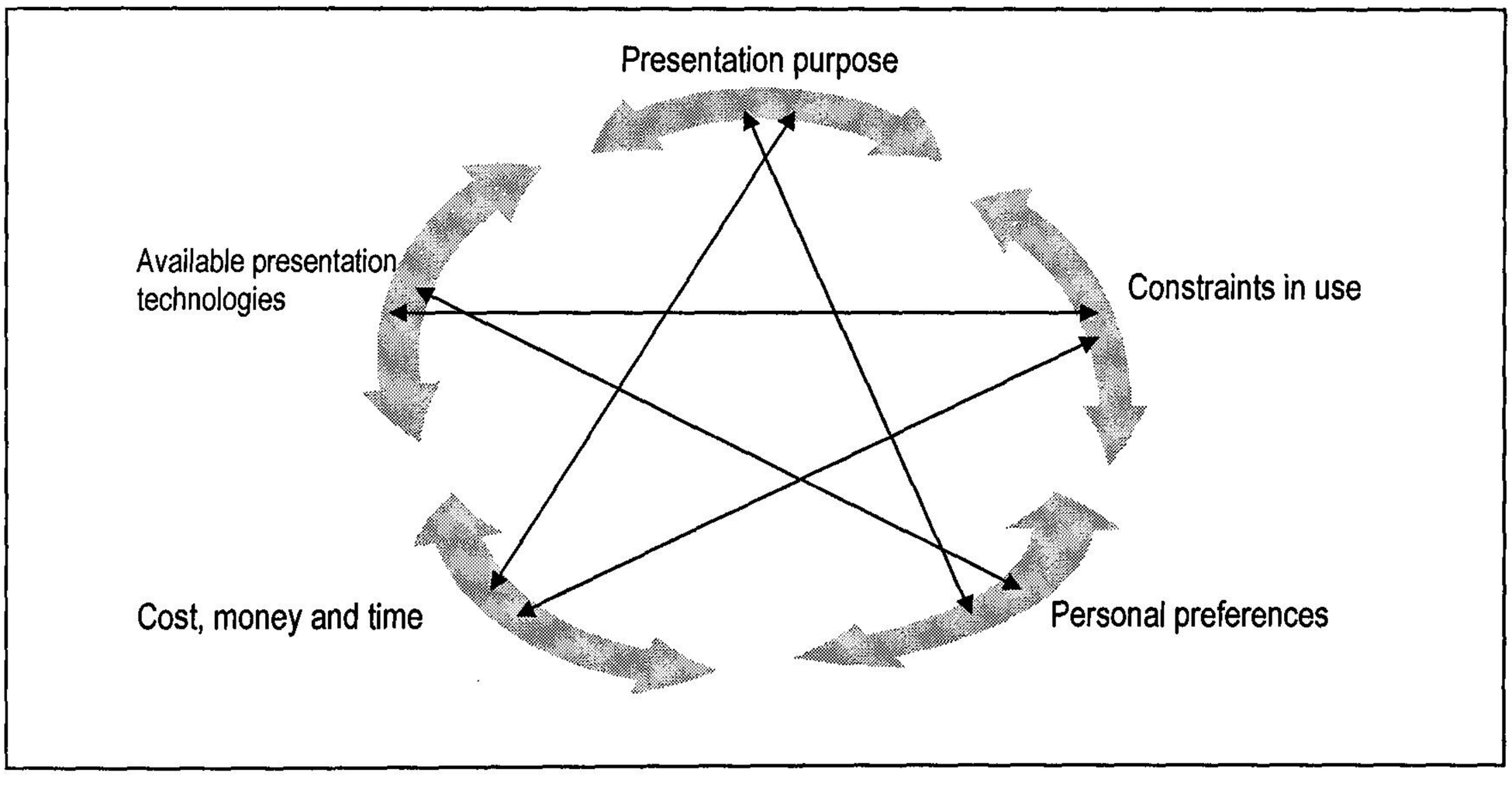
- evaluating the nature of the activity or learning task;
- being knowledgeable of the functional, production and presentation capabilities and limitations of educational media available and of the environment in which the media will be applied;
- estimating the costs involved in the preparation, production, distribution and use of instructional materials;
- considering the learning style preferences of learners; and
- researching the availability, accessibility and convenience of using particular media.

The interrelationship of the above considerations and the flexibility in choosing a starting point are clearly indicated by Figure 2.10.

FIGURE 2.10: Interactive factors of media selection for distance education (Thomas et al 1994:92)



Through the choice of media the facilitator aims to communicate messages or information. According to Moore & Kearsley (1996:96), the outcomes of the media selection should be to:

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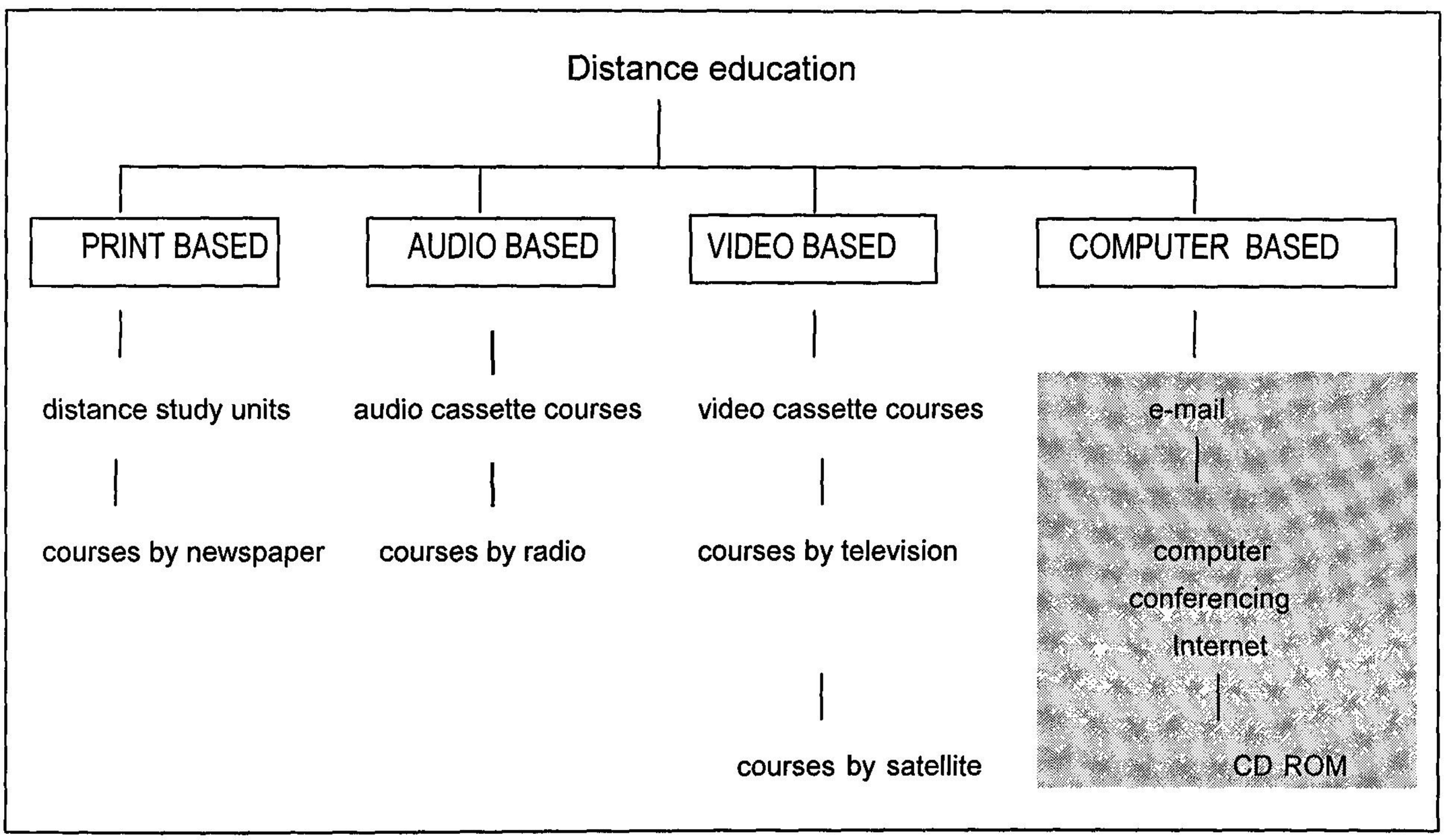
- motivate learners;
- facilitate the recollection of information;
- provide learner stimulus;
- activate the learners` responses;
- provide speedy feedback; and/or
- encourage the correct use.

A number of delivery systems should thus be taken into consideration when planning a learning programme. The facilitator should select the medium that would enhance and facilitate the learning material best. Figure 2.11 categorises the types of media usually present in distance education programmes.

FIGURE 2.11: Delivery modes common to distance education practice



In order to identify the delivery system that best suits a learning programme's requirements, the pros and cons of the different systems should be compared. The following Table, 2.7, portrays the advantages and disadvantages associated with different types of media (Thomas et al 1994:95-105; Moore & Kearsley 1996:34-37).

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TABLE 2.7: Advantages and disadvantages of different types of media

ADVANTAGES	DISADVANTAGES
PRINTED TEXT	
1. Portable and easy to use. 2. Adaptable to a variety of learning situations: learning, revision, reference. 3. Economically cheap to produce and revise. 4. Ease of distribution. 5. Comfort - familiar and non-threatening to user. 6. Reliable - is not dependent on external factors.	1. Inappropriate for some skills: involving animation, motion, complex sequences. 2. Inaccessible for visually impaired learners. 3. Tend to force a sequence of learning. 4. Difficult to provide a variety of stimuli: reading and performing actions. 5. Expensive when incorporating colour.
AUDIO CASSETTES	
1. Inexpensive to produce. 2. Fast and inexpensive copies. 3. Portable. 4. Used in variety of locations. 5. Private method of studying when using ear pieces. 6. Easy access to text. 7. Can be used in conjunction with text. 8. Replayed as often as necessary. 9. Reusable.	1. Visual stimuli can interfere with hearing. 2. Can easily become passive and non-involving. 3. Speed is set (cannot go faster or slower). 4. Learning requires considerable listening concentration. 5. Longer tapes are prone to break when often used.
VIDEO CASSETTES	
1. Show things that are normally inaccessible. 2. Present previously recorded information. 3. Bring viewers close to the action. 4. Present a magnified image of small objects.	1. Interference and distraction of images. 2. TV images are restricted in the production of images. 3. High production costs. 4. Copyright of programmes used for teaching.

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(Table 2.7 continued)

ADVANTAGES	DISADVANTAGES
VIDEO CASSETTES continued	
5. Add enhancements to an image: text or graphics.	
6. Provide models of behaviour.	
7. Demonstrate processes and skills.	
8. Provide feedback on personal performance.	
COMPUTER ASSISTED LEARNING	
1. Ideal where computers are in use.	1. Expensive to produce software.
2. Large numbers of learners need to repeat exercises.	2. Hardware requirements can limit potential applications.
3. Engages learners in controlled interactions.	3. Hardware needs to be updated on regular basis.
4. Can integrate assessment and progress reports.	4. Incompatibility of different programmes on PC's.
5. Provides controlled and repeated animated sequences.	5. Programmes become expensive text based page turning systems.
6. Easily updated when necessary.	6. Computer learning programmes are not easy to browse. Difficult to refer back to information.
7. Can import colourful graphics.	7. Most programmes do not have a place mark function.
8. Can be integrated with other media.	

From the Table 2.7 one can deduce that all the delivery systems have certain factors in their favour and others against. These advantages and disadvantages should be compared in order to select the most appropriate form of media. 'It is clear that achieving specified educational goals in distance education is not just a matter of choosing an appropriate set of teaching media and methods but is also a matter of using them appropriately, especially in order to achieve active rather than passive learning' (Sparkes 1992:144). The inclusion and design of various types of media in the learning process will be discussed in further detail. By incorporating authentic tasks, situated learning experiences and interactive media, learners are guided through instruction that provides concrete and meaningful experiences which are appropriate for today's world (Olson 1995:54). The use of printed text, audio and

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video cassettes and computers as delivery modes will be discussed in the following paragraphs.

2.5.2 Printed text

Print-based material is the most common form of distance education delivery. Laurillard (1993:98) gives the following reasons why print-based material is considered as the most important educational medium. Print-based material is the easiest medium to:

- Design: a single author can compile the learning material.
- Produce: publishing mechanisms are established.
- Deliver: books are readily available in bookshops and libraries.
- Handle: the portability of books make them easy to handle.
- Use: random access to information is possible.

In printed material the facilitator presents the information, but the learner is able to control it. Learners can decide on the sequence of learning and revision that they would like to follow. Print-based material has the limitation that it does not always facilitate interactive involvement. However, in order to overcome this problem, certain design principles can be applied. According to Laurillard (1993:110), these principles include:

- formulation of learning outcomes to clarify the goal of the instruction;
- asking in-text questions and providing in-text activities;
- providing supplementary information via audio and/or video cassettes; and
- facilitating self-assessment activities.

The printed text is often combined with video and sound cassettes to enhance the learning activity. Although audio-vision is a highly underrated educational media learning can be successfully facilitated by combining auditory and visual stimuli.

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2.5.3 Audio cassettes

The inclusion of audio cassettes is imperative in a Music Education programme. Sound should be considered to be the core of music and Music Education. 'When any music experience takes place, it is being intentionally or unintentionally listened to' (South Africa 1995b:78). In Music Education learners are introduced to music either by creating their own music through singing, instrumental playing and creativity or by listening to music examples.

Audio cassettes can be successfully used to present music of different styles and genres. By listening to music learners can become aware of good quality music. The following factors should be taken into consideration when sound examples are selected:

- Suitable music examples should be selected to underline the learning outcome of the listening activity.
- The material should be selected with the listening environment in mind. The learners should know what the purpose of the listening activity is.
- The selected sound material should be relevant to the learners' age and level of comprehension.
- Short music examples should be selected that explain the purpose of the listening activity.
- The recorded music should be of good quality.
- The selected material should not violate the copyright laws.

Learners should be encouraged to become active participants in the learning process. The learning material accompanying the audio cassette should therefore facilitate activities for the learner to engage in, whilst listening to the examples. Learners could be asked to design a listening guide or questionnaire. By doing so they get the opportunity to highlight and recognise the elements of music.

2.5.4 Video cassettes

The focus is here not on interactive television but on the use of video cassettes in the learning programme. By incorporating video cassettes in the learning process the facilitator can show the learners material that would usually be inaccessible.

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Videos are a multi-sensory method of teaching. This is an important factor in distance education where the facilitator is not present. Through looking at video material learners are introduced to information as well as a variety of sound and audio stimuli. Learning does therefore take place by means of auditive and visual encouragement. Videos in the learning programme can be used to:

- explain and highlight the history of music.
- show learners didactical approaches in practice;
- demonstrate teaching processes and skills;
- explain and demonstrate the practical components of a subject; and to
- compare and evaluate various teaching strategies.

It is, however, important that the learners are guided in their use of the video material. They should know what and why they are looking at the video. Specific tasks and/or outcomes should be highlighted prior to looking at the video (Thomas et al 1994:98).

2.5.5 Computer assisted learning

Computer assisted learning is traditionally divided into three sections:

- computer-managed instruction;
- computer-assisted instruction; and
- computer-based instruction (Romiszowski 1984:25).

- **Computer-managed instruction**

Computer-managed instruction gathers and processes information about the learning programme and the learners' progress. 'Computer-managed instruction uses the capability of the computer to manage the progress of a student through a programme of instruction' (Romiszowski 1984:25).

- **Computer-assisted instruction**

The purpose of the computer in this mode is to present instruction that is simple, straightforward and individualised for each learner. In computer-assisted instruction the instruction is administrated by a computer. This is done through the facilitation of

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drill and practice exercises. Through assimilating real situations the learners are given the opportunity to apply their knowledge in practice. The computer keeps record of the learners' progress and this is used to monitor their progress (Romiszowski 1984:26-28).

- **Computer-based instruction**

Computer-based instruction refers to learners' use of learning programmes on a private computer (Moore & Kearsley 1996:34-37). This includes CD-ROMS and Web-based courses. With computer-based learning aids, the computer is used as a tool in the learning process. The computer assists the learner in structuring the learning material thereby becoming a tool to assist the learner in the thinking process (Romiszowski 1984: 29).

An important difference between computers and other forms of media is the number of control capabilities the computer offers. These capabilities include the ability to present and receive, process and manage information. By involving a computer in the learning process a number of tasks can be performed. The computer can adapt to different levels of learner expertise and can act as a learning tool to help the learner, no matter what his/her current level of knowledge is. Audio visual media and computer assisted learning are traditionally considered to be separate. With the development of new hardware and software technologies it is, however, possible to combine the two as part of interactive computer assisted learning (Jasper 1991:161-162).

- **World Wide Web (WWW)**

Computer-based instruction includes Web-based learning. 'The increased use of computers in our society, resulted in the increase in Web-based courses. This is mostly due to the need for less expensive courses and the ever growing need for learner convenience' (Pieterse 1998:44). Web-based and computer-based instruction employes the interactive, multimedia technologies of the Web as well as the world-wide structure of the Web to deliver and support a course. Originally the Web was used as a static medium for presenting text and graphic examples. Interactive use of the Web is, however, now becoming increasingly popular. By encouraging learners to make decisions and answer questions they take control over the learning content. 'Interactivity is a necessary attribute of any successful educational technology. Learning is generally more effective when the learners can

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control the information exchange' (Fouché 1998:51). The need for cheap, easily accessible learning opportunities has increased the importance of Web-based instruction.

With the increased development on the Internet, the merging of audio and visual stimuli becomes common practice. 'Instruction through the WWW is computer based and involves interactive multimedia technologies and resources as well as world wide support and information structures' (Pieterse 1998:43). Apart from these advantages the following advantages and disadvantages were compiled, in Table 2.8, from Pieterse (1998:43) and Harasim et al (1995:12-15).

TABLE 2.8: Advantages and disadvantages of Web-based instruction

ADVANTAGES	DISADVANTAGES
Cost efficient No travel and accommodation expenses are involved. The learner only needs to subscribe and log on to the Internet.	**Band-width limitations** The available band-width limits the accessibility of the material on the Web. This problem will increase as more people subscribe to the Internet.
Available and convenient The Internet is always available. This enables learners to access information at their own time and pace.	**De-humanisation** Computerised instruction results in the learner not having personal contact with the facilitator. Learning becomes an impersonal experience.
Efficient Learning material can easily be changed and adapted.	**Static instruction** Lack of contact between the learner and facilitator results in the learning process becoming static.
International Learning programmes can be accessed across geographical borders.	**Developmental constraints** To develop Web-based instructional material is time and resource consuming.

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(Table 2.8 continued)

ADVANTAGES	DISADVANTAGES
Communication Internet learners can make contact with other learners via chat rooms and e-mail.	**Computer constraints** Not all material can be effectively presented on the Internet. Certain subjects should have an interpersonal background.
Control over learning The Internet encourages learners to become explorers and discoverers. Learning can easily become individualised.	**Information overload** If the learning tasks and information are not clearly structured learners can easily experience a learning overload.
Resources Online studying enriches the learning material and environment and introduces learners to new ideas, perspectives and cultures. Cross-cultural understanding is facilitated.	**Power failure** Power failures prevent access to the learning material.
Access Learners have equal access to information and the facilitator. Learning is an equal opportunity for all participants.	
Active learning All learners are expected to become active participants in the learning process.	
Confidential Learners' personal questions can be answered confidentially by using e-mail.	
Encouraging Immediate certification of completed courses are possible via the Web.	

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■ Designing Web-based instruction

When designing a Web-based course one cannot take a written, paper-driven handbook and copy it onto the Web. The Web will then only be used as an electronic page turner. Academics that have presented their courses in this fashion on the Web have found that learners simply download the information and study from the printed text. Khan in Le Roux (1998:67) describes the correct use of the Web as a learning facilitator by explaining that the Web should be an instructional strategy which should use its attributes and resources to create a meaningful environment where learning is fostered or supported. The Web should therefore be used as a thinking tool that facilitates understanding and self-testing. Because Web-based design is still a relatively new field of design, few design guidelines exist for the WWW. Traditional instructional design principles are applied to the field of Web design. General design principles are given by Harasim et al (1995:145) and Barron & Tai (1998):

- Identify the need and educational activity that can be presented as an online activity.
- Ensure access to the requisite computer resources and systems. The programme designer should ensure that access to the Web-site is possible and convenient. This could be done by using standard software which is regularly available.
- Obtain administrative support. Support systems should be in place to help with system or learner problems.
- Design the curriculum. The Web document will be most effective if the content and learner population are analysed. The structure of the course should be determined. This includes the formulation of learning outcomes and facilitation of skills.
- Develop educational material. After the curriculum outline is determined the content of the course should be structured.
- Design the online environment. The actual design involves the selection of the most appropriate software and design tools.

■ Designing the online environment

When designing an interface, the following aspects should be taken into consideration (Möller 1998:160; Kearsley 1985:211; Barron & Tai 1998):

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TABLE 2.9: Interface design

Parameter	Application
Menu	• A variety of menus should be provided from which learners can choose their learning focus.
Screen layout	• A consistent layout should be used throughout the material. • The control options for e.g. the mouse button should be at the bottom of the screen. • Information should be functionally organised. • The layout should be uncluttered. • All pages should be titled. This will indicate the page's position within a larger document hierarchy. • Indicate a date on all pages. This will show the browser when the document was last updated. • Include copyright notices in the footer of the page. • Include the URL on each page. This will help the browser to re-visit the site at any given time. • Design for a variety of browsers. • Pilot test your Web page with the target group. This enables you to sort out problems before the site is launched internationally.
Colour	• Limit the colour pallet per screen to not more than six colours. This does, however, depend on the complexity of the screen design. • The selected colours should be consistently used throughout the design. • It is important to choose colours that are compatible. • Always select text and background colours to create contrast. • Highlighting should be used sparingly.

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(Table 2.9 continued)

Text	• Sentences and paragraphs should be short and well formulated. • A 'clean', easy to read font should be used. • Avoid full screen scrolling. • Use bolds and italics sparingly seeing that many browsers don't recognise them. • Limit the length of text lines as this will increase readability.
Graphics	• The included graphics should highlight and/or explain the text. • The graphics should underline the learning material. • Limit the size of graphic files. • Limit the number of graphics on each page as this will decrease the transfer time of the document.
Animation	• Special effects can be used to indicate a change of frame. • Animation is also used to draw learners' attention to important information.
Sound	• Sound becomes essential if listening is part of the learning sequence. • Sound can, however, also be used to attract learners' attention. • Use only where appropriate.
Video	• The inclusion of video material enables the facilitator to include realistic examples from, for instance, good teaching practice. • In order to make the multimedia elements accessible to all platforms they should be stored in standard formats.
Interactivity	• Learners should be encouraged to become interactive participants in the learning process. • If interactivity is not facilitated, then the computer is used as paper-driven material. • Provide a method for feedback. It is important for the learner to know who is in charge of the Web page and who should be contacted.

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The aim of Web-design should be to design an effective method for disseminating information that is appealing and offer an easy-to-investigate interface (Barron 1999:5).

CONCLUSION

Learners' active involvement in the distance education environment is crucial. This can be accomplished in a variety of ways: by watching, reading, writing, speaking and interacting with the presenter, facilitator and tutor.

Quality distance education must include first-rate instructors, a smooth delivery system and well organised administrative and instructional support. An appropriate infrastructure should ensure that all these functions exist and work together to enhance the learning process. Course delivery should carefully weigh learner contexts, such as the multicultural, diversity and equity concepts in education.

Distance education as a solution to current and developing education problems is also discussed. De Munnik (1993:87) indicates that the lack of contact between learners and facilitators would necessitate the handling of learners as individuals. This results in the encouragement of distance education learners to take full responsibility for their learning.

Quality learning can only occur if the learning programme is properly designed and managed. This would involve consideration of who the learners are, how they learn and what they want from the learning experience. Learning behaviour and theories should thus be incorporated into the learning process and should be presented by means of the best suited educational media. It is therefore not necessarily the most advanced technology that will ensure that learning is successfully facilitated. The selected delivery mode should be accessible and affordable for all learners involved.

> Distance education may be defined as the family of instructional methods in which the teaching behaviours are executed apart from the learning behaviours, including those that in a contiguous situation would be performed in the learner's presence, so that communication between the teacher and the learner must be facilitated by print, electronic, mechanical or other devices (Moore & Kearsley 1996:26).

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From the literature review the parameters of quality distance education and instructional design can be deduced.

- **Quality distance education is characterised by:**

- gathering information about the target group;
- selecting the most appropriate learning theory;
- incorporating various learning experiences;
- facilitating individualised, self-paced learning instruction; and by
- appointing a delivery mode(s);

- **In quality instructional design:**

- learning outcomes are clearly stated;
- the layout and structure of learning material is meaningful;
- icons are used to guide the learner through the learning material;
- self-assessment questions and activities are facilitated;
- feedback on assessment is given;
- the tone and style of the text is reader friendly and personal;
- graphics, diagrams and other illustrations are used to highlight and explain the text; and
- assessment criteria are given.

These principles can now be applied to the design of the DMEP in Chapter 3.

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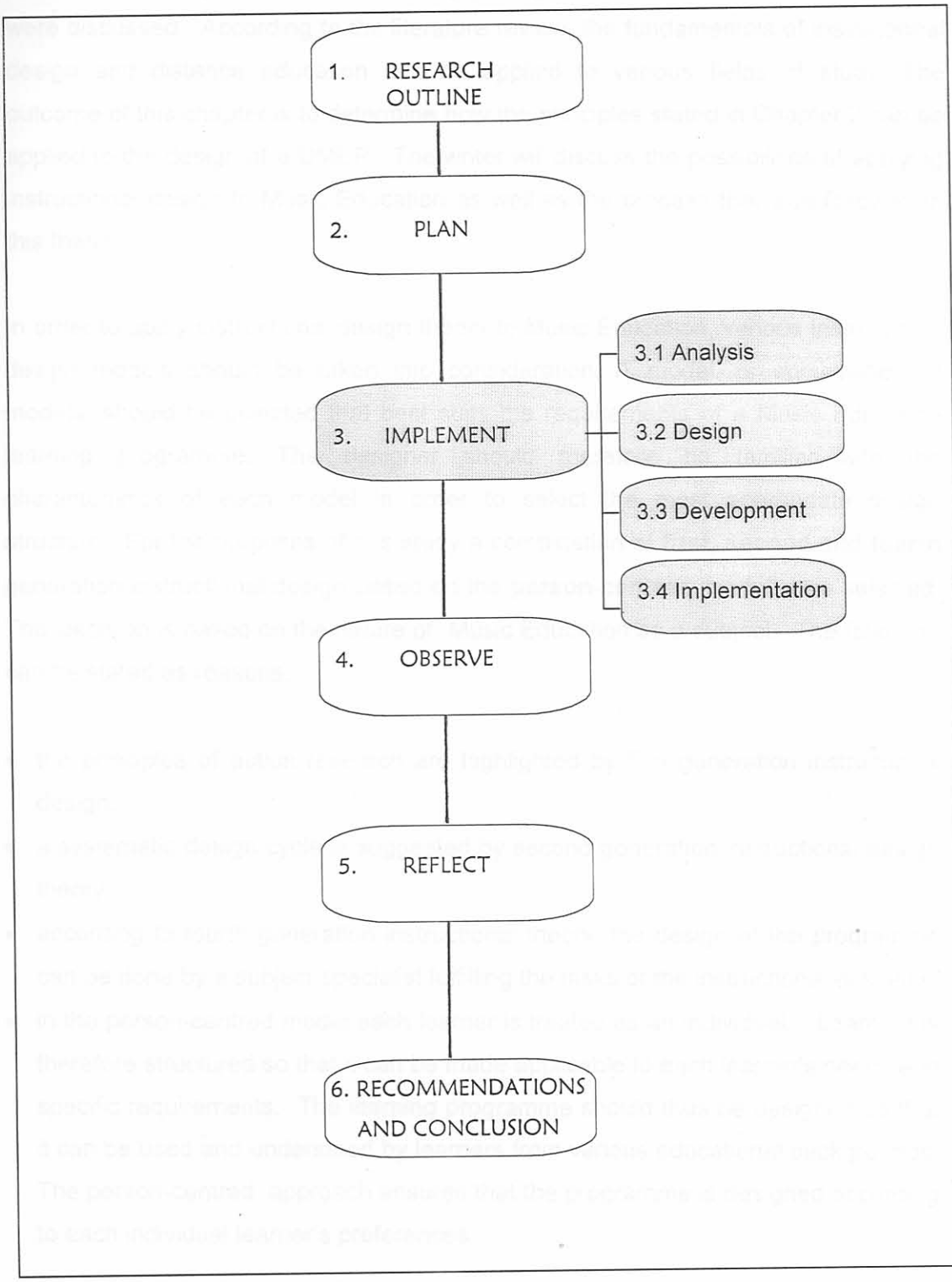
CHAPTER 3

IMPLEMENT



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INTRODUCTION

In Chapter 2 the principles of instructional design and distance education in general were discussed. According to the literature review, the fundamentals of instructional design and distance education can be applied to various fields of study. The outcome of this chapter is to determine how the principles stated in Chapter 2 can be applied to the design of a DMEP. The writer will discuss the possibilities of applying instructional design to Music Education as well as the process that was followed in this thesis.

In order to apply instructional design theory to Music Education, various instructional design models should be taken into consideration. A model, or combination of models, should be selected that best suits the requirements of a Music Education learning programme. The designer should therefore be familiar with the characteristics of each model in order to select the most appropriate design structure. For the purposes of this study a combination of **first**, **second** and **fourth** generation instructional design based on the **person-centred model**, was selected. This decision is based on the nature of Music Education as a subject. The following can be stated as reasons:

- the principles of action research are highlighted by first generation instructional design;
- a systematic design cycle is suggested by second generation instructional design theory;
- according to fourth generation instructional theory, the design of the programme can be done by a subject specialist fulfilling the tasks of the instructional designer;
- in the person-centred model each learner is treated as an individual. Learning is therefore structured so that it can be made applicable to each learner's needs and specific requirements. The learning programme should thus be designed so that it can be used and understood by learners from various educational backgrounds. The person-centred approach ensures that the programme is designed according to each individual learner's preferences.

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Music, and more specifically Music Education, is a specialised field of study which does not usually involve large groups of tertiary learners. Although student numbers are increasing, Music Education courses can also involve small learner groups. The relatively small learner numbers are ideal for conveying the practical aspects involved in the teaching of Music Education. Through the person-centred model each learner can be given the opportunity to develop the necessary skills with guidance from the course leaders and study material. In a personalised learning programme the course leaders need to keep track of each individual learner's progress. This involves thorough planning and organisation. It can therefore be assumed that a prerequisite for incorporating the practical aspects of Music Education is co-ordination and systematic programming.

In order to plan and structure a course successfully, a combination of first and second generation design models is followed. By continuing the cycle of analysis, review, selection, integration, organisation and evaluation, a structured learning programme can be compiled. The design cycle will also help the course developers to identify specific problems concerning the methodology applied and method of presentation. In order to solve the identified problems, the person involved in the design process should be knowledgeable about the course **content** and **didactic principles** of the subject. A **subject specialist** involved in the teaching of the learning content should be able to identify the problems and possible solutions. In practice, however, the **instructional designer** is expected to solve the complications. He/she is usually not the person involved in the actual teaching of the subject and does not have the necessary insight to offer solutions. For maximum learning to be facilitated, the instructional designer should have the necessary subject knowledge. It is, however, not possible for instructional designers to be knowledgeable of all academic fields. A possible solution is for the subject specialist to become an instructional designer.

According to fourth generation instructional design, the subject specialist can perform the tasks of the instructional designer. By becoming an instructional designer, the subject specialist can identify problems and be equipped to solve these problems. Knowledge of instructional design therefore enables the subject specialist to select the appropriate solution to a problem without sacrificing the course content. The subject specialist gains his/her knowledge of the design process by analysing the parameters of second and fourth generation instructional design as listed in

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Chapter 2 section 2.2.1. The parameters are then applied to the field of Music Education.

For the design of the DMEP the writer, a Music Education specialist, became the instructional designer. From this point forward the Music Education specialist is referred to as the instructional designer or facilitator. The method of design as well as the parameters of the course will be discussed in further detail in the following paragraphs.

The design of the DMEP was based on examples of instructional design books such as *Textbook for Human resource practitioners*, (Pieterse 1996), *Secrets to enliven learning, (*Petit 1994), and *Small business management series: Management of a small business,* (De Beer et al 1997). The writer used these books as a reference and compiled their ideas, adding her own creative input. The actual design of the programme was structured according to the following instructional design domains given by Seels (1995:122):

- analysis;
- design; and
- development.

These domains form part of the fourth generation instructional design programme and will be discussed according to the application to the design of the DMEP.

3.1 ANALYSIS

The analysis domain involves an investigation into the variables of a learning programme. These variables differ for each course and should be evaluated in order to decide on the method of design that is to be followed. The changeable factors determined for the DMEP include the following phases of analysis:

3.1.1 outcomes analysis;

3.1.2 performance analysis;

3.1.3 target population analysis;

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3.1.4 media analysis; and a

3.1.5 task analysis.

By making a thorough evaluation of these changing factors, the instructional designer can determine how to present knowledge in order to facilitate learning. Each aspect and its application to the DMEP will be discussed individually.

3.1.1 Outcomes analysis

According to Cronje (1995:3), the purpose of the outcomes analysis is to formulate the concrete outcomes of the learning programme. These outcomes indicate the general goals of the learning process. The question that needs to be answered is: What will learners be able to do after studying with the designed programme?

Application

The outcomes of the DMEP are to:

- provide equal learning opportunities to all enrolled learners;
- facilitate active participation in the learning process;
- promote understanding of Music Education's concepts and skills;
- demonstrate the practical aspects of Music Education through distance educational means;
- present an understandable, accessible learning programme;
- develop each student into a competent Music Educationalist;
- apply the theory of Music Education to various learning environments according to the principles of Curriculum 2005 (South African 1997);
- further the application of distance education to Music Education;
- facilitate assessment opportunities for learners; and to
- encourage learners to take control of the learning process.

To realise these outcomes and to enable personalised learning to take place, a design strategy based on instructional principles should be employed. The instructional designer therefore has to design a method for ensuring that learners reach the suggested outcomes. Apart from these general outcomes, specific outcomes are formulated to guide the learner through the various modules. These

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specific outcomes will inform the learner what the focus of specific areas of learning entails. By monitoring the realisation of both general and specific outcomes, the learners' performance can be analysed.

3.1.2 Performance analysis

Analysing learners' performance should not only focus on the realisation of learning outcomes but should facilitate effective learning. In order to compile a balanced learning programme, the entry levels of the course need to be determined. The facilitator should determine what learners should know in order to follow this course. The entry level of the learners will therefore influence the structure and content of the course. By analysing the learner population, their needs and expectations of a course can be highlighted.

Application

The learning programme should be designed so that it is compatible with the different educational backgrounds of all enrolled learners. This can be achieved by the facilitator:

- stating information clearly in an easily understandable language which still has academic merit;
- presenting knowledge in an innovative way so that experienced learners will find it stimulating;
- guiding learners through the learning process and explaining assignments and learning tasks in detail;
- providing learners with the opportunity to apply their knowledge so as to develop the necessary practical skills;
- basing the knowledge on pedagogical criteria so as to guide learners through the knowledge component of Music Education; and by
- indicating how practical experience can be applied to enhance the learning sequence.

By following these steps the facilitator takes learners` needs into consideration. This can, however, only be successfully facilitated if the facilitator analyses the target learning population.

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3.1.3 Target population analysis

The person-centred model suggests that the learning sequence should be designed according to all individual learners' needs. These needs can be determined by engaging in a breakdown of the learners' profiles. The facilitator should therefore focus on various components of the learners' background and previous experiences. According to Cronje (1995:3), the following aspects listed under Table 3.1 need to be considered during the target population analysis.

TABLE 3.1: Parameters of a target population analysis

Focus	Parameters
Physiological.	• age. • gender.
Demographics.	• location. • accessibility. • size of group.
Education and experience.	• educational qualifications. • previous training. • prior knowledge and skills. • number of years of service. • aptitude.
Language.	• number of second language speakers.
Motivation.	• interests. • intrinsic/extrinsic needs. • attitudes.

Using these parameters, the facilitator can determine how the learning programme should be designed and structured. In order to indicate the diversity of the learner population, Figure 3.1 was compiled, summarising the diverse backgrounds of the learners enrolled for the BMus Honours in Music Education course in 1998 and 1999.

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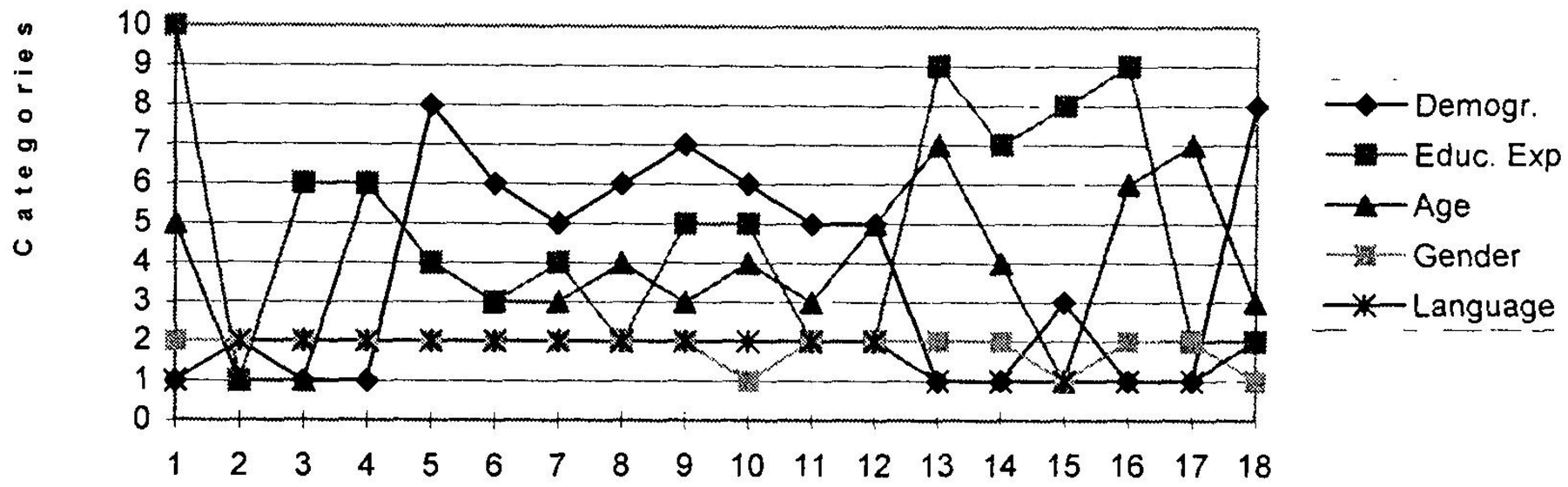
FIGURE 3.1: Profiles of enrolled learners in 1998 and 1999



Legend

Demographics	Education experience	Age	Gender	Language
1 = Pretoria	1 = BMus	1 = 20 - 25	1 = Male	1 = English
2 = Johannesburg	2 = BA Mus	2 = 26 - 30	2 = Female	2 = Others
3 = Botswana	3 = BA Mus + UED	3 = 31 - 35		
4 = Eastern Cape	4 = BA Mus+ PTD	4 = 36 - 40		
5 = Transkei	5 = BA Mus + STD	5 = 41 - 45		
6 = Venda	6 = Other Bachelors degree	6 = 46 - 50		
7 = Free-State	7 = BMus + HED	7 = 51 - 55		
8 = North West	8 = SPD	8 = 56 - 60		
	9 = PTD + FDE			
	10 = BA Mus + post grad			

Application

The learners who enrol for the DMEP are from diverse cultural and educational backgrounds. Learners from all over South Africa and surrounding countries enrol for this distance course. As was explained in Chapter 1, the University of Pretoria is, in fact, mainly a contact education institution. Because of the learners' diversity of locations and the distance of learners from the University, the course is presented through a combination of distance and contact education methods.

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The diversity of the learner population is highlighted by Figure 3.1. All these groups are equally important in the learning process. The facilitator has to ensure that all learners benefit from the learning experience. By analysing the learners` individual needs, a balanced programme, theoretical and practical, can be organised and managed. The diverse backgrounds and learning styles of the learners should therefore be taken into consideration when a media analysis for the selection of a delivery mode are conducted.

3.1.4 Media analysis

Through the media analysis the instructional designer can determine the most effective delivery mode for the course. The following factors need to be considered when a delivery mode is selected:

- **Presentation purpose** of the media: The facilitator should determine when and where the media will be used. In a distance learning programme the selection of a delivery mode depends upon the enrolled learner numbers, the place and pace of learning. The facilitator should determine whether learners will be studying
  - as a group from a virtual campus;
  - as a group by means of video conferencing;
  - individually by means of the Internet;
  - individually by means of paper-driven learning material; or by using a
  - combination of the above mentioned delivery systems.

- **Constraints in use**: There are identified constraints on the part of learners and facilitators. Learning material can only be presented if learners have access to the proposed hardware. The learner population's access to media therefore determined what delivery mode could be selected. Constraints on the part of the facilitator include the time and costs involved in developing new learning material. These are referred to as the developmental constraints. A lack of time and money would force a facilitator to go for a cheap, less time consuming method of compiling and presenting the learning material. This could, however, result in material not being designed with a specific target group and their learning needs in mind. The aim should therefore be to ensure that enough time and money is allocated for the development of new instructional material.

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The selection of media for the DMEP will be discussed in the developmental stage of the design process. The researcher will then focus on the application and choice of media that best suits the DMEP. The results of the analysis phase can therefore now be applied to the design task.

3.1.5 Task analysis

With a task analysis the facilitator should determine how and when the task is performed, under what conditions, and to what level of achievement. This involves the structuring of the learning programme and writing of course content. When designing a distance education course, the facilitator should ensure a flexible learning environment which not only incorporates various learner needs, but is also accessible in diverse learning circumstances.

Application

The course is designed as part of a Music Education Honours degree course. This two year part time course at the University of Pretoria is presented as a combination of contact and distance strategies. Learners have three contact sessions of a week each during the course of each year. Seeing that most learning takes place over a distance in between contact sessions, the course is considered to be a distance education course.

The programme was originally compiled as in-service training material for teachers during 1990 by the former Transvaal Education Department (TED). The group consisted of a subject advisor for Class Music, primary and secondary school teachers and lecturers at tertiary institutions. The lecturers were mostly involved in a research capacity. The specialists selected the information in order to provide a balanced programme based on music educational practice and theory. When material for a DMEP was needed, it was decided that the in-service material could be adapted to be used as a distance education programme. The in-service material was therefore transformed into a distance learning programme. Melton (1997:93) indicates that there are three levels of transformation of learning material. These are:

- major transformations involving substantial changes in the structuring of materials;

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- moderate transformations focussing primarily on the development of aids to learning; and
- minor transformations concerned primarily with the layout and presentation of instructional materials.

Melton (1997:94) suggests that the following checklist, Table 3.2, can be used in order to determine the level of transformation. The three right hand columns will indicate the researcher's assessment of the original in-service programme. Each question was answered from the facilitator of the DMEP's perspective. A discussion answer, 'other', indicates that there is not a straightforward answer and that the matter needs to be discussed in further detail. Such discussions will take place during the course of Chapter 3.

TABLE 3.2: Checklist to help identify major changes that might be required (adapted from Melton 1997:94)

THE TARGET GROUP	YES	NO	OTHER
1. Is the target group the same as the one for which the course was originally designed? If not, how does it differ?		✓	
2.1 Will the learners be studying full time or part time? 2.2 What are their full time occupations? 2.3 Are they young or mature learners?			Part time teachers mature
3. To what extent are the learners likely to be studying on their own?			Mostly
THE TARGET GROUP			
4. Are they likely to respond to some forms of teaching better than others? For example, to what extent will they want to determine for themselves what they learn and how they go about learning?	✓		

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(Table 3.2 continued)

THE BROAD OUTCOMES OF THE COURSE	YES	NO	OTHER
5. What are the needs of the members of the target group?			Discussion
6. Does the existing course meet these needs and, if not, how do the aims or objectives of the course need to be changed?		✓	Discussion
7.1 Are national standards to be achieved through this course?		✓	
7.2 If so, are these the only course outcomes to be achieved or are there others?	✓		
8. Will all learners be expected to achieve all the outcomes identified?	✓		
9. Will the course be expected to meet the needs of learners of different ability, and how will this be achieved by different outcomes?	✓		Discussion
10. Is the existing course already well structured?			Not for new application
11. Are the teaching strategies in the existing course still appropriate?		✓	
12. Are learners sufficiently involved in the process of learning through appropriate activities and projects?		✓	
13.1 Are materials available for reinforcement and enrichment?		✓	
13.2 Are they sufficient to meet the perceived needs?			Discussion
14. Does the content of the course need to be substantially restructured?	✓		

From the answers and seeing that the in-service programme compilers had no experience of instructional design, or had not intended the material to be used for distance learning purposes, major transformations were made. The theory of instructional design was therefore applied to the original learning material so as to formulate expected learning outcomes and provide for learners` personal needs. Apart from the problems identified through Table 3.2, other problems were also recognised. These problems will be stated and the solutions discussed.

- **Problem 1:** The content of the learning programme was compiled in the form of an essay and no learner interaction was facilitated.

Solution: In order for this material to be used as distance teaching material, it needed to be revised and instructionally designed. Being a music educator the

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researcher could apply the parameters of instructional design to the programme without neglecting the important facilitation of music skills. The theory of instructional design gives clear guidelines on how to facilitate active learning and enable learners to take responsibility for the learning process.

- **Problem 2:** Although the programme was compiled with certain aims in mind, these aims were not clearly identifiable.

Solution: To overcome this problem, learning outcomes were formulated according to the principles of Curriculum 2005 (South Africa 1997). Icons are used so that learners can easily identify the outcomes from the text. During the course of a module the learner is asked to revise if he/she has reached the various outcomes. If not, they are instructed to review a particular section of the learning programme.

- **Problem 3:** The programme did not involve assessment activities.

Solution: The absence of assessment activities or assignments resulted in the learners being passive recipients of the information. The value of the learning process was not indicated. The facilitator thus had no indication whether learning had, in fact, taken place. The instructional designer had to change the style of writing from an essay orientated style to an interactive style. Interactive assignments were included in the text so that a learner can assess his/her progress. At the back of the DMEP possible answers to these assignments are given so as to guide the learner through the evaluation process.

The above mentioned problems were further exacerbated by the diversity of the learner population of this course. To facilitate effective learning, the instructional designer had to determine who the learner is. The target population of the DMEP therefore determined.

The information gathered through the analysis of the outcomes, expected learner performance, target population, media selection and design could now be applied to the design of the DMEP.

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3.2 DESIGN

The design of a programme involves those aspects that enhance the learning process and enable learning to take place. These aspects include various visual and structural criteria including:

3.2.1 formulation and presentation of learning outcomes;
3.2.2 structure and style of the text;
3.2.3 guidance structures (for example, the use of icons and the value of introductions, summaries, review and graphics);
3.2.4 facilitation of the practical components of Music Education; and
3.2.5 facilitation of self-assessment questions and activities.

These aspects should be taken into consideration and used as a checklist whenever material is redesigned, adapted or created. In each instance the criteria as used by instructional designers will be given, after which the application to Music Education will be discussed.

3.2.1 Formulation and presentation of learning outcomes

Learning outcomes can be described as reports that define what learners should be able to do when a learning activity is completed. According to Wright (1987:24) learning outcomes can be described as being:

- a set of learning specifications that direct you when making important decisions about delivery modes, instructional media and student assessment strategies;
- representative of the cognitive, psychomotoric and affective domains;
- reflective of complex learning levels such as knowledge and comprehension, application and problem solving; and
- prescribed by government regulations, existing programme outcomes and course materials.

Two variables should be taken into consideration when learning outcomes are formulated: needs assessment and objective formulation. The designer should consider what the learners need to know and how this information can be formulated.

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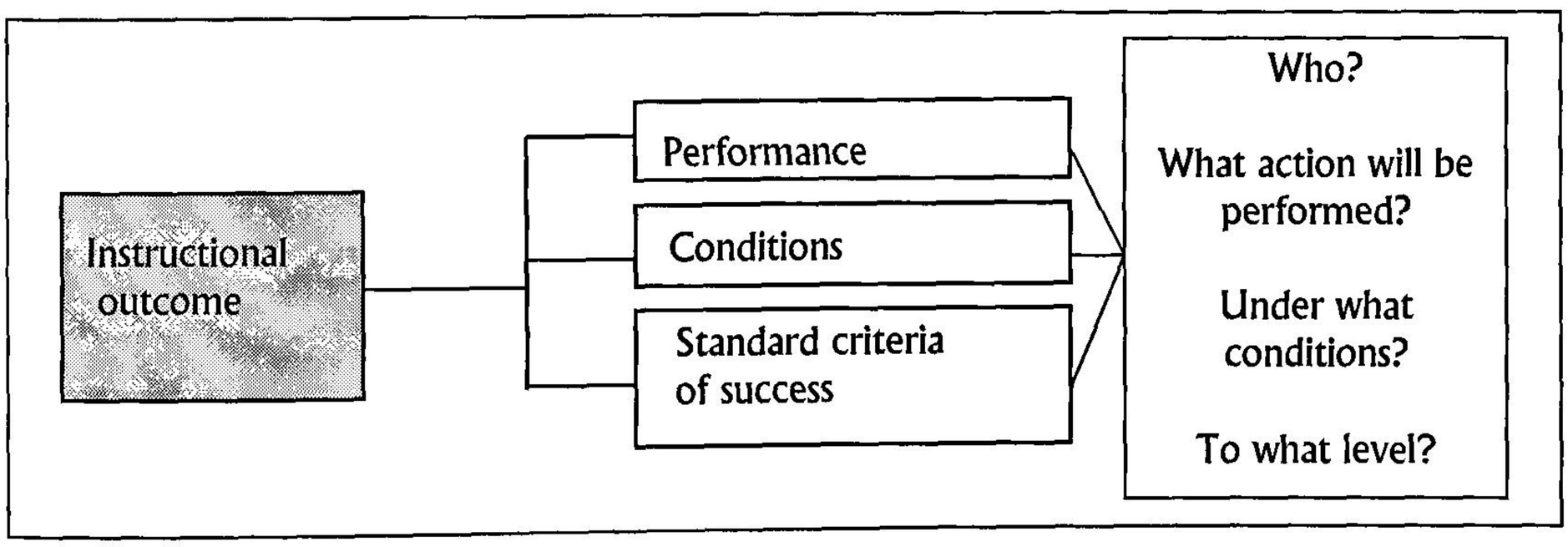
The writing of learning outcomes forms an important part of the design process. Well structured learning outcomes should determine the course content, teaching and instructional methods used. By including learning outcomes in the learning content, learners will be knowledgeable about what is expected of them.

In order to facilitate effective and successful learning, the facilitator should answer the following questions when formulating learning outcomes:

- Should prerequisite knowledge or skills be outlined?
- How can the intended outcomes be stated clearly?
- Can the outcomes be formulated in such a manner that the learner is encouraged by the learning prospect and not discouraged?
- What methods can be employed to evaluate whether the stated learning outcomes were reached?
- Will the learning outcomes be better understandable if verbs are used in the formulation? (Cass 1997).

When formulating learning outcomes, the value of the learning experience should be outlined. The facilitator should highlight what is to be learned, or what the learner will be able to do after a given section or module is completed. Outcomes can therefore be described as consisting of a performance, the conditions of the performance and the standard criteria for success. The outcomes further stipulate who the performer is, under which conditions the performance is taking place and what the level of the performance is. These principles can also be explained according to Figure 3.2, adapted from Wright (1987:26).

FIGURE 3.2: The parameters of learning outcomes



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The instructional outcome is determined by a performance, the conditions under which the performance takes place and the criteria through which success is determined. When formulating learning outcomes, the writer should ask the appropriate questions concerning the performance, the conditions of the performance, the standard or success criteria as well as who will be performing the task. The questions should then be linked to phrases that describe the process. These questions will ensure that the outcomes portray the value of the learning process. The questions should be considered to be the guiding structures for writing outcomes. The following example further explains the formulation of outcomes.

The facilitator is asked to compile an outcome that portrays the individual's role in the learning process. Each question should be linked to a corresponding answer to form an outcome.

• Who?	facilitator
• What action will be performed?	design learning programme
• Under what conditions?	according to instructional design principles
• To what level?	applicable as course facilitating and encouraging learning

The corresponding outcome could be stated as follows: After studying the principles of instructional design the facilitator should be able to design a learning programme which can be applied as a course and can facilitate and encourage learning.

From the given example it can be deduced that the following information should form part of a learning outcome:

- *Who* must meet the objective?
- *Under what circumstances* should the objective be met?
- What action is required to measure the outcome *(verb)?*
- *What* behaviour must be exhibited to meet the objective?
- What level of *accuracy* must be achieved to conclude that the objective was met?

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By stating these intended learning results, prior to the learning experience, learners can form an idea of what is expected of them. This can, however, only be achieved if the learning outcome is stated in performance terms that reflect the intent of the instruction. It is also important to note that the design of outcomes should motivate the learner to study and to reach the stated learning outcomes.

Application

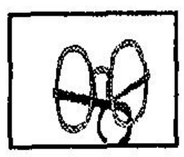
In the original text of the Music Education programme, goals were stated as part of the introduction to each topic. These goals were not clearly identifiable, making it difficult for the learner to see what was expected of him/her. With the design of the learning material these goals were rewritten as learning outcomes. In accordance with Curriculum 2005 (South Africa 1997) learning outcomes for each module were subsequently formulated. These outcomes are given at the beginning of each module and can be identified by recognising a highlighted box as shown in Figure 3.3.

FIGURE 3.3: Learning outcomes

> At the end of this module you should be able to:
> - name the skills used in group music
> - apply the skills in a teaching environment.

Apart from the learning outcomes, specific outcomes were indicated to explain the outcomes of specific topics. In order for these outcomes to be easily identifiable, they were marked by an icon. By recognising the icon indicated in Figure 3.4, the learner can easily trace the specific learning outcomes.

FIGURE 3.4: Specific outcomes



SPECIFIC OUTCOMES

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The same icon and format for learning - and specific outcomes - are used throughout the learning material. This enables the learner to easily find the outcomes when they need to be revised. During the learning programme, learners are referred back to the outcomes so as to remind them of the reasons for studying a given topic. The icons help learners to identify and guide them through the different components of the written material. In order for the text to be understandable, it should be written and structured according to specific criteria.

3.2.2 Structure and style of text

The manner in which the text is written and presented has an influence on the learners` perception and understanding of the learning material. The presentation of the text is an important aspect of the design process. The instructional designer should remember that the text is a method of communicating with the learner. In order for maximum learning to take place, the text needs to be designed according to given principles. The following principles should be taken into consideration when text is compiled:

- Take learners' educational background and varying levels of expertise into consideration. The textual design should cater for all learner needs and styles.
- The text should be easily understandable and written in an uncomplicated format. This can be achieved by writing in the first person. The writer should talk to the learners as though they are attending a contact session.
- Short sentences and paragraphs facilitate easy reading and better understanding of the content.
- Divide the learning content into manageable chunks.
- Encourage learners to study one module at a time and to pace their learning. This will help to motivate them and keep them focused.

After writing the text according to learner needs, it should be designed so that good learning results can be facilitated. Whenever a layout is considered, the designer should ask whether the structure will enhance the learning process and how the learner will benefit from it. When text is designed, the promotion of interactivity should take preference. Learners should be prompted to become active participants in the learning process. This can be achieved by including a variety of activities in the learning programme. These activities should involve the development of cognitive,

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affective and psychomotor skills. It is important that a variety of activities be included in order to cater for different learner needs and preferences. The ultimate purpose of these activities is the reaching of learning outcomes. Structured activities should be designed so as to facilitate the understanding and performing of difficult concepts and skills.

Information is explained by means of practical examples. By alternating text, illustrations and lists, reading is made interesting and enhances the understanding of difficult concepts. The learning process can be further enhanced by a user friendly page layout that encourages learning. By using white space (spacing) between headings and paragraphs, learners` eyes are led through the material. This helps them to distinguish between various text components. Headings should therefore be clearly numbered and highlighted so that learners can find their way and review information.

When the design is complete, the designer should assess the design and layout. The design should be attractive and functional, facilitating interesting and meaningful learning. In order to facilitate effective learning, the following checklist can be used. The instructional designer should:

- write in the first person;
- alternate text and graphics;
- involve learning activities;
- explain difficult concepts by means of practical examples;
- make use of sufficient white spaces; and
- ensure that headings are visible and clearly numbered.

The application of these design elements to the DMEO will be discussed in the following paragraphs.

Application

The text of the distance programme was compiled for a broad spectrum of learners. The information needs to be presented so that all learners will benefit from it. To facilitate personalised learning, learners are encouraged to apply the information practically. By doing so, they familiarise themselves with the information and can

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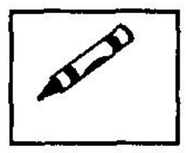
discover its application in their specific field of interest. Throughout the learning programme, learners are given a variety of assignments. These assignments involve the cognitive, affective and psychomotor domains. This ensures that maximum learning can take place. The given examples indicate the researcher's incorporation of various learning styles in the given assignments. It is however important to note that the headings given with each example are not included in the original copy of the learning material. The headings are included here to describe the example's purpose.

Figure 3.5 is given after the learner has completed a section on planning of a curriculum and formulation of learning outcomes. The outcomes of this assignment are to evaluate if the learners understood the concept of learning outcomes and to give them the opportunity to apply their knowledge. To complete this assignment, the learner has to make use of cognitive activities such as: define, list, name, observe and recall.

FIGURE 3.5: Cognitive assignment



Can you rewrite the following goals into outcomes?

1. To give pupils, through music, a short historic account of South Africa.

Outcomes:.....
.....
.....

Did you remember the

- WHO?
- ACTION?
- WHEN?
- WHAT?

This example also indicates how the learner should be addressed in the first person. The question is formulated as if it is stated for each individual learner. The light bulb is given to remind the learner of the different components that should be

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incorporated when formulating learning outcomes. This will help the learner to formulate the correct answer.

Figure 3.6 highlights the application of the affective domain. After reading the material on the concepts of music, learners are asked to complete the assignment by utilising their knowledge concerning mood. Learners should evaluate how they respond, perceive and value the information. In order to complete this assignment successfully, learners should be able to relate to feelings evoked in them by certain pieces of music.

FIGURE 3.6: Affective assignment

Name a piece of music that makes you feel:

* HAPPY..... * SAD.....

* CALM ..... * ENERGETIC.....

To complete this assignment, learners can select any example known to them. Through this assignment the learner gets the opportunity to apply the knowledge of his/her particular culture. The information studied will then become meaningful and will encourage learners to apply it in their teaching or working environment.

After studying the module on music skills, Figure 3.7 is given. Learners are then asked to perform a piece of music which they have created. For this assignment to be performed correctly, the psychomotor skills of the learners need to be incorporated. The learner therefore needs to be actively involved in the learning process by miming, playing on instruments and performing various types of movements.

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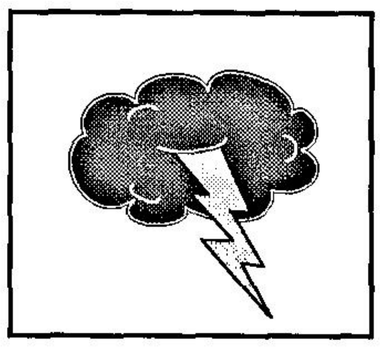
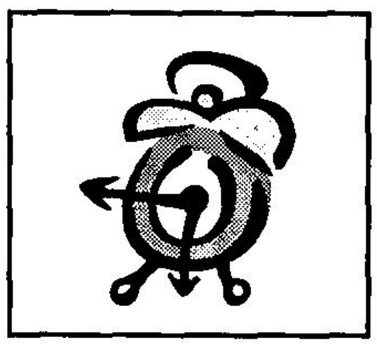
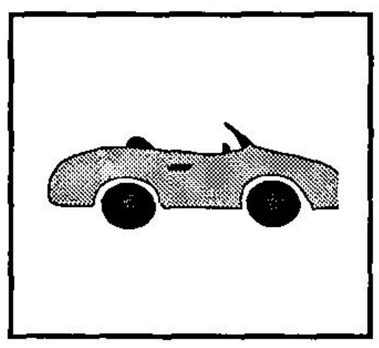
FIGURE 3.7: Psychomotor assignment

Look at the following pictures and imagine the sounds that are related to them. How can you portray these sounds by using body percussion, vocal sounds and instrumental improvisation? Perform them by yourself or with some friends.

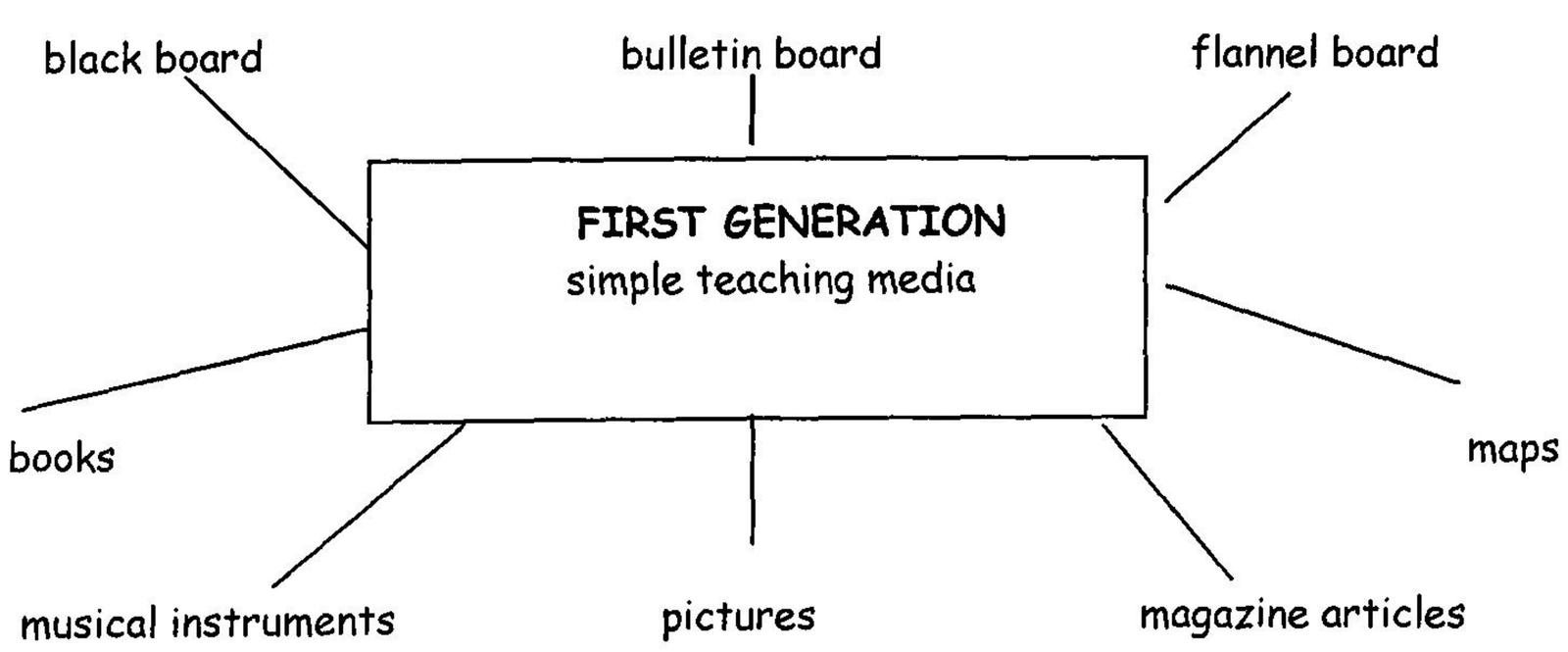
By performing this assignment in groups, the learners are encouraged to use this idea in their various teaching environments. Group work and social interaction are therefore facilitated.

Another important aspect of textual design is the use of white space, graphics and clear numbering. These are used to guide the learner through the structural components of the reading material and are illustrated in Figure 3.8.

FIGURE 3.8: Textual and structural design principles

1.1 First generation media

First generation teaching media include readily available material. Teachers often overlook the value of these simple teaching media.



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Specific design methods or tactics were used in this example to facilitate understanding of the information. The design approach incorporated the writing of headings and numberings, the use of graphics and the use of white space. These design methods are now looked at in more detail:

- **Headings and numberings** - The heading and number are typed in a bigger font than the rest used on the page. No other numbers are used, so the learner will know that this is, in fact, the beginning of a new topic or section of the reading material.

- **Use of graphics** - Information should not be stated with bullets, but should be represented visually. The visual representation of the text will enable the learners to remember the information more easily. Making use of webbed, thematic graphic organisers offers the learner the opportunity to organise ideas around a key concept. This provides an understanding of ideas, themes and associations (Jensen 1995:189). By looking at the example, the learner will be able to form a global idea of first generation media and its different components. Mind maps and metacogging are employed to facilitate the understanding of complex concepts. According to Jensen (1995:193), researchers have found that graphic organisers, like mind mapping, help learners to understand and recall information better. By looking at a mind map, the learner forms a visual idea of the information and remembers it as a whole. The information is therefore more easily retrievable as it is not broken down into small chunks. In Figure 3.8 the mind map is given to provide learners with a one-off glance at the learning material that is to be discussed. The mind map is therefore used as a preview of information that is to come.

- **Use of white space** - by making use of white space between the heading and text components, information is highlighted. The learners` eyes can clearly distinguish between the various sections of importance. Although the learner is not consciously aware of the white space, it enables the subconscious to distinguish between the various textual components. This would not be as easy if the material were given as in Figure 3.9 'before'.

In order to demonstrate the effectiveness of white space a before and after example will be given. This should indicate what effect the correct use of white space has on

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the learner's perception of the learning material. The before example was taken from the original compiled learning material before any design principles were applied.

FIGURE 3.9: Textual and structural design without the use of white space

3.9 Before

1.1 First generation teaching media

First generation teaching media include readily available material.

Teachers often overlook the value of these simple teaching media.

3.9 After

1.1 First generation media

First generation teaching media include readily available material.
Teachers often overlook the value of these simple teaching media.

The researcher has found that it is often useful first to view the page layout on the computer screen at 25% view. This gives a clear indication of the use of different fonts, white space and general page layout. This enables the designer to ensure that the page is attractively and effectively designed.

3.2.3 Guidance structures

An important task of the designer is to anticipate learning problems and to help the learner to overcome these problems. Structures should be put into place that can guide the learner through the learning process although the facilitator is not present. These structures include the use of:

- icons;
- visual presentations;
- practical examples; and a
- modular structure.

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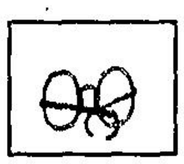
Each of these guidance structures will be discussed individually, after which their application will be given by means of an example from the designed DMEP

- **Icons**: By using icons, the learner can be guided through the learning process. These icons should represent certain activities or tasks. The learner will come to identify these icons and will act accordingly. The icons therefore represent certain activities or headings in the text. By making use of icons the designer does not need to repeat similar headings in each chapter. The learner recognises the icon and associates it with a task or heading.

Application: A number of icons have been selected for this programme. These icons are explained in the preface of the study guide so that learners can familiarise themselves with the icons before embarking on the actual study. The icons are designed and selected for their ability to portray the text that would have been written out. The icons should therefore be self-explanatory. Figure 3.10 explains the icons and their meanings as given in the preface of the DMEP.

FIGURE 3.10: Icons and their meanings

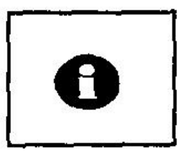


The specific outcomes explain the outcomes of the selected headings of modules. These outcomes will help you to achieve the general learning outcomes.

After a section a brief summary of content is given to ensure that you have understood the knowledge previously explained before continuing with another section.

The given examples explain how the content will be applied in practice. The examples will also guide you in your problem solving.

This icon indicates that you should complete the assignment. When you come across this icon you have the opportunity to evaluate your progress. If you have trouble completing this assignment, refer to the study material before continuing.



This icon indicates that a definition of terminology is given.

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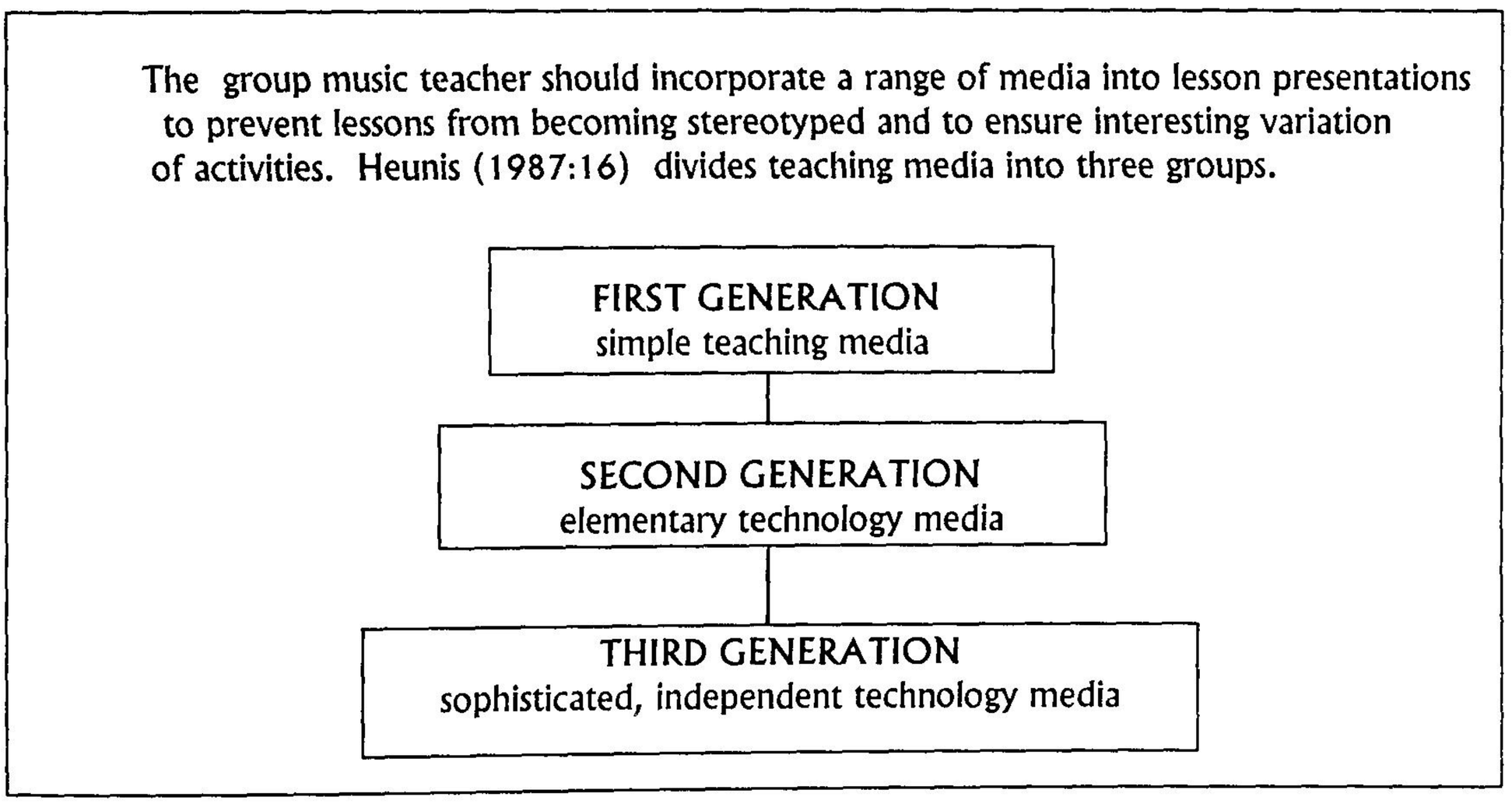
When the learner recognises this icon , for example, he/she should be able to recollect what the meaning of that specific icon is. In this example, the learner should interpret that an assignment will be given. The word *assignment* is not given after the icon, for this would result in a dual statement of the task at hand.

- **Visual presentations:** Illustrations and graphics can also be used to explain information in further detail. The illustrations should be as self-explanatory as possible, seeing that the facilitator is not present to guide the learner. By making use of illustrations, difficult concepts can be highlighted and viewed from another perspective, in order to help the learner to understand. The alternation between text and diagrams increases the readability and level of interest of the learner. By involving graphics and diagrams, the learners' attention can be directed to look at the information in a new or different manner. This leads to increased awareness.

Application: From the theory one can gather that the principle of graphic and illustration use should be to highlight and further explain the text. Diagrams are often used to summarise or preview the information that will be discussed. The diagram given in Figure 3.11 indicates the headings of the following paragraphs. By looking at the diagram, the learner can form an overview of the information that will be discussed.

FIGURE 3.11: The use of diagrams and graphics



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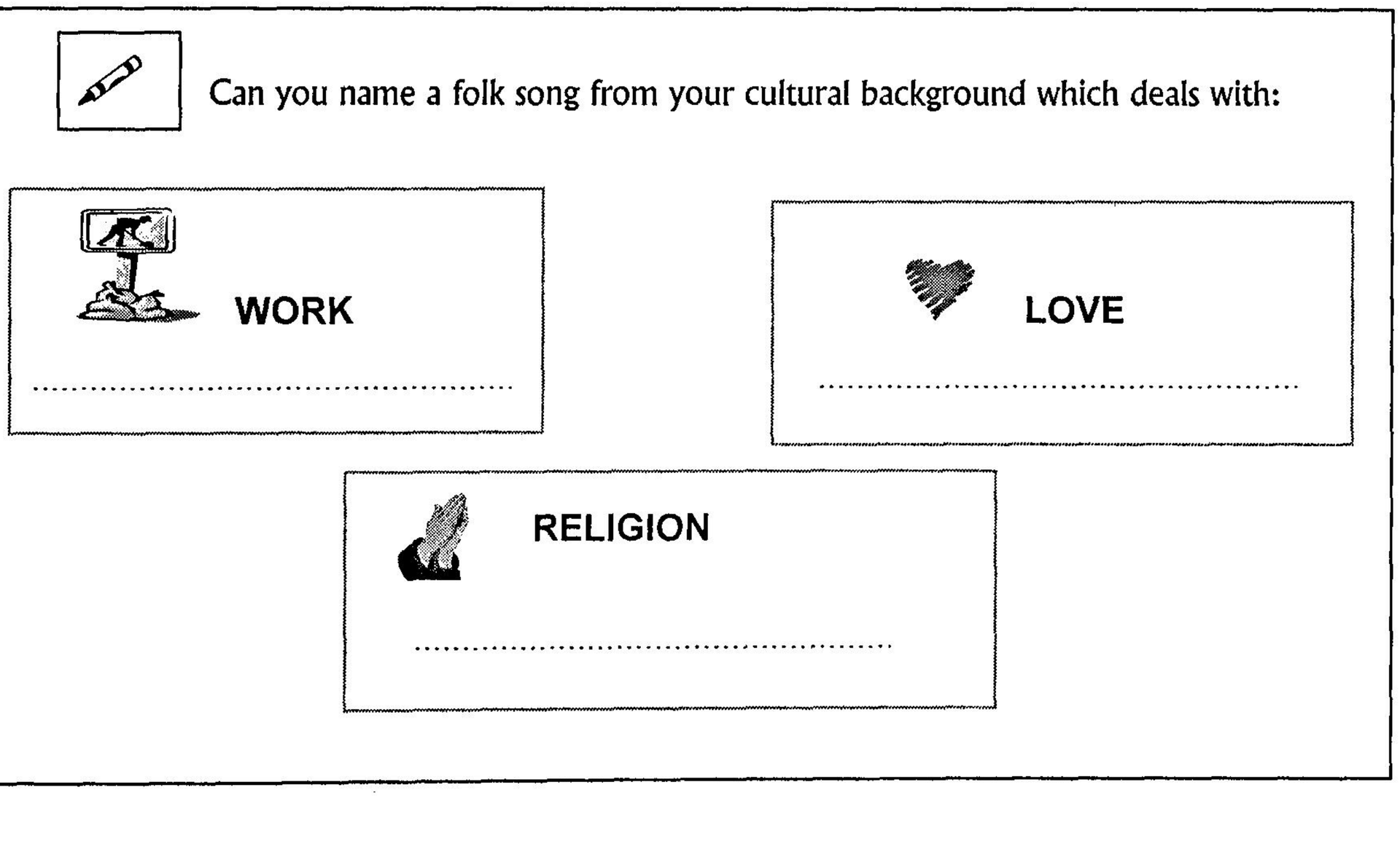
After presenting the three generations of instructional media in diagram form, each of the bold headings will be presented. The learner can thus assume that the three generations will be presented and explained in further detail.

- **Practical examples:** For learners to fully understand the learning material, they should be given the opportunity to apply the information to a context that is relevant to them. Learning should therefore become personalised. Jensen (1995:294) describes the importance of personalised learning by stating that the highest priority is the demonstration of learning to the learner's own life. In his opinion it is not a question of information, but has to do with the integration of personal meaning into it.

Application: In Figure 3.12 the learners are given the opportunity to use their cultural and educational background as point of departure to complete the assignment. By doing so, the information becomes useful and meaningful.

FIGURE 3.12: Making use of learners' unique background



Through this assignment learners are encouraged to use their background knowledge. By using information that is known to them, they can easily assess if they have understood the concepts that were explained.

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- **Modular structure**: A modular structure divides the learning material into smaller study units. Information is grouped according to topics. It is important that the learner knows how the modules were compiled and how they should proceed.

Application: Figure 3.13 was taken from the preface to the study material. In the preface the learner is introduced to the study guide and is guided in the use of the learning material.

FIGURE 3.13: Introduction to modular structure

How do you proceed?

1. The study material is divided according to modules.
   The modules should be completed in numerical order.

2. There are set learning outcomes for each module.
   Self-evaluation assignments are given throughout the module so that you can monitor your progression.
   The answers to these assignments are at the back of the study guide.

3. You must master all the outcomes before continuing with the module.

After the study procedure is explained, an outline of the modular structure is given. The learner is hereby given an overall glance at the course content. The modular structure of the Music Education course is outlined in Figure 3.14.

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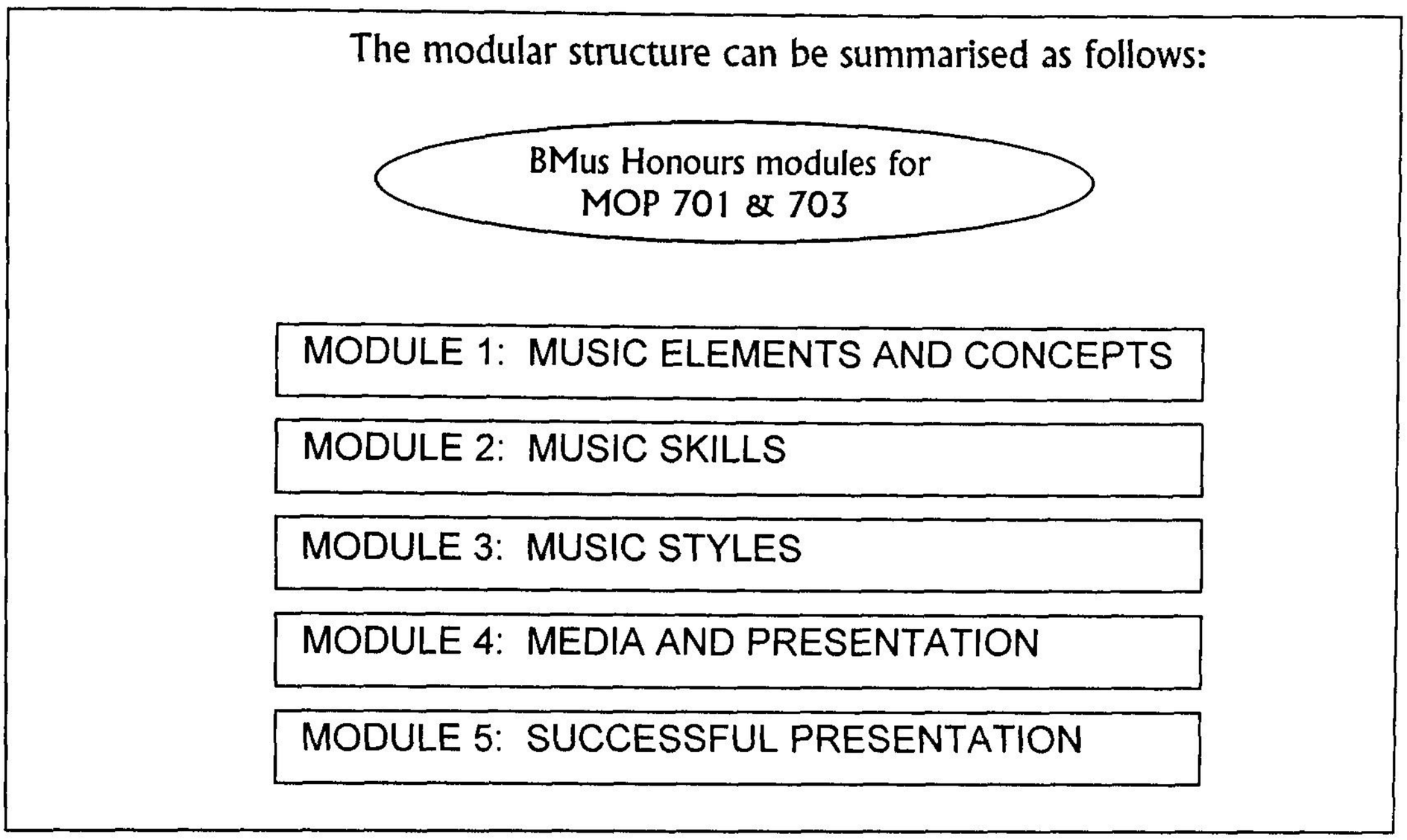
FIGURE 3.14: Modular structure



With the proposed guidance structures in place, active learning can be facilitated. Through an active learning process, learners are given the opportunity to discover and apply the given information. Learning by doing is therefore facilitated.

3.2.4 Facilitation of the practical components of Music Education

The facilitation of the practical skills of Music Education becomes problematic when teaching over a distance. The correct teaching method should be explained without the facilitator being able to demonstrate. The instructional presentation of these skills should be carefully selected. The instructional designer should facilitate the teaching of songs, playing on instruments, reading of notation, movement, creative activities and listening to music without being present. The facilitator should therefore be able to demonstrate the use and application of these skills in practice by making use of written guidelines.

According to Rowntree (1997:93), the lack of contact between learners and the facilitator should not hinder the inclusion of the practical aspects of a subject. He suggests that the facilitator determines the didactic approach that should be followed, selects the material and equipment needed for the teaching of the skills and decides on the method of assessment. This viewpoint is shared by Verduin

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(1991:98) who states that 'people who say one cannot teach skills and practical subjects at a distance often assume that print alone is being used.' Although the learning may be based on written instructional material, the learners will often also receive a media kit that explains and demonstrates the practical skills in more detail. Rowntree (1997:93) suggests the following methods and/or tools to help facilitate the practical skills. The instructional designer could:

- Provide video and audio materials that demonstrate the procedures and talk the learner through practising them.
- Make use of resources available in the learners' work or learning context. This could include observations, data-collection and surveys.
- Encourage learners to do practical work in face-to-face sessions.
- Set up projects in which learners can share resources.

Application: In the designed DMEP the instructional designer aimed at a clear, step-by-step explanation of the didactics involved in teaching these skills. The skills are individually presented. Emphasis is placed on **why**, Figure 3.15, that particular skill is important and **how,** Figure 3.16, that skill should be presented. Examples taken from the designed programme will highlight the answers to these two questions.

FIGURE 3.15: Why is singing important?

The value of singing for pupils is a subject on its own. Only two aspects will be highlighted that are directly relevant to group music.

- Group singing binds the participants.
- Music concepts can be explained and taught through singing.

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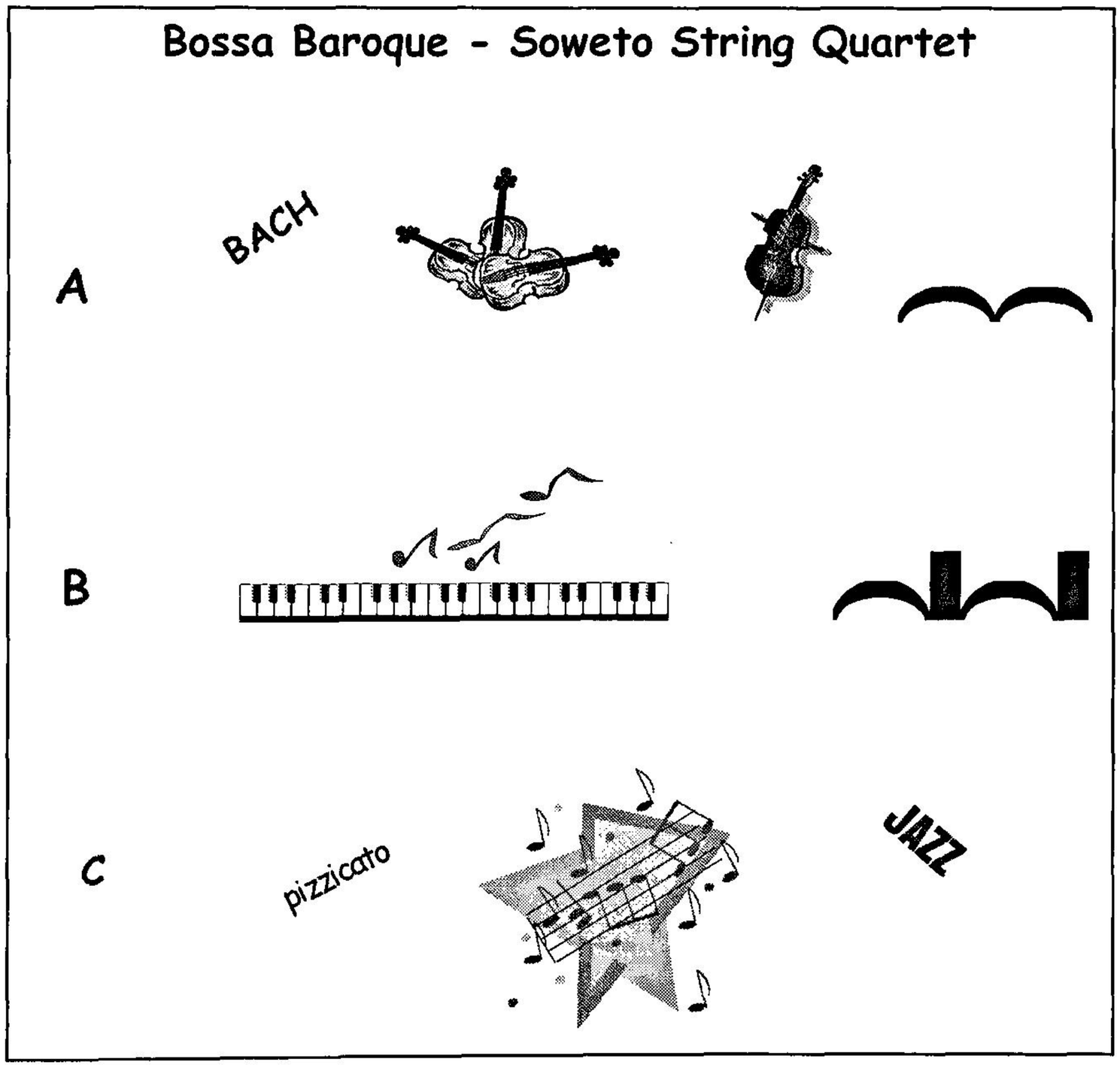
FIGURE 3.16: How to create a listening guide

1. Listen to the music repeatedly.
2. Write down the concepts that can be heard.
3. Decide on the concept/s that could serve as learning outcomes.
4. Design the layout of the transparency on a piece of paper.
5. As soon as the design is completed, listen to the music once again and check whether the guide is portraying the music.
6. Make the transparency.

After the guidelines are given, an example of a listening guide is included. Learners can then determine how the advice should be applied to the design of their own listening activities. Figure 3.17 is an illustration of a listening guide taken from the DMEP.

FIGURE 3.17: Example of a listening guide (Potgieter 1995)



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Learners are encouraged to design their own listening guides by making use of the media that are available to and affordable for them. Learners who do not have access to a computer can draw their own illustrations or can make use of cut out pictures. The listening guides can therefore be presented on a black board, poster or transparency. The same design principles apply to all of these media.

Assignments are given in all the skills. Learners are thereby introduced to the facilitation of the skills. The accompanying video and audio cassettes are utilised as a further explanation on the topics discussed in the DMEP. The video clips include material on successful presentations, successful sounds, music styles, instrumental playing and choir conducting.

By looking at the video the learner can see teachers in action, presenting the skills in a practical teaching environment. Learners are encouraged to consider these teachers to be role models. The introduction and correct use of different media is highlighted in the section on successful sounds. Learners who have not yet been introduced to these advanced media can become aware of their functions before being asked to use them in the contact sessions. Learners are made aware of the different types of media so that they can become knowledgeable about them, even though they do not necessarily have the equipment in their teaching environments.

The **music styles** are introduced through colourful presentations on the way of life, fashion, visual arts and music customs of each particular era. The video's dual function of presenting audio and visual stimuli at the same time makes it an appropriate and useful medium to introduce this complex concept of music. Video clips on different folk dances, traditions and costumes are also included to highlight the learners' awareness and understanding of folk music. To ensure that the video aids the learning process, learners are asked to answer questions whilst watching the video. The video is therefore used as a supplement to the text of the DMEP. Figure 3.18 will be completed whilst watching the video clip on music style.

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FIGURE 3.18: Music style

Watch the video clip on music styles and complete the following table.

BAROQUE

STYLE	GENRES
.....	.....
.....	.....
.....	.....
COMPOSERS	**INSTRUMENTS**
.....	.....
.....	.....
.....	.....

By completing assignments and watching the video, learners are prepared to present the skills. The emphasis in the three contact sessions per year is placed upon the refining of the presentation of the skills. The facilitator can then perform the skills so as to highlight the didactic principles involved. Learners are also encouraged to present their prepared material. By practising the skills, learners can access their own standard of presentation and can determine which method can be applied to their unique teaching environment. Learners are also encouraged to discuss their work and experiences in order to determine the success of their teaching approaches.

Learning by doing is promoted by giving learners tasks to complete. These tasks are formulated so as to develop the learners' didactic skills. Although the application of information in various contexts is a form of evaluation, the learners should be able to assess whether they have completed a task successfully. Seeing that the facilitator is not always present, self-assessment questions and activities should be drafted in order to determine if the learning process was indeed successful.

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3.2.5 Facilitation of self-assessment questions and activities

In a traditional, contact learning situation, the teacher can readily respond to learners` reactions to the learning content. By monitoring the learners` responses and behaviour, the facilitator can determine if the learners have grasped the learning content. Assessment therefore becomes a continuous process of evaluation and immediate reaction.

The absence of the facilitator in distance education necessitates another form of evaluation. The only person who can determine if the learning process was successful is the learner him/herself. This assessment can be done by making use of self-assessment questions and assignments. Through the course of the learning programme learners should be given the opportunity to assess themselves.

The absence of regular, personalised feedback makes it difficult for the distance learner to stay motivated. One should bear in mind that the learners' only method of assessing their progress is through feedback. In a distance course where the facilitator has very little or no contact with the learners, the feedback should be motivating and inspiring. 'Feedback is the key to quality in education and training' (Rowntree 1997:58). A lack of motivation can easily result in learners becoming uninterested and ultimately giving up on the learning process. Other forms of motivation need to be employed to encourage distance learners.

Although feedback can be built into the learning programme, Rowntree (1997:58) states that the learner needs to have positive feedback from the facilitator as well as from other learners and tutors. It is therefore important to consider how motivation can be facilitated. According to Keller (1983:395), there are four basic categories of motivational conditions that the instructional designer must understand and respond to in order to offer instruction that is interesting, meaningful, and appropriately challenging. By incorporating these elements into the learning process, learner motivation can be facilitated.

To underline the importance of the mentioned motivational factors, they can be combined to form a motivational model. The model serves three purposes. Firstly, it provides a theoretically based model for integrating strategies for increasing motivation. Secondly, this model facilitates the effort to integrate motivation theory

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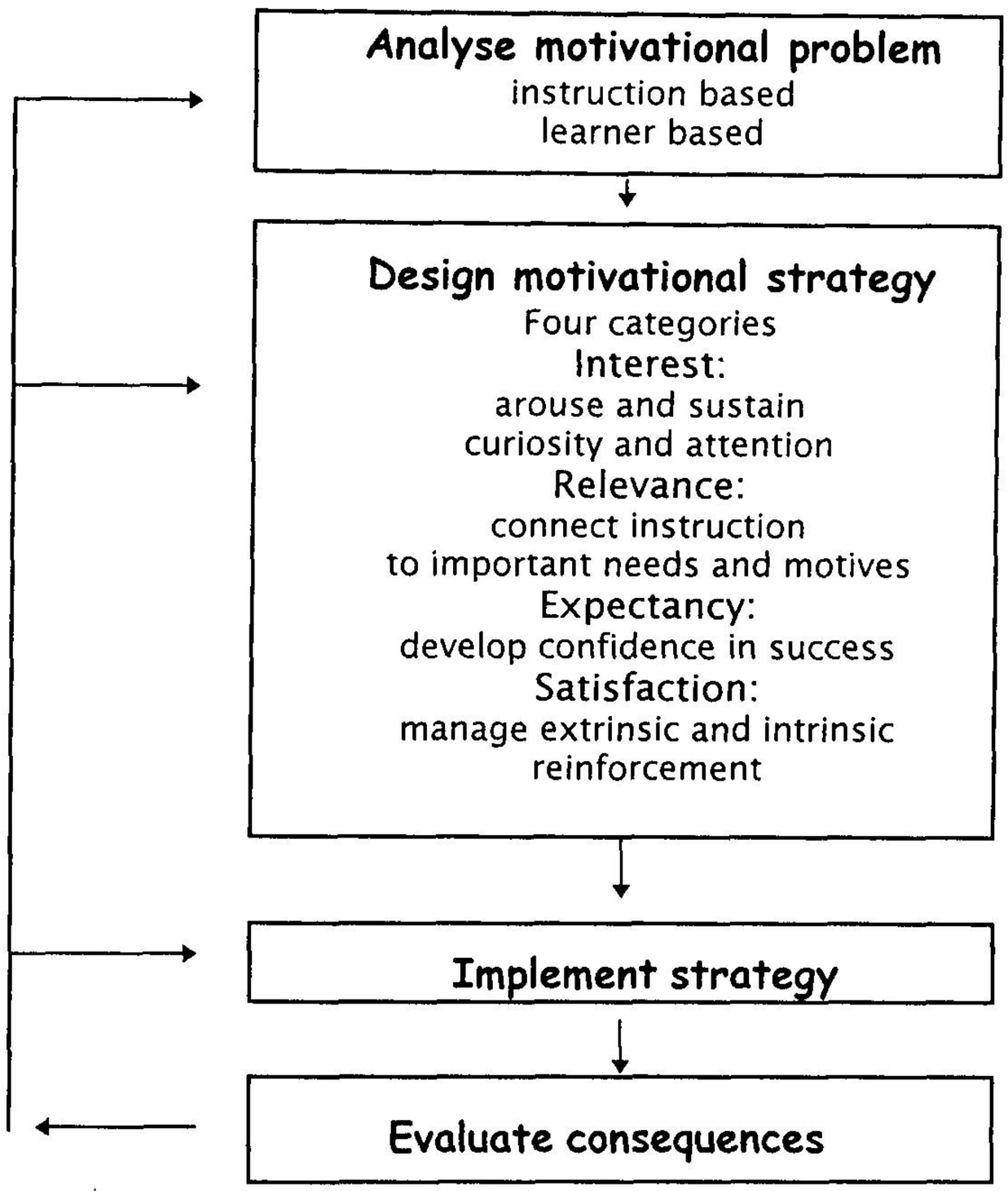
and strategies with instructional design theory. Thirdly, it allows a problem-solving approach to identifying the solving of motivational problems. The interrelationship of these three elements will result in the compiling of an instructional motivational model. Such a model can be compiled through facilitating the different components of Figure 3.19.

FIGURE 3.19: A model for designing motivational instruction



The motivational model suggests that learners can be motivated by involving interest, relevance, expectancy and satisfaction. The instructional designer should ensure that the four components of the motivational model are facilitated in the learning programme.

Application: In order to facilitate learner motivation, stimulative elements should be included in the learning process. This can be achieved by asking the following questions:

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- How can interest be aroused and maintained?
- Is this information important and relevant to the learning context?
- Will the learner gain from this information?
- Will the learner be able to apply the information in his/her work context?

If these questions have positive outcomes, it can be assumed that Keller's motivational aspects will help to stimulate and motivate the learner. Learners will be able to relate to the studied information and will be encouraged to use it in their working environment. This is, however, not the only suggested method.

Like Keller, Spitzer (1996:47) indicates that motivation can be facilitated if certain motivators are built into the learning text. Spitzer's motivators are action, fun, choice, social interaction, error tolerance, measurement, feedback, challenge and recognition. By incorporating these motivators as part of the learning process, learners will be stimulated and prompted to become active participants in the learning process. Spitzer suggests the use of a motivational action plan for the incorporation of the following principles:

- **Action** - Motivation is considered to be an active rather than a passive activity. 'A body at rest tends to remain at rest, a body in motion remains in motion - and the brain usually follows' (Spitzer 1996:47). It is therefore important to facilitate activities so that learners can become active participants in the learning process.
- **Fun** - Fun energises people and motivates them to become enthusiastic learners. Fun can be facilitated by incorporating humour and surprises.
- **Choice** - Learners should be given the opportunity to make decisions concerning the learning process. A choice of assignments or choice of learning method could be incorporated.
- **Social interaction** - Humans usually have a desire for social contact. By involving co-operative learning experiences, motivation can be facilitated.
- **Error tolerance** - Mistakes are an inevitable part of the learning process, and could present valuable learning opportunities. Learners should be stimulated and guided to improve their mistakes.
- **Measurement** - Learners should be aware of the assessment criteria that will be used and should be prompted to take part in various forms of evaluation.

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- **Feedback** - For learners to be able to develop, they should be given feedback and encouragement on a regular basis. The feedback commentary should reinforce the positive rather than concentrating on the negative.
- **Challenge** - Outcomes should be stated as reasonable challenges. Learners should also be given the opportunity to set their own outcomes.
- **Recognition** - To sustain motivation learners should be given recognition of their efforts and progress made.

Instructional designers should be aware of the value of these and other motivators in the learning programme and should aim to facilitate as many as possible in the learning process. By doing so, learning can be transformed from a place where learners 'do their time' into a place where learners actually 'want to do their best' (Spitzer 1996:48). The facilitator should take into consideration that the 'place' where learning occurs can be a variety of locations for the distance learner. It is therefore important for the instructional designer to be able to determine if learners are doing their best. By making use of the suggested motivational structures, by introducing the learning material and by formulating self-assessment questions and assignments, the facilitator can aim at motivating the learners. It is, however, the learners` responsibility to assess their learning progress. To facilitate successful assignment completion, the following guidelines should be remembered:

- Assignments should be clearly stated to help learners complete them successfully.
- Learners should be provided with possible model answers or guidelines on how to answer the questions.
- Learners need to practise skills, procedures and processes that they are learning.
- The exercises and questions should be presented throughout the text.
- Ensure that the questions, or exercises, cover the critical areas of the text.
- The questions/exercises should be placed at the end of sections.
- The answers should be grouped together at the back of the package.
- It may help to show a method of reaching the answer by giving an example.
- If there is not a right or wrong answer, the learners should be guided as to the type of information that is wanted (Canada 1995:16).

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In order to assist learners with the completion of assignments, an answer-wizard is given at the back of the study guide. By reading through the answer-wizard, the learner will know what type of answer is expected of him/her.
By incorporating these principles, the learners should be able to determine if they are successful in their learning endeavours. It also helps to motivate the often isolated distance learner. It is, however, important to remember that the success of the assessment activities is determined by thorough planning and purposeful facilitation.

3.3 DEVELOPMENT

After the analysis process of learners` needs and learning outcomes was completed and the programme was designed, the programme needed to be developed. The criteria gathered from the analysis and design attempts needed to be co-ordinated in order to develop the learning programme.

In the development stage, the information and guidelines gathered through the analysis and design process were combined to create a programme that could be applied to a specific course and target group. The main concern of the development stage is the method of application or choice of delivery mode that should be used. The question at hand is: what type of media should be selected to present the learning material? The decision should be based on the target group, their knowledge and educational background, the availability and cost of different media as well as the time it takes to develop the learning material and the 'timelessness' of the selected media. Media should therefore be selected that:

- are consistent between lessons;
- can communicate information successfully;
- are available to all learners;
- stimulate and facilitate learning;
- interact with the learner; and
- enhance learning.

The selection of appropriate media that fit the above mentioned characteristics, is not always an easy task. The programme design should be of such a nature that it would not need to be revised every year. In order to be cost effective, it should be

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applicable to a number of student audiences and learning situations. The information included in the programme should be up to date so that it need not be changed every year. One can therefore gather that the ideal delivery mode is low in production costs and easily upgraded.

To keep up with modern media trends, the facilitator needs to consider the latest media developments. The facilitator would therefore begin by considering a CD-ROM as delivery mode. It should be taken into consideration that the number of learners involved in the learning programme does have an influence on the cost effectiveness of the learning material production. CD-ROM's are high in production cost and not easily upgraded. The more learners enrolled in a course, the more CD-ROM's would be needed. This would mean that production costs would drop and the development price would become cost effective. The number of learners enrolled for the course is therefore an important factor to be considered. It is, however, also important to determine if the learners have the necessary equipment to run or view the media that were selected. In the case of CD-ROM's, the learners should all have access to computers with a CD-drive.

From the analysis of the target group, the instructional designer can gather that a relatively small learner group will be making use of the developed material. It can also be assumed that many of these learners would not have access to a computer. A CD-ROM was therefore not an economical and functional option for the DMEP. Other delivery modes therefore had to be considered for the DMEP.

Dijkstra (1997:384) suggests the ACTIONS model for deciding which media should be used in the learning process. ACTIONS indicate the capital letters of the following factors:

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- **A** Access: Where will students learn: home, work, local centres?
- **C** Costs: What are the capital and recurrent, fixed and variable costs?
- **T** Teaching functions: What are the presentational requirements of the subject; required teaching and learning approaches?
- **I** Interaction and user-friendliness: Do students and teachers require a great deal of training to use the technology?
- **O** Organisation: What changes in organisation will be required to facilitate the use use of a particular technology?
- **N** Novelty: To what extent will the trendiness of the technology stimulate funding and innovation?
- **S** Speed: How quickly and easily can material be updated and changed?

The ACTIONS model gives the instructional designer a clear guidance structure for selecting the appropriate media. The theory suggests that if a small, diverse and specialised learning corps is enrolled, as is the case with the Music Education course, then a self-paced, print-based instructional medium is ideal. The costs involved in developing and distributing such material could be kept as low as possible. A printed manual, which is ring bound, can also be cheaply and easily updated.

Application: After considering all the different theoretical aspects concerning media selection, it was decided to make use of a paper-driven format for the presentation of the DMEP. The small learner numbers, their diverse backgrounds and lack of computer facilities made this an obvious choice. In order to stimulate and enhance the learning process, a video and audio cassette are included. These cassettes can be used as supplementary material, which highlights and further explains the printed material. A feasible entrance requirement for each learner is thus a video machine and audio cassette player.

Both the video and audio cassette were compiled for teacher in-service training and are being used as a trial model. The compiling of these products was therefore not part of the developmental costs. By using these cassettes, learners could be given access to the music examples used in the DMEP.

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The video includes a number of programmes linked to the modules in the study guide. These programmes include footage on art and folk music as well as the correct use of teaching media. By looking at the video, the learner can be introduced to more information concerning these modules and can see the practical use of teaching media. A balanced learning experience involving different senses is therefore possible.

The cassette gives the learner the opportunity to follow the listening questionnaires and guides given in the learning programme. The learner can thus compare the visual components with the sound. After following the charts and listening to the music, the learner is asked to compile his/her own charts accordingly. By making use of the sound cassette the sequence of hear, do and see is made possible. The learners hear the music, see the example and are then asked to create their own.

To evaluate the applicability of the DMEP, the questions of the ACTIONS format should be answered:

- **Where will learners learn: home, work, local centres?**

  The learners involved in the Music Education course are distance education learners with three contact sessions a year. Learning will therefore mostly take place at home.

- **What are the capital and recurrent, fixed and variable costs?**

  Fixed costs include the one-off development and instructional design of the programme. The variable costs are the number of learning packages that need to be prepared and posted. This includes the copying of the video and audio material. The paper-driven material becomes the learners` property, but the video and audio cassettes need to be handed in after completion of the course. Additional and damaged cassettes would thus need to be provided and replaced.

- **What are the presentational requirements of the subject; required teaching and learning approaches?**

  Active participation should be facilitated by the learning material. By watching the video and listening to the audio cassette, the practical and auditive characteristics of the music can be presented to the learner. The paper-driven materials were

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compiled according to the principles of Curriculum 2005 (South Africa 1997). The teacher becomes the facilitator and the learner the doer. The learner should thus be encouraged to take control over the learning process by carefully facilitated exercises and assignments.

- **Do learners and teachers require a great deal of training to use the technology?**

  No, the technology involved is elementary and should be easily accessed by both experienced and less-experienced learners.

- **What changes in organisation will be required to facilitate the use of a particular technology?**

  The use of these particular media is facilitated through the text. The learner is thus guided as to the purpose and use of the different media. The organisational aspects include the control over cassette return and copying of required material.

- **To what extent will the trendiness of the technology stimulate funding and innovation?**

The use of audio and video cassettes is no longer trendy and will not have the same funding possibilities as, for instance, CD-ROM's. The media were, however, selected on account of the learners` background and often limited financial resources.

- **How quickly and easily can material be updated and changed?**

  The ring-bound format of the paper-driven material enables the facilitator to changes easily any section of the learning content. A page or pages can be replaced by rebinding the package. The content of the video and audio cassette will not require continuous updating. The material is compiled of music characte-ristics and presentation principles that have been in use for many years.

The ACTIONS model for choosing the appropriate media helps the instructional designer in the development of the learning programme. As soon as the material is bound and video and audio cassettes copied, the programme can be implemented.

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3.4 IMPLEMENTATION

After the design and development of the programme was completed, the next phase of the action research model - implementation - could be incorporated. At the beginning of 1998 the designed DMEP was implemented, for the first time, as part of the BMus Honours course. Learners received the instructionally designed paper-driven material as well as a video and audio cassette. At the beginning of 1999 the newly enrolled learners also received a copy (c.f. Addendum). The DMEP has therefore been implemented for two consecutive years.

CONCLUSION

The instructional design of a learning programme is a perpetual process. In order to successfully design a programme, the instructional designer should be knowledgeable about the different components involved in the design process. By being aware of the theory prescribed for a design process, the instructional designer can attempt to eliminate possible difficulties.

By fulfilling the roles of the instructional designer and the Music Education specialist, the writer has aimed to increase the understanding of the practical components of a Music Education programme. The application of the instructional design theory to the field of Music Education could therefore be completed in a short period of time.

After implementation, the evaluation data can be collected. This includes the evaluation of the programme by indicating what the parameters of a successful learning programme are and how the learners experienced learning from it. This will be the focus of Chapter 4.

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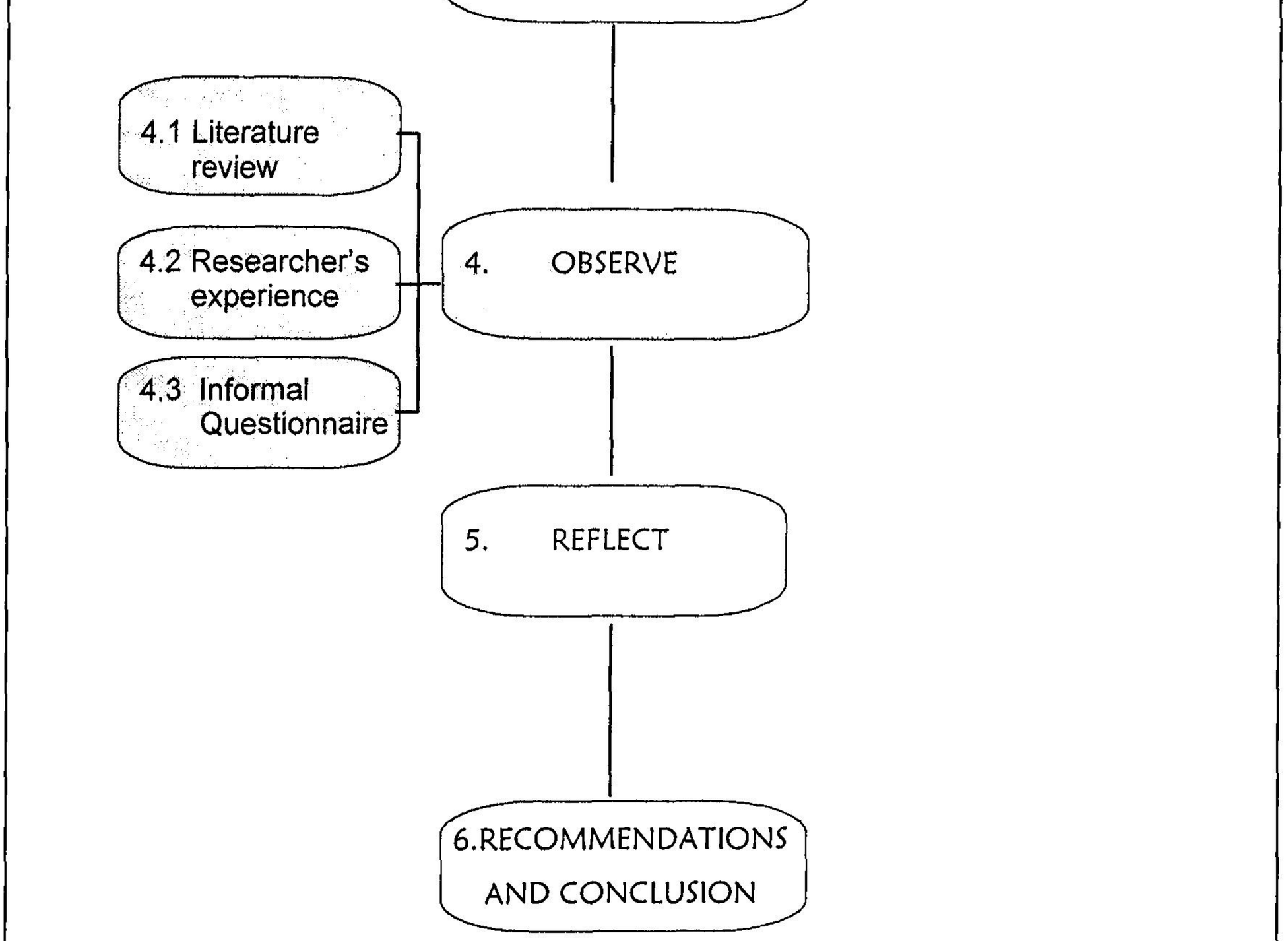
CHAPTER 4

OBSERVE



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INTRODUCTION

The purpose of instructional design is to ensure that the instructional methods used and the materials designed are accomplishing the established outcomes of the learning programme. Assessment of a designed programme is therefore imperative. Melton (1997:107) indicates that three phases of evaluation are present in the instructional design process. These are evaluation **prior** to the development of the course, evaluation **during** the development of the course and evaluation **following** the presentation of the course. The importance of continuous assessment is further underlined by the following quotation:

> It is all too easy to think of evaluation as a process that only gets underway once a course has been produced. Evaluation needs to be an integral part of the course development process, providing feedback on the products at each and every stage, at a time when it can be acted upon and used to help improve the products before further developing them in the next stage (Melton 1997:107).

In Chapters 2 and 3 the first two steps of the action research model, planning and design, were followed. In these chapters, assessment **prior to** and **during** the design of the programme were facilitated through formative evaluation methods. This enabled the designer to redesign and develop the modules or identified aspects of the learning programme before implementing or testing it. Seeing the programme has already been implemented, the focus of this chapter should be on assessment **following** the presentation of the course. This empowers the designer 'to collect data under real-life study conditions, on a larger scale than so far possible, and from a wider variety of perspectives' (Melton 1997:112).

It is important that the focus of the evaluation is on the strengths and weaknesses of the programme. This will enable the designer to assess the value of the designed programme. Rowntree (1997:45) compares quality assessment of a newly designed educational programme with the launch of new products in the marketing industry. As most companies pilot a product before launching it, so educationalists should test their programmes before accepting the standard thereof. The learners therefore become important role players in the determining of the success of a designed learning programme. Seeing that they study with the material they will be able to indicate where the programme should be improved or better designed.

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> However experienced we are and however insightful our anticipation, we can never expect to foresee all the difficulties that learners are likely to have with our courses. Pilot learners' reactions may reveal a number of errors or design faults that we can put right before launching a course on its first run (Rowntree 1997:45).

The observation of the DMEP was done as a summative evaluation. According to the systems approach, described in Chapter 2, the summative process is used to assess the standard of an implemented or pilot programme. Through summative evaluation the effectiveness of the implemented programme is evaluated on a multi-dimensional scale. This includes the evaluation of the process, instructional designer and the programme. The effectiveness of these parameters can, however, be determined only if the criteria for quality instructional design have been compiled. In this research, the assessment and effectiveness criteria were drafted through a:

- **literature review** consulting **experts' opinions**;
- reflection on the **researcher's experience**; and an
- informal **questionnaire.**

These three approaches were used to determine the criteria for successful design. The above mentioned methods were used to answer the questions key to this study. By discussing the principles or defining the terminology, assessment criteria could be formulated. The answers could then be used to determine whether the design of the DMEP was, in fact, successful. The principles are:

- What are the *theoretical* principles of distance education and instructional design?
- What are the *design principles* of distance education?
- What are the *motivational* aspects involved in a distance education programme?
- What aspects determine the selection of an appropriate *technological* delivery mode?

The researcher aimed at discussing these principles by making use of the following methods as highlighted by Table 4.1.

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TABLE 4.1: Summary of assessment criteria

	Literature review	Researcher's experience	Questionnaire
Theoretical principles	✓	✓	✓
Design principles	✓	✓	✓
Motivational principles	✓	✓	✓
Technological principles	✓	✓	✓

The literature review, researcher's experience and questionnaire were used to determine the criteria for successful design as highlighted through the different principles. These principles include the theoretical, design, motivational and technological components of an instructionally designed DMEP. For each principle a quality assurance checklist were compiled. This was done through a literature review, researcher's experience of the design process and an informal questionnaire.

4.1 LITERATURE REVIEW

In Chapter 2 the experts' opinions concerning the theoretical, design, motivational and technological principles were given. In order to determine what the criteria for successful design are, a summary of the basic literature principles is given. The summary will be drafted in the form of questions that can be employed to determine the criteria of the various disciplines.

4.1.1 Theoretical principles

The theoretical principles incorporate the learning process, instructional design and distance education principles and models. The questions guiding the theoretical analysis are given in Table 4.2.

TABLE 4.2: Literature review - theoretical principles

Learning theory	• Which theory or combination of learning theories should be selected to form the basis of the design of the DMEP?

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(Table 4.2 continued)

Learning experience	• Why should deep approach learning be encouraged? • To what extent should meta-cognitive skills form part of the distance Music Education learning programme?
Distance education theory	• What are the principles of industria-lisation? • What are the benefits of individualised instruction in a distance education programme? • What are the advantages of two-way communication for the DMEP?
Distance education models	• Which distance education model should be selected for the DMEP?
Instructional design theory	• Which of the four instructional generations best suit the needs of the DMEP?
Instructional design models	• What is the value of the systems approach model to the DMEP?

4.1.2 Design principles

The design principles were compiled from instructional design parameters and principles stated in Chapters 2 and 3. The following questions, given under Table 4.3, were taken into consideration when a successful design sequence was structured:

TABLE 4.3: Literature review - design principles

The distance learner	• What are the principles of indivi-dualised instruction? • What choices should learners be given regarding content, methods used and materials?

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(Table 4.3 continued)

The instructional designer	• What are the tasks of an instructional designer?
Learning theory in relation to design	• What study methods should be introduced and facilitated in a DMEP?
Course content	• What are the principles of successful design?

4.1.3 Motivational principles

Motivational aspects can help focus the distance learner's attention on and interest in the learning process. The formulation and presentation of the motivational factors will therefore influence the learners' perception of the learning material (Rowntree 1997:10). By answering the questions, listed in Table 4.4, the designer could determine if the designed motivational factors were successful.

TABLE 4.4: Literature review - motivational principles

Motivational structures	• Which motivational structures could be employed in the DMEP?
Student support services	• Which student support services should be employed in the DMEP?
Assessment	• What assessment criteria and methods of assessment should be included in the DMEP?

4.1.4 Technological principles

Through selecting appropriate media, the designer can ensure that the learner becomes actively involved in the learning process and that communication is facilitated. Table 4.5 highlights the questions to be asked concerning media selection.

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TABLE 4.5: Literature review - technological principles

Media selection	• What are the criteria for media selection for a distance education course? • What could be the most effective delivery mode for facilitating the pedagogy of the practical music skills in the DMEP?

4.2 RESEARCHER'S EXPERIENCE

As was described in Chapter 3, the design of a DMEP was the researcher's first attempt at instructional design. Seeing that very little information on the application of instructional design principles to Music Education is available, the researcher had to rely on the general theoretical principles of instructional design and apply them through a process of trial and error. The researcher's experience, therefore, developed through the design process. The result is that the designer had to make assumptions on the successful design of a DMEP. The researcher's experience will therefore focus on assumptions that were made concerning the different components of a designed programme.

4.2.1 Theoretical principles

Instructional design theory suggests a number of models that could be used in the instructional design process. The researcher had to evaluate each of these structures in order to determine which model is best suited for a DMEP. The following questions concerning the theoretical principles were asked in Table 4.6.

TABLE 4.6: Researcher's experience - theoretical principles

Learning theory	• How were the learning theories employed in the DMEP?
Learning experience	• How was deep approach learning facilitated in the DMEP?

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(Table 4.6 continued)

Distance education theory	• How could the theory of industria-lisation be adapted to the DMEP, having small learner numbers and only one designer? • How were the needs of the indepen-dent learner met through the DMEP? • How could two-way communication be facilitated in the DMEP?
Distance education models	• How was the selected distance education models applied to the DMEP?
Instructional design theory	• How could the principles of the instructional design generations be applied to the DMEP?
Instructional design models	• How could the systems approach model be applied to the DMEP?

4.2.2 Design principles

The principles underpinning the theory of instructional design give a clear indication of the structuring of a designed programme. A detailed discussion on the application of the parameters of instructional design to the DMEP course content was given in Chapter 3. It will therefore not be discussed again. The evaluation through the literature review and questionnaire will give a clear indication of the success of the designed DMEP. The focus will of Table 4.7 will be on the distance learner, the instructional designer and the relation between learning theory and the design process.

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TABLE 4.7: Researcher's experience - design principles

The distance learner	• How was the material structured to suit the individual learners' learning requirements?
The instructional designer	• What does the task of facilitation entail in a DMEP?
Learning theory in relation to design	• How could appropriate study methods be introduced and facilitated?

4.2.3 Motivational principles

The absence of the designer in the distance learning environment can be a motivational hazard. In a contact teaching environment, the designer can react to the learners' experience of the learning process. The designer would therefore be able to respond to learners being tired, bored, confused, enthusiastic and a number of other emotions. In a distance learning programme, motivational structures need to be designed into the learning experience. The designer had to imagine him/herself being part of the learning process and reacting to the learners' responses to the learning material. The researcher's experience highlighted the following aspects in Table 4.8.

TABLE 4.8: Researcher's experience - motivational principles

Motivational structures	• Which motivational structures should be incorporated in the DMEP?
Student support services	• How were the student support ser-vices introduced to the DMEP?
Assessment	• How were the identified assessment methods and criteria facilitated in the DMEP?

4.2.4 Technological principles

The difficulty of incorporating the practical aspects of Music Education over a distance has been referred to during the course of the research. Seeing that very little information is available concerning the instructional facilitation of practical skills,

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the researcher had to rely on her own knowledge and often instinct. According to the theory, the selection of the correct delivery mode should depend on factors like the developmental costs, the preferences of the designer, the available technologies and the cost - money and time - of the delivery material. All of these aspects were taken into consideration when the researcher's decision on the selection of media was made in Table 4.9.

TABLE 4.9: Researcher's experience - technological principles

Media selection	• How were the criteria for media selection applied to the DMEP? • Through which methods could the practical aspects of the DMEP be facilitated? • Could the media selection enhance the learning process? • How was the use of media in the DMEP explained to the learners?

4.3 INFORMAL QUESTIONNAIRE

A questionnaire was drafted so that the designer could determine how the learners experienced learning with the DMEP. After studying with this material, for the period of one year, three case studies were asked to evaluate the programme according to given criteria. This assessment was done informally. Through the questionnaire, the case studies were given the opportunity to evaluate the DMEP from their learning experience.

Two types of questions were asked. Firstly, questions were formulated were learners had to write their comments in paragraph form. The second type of question gives the learner a number of answers to choice from. In order to assess the value and standard of the programme, the same points of discussion as in the literature review were used. The questions asked in the questionnaire will be highlighted in this Chapter.

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4.3.1 Theoretical principles

All theoretical issues or criteria as stated in the literature review could not be assessed through the questionnaire. Learners would, for instance, not be able to assess the industrialisation principles of division of labour, mass production and automation. The same applies to the choice of instructional generation and distance education models used. In Table 4.10 the other issues addressed are listed.

TABLE 4.10: Questionnaire - theoretical principles

Learning theory	• Through the material you were prompted to understand and apply knowledge rather than remembering it off by heart. How successful was this strategy? 1 = Not successful at all 2 = Moderately successful 3 = Successful 4 = Very successful • If you chose numbers 1 or 2 could you give a suggestion to improve the understanding of the material?
Learning experience	• Describe when you studied the material. More than one answer can be selected. Did you study the material: 1 = Once off 2 = Per module 3 = Over weekends 4 = During holidays 5 = Whenever you got the chance 6 = I still refer back to it • Explain why you studied at this/these particular time(s).
Distance education theory	• How did you benefit from the opportunities to discuss learning related problems with your fellow learners and course presenters?

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4.3.2 Design principles

The core problem of this study focuses on the facilitation of the practical skills of Music Education over a distance. The method that was used to present the skills was discussed in Chapter 3. The question is, however, whether the method of facilitation conveyed the necessary information to the distance learner. The learners were not asked to evaluate the efficiency of the instructional designer, for they have no knowledge of instructional design principles. In Table 4.11 learners were asked if the following design principles were meaningfully employed.

TABLE 4.11: Questionnaire - design principles

The distance learner	• What were your learning expectations of this course? • To what extent were your learning expectations addressed through the learning material? 1 = Not at all 2 = Satisfactory 3 = I got more than I bargained for • What would you like to be added to the learning material?
Learning theory in relation to design	• How meaningful was the sequence of the learning material? Would you like the order of the modules to: 1 = Change? 2 = Be left unchanged? 3 = Be selected by yourself? • If you want the order to change - what do you suggest? • If you want to structure your own order- what would the sequence be? • Which aspects did you find appropriately challenging? • Which aspects did not challenge you?

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(Table 4.11 continued)

Course content	• How successful was the use of icons in the locating of the – Practical assignments – Summaries of important information – Learning outcomes. 1 = Could not locate them 2 = Had some trouble in finding them 3 = Found them easily • How successful was the explanation of the didactic methods involved in the teaching and presentation of the following skills? – Listening – Movement – Playing on instruments – Singing – Being creative – Reading notation 1 = I did not understand how I should present the skill 2 = It could be described by incorporating more examples 3 = I understood it clearly 4 = I found that I was already familiar with the methodology.

4.3.3 Motivational principles

The learners' responses concerning the motivational component of the learning material is particularly important to the success of the DMEP. The successful facilitation of the motivational factors will have a meaningful effect on the learning outcomes and/or results. In order to determine the value of the motivational aspects the questions listed under Table 4.12 were asked.

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TABLE 4.12: Questionnaire - motivational principles

Motivational structures	• To what extent did the DMEP motivate you in your studies? 1 = I found the material boring 2 = It was moderately stimulating 3 = I liked learning with this material 4 = Learning becomes a fun experience • Did the learning material motivate you to apply it in your work and community? 1 = yes 2 = no • If your answer was yes, describe how you could apply the material to your work and community involvement?
Student support services	• To what extent did you make use of the following student support services when you experienced study related problems? – A study group consisting of learners that meet occasionally or consult on the phone – A tutor – Your lecturers 1 = I did not know of such a support system 2 = Occasionally 3 = Often 4 = Very often 5 = This should be encouraged and implemented

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(Table 4.12 continued)

Assessment	• How did you experience each of the following methods of assessment? Refer in your answer to the feedback given, answers at the back of the book and the effectiveness of this type of assessment. – Practical presentations – Group discussions – Written assignments – Group assessment 1 = Were not used 2 = Did not find it useful 3 = Useful 4 = I learned a lot

If the design is meaningful then the learner will be motivated, encouraged and well briefed concerning the learning programme and its use. The design principles have been discussed in detail in Chapter 3. The compilation of assessment for design principles in this section will focus on the learners' experience.

4.3.4 Technological principles

The selection of the correct technological delivery mode is very important in the DMEP. The variety of backgrounds that the learners are from and their available technologies could be stated as reasons. In choosing the most appropriate media the designer should focus on where, when and how learners will be studying. These questions will be answered through Table 4.13.

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TABLE 4.13: Questionnaire - technological principles

Media selection	• To which of the listed media do you have access? – Video machine – CD-player – Overhead projector – Cassette player – Computer – Computer with CD-drive 1 = I have one at home 2 = There is one at school 3 = I could get hold of one, but with difficulty 4 = Impossible to get hold of one • Discuss how the audio and video cassette enhanced the learning process? • What would you like to be added to these cassettes? • How did the use of media contribute to your understanding of the practical music skills? Do you have any suggestions to make the facilitation even more effective?

CONCLUSION

Having structured the evaluation of each component of the DMEP, the success of the programme can be determined. It is, however, important to remember the circular structure of both action research and the systems approach, highlighting the recurrence of the evaluation process. The problems identified through the assessment will be solved by once again analysing the target population and their needs, the course content and the formulating of learning outcomes. The problems identified will then need to be redesigned according to the structure and style of the text, the correct use of guidance structures and the facilitation of self-assessment questions. It is, however, possible that the problem lies with the development sector. If this is the case, the instructional designer should evaluate the effectiveness of the delivery mode.

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Only after all the problems are addressed, will the programme be implemented and will the learner and designer once again get the chance to evaluate the effectiveness. This recurring design process will continue until the designer is satisfied that this is a meaningful learning programme. The designer should also bear in mind that the designed programme will need to be reassessed as time progresses and as the parameters of the DMEP change. These changes could include learning population, learner needs, course content, availability of delivery modes and the structure of the course.

Having completed the evaluation the DMEP, step 4 of the action model can be introduced. Step 4 will focus on a **reflection** on the programme that was designed. The reflection will be based on the answers of the assessment questions. To determine if the design was successful, the outcomes of the evaluation will be discussed in Chapter 5.

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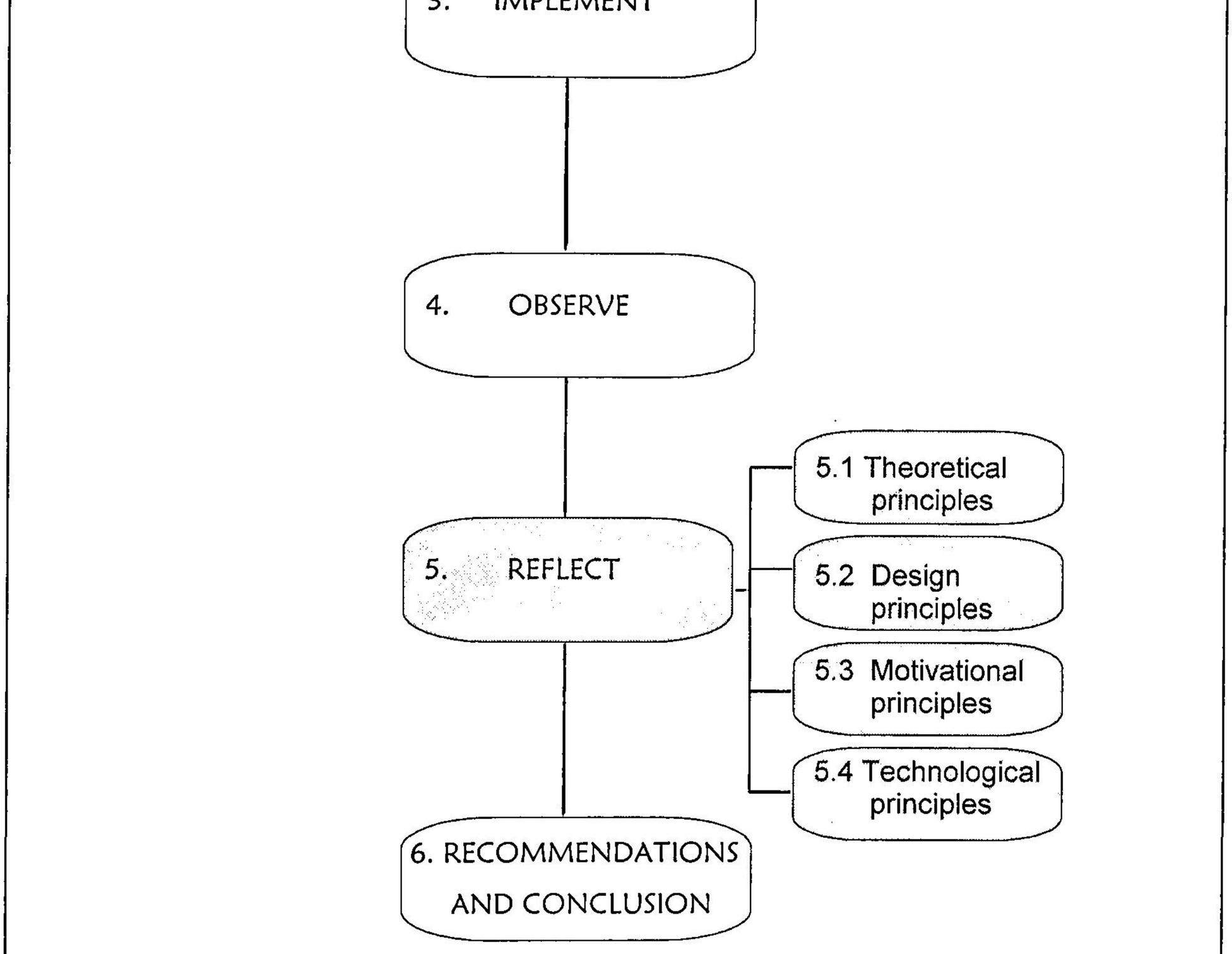
CHAPTER 5

REFLECT



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INTRODUCTION

The focus of Chapter 4 was on observing the effectiveness of the DMEP by means of various data collection structures. Davidoff (1990:42) suggests that as many as possible resources should be used for gathering information. 'Observation means gathering information from as many resources and perspectives as you regard as helpful and necessary, so that you will be able to make meaning of your observations in your reflection' (Davidoff 1990:43).

The focus of this chapter will be on the reflection on the gathered data. This involves a critical revision of the designed programme in order to determine the effectiveness of its design. The critical observation will once again involve the experts' opinions, the researcher's own experience as well as the learners' responses as addressed in the informal questionnaire.

Unlike the answers to the literature review and researcher's experience, the answers to the questionnaire will be tabulated. It is important to note that the answers to the questionnaire will be given by case studies from the three identified learner groups. The informal questionnaire's answers are further supported by the comments made by each case study during an interview. The case studies were selected according to their diverse educational backgrounds and levels of experience. The learners are therefore divided into the following categories:

- African and foreign learners;
- teachers with a degree or teachers' diploma; and
- residential learners furthering their education.

These three groups are not watertight compartments. Most of the African or foreign learners are indeed also teachers, but they are classified separately because of their language preferences and study experience. The characteristics of each group as well as the selected case study will be introduced in the following paragraphs.

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■ African and foreign learners

The first group of learners discussed are African and foreign learners. Most of these learners are from South Africa's neighbouring countries or come originally from other countries such as Germany and China. These learners have already obtained at least a BA Mus degree or BA degree with music as a subject and/or a teacher diploma or the equivalent thereof. These learners often lack the necessary pedagogical background of Music Education as practised at the University of Pretoria. The pedagogical backlog is increased by the fact that most are not English first language speakers. These learners often experience problems understanding the information and expressing themselves effectively. Although many of these learners are also teachers by profession, they are listed separately because of the language and educational barrier.

• African learner case study

The African learner that was selected is a male student of 33 years of age. He teaches Music at a teachers college in the North West Province. Currently, he is busy with his BA Mus degree but because of his work schedule and distance from Pretoria, he made use of the DMEP for study material and attended the three contact sessions prescribed for the course. Because he is not yet an Honours, student his assignments were drafted to fit his level of knowledge and expertise. The same methods of assessment were, however, used as in the Honours programme. This student will therefore be able to assess every level of the DMEP as a BMus Honours student would have done.

■ Teachers with a degree or teachers' diploma

The second group of learners enlisted for the Music Education Honours course are teachers who have been in practice for a number of years. These teachers often experience a need to further their qualifications and are looking for new inspiration and ideas from the lecturers and their fellow learners. For many of these teachers it has been a long time since they last studied and they find it difficult to cope with their studies and work load. These teachers often find that the methods that they have been using are outdated. They therefore have to adapt to the latest methods and trends in Music Education teaching. These trends include the principles of Outcomes-based facilitation, computerised teaching, research methods and academic approaches. Although the teachers may be practically highly skilled, they

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are academically not as well advanced as recently graduated learners. Their many years of practical teaching experience are to their advantage, but they still need to balance this with increased academic skills.

- **Teacher case study**

The teacher is a 51 year old female student with 30 years of teaching experience. She is currently teaching at a Private English School in Pretoria. She did a PTD (Primary Teacher's Diploma) as well as a FDE (Further Diploma in Education) in music. Although she has 30 years' experience, she last studied in 1987. She therefore needs to ensure that her knowledge and teaching skills are still up to date with the latest developments in the field of Music Education.

- **Residential learners furthering their education**

The third group of learners are learners who have recently completed their BMus or BA Mus courses at the University of Pretoria or other South African universities. These learners have significant academic background, but lack teaching experience. They are usually residential, full time learners. The DMEP has to be compiled so as to stimulate their advanced subject knowledge and give them the opportunity to develop their practical skills.

- **Residential case study**

The case study for a residential student is a late starter, female student in her early forties. After completing her BA Mus degree at the University of Pretoria in 1997, she studied an Honours degree in Biblical studies. This student has therefore been a student since 1995 and has no formal teaching experience.

Because of the fairly small number of learners enrolled in the DMEP, only one learner from each group was used for the case study. The learners were selected to fit the profile of the selected three groups. The three case studies' exact answers to the questionnaire and interview will be given in tabulated form. This will enable the researcher to compare the learners' experiences. It is possible that the literature review, researcher's experience and questionnaire have varying responses and results. This will give a clear indication of the success or otherwise of the programme. All of these should be taken into consideration when the programme is

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refined. The outcome of the reflection is to determine where the designed programme can be improved.

The outline of this chapter will be based on the first of the three steps of reflection as suggested by Davidoff (1990:46) in his action research cycle. These steps involve:

- *sorting out* the meaning of all data that was gathered;
- *critically evaluating* the consequences of the designed action; and
- using this evaluation to help *plan* the *next action cycle.*

In order to sort the data for meaning, the questions asked in Chapter 4 under the literature review, researcher's experience and informal questionnaire were answered. The theoretical, design, motivational and technological principles of the three observation structures will be grouped together. By doing so, the outcome of the three evaluation structures can be compared. This will enable the researcher to determine the success of the DMEP.

A short summary of the questions asked and their headings will be tabled before the questions will be answered. The three evaluation structures answer the questions of:

- what does the literature say?
- how did the researcher experience it? and
- did the learners experience it differently?

By tabulating the questions, the interdependence of the literature review, researcher's experience and informal questionnaire can be highlighted.

5.1 THEORETICAL PRINCIPLES

The theoretical principles form the basis of an instructionally designed programme. Although no literature could be found on the design of a DMEP, these questions will enable the researcher to determine how the principles of instructional design and distance education can be applied to the field of Music Education.

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TABLE 5.1. Questions on learning theory

Theoretical principle	Literature review	Researcher's experience	Informal questionnaire
Learning theory	• Which theory or combination of learning theories should be selected to form the basis of the design of the DMEP?	• How were the learning theories employed in the DMEP?	• Through the material you were prompted to understand and apply knowledge rather than remembering it off by heart. How successful was this strategy? 1 = Not successful at all 2 = Moderately successful 3 = Successful 4 = Very successful • If you chose numbers 1 or 2, could you give a suggestion to improve the understanding of the material?

- **Which theory or combination of learning theories should be selected to form the basis of the design of the DMEP?**

In order to answer this question, the key aspects of constructivism and behaviourism need to be presented. Curricula have traditionally been sequenced according to the behaviouristic belief that the best way to learn is to master small bits of information and then integrate them into major concepts. As a result, assessment practices focus on the measurement of knowledge and skills and not on performance and understanding (North Central 1999).

The need for assessment of learners' performance and their understanding of assessment structures led to the formulation of a learning theory where active

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involvement in the learning process is key. According to the constructivist learning approach, learners should be considered to be individuals in the learning process, each bringing their own background and needs to the learning process. To select the most appropriate learning theory, constructivism and behaviouristic philosophies need to be compared. Table 5.2 summarises the key principles of behaviourism and constructivism.

TABLE 5.2: Behaviourism compared to constructivism (Houghton Mifflin 1999)

Behaviourism	Constructivism
Learning is inactive.	Learning is active.
Individuals are passive recipients of knowledge.	Individuals construct knowledge.
Learning occurs through programmatic, repeated activities.	Learning develops from what the learner already knows.
Authoritative facilitation.	Strategic and meditative facilitation.

Table 5.2 can be used as a reference for indicating how and which of these principles were used in the design of the DMEP. By linking each of these aspects with the designed DMEP, the facilitator could determine what learning theory or selection of learning theories should be chosen for the DMEP.

- **How were the learning theories employed in the DMEP?**

In selecting the most appropriate learning theory, the principles of each theory and the application to distance Music Education need to be considered. Because of the diversity of learners enrolled for the DMEP, not only one learning theory could be selected. The facilitator needed to select a learning strategy that would involve different aspects and methods of learning. This will enable learners to follow the DMEP regardless of their educational background and current level of expertise. This approach to learning is in line with the beliefs of lifelong learning and individualised instruction where the emphasis is not on the entry level of learning but on the outcomes reached at the end of the learning sequence. The following aspects from behaviourism and constructivism were incorporated in the DMEP.

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- **Behaviourism**

Behaviourism is prominent in the roots of the systems approach to instructional design. The task analysis of the systems approach and the specification of behavioural objectives are related. Gagné, Briggs and Wagner in Burton (1996:58) identified several principles that apply centrally to behavioural instructional design processes. These include the:

- identification and stating of goals and objectives;
- validation and measurability of outcomes and standards; as well as the
- adaptability of the programme to learner behavioural changes.

Through this process, learning material is broken down into small manageable chunks, each followed by a question which the learner can almost never answer incorrectly. The outcome is to reinforce learning through immediate response and the reward of getting it right (Black 1995). These principles of facilitating the learners' response and behaviour were followed in the DMEP.

The learning material of the DMEP was divided into modules of learning. Each module is further divided into manageable learning chunks. After a section is completed, a summary of the content is given. Learners then have the opportunity to apply the newly acquired knowledge by means of various activities and assignments. Through the activities learners get the opportunity to respond to the learning process and reinforce their knowledge. If learners answer incorrectly, they are given guidelines on how to rectify their mistakes. Learning is consequently repeatedly reinforced. Behaviourism has therefore proven to be useful in managing both behaviours and the instructional delivery.

- **Constructivism**

In constructivism the emphasis is placed on learners, their experience and contribution to the learning process. Learning should be facilitated so as to give the learners the opportunity to gain knowledge and understanding through problem-solving activities. The constructivist viewpoint acknowledges the diversity of learner backgrounds and takes their experiences into account.

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Through the DMEP, learners were given the opportunity to apply their knowledge to practical environments. Learners were also encouraged to become creative and active participants in the learning process. Learners should discover how the knowledge can be applied to their particular educational and cultural environment. In this process the facilitator is considered to be a mediator between the learners' entry knowledge and the supposed outcomes of the course.

According to constructivist theory, these outcomes should be monitored through a variety of measurement structures. These measurement structures were used as a formative evaluation system in which the learners' progress was constantly monitored and adapted. In the DMEP, learners are encouraged to evaluate their own progress, take part in performance assessments as well as group assessments. Collaborative learning is therefore facilitated.

Through combining the principles of behaviourism and constructivism the facilitator of the DMEP could create a learning environment that is adaptable to a variety of learner needs and responses.

Although the learners were not made aware of the specifics of the different learning theories, they were asked to comment on the effectiveness of the facilitation of knowledge rather than its memorisation. Their comments are given in Table 5.3.

TABLE 5.3: Learning theory case study answers

- Through the material you were prompted to understand and apply knowledge rather than remembering it off by heart. How successful was this strategy?

  1 = Not successful at all
  2 = Moderately successful
  3 = Successful
  4 = Very successful

African learner	Very successful.
Teacher	Very successful.
Residential learner	Successful.

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(Table 5.3 continued)

• If you chose numbers 1 or 2, could you give a suggestion to improve the understanding of the material?

African learner	Not applicable.
Teacher	Not applicable.
Residential learner	Not applicable.

The facilitation of the understanding of knowledge rather than remembering it off by heart was considered to be the preferred learning method for the three case studies. This was achieved by implementing their newly acquired knowledge and skills in their various practices. The next theoretical principle under discussion is the learning experience. Table 5.4 summarises the questions asked.

TABLE 5.4: Questions on the learning experience

Theoretical principle	Literature review	Researcher's experience	Informal questionnaire
Learning experience	• Why should deep approach learning be encouraged? • To what extent should meta-cognitive skills form part of the distance Music Education learning programme?	• How was deep approach learning facilitated in the DMEP?	• Describe when you studied the material. More than one answer can be selected. Did you study the material: 1 = Once off 2 = Per module 3 = Over weekends 4 = During holidays 5 = Whenever you got the chance 6 = I still refer back to it • Explain why you studied at this/these particular time(s).

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- **Why should deep approach learning be encouraged?**

In order to facilitate the most meaningful learning experience, deep and surface approach learning need to be compared. By doing so, the method applicable to the DMEP and its learners can be selected. Table 5.5 highlights the differences between deep and surface approach learning.

TABLE 5.5: Deep approach learning compared with surface approach learning

Deep approach learning	Surface approach learning
Learning is enjoyable.	Learning is a demand to be met.
Learning is meaningful.	Learning is means to an end.
Seeks personal meaning.	Personalised meaning is avoided.
Information experiences are related.	Information experiences are unrelated.
New meaning is formulated.	Information is reproduced.

From Table 5.5 it becomes apparent that the DMEP should aim at facilitating deep approach learning. The deep approach to learning enables learners to take control of and become actively involved in the learning process.

- **To what extent should meta-cognitive skills form part of the distance Music Education learning programme?**

The function of meta-cognitive skills is to help learners take control over the learning process. Meta-cognition makes learners aware of the learning process, enabling them to understand the knowledge they are studying. According to the literature review, understanding of the learning process will enable learners to develop their long-term memory. Meta-cognitive skills enable learners to utilise their knowledge through problem-solving and self-questioning exercises.

- **How was deep approach learning facilitated in the DMEP?**

The DMEP aimed at involving the principles of deep approach learning through facilitating a variety of learning stimuli and activities in order to make learning enjoyable. To make learning meaningful and personalised, learners were encouraged to apply the information to their cultural and working environment. The outcome was to guide learners in the application of the learned information in various circumstances. New meaning was therefore created.

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TABLE 5.6: Learning experience case study answers

- Describe when you studied the material. More than one answer can be selected. Did you study the material:

  1 = Once off
  2 = Per module
  3 = Over weekends
  4 = During holidays
  5 = Whenever you got the chance
  6 = I still refer back to it

African learner	Per module. I still refer back to it.
Teacher	Whenever I got the chance. I still refer back to it.
Residential learner	Whenever I got the chance.

- Explain why you studied at this/these particular time(es).

African learner	I used it per module because it was designed in such a way that attention be given first to the concepts, skills and theoretical aspects of music before it is implemented. I also refer back to it from time to time as it has since be-come my guide, which I refer to, for topics relevant for my college learners.
Teacher	I would not be able to retain the knowledge if I were to study it all at once. I found it very useful to refer back to the different components and sections, just to refresh my mind, as it is impossible to remember everything after reading it through once.
Residential learner	I had to fit my studies into my family life and not neglect my daily chores. I endeavoured to study during the mornings. Afternoon's I'm Mom's taxi.

From their answers it is apparent that the three learners are adult learners with other responsibilities apart from being learners. They prefer to study whenever and as much as their circumstances permit. It was also suggested that the material can be used as a resource for their respective working and/or teaching environments.

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The distance education theory questions facilitated under the theoretical principles are given under Table 5.7.

TABLE 5.7: Questions on distance education theory

Theoretical principle	Literature review	Researcher's experience	Informal questionnaire
Distance education theory	• What are the principles of industrialisation? • What are the benefits of individualised instruction in a distance education programme? • What are the advantages of two-way communication for the DMEP?	• How can the theory of industrialisation be adapted to the DMEP, having small learner numbers and only one facilitator? • How were the needs of the independent learner met through the DMEP? • How could two-way communication be facilitated in the DMEP?	• How did you benefit from the opportunities to discuss learning related problems with your fellow learners and course presenters?

- **What are the principles of industrialisation?**

The theory of industrialisation is used to manage industries involving large numbers. The management principles include:

- division of labour;
- structuring of mass production;
- automation of the production process; and
- quality control.

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In order to manage a large industry these principles should be applied. Instructional designers have discovered that these principles could be successfully applied to the field of instructional design.

- **What are the benefits of individualised instruction in a distance education programme?**

The literature review on learning theory and the learning experience highlights the importance of individualised instruction in a distance teaching environment. Through individualised instruction:

- the learning experience is diversified;
- learning generates an experimental process;
- lifelong learning is facilitated; and
- learning becomes personalised.

In a distance education course where the facilitator does not have control over the learning process, individualised instruction is beneficial. The shift of control from the facilitator to the learner enables the distance learner to take responsibility for the learning process. Learning can therefore become personalised and structured according to each individual learner's requirements.

- **What are the advantages of two-way communication for the DMEP?**

The lack of contact between learners and the facilitator in the DMEP can result in the learner feeling isolated. In order to monitor and facilitate effective learning, it is imperative that communication structures are put in place. By facilitating effective communication:

- learners are motivated;
- learner problems can be addressed; and
- productive study methods can be facilitated.

The effectiveness of the communication does, however, depend on the choice of media and student support infrastructure that is generated. Learners need to be

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able to make contact with the facilitator or tutor whenever the need arises. This will result in the distance learner becoming part of a learning community.

- **How can the theory of industrialisation be adapted to the DMEP, having small learner numbers and only one facilitator?**

Although the DMEP does not involve large learner numbers, the programme should still involve the setting of standards and quality control. Furthermore the structures for dealing with larger learner numbers and the need for division of labour should be put into place, for future increase in student numbers.

- **How were the needs of the independent learner met through the DMEP?**

Through evaluation of the learner and learner needs it was decided that the learner should be handled as an individual in the learning process. The design should therefore incorporate the individual learner's needs and should find ways of making the learner experience the learning process as an active participant. In order to stay in line with Curriculum 2005 (South Africa 1997), the learning material was written with lifelong learning in mind. This was achieved by writing the material in a user friendly manner and making it applicable to learners from various age groups, educational and cultural backgrounds.

- **How could two-way communication be facilitated in the DMEP?**

Communication in the DMEP was facilitated through encouraging learners to become actively involved and take responsibility for their learning. The learner could, thereby, experience the learning process on a more personal level. By asking questions directly from learners and by facilitating answers through the given assignments, two-way communication was encouraged.

Submitted assignments were also returned to learners with some guidelines for improvement and encouragement to try again and resubmit the work. During the contact sessions, learners were also encouraged to ask questions concerning their studies and learning problems.

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TABLE 5.8: Distance education theory case study answers

• How did you benefit from the opportunities to discuss learning related problems with your fellow learners and course presenters?	
African learner	During the contact sessions, we often held discussions, allowing us to share ideas. This made us realise that there is a need to come together once in a while, to help clarify certain issues - especially those of a practical nature for e.g. movement and instrumental playing.
Teacher	I don't think there were many opportunities for discussing problems with fellow learners. When we were divided into groups, we had to discuss activities, rather than problems.
Residential learner	It gave me more ideas that could be applied. Various alternative teaching methods were also highlighted. The environment dictates the method used, although the environment can be applied to suit the material being taught.

The three learners' experience of the group discussions differs. The residential and African learner felt that the group discussions were a meaningful part of the learning process. They saw the group discussions as an opportunity to share ideas and get to know one another.

The teacher, on the other hand, experienced a need for discussing teaching related problems. She wanted to discuss the problems of her specific environment with fellow teachers in order to resolve them.

In Table 5.9 the questions regarding the choice of a distance education model is given. No questions were asked in the informal questionnaire because learners would not be able to evaluate the effectiveness of these models.

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TABLE 5.9: Questions on distance education models

Theoretical principle	Literature review	Researcher's experience	Informal questionnaire
Distance education models	• Which distance education model(s) should be selected for the DMEP?	• How were the selected distance education models applied to the DMEP?	• *No questions asked.*

- **Which distance education model should be selected for the DMEP?**

The selection of a distance education model depends to a large extent on the mode of delivery. The delivery mode or media generation specifies how information will be communicated over the distance. Table 5.10 highlights the three generations of distance education and their corresponding delivery modes.

TABLE 5.10: Three generations of distance education

Generation	Delivery mode
First generation	• Single media. • Mostly paper-driven material.
Second generation	• Multi-media approach. • Paper-driven material is used, corresponding to video and audio cassettes.
Third generation	• Tele-media. • Interactive television, telephones, computers and multi-media workstations are introduced.

Apart from the selection of models according to delivery modes, distance education models can also be divided into three basic categories. These categories and their principles are outlined in Table 5.11.

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TABLE 5.11: Classification of distance education models

Model	Institution-centred	Person-centred	Society-centred
Application	• Formal education systems.	• Small learner numbers.	• Mass education.
Methodology	• Behavioural approach.	• Humanitarian approach.	• By rote learning.
Outcome	• Efficient education systems.	• Personalised instruction.	• Changes social structure.

In selecting a distance education model, the facilitator should compare the proposed models. By doing so, the model best suited for the DMEP could be selected.

- **How were the selected distance education models applied to the DMEP**?

For the purposes of the DMEP, a second generation distance learning programme was selected. The second generation model made it possible for the facilitator to incorporate multi-media structures in the designed programme. The DMEP makes use of a paper-driven package, a video and sound cassette. The result was the selection of a multi-media delivery mode.

It was further decided that a person-centred model should be applied to the DMEP. The person-centred model focuses on the individual learners' experience of the learning process. This model could be easily adapted to the DMEP, seeing that it enabled the learner to determine the learning pace and time of instruction. The person-centred model, focusing on individuals, could then be successfully applied to the DMEP with its small learner numbers.

As with the questions on the selection of a distance education model, no questions were asked of the case studies concerning the selection of an instructional theory. The questions regarding the literature review and researcher's experience are given in Table 5.12.

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TABLE 5.12: Questions on instructional design theory

Theoretical principle	Literature review	Researcher's experience	Informal questionnaire
Instructional design theory	• Which of the four instructional generations best suit the needs of the DMEP?	• How could the principles of the instructional design generations be applied to the DMEP?	• *No questions asked.*

- **Which of the four instructional generations best suit the needs of the DMEP?**

As with the distance education theory, the selection of an instructional theory should be based on a comparison of the available theories. By comparing the theories, the facilitator could select the one that was most applicable to the DMEP's parameters. Instructional design theory is traditionally divided into four generations. Table 5.13 highlights the key aspects of the four generations of the instructional theories.

TABLE 5.13: Comparison of instructional design theories

Parameter	First generation	Second generation	Third generation	Fourth generation
Methodology	• Behaviourism.	• Behaviourism.	• Towards constructivism.	• Constructivism.
Procedures	• Linear sequence. • Fragmentation. • Passive learning.	• Parameter analysis. • Integration.	• Linear sequence of assessment, design, development and production.	• Problem-solving.
Facilitation	• Not defined	• Subject specialist and designer.	• Instructional designer.	• Subject specialist becomes designer.
Assessment	• Formative.	• Summative.	• Feasibility and formative.	• Situational.

Table 5.13 illustrates the methodology, procedures, role of the facilitator and assessment criteria for the four generations of instructional design theories. The

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facilitator could therefore compare the generations and select the most appropriate parameters from each.

- **How could the principles of the instructional design generations be applied to the DMEP?**

A combination of instructional design models was selected for the DMEP. By incorporating various aspects of different models, the facilitator could design a programme that was custom-made for the DMEP. It is important to note that all aspects of the generations listed were not incorporated. Only those components aiding the DMEP were selected. A discussion of the selected principles will follow:

- **First generation**

From first generation instructional design the model of action research incorporating formative evaluation was taken. The division of learning material in manageable learning structures was also selected.

- **Second generation**

The pedagogical prescriptions as listed in second generation instructional design were adapted to:

  - establish learning outcomes;
  - analyse the target population;
  - review the learning content; and
  - integrate the knowledge and skills associated with the learning process.

The analysis of the various parameters of the DMEP enabled the facilitator to design learning for each individual learner.

- **Third generation**

For the purposes of the DMEP, the third generation instructional design model was not made use of. This is mostly due to the fact that in the third generation the instructional design is handled by a qualified instructional designer. The subject specialist therefore does not form part of the design process.

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- **Fourth generation**

The problem-solving procedure or fourth generation instructional design was also selected. According to the fourth generation, the subject specialist can become the instructional designer. This enabled the researcher to design and develop a programme that could facilitate the practical components of Music Education.

The five domains of the instructional design process - analysis, design, production, implementation and maintenance - were also applied to the DMEP. This enabled the subject specialist to design each phase of the programme according to the selected instructional model as tabulated in Table 5.14. After an instructional theory or combination of theories were chosen the instructional designer should decide on the instructional model to incorporate in the design.

TABLE 5.14: Questions on instructional design models

Theoretical principles	Literature review	Researcher's experience	Informal questionnaire
Instructional design models	• What is the value of the systems approach model to the DMEP?	• How could the systems approach be applied to the DMEP?	• *No questions asked.*

- **What is the value of the systems approach model to the DMEP?**

The purpose of instructional design models is to facilitate quality instructional design. Through the systems approach, the design sequence of instructional practice is highlighted. The sequence comprises:

- analysis;
- design;
- development;
- implementation; and the
- maintenance cycle.

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The systems approach is considered to be a cyclic approach. Any stage of the design sequence can therefore re-occur throughout the design process. Two quality assurance structures are built into the systems approach, namely formative and summative evaluation. The formative evaluation assesses the programme whilst it is being designed. Summative evaluation, on the other hand, is used to assess the completed programme. After both these assessments, the necessary changes can be made or maintenance can be done to the designed programme. This enables the instructional designer to facilitate an effective learning process.

- **How could the systems approach be applied to the DMEP?**

The systems approach highlights the design structure of the instructional design process. This enabled the researcher, who is a novice instructional designer, to design a structured learning programme based on the principles and techniques of instructional design theory. The five phases of the systems approach could easily be incorporated in this study as the systems approach is similar to the phases of the action research model used in this research. After the design was completed and the necessary problems identified, the cycle was repeated. This process was reiterated until the facilitator was satisfied with the programme's outcomes.

The learners' opinions concerning the design process were not asked, due to a lack of background knowledge on their part. The evaluation of the instructional design process leads us to the manifestation of the design principles.

5.2 DESIGN PRINCIPLES

Although the design procedure was extensively explained in Chapter 3, the aim of this chapter is to highlight the most important principles concerning the design of the DMEP. Therefore some duplication of facts may occur. It is, however, necessary to state these principles once again in order to determine if the design was indeed successful. Table 5.15 summarises the questions asked regarding the distance learner.

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TABLE 5.15: Questions on the distance learner

Design principles	Literature review	Researcher's experience	Informal questionnaire
The distance learner	• What are the principles of individualised instruction? • What choices should learners be given regarding content, methods used and materials?	• How was the material structured to suit the individual learners' learning requirements?	• What were your learning expectations of this course? • To what extent were your learning expectations addressed through the learning material? 1 = Not at all 2 = Satisfactory 3 = I got more than I bargained for • What would you like to be added to the learning material?

- **What are the principles of individualised instruction?**

In distance education, the learner has little contact with the facilitator and fellow learners. This may result in the learner feeling isolated. When designing material for distance education purposes, the instructional designer should regard the learners as individuals in the learning process, each experiencing the learning process differently. According to the literature review, four questions regarding individualised instruction should be asked when a distance education course is being designed. These questions and their answers will be given in Table 5.16.

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TABLE 5.16: Individualised instruction

QUESTIONS	ANSWERS
• What is to be individualised?	• Study pace. • Study time. • Media selection. • Learning methods. • Alternative and supplementary learning materials. • Learning outcomes.
• When does individualisation take place?	• Throughout the learning process.
• Who decides?	The decision may be made by either of or a combination of the following role players: • learner in choosing a course. • facilitator prescribing individual learning outcomes. • system's design based on the principles of individualised instruction.
• How does the system adapt to the individual?	The system adapts through the: • style and format of the material. • media. • evaluation structures. • facilitator and tutor. • management systems.

The instructional principles concerning the manner in which the system is adaptable to the individual's needs are not clearly explained through the table. According to the literature review, the instructional designer should incorporate the following aspects, as highlighted in Table 5.17, in order for instruction to be individualised. The left column indicates the design factor whilst the right column lists the corresponding design principles.

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TABLE 5.17: Design principles of individualised instruction

DESIGN FACTORS	DESIGN PRINCIPLES
Style and format of the material	• Write in user friendly manner. • Use short sentences and paragraphs to facilitate better understanding. • Divide the content into manageable modules. • Encourage learners to plan and pace their learning.
Media	The media selected should • be consistent between modules; • communicate information successfully; • be available to all learners; • interact with the learning process; and should • enhance the learning process.
Evaluation structures	• Learner takes control. • Facilitation of self-assessment activities. • Guidance structures.
Management systems	Management is based on the theory of industrialisation and includes the handling of • mission statement; • budget; • goals and objectives; • resources; • design process; and the • evaluation of the programme.

- **What choices should learners be given regarding content, methods used and materials?**

In order for learning to be completely individualised, learners should be given the opportunity to decide what, how and through which delivery mode they would like to study. Each learner can then structure the learning process to suit his/her standard, background and access to delivery modes.

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- **How was the material structured to suit the individual learners' learning requirements?**

This question will be answered by taking the answers to the questions on *what* is to be individualised, *when* the material is to be individualised, and *who* decides as reference.

- **What is to be individualised?**

  - **Pace and time of study:** Seeing that the material is studied at a distance, the learners can decide on the pace, time and method of studying. By alternating learning with activities, the learning experience was diversified. Learning was facilitated through the type of assignments that were given in the DMEP. This was done by encouraging learners to become active participants in the learning process and to apply their knowledge to their specific working and/or teaching environments.
  - **Media selection:** The DMEP is presented through a number of delivery systems. The bulk of the programme is presented as a paper-driven package which is supported by a video and audio cassette. In order to study with the programme, learners need to have access to a video machine and audio player. The diversity of learners enrolled in the DMEP should be taken into consideration when selecting a delivery system. The facilitator should select a delivery mode that is accessible to all enrolled learners of the DMEP.
  - **Method of learning:** The various educational and cultural backgrounds of the learners were taken into consideration when learning was facilitated. The researcher had to bear in mind what the different learner groups might need. The material had to be compiled so that the teachers, learners from other cultures and learners continuing their studies all found the material stimulating and interesting. Deep approach learning was therefore encouraged through facilitating active involvement in the learning process. Learners thus had to take responsibility for their own progress and personalise the learning experience. This was achieved by incorporating various activities, learning theories and stimulating learners to apply the learning material to their unique teaching and working environments.
  - **Choice of alternative and supplementary material:** Although supplementary material was given with the DMEP, learners were also encouraged to consult any

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of the books mentioned in the bibliography as well as topic related books from libraries or any other sources. Learners were therefore encouraged to do further reading on the aspects they were interested in or wanted more information on.

– **Learning outcomes:** General learning outcomes were formulated for the DMEP. The learning outcomes were stated so as to guide the learner in the purpose of the learning process. By reading the learning outcomes, learners were told what they should be able to do by the end of the learning process. The learning outcomes are therefore not compiled with specific learners in mind. In the DMEP, learners are asked whether they have reached the proposed outcomes. If not, they are referred back to the material in order to ensure that they gain the necessary information. Learners are thereby encouraged to control and manage their own learning process.

- **When does individualisation take place?**

Throughout the design of the DMEP, the facilitator aimed at structuring the material to suit the needs of the individual learners.

- **Who decides?**

– **The learner:** The BMus Honours course for which the DMEP was compiled consists of three prescribed subjects, a dissertation and one subject of the learners' own choice from a list of available subjects. Learners are given choices regarding the overall composition of their course, but no choices are given regarding the content of the DMEP. Because the material is partly used as an introduction to the course, all modules are compulsory. This can to some extent ensure that the learners all have the same background knowledge before continuing with the material.

– **The facilitator:** Most of the design decisions for individualisation were made by the facilitator. These decisions include the aspects mentioned under what is to be individualised.

– **The course:** Through all of the above methods the course was adapted so as to suit the learning needs of the individual learner. The facilitator had to revise the DMEP through the formative learning process in order to design the material to be adaptable to the needs of each individual learner.

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- **How does the system adapt to the individual?**

– **Style and format of the material:** The DMEP was written in a user friendly and informal style. The material thereby attempted to make learners experience the information as if they were being taught personally. In the preface to the DMEP, learners are welcomed to the course and guided through the use of the DMEP. It is suggested that learners follow the sequence of modules, numerically. Learners are not given the opportunity to decide on the format of their specific individual learning programmes.

– **Evaluation structures:** The evaluation structures employed in the DMEP are based on the principles of assessment of Curriculum 2005 (South Africa 1997). A variety of evaluation structures are therefore employed. Learners are encouraged to evaluate themselves by using the suggested answers at the back of the DMEP. Evaluation is therefore done on a continuous basis. During the contact sessions, learners were encouraged to apply the information they studied in practical presentations. In these presentations group and peer evaluation was encouraged. It was mostly in these presentations and through written assignments that the facilitator got to assess the standard of learners' work and understanding. Continuous evaluation was further encouraged by giving learners regular feedback and affording them the opportunity to improve on their mistakes. Evaluation is therefore, mostly, not a one off experience.

– **Management systems:** In order for the design to be successful, the design process and product design should be managed. According to the theory of industrialisation, the work load should be divided between various people involved in the design process. The management of the design process can therefore be done by someone other than the facilitator. In the DMEP the facilitator was responsible for the design and management of the programme, excluding the budget. The financial aspects were managed by personnel within the department. The control of the design and management by one person is not necessarily good practice. It is better to divide the work amongst a number of lecturers in order to ensure a successful and quality assured end product.

The selection of media and role of the facilitator and tutor will be discussed further on in this chapter.

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TABLE 5.18: Distance learner case study answers

<table>
<tr><td colspan="2">• What were your learning expectations of this course?</td></tr>
<tr><td>African learner</td><td>I wanted to apply the information to the teaching of children who are still inexperienced as well as for teachers who must achieve the realisation of the importance of Music Education in the school curriculum.</td></tr>
<tr><td>Teacher</td><td>I wanted to learn skills, concepts and other information which enable me to become a better teacher. I would also like to see some information regarding concert and classroom etiquette included in the learning programme.</td></tr>
<tr><td>Residential learner</td><td>I hoped to broaden my horizons to give greater flexibility in the presentation of material, thereby enhancing the learning experience. One needs to be able to apply what is taught.</td></tr>
<tr><td colspan="2">• To what extent were your learning expectations addressed through the learning material?

1 = Not at all
2 = Satisfactorily
3 = I got more than I bargained for</td></tr>
<tr><td>African learner</td><td>Satisfactorily.</td></tr>
<tr><td>Teacher</td><td>Satisfactorily.</td></tr>
<tr><td>Residential learner</td><td>I got more than I bargained for.</td></tr>
<tr><td colspan="2">• What would you like to be added to the learning material?</td></tr>
<tr><td>African learner</td><td>Some more culturally related music experiences and examples should be added. There seems still to be a lot of emphasis on the Western traditional music and methods of teaching and experiencing music. More examples of the musics of Africa should be incorporated and facilitated. This could include more South African music examples and songs in South African languages. The concepts of music would also be better described if some illustrations were added and not just definitions given.</td></tr>
</table>

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(Table 5.18 continued)

Teacher	It would be a little more interesting if more pictures could be used. Sometimes it would make it easier to read through quickly if more information was written in point form.
Residential learner	A module using the latest technology and how to overcome failures in modern technology.

All three learners wanted to increase their skills and abilities as music educators. From the case studies' answers, it is apparent that the provided material did sufficiently address the learners' expectations. It was, however, suggested that the following aspects be added:

- information regarding the latest technological developments;
- a module on classroom and concert etiquette; as well
- examples and information on the various cultures in South Africa.

Both the African learner and teacher felt that more use could be made of graphics and bulleted summaries in order to make the material more accessible.

Table 5.19 highlights the factors regarding the role of the instructional designer in the design process. No case study evaluation was expected, seeing that the learners have no knowledge concerning the tasks of the instructional designer.

TABLE 5.19: Questions on the instructional designer

Design principles	Literature review	Researcher's experience	Informal questionnaire
The instructional designer	• What are the tasks of an instructional designer ?	• What does the task of facilitation entail in the DMEP?	• *No questions asked.*

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- **What are the tasks of an instructional designer?**

Often, in practice, the instructional designer and the subject specialist are the same person. The main function of the instructional designer is to facilitate effective learning. The instructional designer should:

- facilitate the requirements of all distance education learners;
- write topic outlines;
- formulate outcomes;
- design activities and provide feedback in the text;
- handle course administration issues;
- serve as a content resource for learners;
- make use of a variety of instructional techniques;
- employ the resources necessary for achieving personal goals;
- stimulate and motivate learners; and
- evaluate learner progress.

- **What does the task of facilitation entail in the DMEP?**

In the DMEP, the subject specialist became the instructional designer. The subject specialist was also the only person involved in the design of the programme. It was therefore the duty of the subject specialist to facilitate effective learning according to instructional design practice. Apart from the facilitation of effective learning, the subject specialist also had to administer and manage the programme as well as motivate and encourage learners.

For a first time designer, who in principle is a subject specialist, it is suggested that there should be a support structure to help in the process. Being both a subject specialist and designer can be difficult, seeing that the specialist might have other work to do apart from the design of the programme. This can result in the design and development of the learning material taking longer than otherwise necessary.

Administrative problems may also arise where large learner numbers are involved in the learning process. It will then not be possible for the subject specialist to design the programme, manage, support and handle administrative efforts.

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As far as the DMEP is concerned, the subject specialist could handle all the aspects of the instructional design process as only a small number of learners are currently enrolled. Support given by colleagues during the three contact sessions helped the facilitator with the management and administrative aspects of the DMEP. If the course were, however, only presented over a distance, support services would need to be put into place.

Although learners were not able to evaluate the effectiveness of the instructional designer, they could assess the success of the facilitation of a learning theory. This was achieved through the questions listed in Table 5.20.

TABLE 5.20: Questions on learning theory in relation to design

Design principles	Literature review	Researcher's experience	Informal questionnaire
Learning theory in relation to design	• What study methods should be introduced and facilitated in the DMEP?	• How could appropriate study methods be introduced and facilitated?	• How meaningful was the sequence of the learning material? Would you like the order of the modules to: 1 = Change? 2 = Be left unchanged? 3 = Be selected by yourself? • If you want the order to change - what do you suggest? • If you want to structure your own order - what would the sequence be?

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(Table 5.20 continued)

Design principles	Literature review	Researcher's experience	Informal questionnaire
Learning theory in relation to design			• Which aspects did not challenge you? • Which aspects did you find appro-priately challen-ging?

- **What study methods should be introduced and facilitated in the DMEP?**

In order for successful learning to take place, learners should be encouraged to take control over the learning process. This will motivate the distance learner to ensure that learning does, in fact, take place. Active involvement in the learning process is also very important. Through the facilitated activities, learners were given the opportunity to practise the skills involved in Music Education as well as apply the newly acquired knowledge to their working and/or teaching environments.

- **How could appropriate study methods be introduced and facilitated?**

To help structure the learning process, learners were encouraged to meet the suggested learning outcomes. This was done through systematically working through the modules. In the preface to the DMEP, learners were encouraged to ensure that they reach the learning outcomes before they continue with a next module. Learners were also encouraged to study with a pen in hand to make notes or to write down questions. The facilitator could answer these questions at a later stage.

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TABLE 5.21: Learning theory case study answers

• How meaningful was the sequence of the learning material? Would you like the order of the modules to: 1 = Change? 2 = Be left unchanged? 3 = Be selected by yourself?	
African learner	Be left unchanged.
Teacher	Be left unchanged.
Residential learner	Be left unchanged.
• If you want the order to change - what do you suggest?	
African learner	Not applicable.
Teacher	Not applicable.
Residential learner	The material was presented in such a way that it kept me 'happy' and 'satisfied' - most accommodating.
• If you want to structure your own order - what would the sequence be?	
African learner	Not applicable.
Teacher	Not applicable.
Residential learner	Insert lectures on the use of modern technology - right in the beginning. Also include some materials on how to overcome downfalls.
• Which aspects did not challenge you?	
African learner	Not applicable.
Teacher	Not applicable.
Residential learner	Not applicable.

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(Table 5.21 continued)

• Which aspects did you find appropriately challenging?	
African learner	Aspects such as skills and concepts were not new to me. I did enjoy the emphasis on the practical application of them. I was impressed by the modules on media and presentation as well as the one on successful planning. They really helped to get one organised for lessons and presentations. I was very interested in the material on Curriculum 2005 - I felt I needed some information on this topic.
Teacher	I cannot say I found it challenging, but I still learned a lot and my memory was jogged.
Residential learner	The group work.

The learners were satisfied with the sequence of the learning material. Although the information was not necessarily new to them, they found that it was meaningfully presented and that it could be applied to their working and/or teaching environment.

After learners were asked to evaluate the complexity of the learning material, questions regarding course content were asked in Table 5.22.

TABLE 5.22: Questions on course content

Design principles	Literature review	Researcher's experience	Informal questionnaire
Course content	• What are the principles of successful design?	• Reviewed in Chapter 3.	• How successful was the use of icons in the locating of the:

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(Table 5.22 continued)

Course content			– Practical assignments – Summaries of important information – Learning outcomes 1 = Could not locate them 2 = Had some trouble in finding them 3 = Found them easily • How successful was the explanation of the didactic methods involved in the teaching and presentation of the following skills – Listening – Movement – Playing on instruments – Singing – Being creative – Reading notation? 1 = I did not understand how I should present the skill 2 = It could be described by incorporating more examples 3 = I understood it clearly 4 = I found that I was already familiar with the methodology

- **What are the principles of successful design?**

The aim of this chapter is to determine what the principles of successful design in practice entail. The literature states the following broad principles of successful design:

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- clearly stated learning outcomes;
- meaningful structure and layout of learning material;
- icons guiding the learner through the use of the learning material;
- facilitation of self-assessment questions and activities;
- regular feedback on assessment;
- reader friendly tone and style of text;
- use of graphics, illustrations and diagrams to explain difficult concepts; and
- stating of assessment criteria.

TABLE 5.23: Content of course case study answers

• How successful was the use of icons in the locating of the – Practical assignments – Summaries of important information – Learning outcomes? 1 = Could not locate them 2 = Had some trouble in finding them 3 = Found them easily?

African learner	**Practical assignments:** Found them easily. **Summaries of important information**: Found them easily. **Learning outcomes**: Found them easily.
Teacher	**Practical assignments:** Found them easily. **Summaries of important information**: Found them easily. **Learning outcomes**: Found them easily.
Residential learner	**Practical assignments:** Had some trouble in finding them - they were of minimum value. **Summaries of important information**: Found them easily - informative and most beneficial. **Learning outcomes**: Found them easily.

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(Table 5.23 continued)

• How successful was the explanation of the didactic methods involved in the teaching and presentation of the following skills – Listening – Movement – Playing on instruments – Singing – Being creative – Reading notation? 1 = I did not understand how I should present the skill. 2 = It could be described by incorporating more examples. 3 = I understood it clearly. 4 = I found that I was already familiar with the methodology.	
African learner	**Listening:** I understood it clearly. **Movement:** I found that I was already familiar with the methodology. **Playing on instruments:** I understood it clearly. **Singing:** I understood it clearly. **Being creative:** I understood it clearly. **Reading notation:** It could be described by incorporating more examples.
Teacher	**Listening:** I understood it clearly. **Movement:** It could be described by incorporating more examples. **Playing on instruments:** It could be described by incorporating more examples. **Singing:** I understood it clearly. **Being creative:** It could be described by incorporating more examples. Where creativity was presented in the contact session, it was not quite clear what was expected of us. More emphasis can be placed on the disciplinary measures that a teacher needs to incorporate when creativity is developed in class.

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(Table 5.23 continued)

Teacher	**Reading notation:** It could be described by incorporating more examples - we should be given more opportunities to apply the various notation systems in order to become literate in the reading and application of staff, solfa and graphic notation.
Residential learner	**Listening:** I found that I was already familiar with the methodology. **Movement:** I understood it all clearly. The presentation and structuring of movement activities could, however, be described in more detail. **Playing on instruments:** I found that I was already familiar with the methodology. **Singing:** I understood it clearly. **Being creative:** I understood it clearly. More information could, however, be given concerning the facilitation of creativity in the teaching environment. **Reading notation:** I found that I was already familiar with the methodology

In general the icons were considered easy to locate. The residential learner did, however, indicate that the icon used for the practical assignment, the pencil, was of very little value to her.

The three case studies experienced the facilitation of the practical skills as being sufficient. More information and detail could, however, be included for movement, creativity and the reading and writing of notation. It was also suggested that the application of these three skills in practice should be given more attention.

5.3 MOTIVATIONAL PRINCIPLES

Motivation forms an integral part of the distance learning programme. In order to facilitate active learning, the designer should incorporate various motivational aspects into the programme.

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TABLE 5.24: Questions on motivational structures

Motivational principles	Literature review	Researcher's experience	Informal questionnaire
Motivational structures	• Which motivational structures should be incorporated in the DMEP?	• How were the selected motivational structures incorporated in the DMEP?	• To what extent did the DMEP motivate you in your studies? 1 = I found the material boring 2 = It was moderately stimulating 3 = I liked learning with this material 4 = Learning becomes a fun experience • Did the learning material motivate you to apply it in your work and community? 1 = yes 2 = no If your answer was yes, describe how you could apply the material to your work and community involvement.

- **Which motivational structures should be incorporated in the DMEP?**

The instructional designer should incorporate a number of motivational aspects to keep the distance learner motivated and focused on the learning process. Keller's (1983:396) motivational model suggests that the motivation of learners should incorporate the following four categories. Table 5.25 explains these categories and their corresponding outcomes:

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TABLE 5.25: Four motivational categories and their corresponding outcomes

Motivational model	Outcomes
• Interest	• Interest is aroused and sustained. • Curiosity and attention are facilitated.
• Relevance	• All learning becomes connected to important needs and motivations.
• Expectancy	• Confidence is developed through success.
• Satisfaction	• Learners become satisfied with the goals that they have reached.

In order to motivate learners, the instructional designer should ensure that learning:

- involves action;
- is fun;
- choices can be made;
- facilitates social interaction;
- is supported by continuous measurement and feedback;
- is challenging; and that learning
- recognises learners' efforts and progress.

These factors should be incorporated in order for learners to be motivated towards their learning experience.

- **How were the selected motivational structures incorporated in the DMEP?**

The motivational factors listed under the motivational model were included as follows:

- **Fun**: By involving diverse learning activities, the facilitator aimed at making the learning process enjoyable. Where possible, learners were asked to personalise the information and apply it to a situation of their choice. Learners were for instance asked to compile a top ten list of their favourite music. After compiling the list, learners were then guided to discover what the value of that music to their teaching can be.

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- **Social interaction**: The wide spectrum from which the learners came, made group work difficult. Many learners come from remote parts of South Africa and neighbouring countries. Regular social interaction amongst learners was therefore not always possible. To compensate, the learners were given group assignments when attending the contact sessions. They were also encouraged to learn from one another and to help each other with their academic problems.
- **Feedback**: Positive feedback and tips on improvement were given for each written and practical assignment. Learners were thus encouraged to better their didactic skills and improve their written work.
- **Challenge**: The outcomes of the course are of diverse difficulty. Provision was made for learners of different backgrounds and levels of learning. The aim was, however, that all learners should be on the same academic level by the end of the course. Learners were further challenged to gain additional experience and to complete supplementary assignments if interested in particular subjects.
- **Recognition**: After writing reports on their assignments, learners were congratulated and given recognition for their efforts. When a learner submitted or performed an exceptional or interesting assignment, he/she was asked to share it with the rest of the class. By doing so, learners came to respect and learn from one another.

TABLE 5.26: Motivational structures questionnaire answers

• To what extent did the DMEP motivate you in your studies? 1 = I found the material boring 2 = It was moderately stimulating 3 = I liked learning with this material 4 = Learning becomes a fun experience	
African learner	I liked learning with this material.
Teacher	I liked learning with this material - but it could be more stimulating and 'less' academic in nature.
Residential learner	I liked learning with this material.

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(Table 5.26 continued)

• Did the learning material motivate you to apply it in your work and community? 1 = yes 2 = no

African learner	Yes.
Teacher	Yes.
Residential learner	Yes.

• If your answer was yes, describe how you could apply the material to your work and community involvement?

African learner	I use the material when I prepare for my learners or conduct a workshop. This I did at several occasions at the College.
Teacher	If I were to use any of the skills or concepts, I could check to see whether I am on the right track. I could also try a different method, so that the pupils will be stimulated in a different way.
Residential learner	I could apply the singing material and guidelines successfully with a group of children at a Youth meeting as well as with a Sunday School Choir.

Although the material was considered to be stimulating, the teacher felt that more pictures and graphics could be added to make the programme less academic. The residential learner and African learner, on the other hand, felt the graphics used were sufficient. The material could also be used by all three case studies in their personal circumstances, either as a reference or for preparation.

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TABLE 5.27: Questions on student support services

Motivational principles	Literature review	Researcher's experience	Informal questionnaire
Student support services	• Which student support services should be employed in the DMEP?	• How were the student support services introduced to the DMEP?	• To what extent did you make use of the following student support services when you experienced study related problems: – A study group consisting of learners that meet occasionally or consult on the phone. – A tutor – Your lecturers? 1 = I did not know of such a support system 2 = Occasionally 3 = Often 4 = Very often 5 = This should be encouraged and implemented

- **Which student support services should be employed in the DMEP?**

Most motivational structures can be linked to student support services. The function of the student support services is to help the facilitator in the guidance and motivation of learners through the learning process. The services give the learners the opportunity to discuss problems and make contact with fellow learners. The most commonly used motivational structures are tutors and collaborative learning experiences. Table 5.28 summarises the outcomes of these motivational structures.

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TABLE 5.28: Outcomes of motivational structures

Tutors	Collaborative learning
• Mediation between the facilitator and learners.	• Learners come together as study circles to analyse and discuss material.
• Motivation of learners.	• In group academic tutorials a group of learners meet with tutors to discuss problems.
• Keeping of student records.	• With didactic groups, learners get to apply their knowledge in the working environment.
• Answering administrative questions.	• Increased and effective two-way communication.
• Evaluating course effectiveness.	• Learner no longer feels isolated.
• Assignment and test grading.	• Peer assessment.

- **How were the student support services introduced to the DMEP?**

- **Tutors:** Tutors have not yet been identified for the DMEP. All learner questions are directed towards the course presenters via telephone, fax, e-mail or personal interviews. Learners were also given time to make appointments with lecturers during the three contact sessions per year. The facilitators could then answer the learners' questions. The result was that learners had to wait for some time before they could have answers to their questions. Assignments were therefore either done incorrectly or not handed in.

- **Collaborative learning experiences:** No formal collaborative learning structures have been organised for the DMEP. Learners tend to group themselves together as far as demographics, interest and educational background is concerned. In the three contact sessions per year, collaborative learning was used. Learners were often divided into groups to complete assignments and to solve problems. Learners should, however, be encouraged to form collaborative groups outside the classroom to motivate and guide one another between the contact sessions.

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TABLE 5.29: Student support services case study answers

- To what extent did you make use of the following student support services when you experienced study related problems?

– A study group consisting of learners that meet occasionally of consult on the phone?
– A tutor?
– Your lecturers?

1 = I did not know of such a support system
2 = Occasionally
3 = Often
4 = Very often
5 = This should be encouraged and implemented

African learner	**A study group consisting of learners that meet occasionally or consult on the phone?** I did not know of such a support system. **A tutor?** This should be encouraged and implemented. **Your lecturers?** Very often.
Teacher	**A study group consisting of learners that meet occasionally or consult on the phone?** This should be encouraged and implemented. **A tutor?** This should be encouraged and implemented. **Your lecturers?** Occasionally.
Residential learner	**A study group consisting of learners that meet occasionally or consult on the phone?** I did not know of such a support system. This should be encouraged and implemented. **A tutor?** This could be encouraged and implemented. **Your lecturers?** Often - mainly to see if I was on the right track.

The need for support services in the form of learners and tutors was mentioned by all three case studies. It also became apparent that the lecturers, apart from doing their other duties, are the only support service in place. This problem should be addressed and better managed. Assessment formed a vital part in the design process

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for determining the success of the DMEP. In Table 5.30 the success of the evaluation structures of the DMEP were determined.

TABLE 5.30: Questions on assessment

Motivational principles	Literature review	Researcher's experience	Informal questionnaire
Assessment	• Has already been discussed under the distance learner.	• Has already been discussed under the distance learner.	• How did you experience each of the following methods of assessment? Refer in your answer to the feed-back given, answers at the back of the book and the effectiveness of this type of assessment. – Practical presentations – Group discussions – Written assignments – Group assessment 1 = were not used 2 = did not find it useful 3 = useful 4 = I learned a lot.

Seeing that the literature and researcher's aspects of assessment have already been discussed, the focus will be on the three case studies' experience of the assessment activities.

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TABLE 5.31: Assessment case study answers

- How did you experience each of the following methods of assessment? Refer in your answer to the feedback given, answers at the back of the book and the effectiveness of this type of assessment.

– Practical presentations
– Group discussions
– Written assignments
– Group assessment

1 = were not used
2 = did not find it useful
3 = useful
4 = I learned a lot

African learner	**Practical presentations:** They served as a good springboard for a better and clearer evaluation of oneself. It also gave the opportunity to participate, and better our skills - particularly those of us who are teaching music at our schools. **Effectiveness -** I learned a lot. **Group discussions:** These discussions are sometimes boring. Particularly because a lot of members (learners) have very little knowledge concerning the practical aspects and history of Western music traditions. These learners cannot be actively involved in the group discussions so one person has to take the lead and provide all the answers. **Effectiveness -** Did not find them useful. **Written assignments:** I found the topics for assignments interesting and well selected. They force us to keep up to date with the latest trends and books available on related topics. By completing these assignments, one has a resource book of one's own that could be used as an additional reference when teaching. **Effectiveness -** I learned a lot. **Group assessment:** This was not always a successful method of assessment - particularly if your group is not committed to the discussion or knowledgeable about the content discussed. **Effectiveness -** did not find it useful.

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(Table 5.31 continued)

Teacher	**Practical presentations:** There was not enough discussion and transparency about results. I want to know from my lecturers how I have done and how I can improve my marks. Although my marks are good, I am still not satisfied because I feel that one can always improve. It would be a good experience to sometimes evaluate our fellow learners, so that we can learn from the exercise. I often wonder whether there is a big enough difference between the marks of presentations which are weak and the good presentations. This is a de-motivating factor! In some fields of study at this University marks reflect the input - but I'm not always sure that it happens in the Music Department. The feedback should therefore not congratulate you on your efforts but should guide you to improve yourself and your presentation. And good work should be rewarded with good marks. **Effectiveness -** useful. **Group discussions:** I don't always enjoy these as it is usually only aimed at providing knowledge (answering the given questions), and not discussing practical problems. We should be given the opportunity to discuss the problems that we experience in our classrooms. We can then share our knowledge and experience. **Effectiveness -** did not find it useful. **Written assignments:** As in the practical demonstrations, there is too little difference between good and weak assignments. If student X hands in a shoddy assignment and gets 60%, I feel it is unfair if student M gets only 10 % more for a well composed assignment. More feedback should also be given on how to improve, so that those of us who want to improve, get the opportunity to get high marks. **Effectiveness -** useful. **Group assessment:** I do not remember doing any group assessment. **Effectiveness -** were not used.

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(Table 5.31 continued)

Residential learner	**Practical presentations:** It is good to see how one features within the class in order to get some idea of progress made. **Effectiveness** - I learned a lot. **Group discussions:** It gave insight into problems experienced by others and indicated ways in which to overcome their obstacles. **Effectiveness** - useful. **Written assignments:** I learned an enormous amount in the execution of these, as vast amounts of research had to be conducted. I found that the library was well utilised. **Effectiveness** - I learned a lot. **Group assessment:** Although formal group assessment was not facilitated, I did learn a lot from my fellow learners as we were always stimulating one another. **Effectiveness** - useful

- The **practical presentations** enabled learners to become actively involved in the learning process and thereby their presentation skills could be developed. Presenting a skill in front of the other learners gave the learners the opportunity to measure themselves according to the standards set by the other learners. It was, however, felt that not enough transparency regarding the marks and suggestions for improvement were given.
- Because of the varying knowledge of learners it often happens that one learner takes control over and is responsibility for the **group discussions.** Interaction amongst learners and the sharing of ideas are therefore not facilitated. It was also noted that more emphasis would be placed upon problem-solving than the answering of questions posed by the lecturers. The residential learner did, however, express that problems were addressed and ideas shared.
- Through the case studies the deduction could be made that the **written assignments** were well formulated and prompted them to do extensive research on the given topics. When the assignments were then successfully completed, learners could use them as additional resources for their teaching. Meaningful feedback should once again be given regarding the attainment of good marks.

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- Very little structured **group assessment** activities were facilitated. As with the group discussions, the group assessment could only be meaningful if all group members contributed to the activity.

5.4 TECHNOLOGICAL PRINCIPLES

The success of a designed programme depends to a large extent on the selection of an adequate delivery mode. The delivery mode should be accessible to all learners and should enhance the learning process. In a course like the DMEP, where the learner population is so diverse, this could be a problem. In order to solve these problems, the questions stated in Table 5.32 should be answered.

TABLE 5.32: Questions on media selection

Technological principles	Literature review	Researcher's experience	Informal questionnaire
Media selection	• What are the criteria for media selection for a distance education course? • What could be the most effective delivery mode for facilitating the pedagogy of the practical music skills in the DMEP?	• How were the criteria for media selection applied to the DMEP? • Through which methods could the practical aspects of the DMEP be facilitated?	• To which of the listed media do you have access? – Video machine – CD-player – Overhead projector – Cassette player – Computer – Computer with CD-drive 1 = I have one at home. 2 = There is one at school. 3 = I could get hold of one, but with difficulty. 4 = Impossible to get hold of one.

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(Table 5.32 continued)

Technological principles	Literature review	Researcher's experience	Informal questionnaire
Media selection		• Could the media selection enhance the learning process? • How was the use of media in the DMEP explained to the learners?	• Discuss how the audio and video cassette enhanced the learning process? • What would you like to be added to these cassettes? • How did the use of media contribute to your understanding of the practical music skills? Do you have any suggestions to make the facilitation even more effective?

- **What are the criteria for media selection for a distance education course?**

Media can generally be divided into two categories, namely informational and instructional media. Informational media present the information to the learner without facilitating a response from him/her. Instructional media, on the other hand, facilitate active participation and communication from the learner.

Before media can be selected, the instructional designer should determine what the criteria and outcomes of media selection are. The elements stated in Table 5.33 should be taken into consideration when selecting a delivery mode.

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TABLE 5.33: Criteria and outcomes of media selection

CRITERIA The facilitator should:	OUTCOME The media should:
• evaluate the nature of the learning task.	• motivate learners.
• be knowledgeable of the capabilities and limitations of the proposed media.	• facilitate the recollection of information.
• consider the employment and development costs involved.	• provide learner stimulus.
• take the availability and accessibility of the particular media into account.	• activate the learners' responses.
	• provide speedy feedback.
	• encourage the correct use of the selected media.

From Table 5.33 it can be deduced that not only the purpose of the media, but also the expected outcome of the employed media, should be taken into consideration when selecting a delivery mode.

- **What could be the most effective delivery mode for facilitating the pedagogy of the practical music skills in the DMEP?**

In order to answer this question, the facilitator needs to determine the most appropriate media for the facilitation of practical components. The advantages and disadvantages of media as tabulated in Chapter 2 should therefore be taken into consideration.

A summary of the media application will be given in Table 5.34. The first column indicates the type of media that could be selected. Column two evaluates the media for its suitability to present and facilitate the practical skills involved in Music Education, whilst the third column summarises the effectiveness (✓) or ineffectiveness (×) of the various delivery modes according to the needs of the DMEP.

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TABLE 5.34: Media selection for facilitating practical skills

TYPE OF MEDIA	SUITABLITITY FOR PRESENTING PRACTICAL SKILLS	CONCLUSION
• Printed text	• Difficult to provide a variety of stimuli: reading and performing actions.	✗
• Audio cassettes	• Visual stimuli interfere with hearing.	✗
• Video cassettes	• Bring viewers close to the action. • Provide models of behaviour. • Demonstrate processes and skills.	✓
• Computer-assisted learning	• Hardware requirements can limit potential applications. • Can engage learners in controlled interactions.	✗ ✓

From Table 5.34 the conclusion can be drawn that video material and computer-aided learning can be employed for teaching and demonstrating the practical Music Education skills. It is, however, important that the information is developed with that purpose in mind and that the material is kept up to date with the latest educational and technological developments.

- **How were the criteria for media selection applied to the DMEP?**

The media selection for the DMEP was based on two very important parameters, namely the time at hand and the access learners had to media. Most of the learners involved in the DMEP only have access to cassette players and video machines. A video machine and cassette player were selected as a minimum requirement for admission to this course. The in-service material that was adapted for the DMEP also included a video and audio cassette. With the urgency to complete a programme that could be used for the distance Music Education course, these media were incorporated as is. Consequently the DMEP was designed to incorporate the existing media.

It is also important to note that there are learners enrolled in the DMEP who have access to more advanced media. The need for the learning material to be made available via these technologies should be addressed.

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- **Through which methods could the practical aspects of the DMEP be facilitated?**

From the literature review it became apparent that the media used should be up to date and of good quality. The adapted video and audio cassettes should therefore be evaluated for their effectiveness. Although the practical skills of Music Education are explained in the DMEP, the presentation of these skills in practice still needs to be added.

The purpose of the audio cassette was to introduce the music examples discussed in the DMEP. Learners are thereby given examples of the types of material that can be incorporated in listening activities. Through the video, learners are introduced to various music styles, successful music teaching and use of media. The excerpt on music styles is still up to date and relevant. It is, however, necessary to bring the clip on successful music teaching in line with the latest developments in South African education. Examples of the practical music skills taught according to the principles of Curriculum 2005 (South Africa 1997) need to be added.

Although the use of media is successfully described and demonstrated in the video, it should be brought up to date by referring to the latest computer-based learning developments.

- **Could the media selection enhance the learning process?**

Without the audio and video cassettes the programme would not be an effective teaching strategy. Through the audio cassette the learners are introduced to:

- various music styles;
- the designed lesson plans;
- successful listening activities; and
- quality music excerpts.

Although the video material does not include all the necessary information, it is still of value to the learning process. By watching the video learners are introduced to:

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- style in music - including the architecture, fashion and trends of the style periods;
- a classroom setting where Music Education is taught;
- the application of several media in practice.

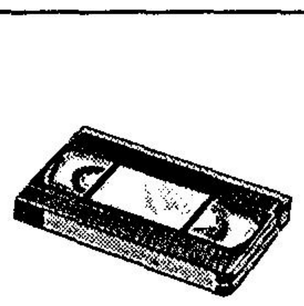
The answer to the question is, therefore, 'yes', the media selection did enhance the learning process, but could be even more effective if brought up to date.

- **How was the use of media in the DMEP explained to the learners?**

In the preface to the DMEP, learners were told that the minimum media requirement is access to video and audio cassette players. Learners do not necessarily have to have their own hardware, but should have access to the required media.

When the learners are required to look at the video or listen to the cassette, clear indications in the text are given. Such an example is given in Figure 5.1.

FIGURE 5.1: Example of media presentation



Watch the video clip 'SUCCESSFUL SOUNDS' and complete the following tables.

With this example, learners are guided to recognise the icon, either a picture of a video or an audio cassette, and will know what is expected of them from the accompanying written instructions.

In the section on lesson planning, the music examples of the cassette were indicated by the following icon, ♫. Learners came to recognise the symbol and then realised that they should listen to the example given on the cassette.

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TABLE 5.35: Media selection case study answers

• To which of the listed media do you have access? – Video machine – CD-player – Overhead projector – Cassette player – Computer – Computer with CD-drive 1 = I have one at home 2 = There is one at school 3 = I could get hold of one, but with difficulty 4 = Impossible to get hold of one	
African learner	**Video machine:** I have one at home. **CD-Player:** I have one at home. **Overhead projector:** I have one at school. **Cassette player:** I have one at home. **Computer:** I could get hold of one but with difficulty. **Computer with CD-drive:** Impossible to get hold of one.
Teacher	**Video machine:** I have one at home. **CD-Player:** I have one at home. **Overhead projector:** There is one at school. **Cassette player:** I have one at home. **Computer:** I have one at home. **Computer with CD-drive:** I have one at home.
Residential learner	**Video machine:** I have one at home. **CD-Player:** I have one at home. **Overhead projector:** There is one available at the church. **Cassette player:** I have one at home. **Computer:** I have one at home. **Computer with CD-drive:** I have one at home.
• Discuss how the audio and video cassette enhanced the learning process?	
African learner	Very much, because they allow us an opportunity to see how other teachers do things. I could also use the video at my college to give them an example of music styles, use of media and teaching. The audio cassette is, however, old fashioned and I would prefer to work with the better quality of a CD.

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(Table 5.35 continued)

Teacher	It provided me with practical examples of how to improve my teaching.
Residential learner	I found it most beneficial. It provided reinforcement - I think it is an economical way of providing lectures.
• What would you like to be added to these cassettes?	
African learner	Although I found the material was useful, I would suggest that some examples of African traditional music and teaching environments be included. Information on how to run and organise a workshop and music festival would also be helpful. The use of 'old' media is described in the video but it should be brought up to date with the latest developments as was described in the learning material.
Teacher	On video, I would like lessons incorporating all of the skills so that one can see how this should be done. Lesson examples of various age groups would also be helpful so that we can see the difference between the presentation and preparation of the different age groups. The use and care of modern media and programmes could also be included in the video. We could, for instance, have learned how to make use of Windows; Power Point; etc. on the video in our own time - and not in a rushed afternoon session. As far as the audio cassette is concerned, I do not suggest that more music should be added. This will force us to make use of the variety of resources in the library and not only make use of this one cassette in our teaching. The cassette should therefore only be used as an example of music that could be incorporated.
Residential learner	A video pertaining to the use of modern technology.
• How did the use of media contribute to your understanding of the practical music skills? Do you have any suggestions to make the facilitation even more effective?	
African learner	I could learn the rules on how to use the overhead projector and other teaching media.

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(Table 5.35 continued)

Teacher	It helped, but as I indicated before I suggest that a demo lesson on HOW to teach effectively be included.
Residential learner	As I was already familiar with the didactics involved in the presentation of the practical music skills - I would like to see them demonstrated in practice on the video so that one can imitate and develop the presentation of these skills.

The teacher and residential learners are both moderately computer literate and have access to advanced delivery modes. The African learner, as most of the others enrolled for the DMEP, does however, not have access to a computer. The video facilitated the presentation of a lesson and practical skills to some extend. It was ,however, suggested that the skills be demonstrated on the video so that learners can see the application of the didactics in practice. More examples on various teaching environments, teaching of various learner groups and cultures are required.

As far as the audio cassette is concerned, it was suggested that material also be made available on CD for those learners who have access to a CD-player. This is, however, not a practical suggestion taking copyright laws into consideration. No suggestions on added material were given for the audio cassette.

CONCLUSION

The outcome of Chapter 5 was to determine how successfully the principles of instructional and distance education were applied to the field of Music Education. The reflection on the design process was conducted through comparing the literature review, researcher's experience and informal questionnaire of the DMEP. This was done by formulating questions that could indicate what the parameters of successful design would be.

By comparing the answers from the literature review, researcher's diary and questionnaire, it became apparent where the DMEP could be improved. After sorting through the information, the facilitator needs to critically evaluate the

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answers. It became apparent that the DMEP could be improved in the following sectors:

- process of design;
- learner automation;
- delivery systems; and
- student support services.

The reflection on the answers can then be used to make the necessary recommendations and plan the next action cycle. The recommendations and proposed changes to the DMEP will be discussed in Chapter 6.

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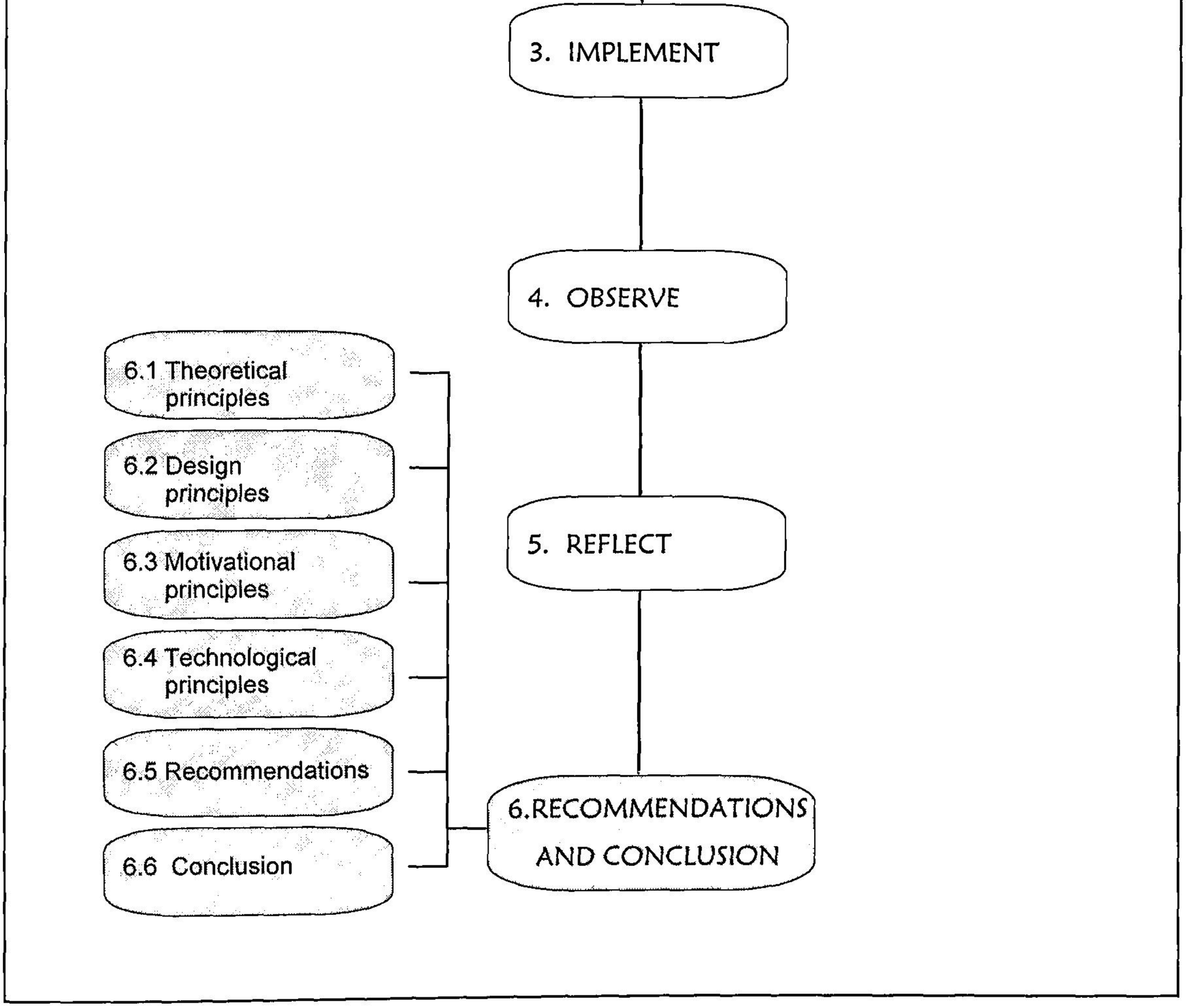
CHAPTER 6

RECOMMENDATIONS AND CONCLUSION



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INTRODUCTION

This thesis responded to the question:

> What are the instructional design principles guiding the development of a distance Music Education programme?

This question was addressed through the action research cycle of plan, implement, observe and reflect. Action research enables the researcher to *improve* the rationality of practices, the understanding of these practices and the situations in which these practices are carried out (Seels 1995:107).

The reflection on the DMEP in Chapter 5 sorted the data which indicated that distance education could be applied to the field of Music Education through the following instructional design principles:

- theoretical;
- design;
- motivational; and
- technological.

These principles were applied throughout the research in order to determine whether the parameters of instructional design and distance education could be applied to the field of Music Education. By applying these principles to Music Education, learning could be made accessible to a wide range of learners.

The outcome of this research is a Distance Music Education Programme for a BMus Honours course at a mainly contact teaching tertiary institution. The course was planned, implemented and observed according to the suggestions of a literature review, the researcher's experience and the learner's comments. The final two phases of the design cycle of reflection, namely *critically evaluating* the consequences of the designed action; and using this evaluation to help you *plan* your *next action cycle* (Davidoff 1990: 46) will be addressed in Chapter 6. This was

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done by sorting the results of the data from the literature review, researcher' experience and informal questionnaire though answering the sub-problems key to this study:

- What are the *theoretical* principles of distance education and instructional design?
- What are the *design* principles for distance education?
- What are the *motivational* principles involved in a distance education programmes?
- What principles determine the selection of an appropriate *technological* delivery mode?

The answers to these questions will enable the facilitator to make the necessary recommendations for the successful design of a DMEP.

6.1 WHAT ARE THE THEORETICAL PRINCIPLES OF DISTANCE EDUCATION AND INSTRUCTIONAL DESIGN?

In the following paragraphs the theoretical principles that were considered in the design of the DMEP will be discussed. These aspects include the facilitation of learning and the learning process as well as the selection of distance education and instructional design models and theories.

6.1.1 Learning

The diversity of the learner population of the DMEP made it necessary for the instructional designer to facilitate various learning strategies. By incorporating a variety of theories, for example behaviourism and constructivism, it could be ensured that each individual learner became an active participant in the learning process.

Throughout the DMEP it was emphasised that learners should make knowledge their own and apply it to their environments, thereby applying the principles of deep approach learning and developing their meta-cognitive skills. In order to apply knowledge, learners have to remember what they have learned and have to make use of their long-term memory. By doing so each learner, regardless of their

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educational background and full time responsibilities, can benefit from the learning material at the time and pace they preferred. After the most appropriate learning strategies and theories for the DMEP had been selected, the designer had to choose a distance education model and theory.

6.1.2 Distance learning

In order to enable learners to become individual, active participants in the learning process, learning should be managed. The management includes the structuring of the learning sequence and handling of administrative aspects. The direction of the learning process further includes the encouragement of two-way communication.

Learners should be prompted to share and discuss ideas and problems. The discussion should incorporate communication between learners and between facilitators. This can be achieved by selecting the most appropriate delivery mode according to the distance education model. The models enable the facilitator to select the most appropriate delivery mode through which material can be made available to learners. In order to facilitate learning according to each learner's individual needs, more than one model or theory of distance education can be selected. This is similar to the selection of an instructional design model and theory.

6.1.3 Instructional design

For the purposes of the DMEP a combination of instructional theories were selected. These theories were selected for their methodological, procedural, facilitative and assessment attributes. The identified qualities were then utilised in the design according to the systems approach.

The systems approach enabled the facilitator to analyse, design, develop, implement and maintain the effectiveness of the DMEP. A cyclic approach of problem-solving was thereby facilitated. This equipped the designer to continuously focus on and assess the design principles incorporated in the DMEP.

The design of a learning programme cannot be completed in one cycle. The planned outcomes of the designed programme determine what instructional model or combination of models should be incorporated. When a stage of the design is

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completed, it should be assessed and re-assessed in order to determine if the learners' needs were met. The systems approach of design should therefore be assimilated.

6.2 WHAT ARE THE DESIGN PRINCIPLES FOR DISTANCE EDUCATION?

Many design checklists are available on instructional design. However, it is important to evaluate the effectiveness of these general principles with reference to Music Education and the facilitation of the practical components of the subject. The design principles focus on the role players in the design process, the learning theory in relation to design and the design of course content.

6.2.1 Role players in the design process

The two role players in the design process are the distance learner and the instructional designer. It has already been stated that the distance learner should be considered to be an individual in the design process. The DMEP was therefore structured so as to give the learners choices regarding **what**, **when** and **how** to study. This was facilitated through the style and format of the text, the selection of the appropriate media, and the structuring of effective management.

By asking the three individuals in the case studies to state their expectations of the course and comparing these expectations to the topics addressed in the DMEP, the facilitator could establish whether the individual learner needs were met. From their answers it could be deduced that they found the topics satisfactorily addressed in the DMEP. When asked what could be added to the programme, they indicated that more culturally diverse material and the latest technological trends could be incorporated in the DMEP. The instructional designer should give attention to these matters in the next cycle of the systems design approach.

Facilitating the needs of the distance learner includes the facilitation of learning at the learners' preferred time and pace. Although the learners could choose when they wanted to study, they were not given the opportunity to formulate their own learning outcomes. It was expected of them to reach the outcomes suggested by the DMEP.

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The second role player in the design process is the instructional designer. In the DMEP, the subject specialist became the instructional designer. This enabled the researcher to effectively apply the principles of instructional design to the DMEP. As a first time designer, the facilitator learned the principles of instructional design through a process of trial and error. The designed aspects of the DMEP had to be continuously evaluated and restructured until the desired results seemed to be achieved. Other responsibilities of the instructional designer in the DMEP included the facilitation of individualised instruction and the structuring and management of the learning content.

The design of the DMEP was done by one instructional designer. The designer was therefore responsible for each phase of the design process, including the management and maintenance aspects. The designer could deal with all of these aspects because of the relatively small learner numbers enrolled for the DMEP. It is however suggested that the necessary administrative and management structures be put into place for a possible increase in student numbers. The instructional designer was therefore responsible for the successful facilitation of the course content as well as the learning activities.

6.2.2 Learning theory in relation to design

The combination of learning theories selected for the DMEP were introduced in the course by encouraging learners to take control of the learning process. This was done by challenging them to apply the newly acquired knowledge and skills to their teaching environments.

The facilitator also had to ensure that the proposed learning outcomes were met. In order to help them achieve these goals, the course content was divided into modules. The learning material was thereby divided into manageable structures and the understanding thereof evaluated through the design of various assessment activities. Apart from the outcomes given, learners should have the opportunity to formulate their own learning outcomes. This would then lead to them deciding on the sequence of the modules to be learned. This was, however, not encouraged in the DMEP. In the informal questionnaire, the three case studies did not indicate the necessity for the sequence of modules to change and did not make any recommendations regarding their order of the modules. Learners should, however,

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be given the opportunity to structure their own learning sequence if they wish to do so. The facilitator should therefore reconsider how the learners could be given control over every aspect of the learning content. A solution could be to consider and incorporate these learner controlled activities in the design of the course content.

6.2.3 Course content

The successful facilitation of the course content is perhaps the most important aspect of the instructional design process. The effective facilitation of the information will result in learners performing at their best. Rewarding facilitation is usually measured by the:

- clarity of learning outcomes;
- relevance of the structure and layout of the text;
- effectiveness of the icons used;
- efficiency of the self-assessment activities and feedback given;
- manner in which learners are addressed;
- descriptiveness of the illustrations;
- clarity of explanations; and by the
- effective statement of assessment criteria.

The success of these employed structures could be best evaluated by the learners. In the informal questionnaire answers it was mentioned that most of these content design principles were meaningful and easy to locate. The learners did, however, indicate that the design could make use of more illustrations and bulleted summaries to make the material 'less academic' and 'more entertaining'. More examples were requested, especially in the module on skills. Learners wanted more examples of the application of movement, creativity and notation. By explaining these skills in detail, the facilitator would be able to encourage and motivate learners.

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6.3 WHAT ARE THE MOTIVATIONAL PRINCIPLES INVOLVED IN A DISTANCE EDUCATION PROGRAMME?

Through the design of the DMEP the facilitator incorporated structures, student support services and assessment activities to motivate learners. Through these employed motivational principles, the learner should be encouraged and enabled to enjoy the learning experience.

6.3.1 Motivational structures

In the DMEP the motivational aspect suggested by Keller (1983:396) was incorporated. This model facilitates learners to become interested in the learning process. Learners are motivated by incorporating course content that is relevant to their environment and satisfies their expectations.

According to the three case studies, the DMEP did succeed in successfully presenting these motivational structures. They expressed that they liked learning with the material and that the DMEP encouraged them to apply their newly acquired knowledge and skills to their teaching and working environments. The assumption can thus be made that learners were motivated by the structures implemented in the DMEP.

The motivation of learners could, however, be further increased, if they were encouraged to interact with fellow learners and share ideas. This was attempted by incorporating various student support services.

6.3.2 Student support services

To keep the DMEP's learners motivated, certain student support services had to be put into place. The suggested services include the appointment of tutors and structuring of collaborative learning opportunities.

Tutors for the DMEP have not yet been identified. The result is that the facilitator had to answer all the learners' queries. This was confirmed by the three case studies, who indicated that whenever they experience learning related problems they

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consulted with the facilitators. As a result, their questions could only be answered when the facilitator was available (on the phone or reachable by fax or e-mail) or when they came to the University for their contact sessions. This could mean that learners could not continue with their work before these problems were addressed.

It was suggested by the literature and supported by the case studies that study groups and tutors should be appointed and put into place. This would enable learners to consult one another or a tutor, in their vicinity, when a problem was experienced.

Because of the difficulties learners experienced regarding the solving of their learning related problems, they felt that they could not always achieve their goals and fulfil assessment activities effectively. In order to address this problem, the assessment activities incorporated in the DMEP need to be evaluated.

6.3.3 Assessment

In the DMEP, various assessment activities were incorporated. These included self-assessment activities, practical presentations, group discussions and written assignments. According to the literature, group evaluation should also form part of the assessment activities of a distance learning programme. In order for assessment to be meaningful, learners should be challenged and guided towards the correct answers. By providing regular and meaningful feedback, learners will be able to monitor their progress and better their results.

The success of the DMEP's assessment activities were monitored by the questions asked in the informal questionnaire. The systems under scrutiny were practical presentations, group discussions and written assignments which were regularly used, and group assessment which was not purposefully facilitated but did occur from time to time in the contact sessions.

The three case studies regarded the practical presentations and written assignments as meaningful. On the other hand, the group discussions and assessment were considered to be of little value. Problems regarding equal group participation and standards were expressed. It was proposed that activities related to teaching be discussed, rather than spending time to answer a question or give a definition the

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facilitator prompted. It was also mentioned that there was insufficient transparency regarding the assessment criteria and marks given. Learners expressed the need for feedback focusing on the improvement of results. The conclusion that can be made is that the assessment activities of the DMEP still need to be revised and adapted as learner needs changes.

6.4 WHAT PRINCIPLES DETERMINE THE SELECTION OF AN APPROPRIATE TECHNOLOGICAL DELIVERY MODE?

As we approach the turn of the century, the instructional designer is increasingly being confronted with advanced technological developments. The designer should, however, not lose sight of the purpose of the media in the design process. The **media selection** in a distance course, to some extent, becomes the facilitator's voice. Media should therefore be selected that are accessible to and affordable for all enrolled learners.

The selection of media to a large extent determines the success of the facilitation of the course content. When a delivery mode for the DMEP was selected, the facilitator had to determine what media the learners would have access to. Although many of the learners do have access to more advanced media, it was decided to make use of a paper-driven package supported by a video and audio cassette.

The three case studies commented positively on the media selection of the DMEP. These three learners do, however, have access to more advanced media and therefore suggested that the learning material for the DMEP should also be made available on these media for learners who have such access.

It is therefore proposed that the material of the DMEP be made available on the Internet and that learners could make use of CD-ROMS's to access additional information.

The case studies also indicated that additional information be made available on the video cassette. It was indicated that material regarding lesson examples for various age groups in different teaching environments be included. Learners therefore want

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to see teachers in action in contrasting teaching environments, both formal and informal. The contrasts imply facilities, access to media and numbers of learners. The African learner also indicated that the incorporation of culturally diverse material was not successful. More information regarding cultural festivals and customs should be incorporated.

6.5 RECOMMENDATIONS

After an in depth study regarding the application of the principles of instructional design and distance education to Music Education, the researcher could formulate recommendations regarding further development in the field of instructional design for Music Education.

In the following paragraphs, suggestions are made regarding the importance of distance education and the development of material for distance education purposes on international and national level, at the University of Pretoria, its Music Department and the specific application of instructional design to Music Education.

- **International perspective**

Globally, universities and education institutions need to reconsider their methods and policies regarding the facilitation of learning independent of time, place and pace. Increasing flexibility in education systems should therefore be addressed. This would enable learners to study what, when and how they wish.

On various occasions the researcher tried to make contact with other designers of distance Music Education material. No designers in this field could be located. It is therefore proposed that an international database for instructional design for Music Education needs to be established.

- **National perspective**

The bill on *Further Education and Training* (Parliamentary bulletin 1998) states that all South Africans have the right to further their education, and that education should be made available by the State. Learning opportunities for South Africans at all levels need to be put into place. It is further suggested that accessibility can be

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promoted by providing further education in existing centres on full-time, part-time and distance basis.

Naidu (1999a:3) reports on the comments of Kadar Asmal, the new Minister of Education: ' ... serious gaps in fundamental knowledge, reasoning skills and methods of study ...' of South African learners. Asmal has suggested a nine point plan to better education. His top priorities include '... developing the teaching profession ... creating a vibrant further education and training system and developing a higher education system which understands the challenges facing the country' (Naidu 1999b:9).

In line with Asmal's plan, it is therefore proposed that educational institutions in the process of restructuring their learning strategies so as to facilitate equal learning opportunities for all South Africans, develop and expand their programme presentations. This can be achieved by making more distance learning opportunities available to learners and highlighting the importance of literacy and lifelong learning.

- **University of Pretoria**

In the light of the educational reforms on international and national level, the University of Pretoria is reconsidering its policy on teaching and methods of teaching so as to cope with the foreseen massification of education at tertiary level. These reforms include increased use of technology, diversifying learning programmes and facilitating distance learning. This is underlined by the Principal of the University Professor Johan van Zyl's core strategies for future development at the University of Pretoria. The proposed core strategies include the:

- promotion of access for all learners;
- development of Telematic education as an important strategy to cope with the massification of Higher Education;
- facilitation of student centred learning opportunities involving less contact; and
- continuos evaluation of existing and newly structured learning programmes (Van Zyl 1999).

Reformed education policies, including distance education, is therefore becoming an increasing part of the University of Pretoria's teaching approach. In order to cope with the increased distance learner numbers, the University needs to ensure that the

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administrative aspects regarding such matters as registration and communication between departments be addressed.

In order to develop material for use as distance material it is proposed that co-operation and understanding of content be encouraged between instructional designers and subject-specialists. Lecturers should also be given the opportunity to develop their instructional design skills, enabling them to generate their own material successfully for distance education purposes.

- **Music Department**

An increasing number of learners both nationally and internationally are interested in furthering their music studies, either on under-graduate or post-graduate level, at the University of Pretoria. The preparation of material in all music subjects for e.g. history harmony, theory and technology, to be used for distance education purposes can thus no longer be ignored.

In order to cope with the increased distance education learner numbers it is recommended that possible distance education courses be identified and developed within the department. The Music Department should also formulate an action plan regarding the development of material and appointment of staff to deal with the academic and administrative responsibilities of distance learners.

In order to ensure the adequate training of learners, who could in future be asked to develop material for distance education, they should be given lectures and practical assignments regarding the instructional design of distance learning materials. This implies that all learners should first and foremost be given the opportunity to develop their computer literacy skills, regardless of having regular access to a computer.

- **Instructional design for distance Music Education**

Recommendations from the results and conclusions drawn from the planning, implementation, observation and reflection phases discussed in this research should be taken into consideration when the principles of instruction, distance education, design, motivation and technology are applied to the field of Music Education. From the research results the following recommendations could be made:

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- Institutions and role models that develop distance education material, especially for Music Education, need to be identified. This will enable Music Educators to approach them for guidance and assistance when developing a DMEP.

- Publications and support material for the design of a DMEP should be compiled and made available to other designers and subject specialists.

- A network or discussion group on instructional design for distance Music Education needs to be formed where ideas can be shared and problems solved.

- The DMEP should be made available on the Internet. This will maximise the availability of the programme both nationally and internationally.

- In order to design a successful DMEP, the recommendations as summarised under Table 6.1 should be taken into consideration.

Table 6.1: Recommendations for the successful application of instructional design to a DMEP

THEORETICAL PRINCIPLES	
ASPECTS	**RECOMMENDATIONS**
Learning	Incorporate a variety of learning theories (c.f. 2.1.1). • Facilitate individualised, learner controlled learning (c.f. 2.3.2). • Enable learners to take control of the learning process. • Encourage active participation. • Base the work on meta-cognition (c.f. 2.1.2) and deep approach learning (c.f. 2.1.2).

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(Table 6.1 continued)

ASPECTS	RECOMMENDATIONS
Distance education	• Incorporate management principles in the administering and structuring of the learning process (c.f. 2.1.1) . • Prompt learners to share ideas and discuss problems and activities through two-way communication (c.f. 2.1.4). • Select a distance education theory (c.f. 2.1.4) and model (c.f. 2.1.4) according to the requirements of the designed programme.
Instructional design	• Single out an instructional theory (c.f. 2.2.1) or combination of theories supporting the methodological, procedural, facilitative and assessment qualities of the designed programme (c.f. 2.2.1). • Apply the principles of the systems approach (c.f. 2.2.2) to the design process. • Continue to analyse (c.f. 3.1) the design process and make the necessary changes.
DESIGN PRINCIPLES	
Role players in the design process	• Facilitate individualised instruction (c.f. 2.3.2) by giving the learner choices regarding when, what and how to study. • Further the design of individualised instruction through: – formulation and structuring of learning outcomes (c.f. 3.2.1); – the style and format of the text (c.f. 3.2.2); – media selection (c.f. 2.5.1and c.f. 3.1.4); – incorporated evaluation structures (c.f. 3.2.5); and – structuring the necessary management systems for future developments in learner numbers.

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(Table 6.1 continued)

ASPECTS	RECOMMENDATIONS
Instructional designer	• The subject specialist can become the instructional designer (c.f. 2.2.1). • The instructional designer should: – write topic outlines; – formulate learning outcomes; – design activities and feedback; – serve as content resource; – make use of a variety of instructional techniques; – stimulate and motivate learners; and – evaluate learner progress (c.f. 2.3.3).
Learning theory in relation to design	• Empower learners to control the learning process. • Encourage the application of knowledge and skills. • Divide learning materials into modules (c.f. 3.2.2). • Evaluate learner achievements (c.f. 3.2.5).
Course content	• Compile structured learning outcomes (c.f. 3.2.1). • Plan a meaningful layout of the text (c.f. 3.2.2). • Select the icons to be used (c.f. 3.2.3). • Facilitate the practical components of Music Education through active participation (c.f. 3.2.4). • Analyse the efficiency of the self-assessment activities to be used and feedback provided (c.f. 3.2.5). • Address learners in a friendly manner. • Select illustrations for their descriptive qualities (c.f. 3.2.2). • Explain information clearly. • State assessment criteria.

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(Table 6.1 continued)

MOTIVATIONAL PRINCIPLES	
ASPECTS	**RECOMMENDATIONS**
Motivational structures	• Assimilate the motivational aspect (c.f. 2.4) involved in the learning process. • Interest learners in the learning activity. • Make learning relevant to learners' teaching and working environments. • Determine learner expectations and facilitate them. • Satisfy learner needs.
Student support services	• Facilitate contact between learners and between learners and facilitators (c.f. 2.3.2). • Train tutors (c.f. 2.4.1). • Encourage collaborative learning (c.f. 2.4.2).
Assessment	• Incorporate diverse assessment activities. • Challenge learners. • Provide regular and meaningful feedback.
TECHNOLOGICAL PRINCIPLES	
Media selection	• Select an instructional or informational delivery mode (c.f. 2.5.1). • Analyse learner population and their learning requirements (c.f. 3.1.3). • Take modern trends and developments into consideration. • Determine learners' accessibility to various media. • Assess the efficiency of media on a recurring basis (c.f. 3.1.4).

The systems approach to instructional design and the action research model on which this study is based both indicate that the **design** of a DMEP is a continuous process. The DMEP therefore needs to be adaptable to the learning environment it was designed for.

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6.6 CONCLUSION

The significant changes that South Africa has undergone since the new political dispensation came into being in 1995 can be compared to a renaissance, an African renaissance, and symbolises Africa's awakening from a dark age.

The concept African Renaissance suggests that the people of Africa take full control of their future, on equal terms with the rest of the world (South Africa: the African renaissance 1999). This does not only imply political, economic and social control, but also includes control over the individual's education. The vision of equal learning opportunities for all South Africans, free of time and place, should also be made possible in the field of Music Education. This can be achieved by restructuring existing learning programmes and instructionally designing material that can be specifically used for distance learning purposes.

> Course design and instruction can achieve at best a good enough but not a perfect fit for successive cohorts of students, and thus that students themselves need to be pro-active in recognising their own learning difficulties and taking appropriate action to keep their own learning process alive and effective (Thorpe 1995:179).

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ADDENDUM

Refer to Chapter 3. This Addendum, comprising the DMEP, was instructionally designed, although not originally compiled by the author of this thesis. The subject content was originally compiled from material written by a variety of experts. Over the period of nearly a decade it has been constantly added to/set-out according to the principles discussed in this thesis.

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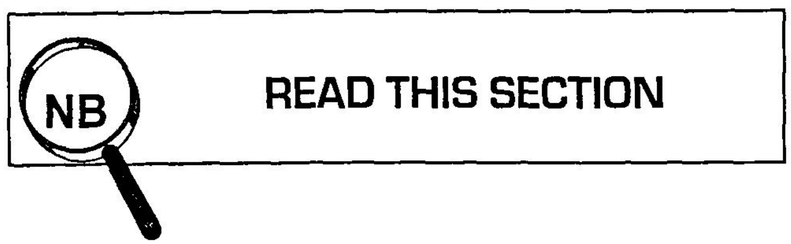

Preface

Welcome to the first year study guide for MOP 701 and 703, two of the five subjects which together make up the BMus Honours course in Music Education. Take time to read this preface so that you know how to use the study material. We hope you will find this guide practical and fun to work with.

What is this material about?

This BMus Honours course deals with Music Education. In the study of Music Education you will focus on the didactics involved in group music teaching and music making. This material was especially compiled for the teaching of Music Education in southern Africa.

The guide starts by explaining the elements and concepts of music and goes on by applying these concepts through the basic music and didactical skills for diverse teaching environments.

The material focuses on outcomes-based education. In each module the learning outcomes are stated. By being actively involved in the learning process you will gain knowledge of the use of multimedia, various music styles and the designing and planning of structured lessons.

This guide is accompanied by a video and audio cassette which will assist you in your mastering of the practical skills of Music Education. You will therefore need a video machine and cassette player to complete your assignments.

Ask your lecturers for the booklet containing written and practical assignments. These assignments should be completed and handed in on the given dates.

How do you proceed?

1. The study material is divided according to modules. The modules should be completed in numerical order.
2. There are set learning outcomes for each module. Self-evaluation assignments are given throughout the module so that you can monitor your progress. The answers to these assignments are at the back of the study guide.
3. You must master all the outcomes before continuing with another module.
4. Have a pen or pencil at hand when studying to make notes and to complete assignments.
5. Should you encounter a problem, write it down to ask your lecturers at the first opportunity.
6. Try to apply all information to your specific teaching or working environment.
7. If you would like to read up further, consult the bibliography at the back of the study guide.

Important information

Each module incorporates the following features to enhance your learning:

- ✓ **Learning outcomes** explaining what knowledge you should have acquired after completing the module
- ✓ **Interactive text** and visual presentations
- ✓ **Practical examples** of content and its application
- ✓ **Icons** explaining and guiding you through the material and activities
- ✓ **Assignments** for the application of knowledge and self evaluation.

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Icons and their meanings

The specific outcomes explain the outcomes of the selected headings of modules. These outcomes will help you to achieve the general learning outcomes.

After a section a brief summary of content is given to ensure that you have understood the knowledge previously explained before continuing with another section.

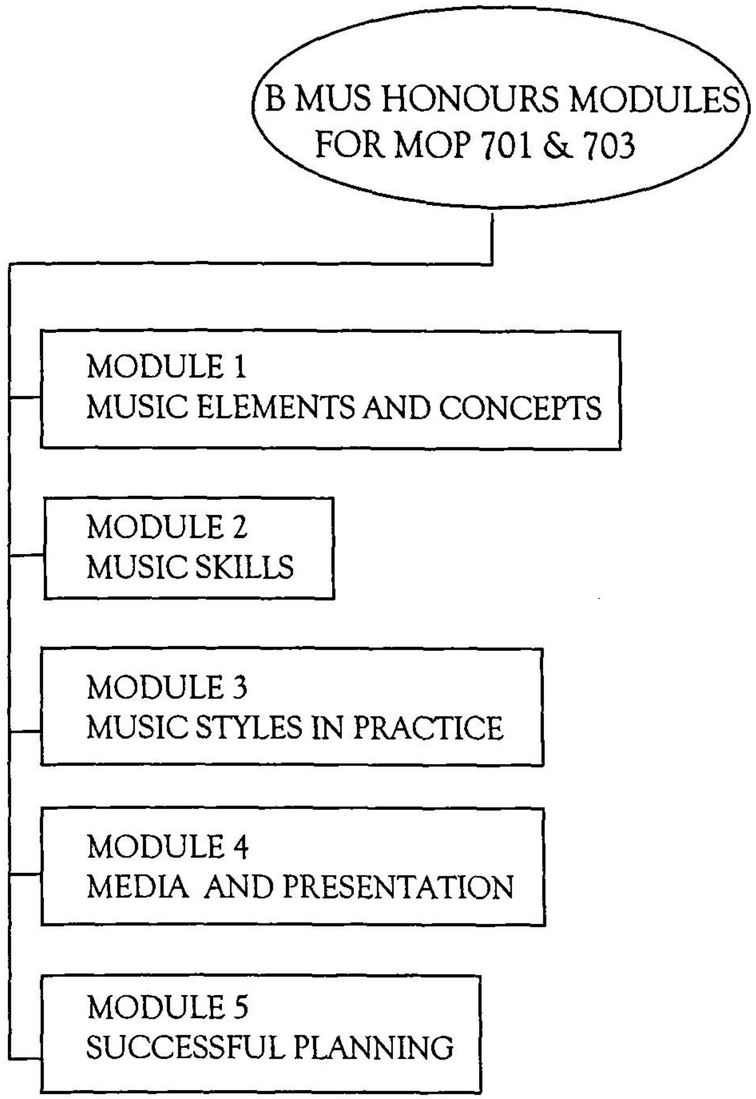
EG

The given examples explain how the content will be applied in practice. The examples will also guide you in your problem solving.

This icon indicates that you should complete the assignment. When you come across this icon you have the opportunity to evaluate your progress. If you have trouble completing this assignment, refer to the *study material before continuing.*

This icon indicates that a definition of terminology is given.

The modular structure can be summarised as follows:



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MODULE 1

MUSIC ELEMENTS AND CONCEPTS

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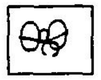
MUSIC ELEMENTS AND CONCEPTS

Learning outcomes

At the end of this module you should be able to:

- define the elements and concepts of music
- name the elements and concepts of music.

Icons to look out for:



- specific outcomes

- summary of content

- examples

- assignment

- definition

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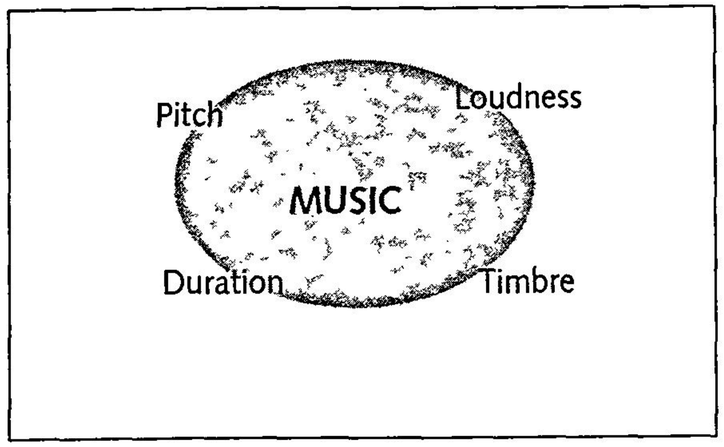
1. Elements

Music elements are the most basic building blocks of music. When listening to music, various elements can be distinguished. These elements are present in all types of music, and can be combined in different ways.

Elements of music:

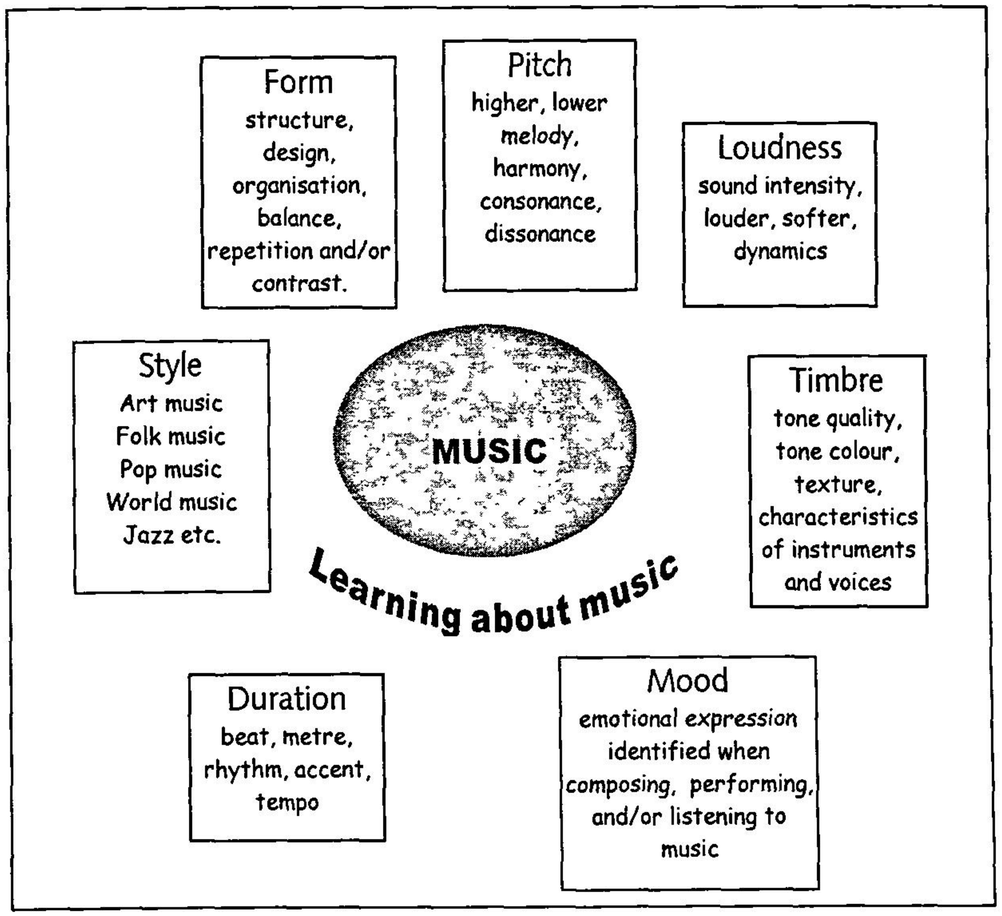


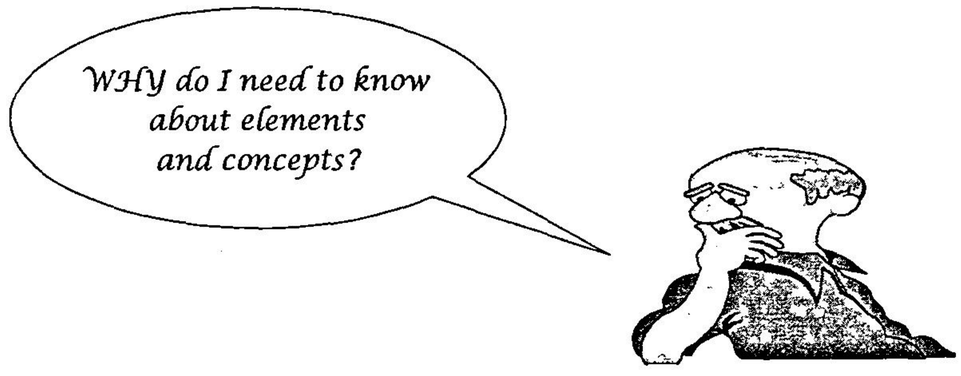
2. Concepts

The concepts of music are the descriptive terms used to facilitate the understanding of the combination of elements present in the music. The concepts therefore describe how the music elements sound, as combined in a particular piece of music.

Music learners also need to form concepts in their minds, based on their recognition and understanding of the musical elements and concepts they encounter.

Concepts of music:





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It is important that you are familiar with the definitions of the different elements and concepts for they are present in all forms of music and in combination they form music.

.....

3. Definition of elements and concepts

The elements of music and their corresponding concepts can be described as follows:

3.1 Duration

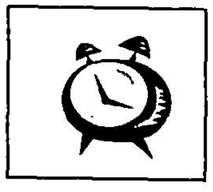
Duration covers everything which relates to the timing of music - that is, the effects of beats, accents, the grouping of notes and the tempo at which they are performed. The *concepts categorised under duration include the following:*

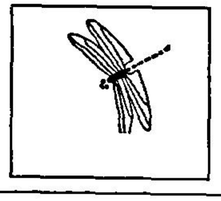
- **Beat** can be described as a rhythmic or structured pulse.
- **Metre** is a regular succession of rhythmic beats.
- **Rhythm** *in music is a grouping of sounds and silences of varying duration, usually* controlled by a regular beat.
- **Accent** can be distinguished when one note or combination of notes are emphasised.

EG

Which of the following aspects regarding duration can be identified in the pictures?

a) beat
b) metre
c) rhythm
d) accent





- **Tempo** indicates the speed of the music. Descriptive words, often in a language like Italian, are used to indicate this pace of the music.

EG

presto	-	very fast
lento	-	slow
ritardando	-	gradually slower

1.1 Can you name a piece of music which has the following tempo?

FAST.....

MODERATE.....

SLOW.....

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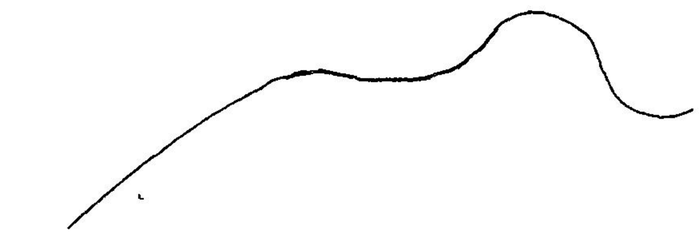
3.2 Pitch

Pitch can be described as the location of a sound or groups of sounds on a scale. In order to distinguish the pitch the notes can:

- move **higher** or **lower;**
- *be grouped together to form a* **melody;**
- be **consonant** or **dissonant;**
- be heard simultaneously to form **harmony.**

EG

The pitch of the song *Kum ba ya, my lord* can be portrayed as follows:



Kum ba yah, my Lord, kum ba yah

3.3 Timbre

Timbre, a French word, describes the **quality** of **tones**. Timbre is also known in English as **tone colour.**

- **Tone colour** is the distinctive sound of any instrument or voice. By distinguishing the tone colour one can, for example, categorise voices as being soprano, alto, tenor or bass.
- **Texture** refers to the relationship between a melody and other simultaneous sounding notes. Texture is often described as light, heavy, thick or thin.

EG

thick texture

When many instruments of an orchestra or band are playing together or when big chords are played on a piano, for example.

THIN TEXTURE
A SOLO VOICE OR INSTRUMENT WITH PERHAPS ONE ACCOMPANYING INSTRUMENT.

3.4 Form

- *The organisation of music into musical forms can be compared to the visual plans* of construction made by architects. Form therefore refers to the **design** or **structure** of a melody. Musical forms are most successful when they are **balanced**. Most musical forms are based on the principle of **repetition** and **contrast** as described by the following example.

EG

An **AB** form structure tells you that there are two basic themes used in this composition, the one is marked **A** and the other **B.**

A B A

- *Repetition and contrast*

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3.5 Loudness

Loudness is characterised by the **intensity of sound**. When variations in loudness are indicated by a composer and found in music, they are also referred to as **dynamics.** Descriptive words are often used to describe the degree of volume, **loudness** or **softness**, of sounds.

EG

p (piano) - soft

f (forte) - loud

cresc. (crescendo) - gradually increasing loudness <

decresc. *(decrescendo)* - gradually decreasing loudness >

3.6 Style

We use the word style in reference to everything from clothing to cooking, cars and paintings. In music, style refers to a characteristic way of using elements and concepts. A particular way these elements are combined results in a total sound that's distinctive or unique. When you listen to the radio and identify music as rock or jazz - you are responding to style. We also refer to the musical style of a composer, country or historical period. Music styles can change from one era to another (Kamien 1988: 86). Music styles are described in further detail in Module 3, and in this course we include Art, Folk, Pop, World music and Jazz.

3.7 Mood

The mood of music refers to the emotional experiences involved when listening to or performing music. It can also refer to the emotion which a composer was trying to convey.

1.2 Name a piece of music that makes you feel:

* HAPPY..... * SAD.....
* CALM ..... * ENERGETIC.....

Music elements and concepts form the basis of music knowledge. According to Nye & Nye (1992) concepts do not exist in reality; they represent our attempts to give order to the information perceived by our senses. The defining of concepts thus helps us to understand, explain and teach music to others.

.....

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1.3 Look at the following piece of music and name the number of concepts you can distinguish.

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MODULE 2

MUSIC SKILLS

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MUSIC SKILLS

Learning outcomes

At the end of this module you should be able to:

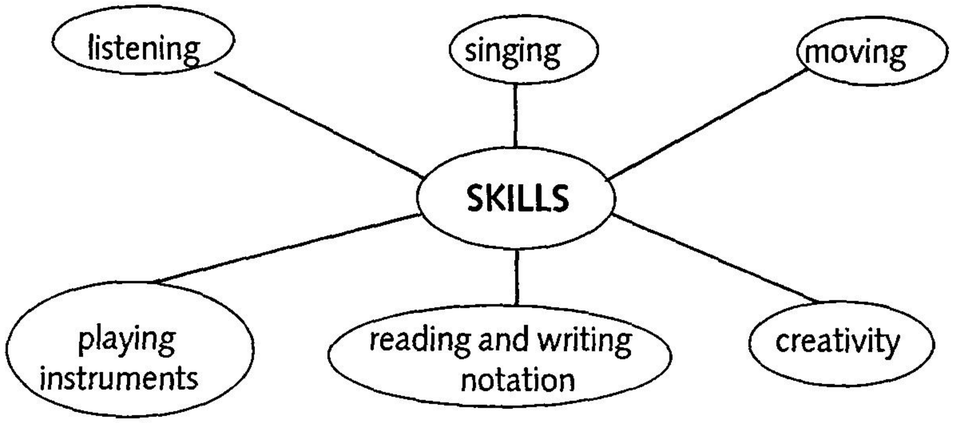
- name the skills used in group music
- describe and demonstrate the didactic guidelines of group music skills
- apply the skills in a teaching environment.

Icons to look out for:

- specific outcomes
- summary of content
- examples
- assignment
- definition

Skills

Skills are the methods or tools by which the concepts are illustrated. Skills are **HOW** concepts are taught. By implementing different skills in a lesson the learners experience the concepts, being actively involved in the learning process.



The different skills will now be introduced separately, focusing on:

- didactic guidelines,
- the planning of structured activities, and
- the integration of skills.

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1. Listening activities

SPECIFIC OUTCOMES:

At the end of this section you should know:

- What listening as a component of group music entails.
- Why guided listening should be part of the group music syllabus.
- What the learning content of guided listening encompasses.
- How to plan for structured, guided listening.
- How to plan and prepare teaching media for guided listening activities.
- How to conduct a guided listening experience.
- How to integrate other skills with guided listening experiences.

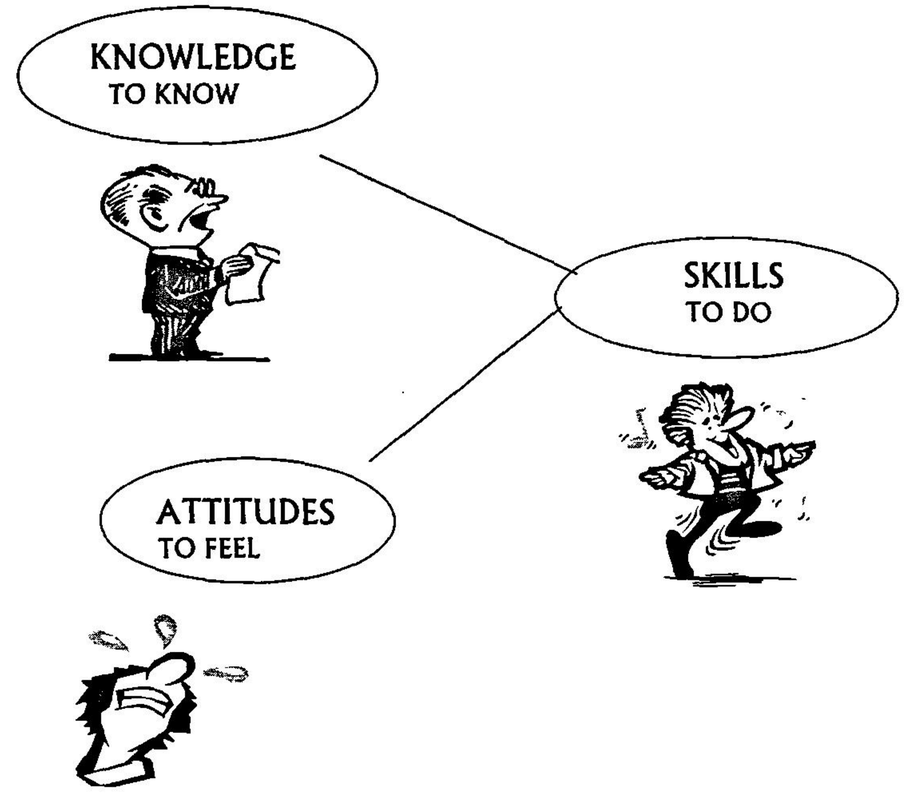
Listening activities in group music should be distinguished from the more general and old-fashioned term, **music appreciation** (Hoffer 1983:403). Music appreciation does not necessarily imply an active involvement in music.

• Passive listening

A wrong impression exists that listening implies solely the playing of sound recordings. During such a listening session learners are passive. This situation creates an ideal opportunity for disciplinary problems seeing that there are no purposeful tasks involved. Learners are deprived of valuable music experience since they develop no insight into the music.

• Active listening

Active listening to music is an activity that includes music:



Since the music is experienced on three levels, it leads to sharpened perceptive faculties and greater insight and understanding on the side of the listeners.

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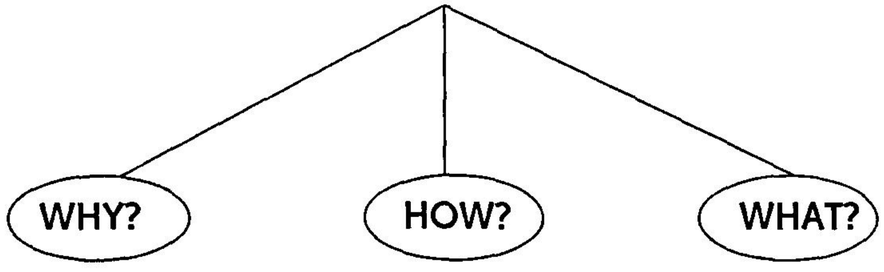
When sound material is being discussed, it is inevitable that listening tuition is also included. Therefore the teacher should be thoroughly aware of the:



1.1 WHY are listening activities presented?

Listening is probably the most important skill in the junior and senior secondary phases of group music. There are various reasons for this:

- Music implies SOUND. Therefore listening activities are present along with all the other skills. When learners sing, play on instruments, read notation, move or create, it always involves sound and they listen, whether purposefully or accidentally.

- Many teenage boys' voices change and singing is no longer easy or satisfying to them. Activities like movement or creativity can cause teenage learners to feel uncertain and exposed. Listening implies no threat and thus learners can identify themselves more easily with this skill.

- The group music teacher is mostly involved in training future listeners.

- By means of listening, learners are introduced to a wide spectrum of music that lies outside their own capabilities of music-making.

- Experiencing a wide spectrum of music, learners develop an insight and judgement regarding all types of music. This leads to a gradual creation of an educated listening public in future.

- By listening to quality music, the learner learns that music can translate his/her feelings and emotions in a satisfactory manner and can serve as an escape valve for these. It is thus an education of the learner's affective domain, addressed by few other subjects.

From this can be deduced that listening is a useful and valuable activity for learners that can be an enrichment of their quality of life.

.....

2.1 Use keywords to summarise the importance of listening.

1.....

2.....

3.....

4.....

5.....

6.....

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1.2 HOW should listening activities be presented?

When considering the methods of presentation, there are a few **challenges** and possible **solutions** that the group music teacher should take into account.

CHALLENGES

- Listening is primarily an activity that is aimed at the aural sense-organ. This sense organ is, however, not always developed as well as the visual sense-organ. Due to sound pollution, as well as limited exposure to purposeful listening to quality music, the listening ability of the average adolescent is poorly developed. The learners' ability to listen with attention and insight should thus be cultivated.

- Lengthy explanations generally do not succeed in making the abstract character of the music accessible to the learners. Learners are not always capable of listening attentively without a visual stimulus or something concrete to connect the sound to.

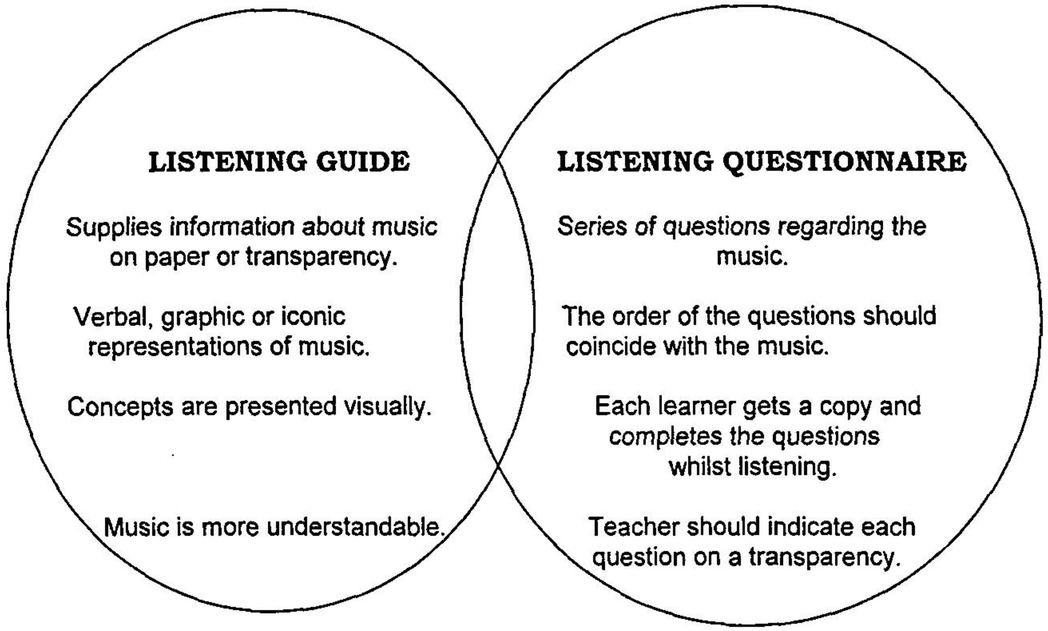
- Music is a multidimensional art form that involves a variety of elements and concepts. The simultaneous sound of various aspects like melody, rhythm, form and harmony can be confusing to inexperienced listeners.

POSSIBLE SOLUTIONS

The teacher should plan strategies to avoid the obstacles surrounding listening tuition. Possible solutions are the following:

- Due to learners' poorly developed aural sense, a variety of educational media should be used to stimulate their visual and auditory interests.

- Learners' attention should be focused on specific aspects in the music. This can be done successfully with the aid of listening guides and listening questionnaires.



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The use of listening guides or listening questionnaires implies that the teacher needs to talk less, allowing for more listening to be done. In this way communication does not take place at the expense of the music. Lengthy verbal explanations about music often bore the learners. The music itself should rather be heard.

- Most learners are inexperienced listeners. It is therefore important to keep listening excerpts short - between 40-80 seconds each. It is, however, also important to expand and develop the listening abilities of the learners, so that they will gradually be able to listen to longer excerpts with concentration.

- Listening tuition can be very successfully integrated with other skills in order to get learners actively involved in a listening lesson. The themes from a listening example could, for example, be sung beforehand with a suitable added text, so that it is already known when learners hear it in the music. With the aid of instruments, music concepts like dynamics, melody and harmony can be illustrated in listening examples. A listening example can encourage learner creativity through improvisation. With thorough planning the teacher can therefore provide for a variety of activities that link up with listening examples, thus creating enriching and meaningful listening opportunities for the learners.

- An aspect that is often overlooked, but which is of prime importance to the success of a listening guide, is the teacher's non-verbal communication. The teacher's positive involvement with the music will be infectious and this safe atmosphere can in turn ensure that the learners will react spontaneously to the music.

Summary of challenges and solutions

CHALLENGES	SOLUTIONS
Underdeveloped listening skills	Use a variety of educational media to stimulate visual and auditory interests
Lack of concentration when listening	Focus learners' interest on specific aspects in the music Limit listening excerpts to 80 seconds Expand listening abilities gradually
Distinguishing concepts simultaneously	Combine listening with other activities Guide learners' perception through non-verbal communication

1.3 WHAT is being taught through listening?

An aspect that will contribute positively towards the success of listening lessons, is the choice of listening material. Group music is largely dependent upon this. Therefore it is of prime importance that the teacher plans judiciously in order to compile a balanced listening programme that will also relate to the interests of the target group. A few guidelines regarding the choice of sound examples follow:

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Sound example checklist

The music should

- ✓ enhance the theme or learning outcome of the lesson
- ✓ be of good quality
- ✓ be selected from various styles and periods
- ✓ excite you as teacher
- ✓ reflect the learners' environment.

2.2 *Can you name four pieces of music that could serve as examples to the checklist?*

1.

2.

3.

4.

In the choice of listening material, the teacher should consider which is more important - stylistic variety or repetition of certain quality compositions. The best solution is to keep a balance. Certain works can be heard repeatedly while the learners should also be exposed to as many different examples of quality music as possible.

Any composition worth hearing, is worth hearing more than once
(Regelski 1981:244).

1.4 How to create a listening guide

1. Listen to the music repeatedly.
2. Write down the concepts that can be heard.
3. Decide on the concept/s that could serve as learning outcomes.
4. Design the layout on a piece of paper.
5. As soon as the design is completed, listen to the music once again and check whether the guide is portraying the music.
6. Make the transparency, blackboard presentation or poster.

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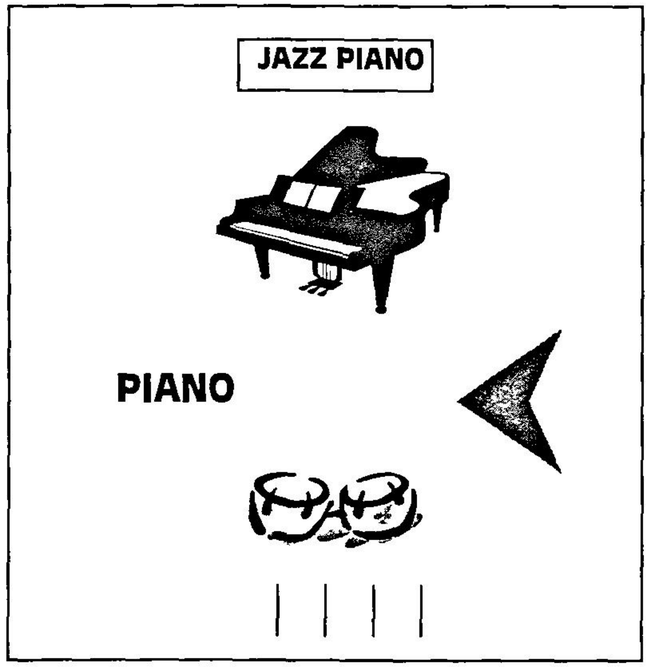
EG



1.5 How to create a listening questionnaire

❶ Listen to the music repeatedly.

❷ Write down the concepts that can be heard.

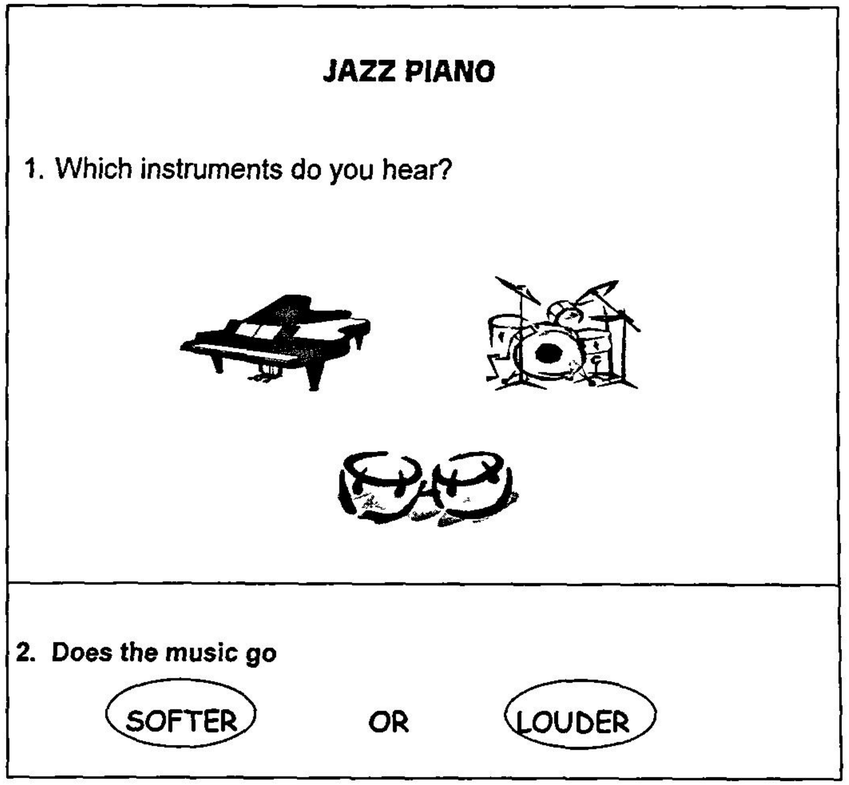
❸ Decide on the concept/s that could serve as learning outcomes.

❹ Formulate questions which will guide the learners to the correct concepts.

❺ Give multiple answers from which the learners could choose.

❻ Design an attractive listening questionnaire on paper. Each learner should get a copy. A master copy could be written on transparency.

EG



2.3 Read the section on listening in the prescribed supplementary material - answer the following questions:

- What is the difference between a listening guide and a listening questionnaire?
- Listen to a piece of music and design your own listening guide and questionnaire using the given guidelines (p 25-26) as examples.

There are templates for listening guides and questionnaires on the next page.

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LISTENING GUIDE	LISTENING QUESTIONNAIRE

Can you still remember the learning outcomes of listening? Look at them once again to ensure that you have gained the necessary knowledge.

If you do not have a projector, you can design a poster or blackboard presentation. The same design principles apply.

2. Singing

SPECIFIC OUTCOMES:

At the end of this section you should know:

- Why singing should be part of group music.
- What the learning content of class singing encompasses,
- and how to select it.
- How to plan and prepare teaching media for singing activities.
- The different methods of how to teach a new song.
- How to guide the out-of-tune singer.
- How to integrate class singing with the other music skills.

Successful sounds can also be experienced through singing. Many music educators believe that singing should be the heart of a group music programme.

'EVERYBODY SING' is a slogan that has enjoyed priority. The question is, however, whether everybody wants to and should sing. In the past, singing was a form of entertainment. Today entertainment is freely available. This has a remarkable influence on singing tuition and group singing in schools.

Singing is not heard as a usual group activity in the home; radio and television consume time formerly available for such effort (Andrews 1971:40).

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2.1 The task of the group music teacher

- Try to ensure that learners experience the joy of group singing.
- Train learners to enjoy singing through listening activities.
- Identify natural singing leaders in class.

2.2 The value of singing in group music

The value of singing for learners is a subject on its own. Only a few aspects will be highlighted that are directly relevant to group music.

- *Group singing* binds the participants.
- *Music elements and concepts can be explained and taught through singing.*

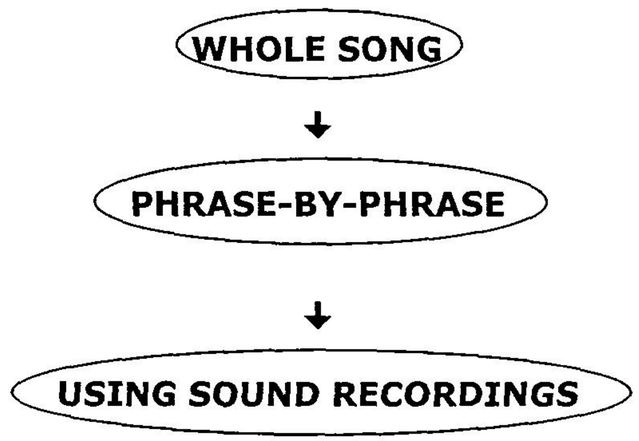
The following elements and concepts can be identified:

FORM:	Repetition; Contrast; AB; ABA; Rondo
TONE COLOUR:	Vocal -different singing voice Instrumental - *different instruments*
DYNAMICS:	Very soft to very loud
TEMPO:	Very slow to very fast
HARMONY:	Major and minor; Blues; Ostinato patterns
TEXTURE:	Unison and part singing
RHYTHM:	Regular; Irregular; *Accents*
MELODY:	Ascending; Descending; Sequences; Stepwise; Leaps

2.3 Choosing songs

- Be sensitive and choose suitable songs.
- Accommodate the learners' preference for songs that are enjoyable to sing.
- Expand the song repertoire of the learners and introduce them to a large variety of songs.
- Read the text to determine for which age group the song is suitable.
- Choose mostly songs sung in unison.
- Accommodate boys' changing voices by using part singing. Part singing includes rounds, descant songs and simple two- and three-voiced songs.

2.4 Methods of teaching a song



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• WHOLE SONG

The best known approach is that in which the teacher repeatedly sings the song as a whole. The learners repeat the song with or without the teacher. Short songs can successfully be taught in this manner.

• PHRASE-BY-PHRASE

By means of introduction the teacher sings the song as a whole. The first phrase is then sung by the teacher and immediately imitated by the learners. Thus the song is taught phrase-by-phrase. It is then sung as a whole.

The teacher needs a good singing voice, accurate intonation and self-confidence to make this method succeed. Should this fall within the teachers' ability, this method is very useful to ensure good intonation during singing. The song should, however, be appropriate.

An electronic keyboard is an effective accompaniment aid. The tone colour of the instrument is attractive to learners and transposition can take place with ease. The instrument can be played in such a manner that eye contact with the learners can be retained throughout. It is easy to play and does not place high demands on the teacher's technical abilities.

• USING SOUND RECORDINGS

This method can be used to encourage learners to sing along while a recording of the song is being played. This method has the advantage of seeming to be acceptable to teenagers, because the sound recording is used as a basis.

With the necessary amplification a volume can be suggested that is encouraging for group singing. This method is especially recommended for the teacher without a good singing voice. To ensure that the learners learn the song correctly and to evaluate whether they know it, the volume can gradually be turned down.

The disadvantages of this method are, amongst others, that the tempo and pitch cannot be adapted to the ability of the learners' singing voices. In general, however, this proves to be a successful method.

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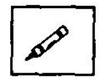
2.4 

- Choose a song and practise how you would teach it by using the whole song and phrase-by-phrase methods.
- Can you compile a list of songs which can be sung from a recording?

  Choose your own age group. How would you teach these songs?

NAME OF THE SONG	ARTIST	CD or CASSETTE

When was the last time that you looked at new releases at a CD shop?

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2.5 Why don't learners want to sing?

Many reasons can be given why certain learners do not want to sing. A few will now be discussed.

- The school situation inhibits singing. The correct method of singing is enforced upon learners. Singing thus loses its spontaneous character. It becomes a group activity that is far removed from the spontaneous singing of infants.

- The tension of choir auditions leaves learners with the idea that choir singing is the aim of all singing. The learner who is not selected for the choir feels that his/her voice is not good enough to sing.

- The emphasis of vocal music normally falls on a group activity (choir) or an individual performance in public. Those who do not see their way clear to participating, normally withdraw from singing activities.

- Often songs that are easy to sing are the ones learners do not like to sing. Conversely, songs that learners sing willingly, i.e. popular songs, are often difficult to sing.

- Changes in society are also responsible for the fact that people sing less. Learners seldom sing at home with their families.

- Learner's ears have become used to sophisticated and high quality sound. Their own singing therefore sounds discouraging in comparison with that to which they are accostumed.

- Most teachers are aware that learners have a limited song repertoire. Singing on camps and other gatherings is less and less spontaneous.

Singing is an activity that is very valuable for group music. There are learners to whom singing is a positive experience. The choice of the song, as well as the way in which the group music teacher teaches a song to the learners, determines successful singing.

2.5 By using keywords summarise the reasons why learners do not want to sing.

1.....

2.....

3.....

4.....

5.....

6.....

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2.6 Read the section on singing in the prescribed supplementary material - answer the following questions.

- Which factors determine the choice of songs?
- Give didactic guidelines for the presentation of singing.

CHOICE OF SONGS	DIDACTIC GUIDELINES

Can you still remember the learning outcomes of singing? Look at them once again to ensure that you have gained the necessary knowledge.

.....

3. Playing instruments

SPECIFIC OUTCOMES:

At the end of this section you should know:

- Why instrumental playing should be part of group music.
- What the learning content of instrumental playing encompasses, and how to select it.
- How to plan and prepare teaching media for instrumental playing activities.
- How to integrate instrumental playing with the other music skills.

Learners of all ages can find ensemble music-making satisfying and even thrilling. However, the motivation for playing instruments and the context in which the activity is introduced, are of prime importance to the learner. In other words, the song or recording to be accompanied or the themes which serve as stimuli for creative work should be perceived as relevant and inspiring.

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An experienced teacher of adolescents will acknowledge that it is the beat of pop music to which this group responds. And exciting orchestral 'art' music with a strong, rhythmic inflection by the brass and percussion is infinitely preferred by the musically unknowledgeable learner to a more flowing harpsichord prelude or operatic solo. While the teacher avoids childishness of subject matter at all cost, variations of co-ordination skills and abilities should be constantly considered.

Differences in experience and stimulation will be manifested in the vast differences in learners' abilities to respond rhythmically as well as to co-ordinate complex rhythmic patterns. Therefore, the well-prepared lesson will always include a range of instrumental accompaniments of varying degrees of difficulty, with weaker players given the benefit of the support of additional players. Successful activities include:

OSTINATO RHYTHM PATTERNS

↓

NON-MELODIC OSTINATO PATTERNS WITH BODY PERCUSSION

↓

MELODIC PERCUSSION INSTRUMENTS

• OSTINATO RHYTHM PATTERNS

- Experience a rhythmic pattern by practising rhythmic body percussion (which can also be preceded or accompanied by speech patterns).
- Ostinato rhythm patterns are very useful - particularly with less accomplished note readers and inexperienced players.
- Then transfer the pattern to the instruments.

Planning the transfer from body percussion to instruments

CLICKING	**Metal sounds**	triangle, finger cymbal
CLAPPING	**Wood sounds**	woodblocks, claves, guiro
PATSCHEN	**Membranes**	hand drum, bongos
STAMPING	**Large percussion**	timpani, gong

Patschen is performed by clapping hands on your thighs.

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• NON-MELODIC OSTINATO PATTERNS WITH BODY PERCUSSION

- The teacher performs a particular body percussion whilst the learners play a non-melodic percussion ostinato.
- The various instrumental parts are first taught.
- While the learners play, the teacher performs various body percussion movements, each of which represents a particular instrumental part.

EG

A "patschen" cue can be given for the tambourine to play, clicking - triangles, etc. Two or more parts to be played simultaneously can involve some complex physical co-ordination by the teacher, while ensemble playing with a whole group can be a highly amusing affair.

• MELODIC PERCUSSION INSTRUMENTS

- Melodic percussion instruments are typically found in the ensemble playing characteristic Orff ostinato and other accompaniments.
- Translating body percussion into instrumental playing can be equally successful for both melodic and non-melodic accompaniments.

- When teaching ostinato progressions and simple non-ostinato progressions, code or key physical movements are established to apply to the music.

EG

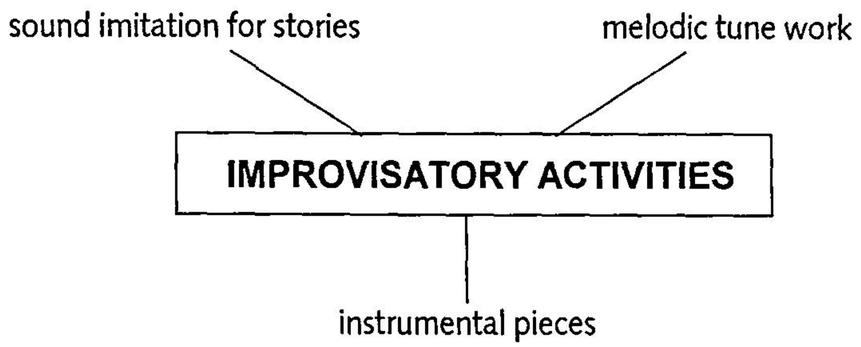
I - is represented by a bang on the knees

IV - a slap on the thighs

V - clap

These movements are then translated into root notes on melodic percussion instruments.

- The playing of melodic percussion instruments is also extremely useful in improvisatory activities:



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• Sound imitation for stories

(Refer to LANE 1984:36 - *Project: The rising of the 45)*

Sound imitation is basically the interpretation or expression of a story through sound. In practice this means that the class decides on the most suitable timbre, dynamics and types of rhythmic patterns with which to portray the various characters as well as the events of the story. This is then 'acted out' or performed in sound, with or without narration.

Whereas one might previously have hesitated to apply this type of activity to negative adolescents, Lane's excellent example has an air of excitement and fun - giving scope to melodic percussion instrumental work which should induce enthusiastic participation.

• Melodic tune work

Melodic tune work is done by imitation, exploration and improvisation. Tunes can be played and improvised and this is an excellent aid to and medium for the learning of notation.

EG

To improvise using only their voices on, say, three notes would be considered childish. However, three-note melodic instrumental exercises - in the form of imitation, exploration and improvisation over an exciting textured ostinato - are a viable proposition and can then be extended to, or combined with singing.

In this way learners can develop their note playing, reading and sight-singing skills (in especially the pentatonic) fairly quickly.

• Instrumental pieces

Melodic percussion instruments are used to create single phrases, introductions, interludes, codas, etc. These compositions can begin with a single phrase - which can itself be the product of, say, a 'question and answer' activity, or body percussion transferred to non-melodic instruments, after which melodic instruments may be added.

EG

A typical Orff activity is to create the A section of a rondo in this way, and retain at least a portion of the ostinato accompaniment while B and C sections are improvised.

2.7 Read the section on instrumental playing in the prescribed supplementary material. Then answer the following question.

- Name the four categories of instruments with an example of each.

1.	2.
3.	4.

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2.8 Read the section on instrumental playing in the prescribed supplementary material - answer the following question.

How can instrumental playing be utilised?

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Can you still remember the learning outcomes of instrumental playing? Look at them once again to ensure that you have gained the necessary knowledge.

.....

4. Creativity

SPECIFIC OUTCOMES:

At the end of this section you should know:

- Why creativity should be part of group music.
- What the learning content of creativity encompasses, and how to select it.
- How to integrate creativity with the other music skills.

The importance of creative activities in group music cannot be disputed. The results of intensive research and experimentation by numerous music educators have conclusively shown that the students' manipulation of musical material - either as improvisation or composition - to create new forms, is an invaluable tool for gaining musical knowledge. It is also a unique channel of self-expression.

It is, however, important that creativity should be found in every group music lesson, even where the major focus of the lesson is not on improvisation or composition. The musicality which results in the satisfying performance of all work produced, should be the result of the combined contribution and creative effort of everyone concerned.

Specific activities which emphasise creativity in the form of original compositions, improvisation, creating texts or movement patterns, etc. provide a unique opportunity for self-expression and fulfilment.

Certain important criteria should be observed by the teacher in order to ensure that the positive outcome of these creative experiences in music teaching are guaranteed:

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Creativity checklist

- ✓ Commend all sincere efforts.
- ✓ Knowledge should be mastered before creativity is attempted.
- ✓ Make use of a spiral curriculum for creative activities.
- ✓ Establish discipline.
- ✓ Spell out the parameters of the creative activity.
- ✓ Give appropriate examples to encourage self-conscious learners.

Improvisation is not a mindless froth of notes, it is something that is, however momentarily, thought out...it is clear that in order to create new music, a player needs experience in music created by others before him, on which he can draw, in order to produce something original (Lane 1984:13).

Learners respond more enthusiastically to creative activities when they feel safe in the knowledge that what is required of them will not result in their feeling foolish or exposing themselves to ridicule - but is a satisfying and fulfilling experience.

The Orff approach is essentially a creative one, since small improvisatory steps are encouraged at each stage in the process, while the process as a whole leads to improvisation or creative music-making. It is therefore useful to look at certain proponents of this approach for methods by which to guide and stimulate creative work with adolescents.

EG

In *Elementaria* (1974), Gunild Keetman provides information about the sequencing of material and activities which build up towards improvisation. Rhythm and melody are introduced in the smallest cells and a careful, sequential vocabulary is built up in each concept using speech, body percussion, instruments and patterned dancing, the activities themselves spiralling from the simplest to the most complex levels. Much of the material could be made relevant to the secondary school, simply by changing the texts. Even in the most basic, initial examples in duple time, one thinks of the words of pop songs, or words that focus on teenage crazes like skateboarding or surfing, Spice girls, discos, etc. to be used as speech patterns.

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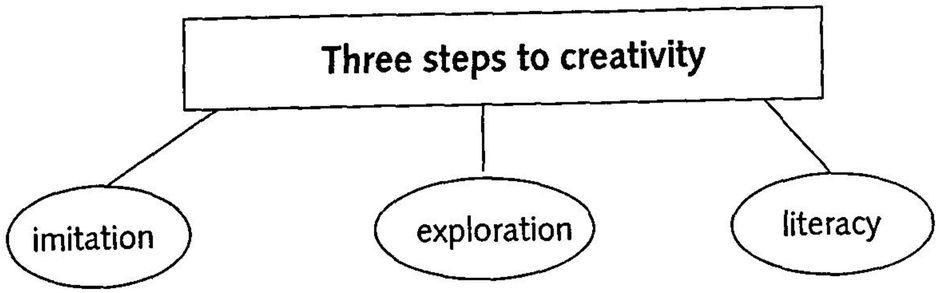
CHALLENGE

It is generally accepted that the experimentation normally associated with creativity in the classroom implies risk, and that not all improvisatory activities will be successful. Teachers of negatively-minded adolescents, however, simply cannot afford to risk initial experiences in which learners are made to feel foolish or be ridiculed while the class may be irreversibly harmed.

SOLUTION

Improvisation should be the final activity at every stage of learning (Frazee & Kreuter 1987: 31) rather than a particular ability which one attains. It is therefore not only possible, but desirable that the smallest possible 'improvisatory steps' are taken at every relevant opportunity by the most inexperienced learners. The ability to improvise can thus be gradually improved (in practice, by both teacher and learners) as the process slowly evolves. In Frazee & Kreuter's book, improvisation is carefully prepared for by the preceding steps of imitation, exploration and literacy.



'Elemental' material - whether this refers to a single rhythmic phrase or a whole pentatonic song with instrumental and/or movement accompaniment - is first learnt through imitation. When the material is known to the learners, it is ready to be explored, that which is relevant notated and finally new phrases, sections, or whole compositions based on this known material, invented.

Four creative steps

- Imitate
- Explore
- Notate
- Invent

Improvisation is thus the ultimate 'manipulatory' technique by which the learners' understanding of the known material is deepened. It is also a useful evaluatory tool for the teacher. The improvisation form, in particular, is a good initial improvisatory activity to be used with inexperienced and musically-illiterate adolescents. Ranging in complexity from:

Question and answer phrases - speech patterns, rhythmic phrases, body percussion

↓

Inventing episodes in a rondo

↓

Inventing whole compositions

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These activities have the advantage of rhythmic stimulus and group support. By this is meant that, right from the question and answer stage, the entire class can be providing a strongly rhythmic ostinato - again by means of speech, body percussion or instrument playing - against which individuals may take turns to improvise answers to the teacher's or leader's question phrases.

In the earlier stages, this improvisation need be no more than interesting body percussion movement patterns. Provided that the initial activities are well within their capabilities, and that the improvisation is relevant and direct, not 'practice for its own sake' but forming a meaningful part of the lesson context, this type of activity has every chance of succeeding with learners.

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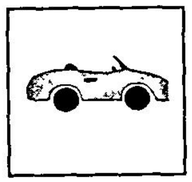
2.9 Look at the following pictures and imagine the sounds that are related to them. How can you portray these sounds by using body percussion, vocal sounds and instrumental improvisation? Perform them by yourself or with some friends.



2.10 Read the section on creativity in the prescribed supplementary material - answer the following question.

- Name the didactic principles involved in the presentation of creativity.

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Can you still remember the learning outcomes of creativity? Look at them once again to ensure that you have gained the necessary knowledge.

.....

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5. Notation

SPECIFIC OUTCOMES:

At the end of this section you should know:

- Why notation should be part of group music .
- What the learning content of notation encompasses, and how to select it.
- How to plan and prepare teaching media for notation activities.
- The different methods of how to teach different forms of notation.
- How to integrate notation reading and writing with the other music skills.

Traditional methods of teaching notation as an entity separated from the more enjoyable, practical aspects of group music, have led to notation becoming an aspect which often arouses negative or even hostile feelings amongst learners. Consequently, many music educators have come to spurn the inclusion of notation, particularly in the secondary school syllabus.

The ability to read music is, however, an important skill which both facilitates and substantially contributes towards progression in music-making. As such, its total exclusion from the group music programme should be viewed as limiting, if not ultimately detrimental to, the learners` participation in music-making and musical growth.

• Presenting notation

NEGATIVELY

It would seem that the negativity commonly expressed towards the learning of notation has stemmed from its commonly being presented in either of the following ways:

✗ **Separating symbol and sound**

The essence of music is sound; therefore, if notation is presented without sound, it becomes meaningless theory and not music.

✗ **Symbol as point of departure**

The symbol becomes the point of departure from which the learner is led to sound. This approach is unjustifiable and negative. The symbol has meaning for the learner when it becomes the visual application of that with which he/she is already familiar aurally. In more simple terms the lesson procedure should be:

HEAR → DO → SEE

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POSITIVELY

The teacher wishing to include notation in the group music lesson in a manner in which it will contribute positively and significantly to the music-making experience in the class, should present the activity with due consideration for the following:

☑ **combine notation with other skills**

Since notation is not 'music' as such, the reading of notes should always be combined with other skills so that it becomes functional and meaningful for the learner. The teacher can include notation.

EG

Provide notated themes in listening guides, with songs or instrumental work - even if these are learnt by imitation. In this way a considerable amount of incidental learning takes place.

Graphic notation can be used very successfully, especially in instrumental work or visual representations of listening material. One of the most important goals of notation is to encourage learners to notate their own compositions. This can be done in either graphic or traditional notation

☑ **Complete involvement in music**

It should be constantly borne in mind that the teaching of notation is in itself not music-making, but merely a means towards the end of achieving a more full and complete involvement with music.

☑ **Reading of notation is not a prerequisite to music-making**

If the teaching of notation adversely affects the learners' love for, or interest in music, it is of no value whatsoever.

☑ **Didactic insight and skill**

The teaching of notation demands a high degree of didactic insight and skills in order to prevent boredom and frustration on the part of the learners.

☑ **Varying individual note-reading skills**

Individual note-reading skills will vary greatly within a single class and, in group music-making, less able learners will benefit from the leadership of the more skilled.

☑ **Realistic expectations**

The teacher should not entertain unrealistic expectations of learners' abilities, particularly of those who do not receive individual instrumental instruction. It is sufficient for these learners to develop a meaningful though limited ability to read and reproduce notation.

NOTATION

Negative presentation	Positive presentation
• Separating symbol and sound	• Combine notation with other skills
• Symbol as point of departure	• Complete involvement in music
	• Reading of notation is not a prerequisite to music-making
	• Didactical insight and skill
	• Varying individual note-reading skills
	• Realistic expectations

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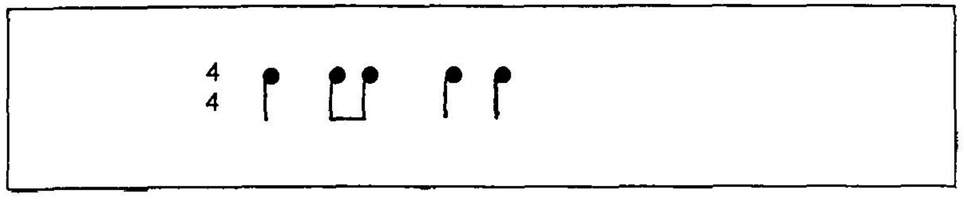
2.11 Read the section on notation in the prescribed supplementary material - answer the following questions.

- Can you identify the following types of notation?

➔.....



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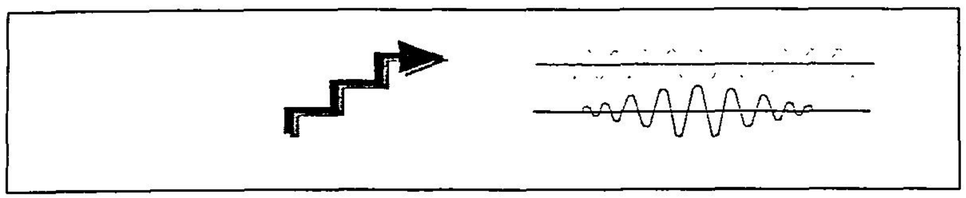

➔.....

➔.....

Can you still remember the learning outcomes of notation? Look at them once again to ensure that you have gained the necessary knowledge.

.....

6. Movement

SPECIFIC OUTCOMES:

At the end of this section you should know:

- Why movement should be part of group music.
- What the learning content of movement encompasses, and how to select it.
- How to plan and prepare movement activities.
- How to integrate movement with the other music skills.

Music educators in South Africa today are faced with a situation where the prevailing attitude to movement in music is a negative one. Two types of movements can be distinguished.

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• FREE INTERPRETATIVE MOVEMENT

For the purposes of definition and reference in this discussion, movements which consist largely of the individual's unique physical response to the music will be referred to as ***free, interpretative movement***. Despite academic differences between the various styles in this genre, free interpretative movement (or at least its goal or ultimate form of expression) is adequately defined by Laban:

> *In a free dance technique, that is a technique without a preconceived or dictated style, the whole range of the elements of movement is experienced and the practised. From the spontaneous combination of these elements arises the almost unlimited variety of steps and gestures....*(Laban 1963:26).

EG

Marsh (1970:38) gives an example of free movement presentation in her book *Explore and discover music:*

Teacher: What does a balloon look like when it flies?
Learners: Light,
Goes faster in an air current
Teacher: What other objects have the same characteristics?
Learners: Clouds

The teacher then plays a piece of music to which the learners should move like a balloon or clouds.

• STRUCTURED RHYTHMIC MOVEMENT

Prescribed, sequenced movements - essentially movement patterns in sequences, patterned dances that are initially imitated by the learners - will be referred to as ***structured, rhythmic movement***.

6.1 Teenagers and movement

Adolescent learners baulk at 'flying like birds' or 'acting out parts of a machine' - dreading ridicule or exposure. The adolescent desperately seeks the identity and security of the teenage culture and vehemently rejects the 'childishness' of activities considered acceptable in earlier standards.

Adolescence is described by Swanwick (1968:69) as a period of 'discomfort and mental pain'. Adolescence is characterised by confusion as to the individual's role and status. Not yet an adult and yet no longer a child, the dichotomy of the two worlds of childhood and adulthood results in tension, exacerbated by an awakening personality, and choices between old and new modes of behaviour. It is a time for:

> *...strong emotional drives, that sometimes practically cripple the possibility of normal communication with other people...*
> (Swanwick 1968: 69).

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This observation offers the music teacher some insight as to the reason why adolescents generally seem loath to express feelings or personal descriptions of music through movement.

However, the desire to comply with the conformity which is the overriding criterion of the adolescent community, and the self-consciousness that results when not doing so, is probably the more likely cause.

Andrews, in a section called *"What are they like"*, describes Junior High school learners bluntly:

> *They are energetic and dynamic when motivated and interested, lazy and indifferent when bored. They are considerate, compassionate, and thoughtful when in sympathy with the other person or persons with whom they are involved. Or, they are rude, thoughtless, and defiant when out of sympathy with what they do not understand or consider unimportant.... Much seems to depend on their attitude towards the adults who teach them and supervise them....* (Andrews 1971: 76).

Movement activities for learners should be well planned, much thought being given to the likely reaction from, and consequent attitude developed by the learners in response to these activities.

CHALLENGE

Teenagers are not very fond of movement activities because they think they are childish and humiliating.

SOLUTIONS

- Use movements that are related to teenage dancing.
- Use music that they would probably dance to outside of school.
- Start with simple, easy to follow movements.
- Body percussion which can be performed close to the body whilst sitting down will give them a feeling of security.
- Give clear instructions on the sequence of movements.
- Set a clear, easy to follow example.
- Keep the age group and ability of the class in mind.

It is theoretically possible for ongoing, specialised movement training to result in the removal of these obstacles which preclude the successful implementation (or certainly commencement) of free interpretative movement with adolescent learners.

However, it is important to note that the use of all 'creative' activities using the medium of movement Is not automatically excluded. The approach to creativity in the Orff process, using movement and all the other media, is one where the process of creativity is developed by giving the learner a basic vocabulary with which to create.

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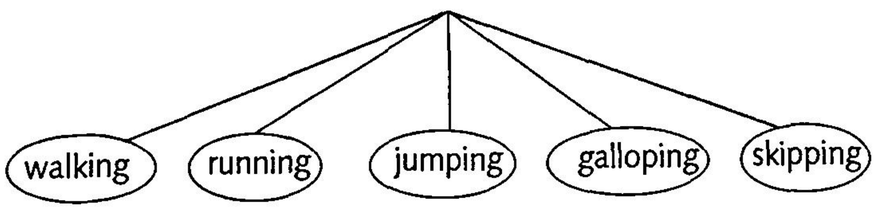
6.2 Movement vocabulary

Movement vocabulary can be divided into two groups namely locomotor and non-locomotor movements.

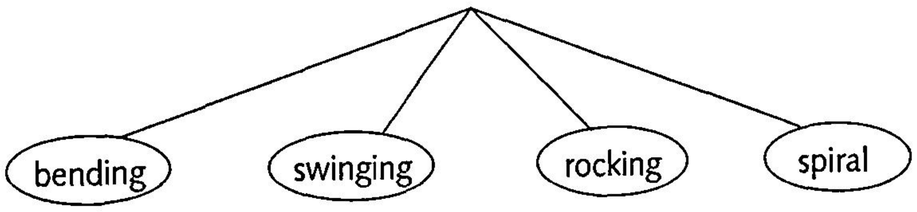
- **LOCOMOTOR**

In locomotor movements the body is taken from one point to another. These movements include



- **NON-LOCOMOTOR**

Non-locomotor movements can be performed without moving the body from one place to another. A part of the body is always in contact with the floor, and these movements include sitting, lying and standing positions. Other non-locomotor movements:



These two types of basic movements can be combined in the designing of movement patterns.

The stimulus for movement, i.e. types of movement and music used, is of utmost importance. In fact, the negativity towards movement often originates here. Adolescents will simply not move willingly to music they do not enjoy, and as a result of the typical mentality of the particular developmental phase within which they find themselves striving for identity, they are far more discriminating about what they enjoy than during their earlier primary school years.

6.3 Hints for successful movement presentations

THE TEACHER SHOULD:

- have a sense of rhythm;
- be sensitive in choosing sound material;
- have knowledge of different styles of music;
- be able to combine movement with other activities;
- be enthusiastic about the movements; and
- be sensitive to the learners' reactions and preferences.

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HOW TO TEACH A DANCE

- The movements should fit the age group and theme of the lesson.
- Every learner should be able to participate.
- Demonstrate movements slowly, step-by-step.
- Practise familiar movements with the learners.
- Give background information on the origin of the movements or music being used.
- Know the music.
- Give verbal clues to successive movements.

SUCCESSFUL PERFORMANCE

- **Rhythm and tempo**

  Be aware of the beat and tempo of the music.
- **Style**

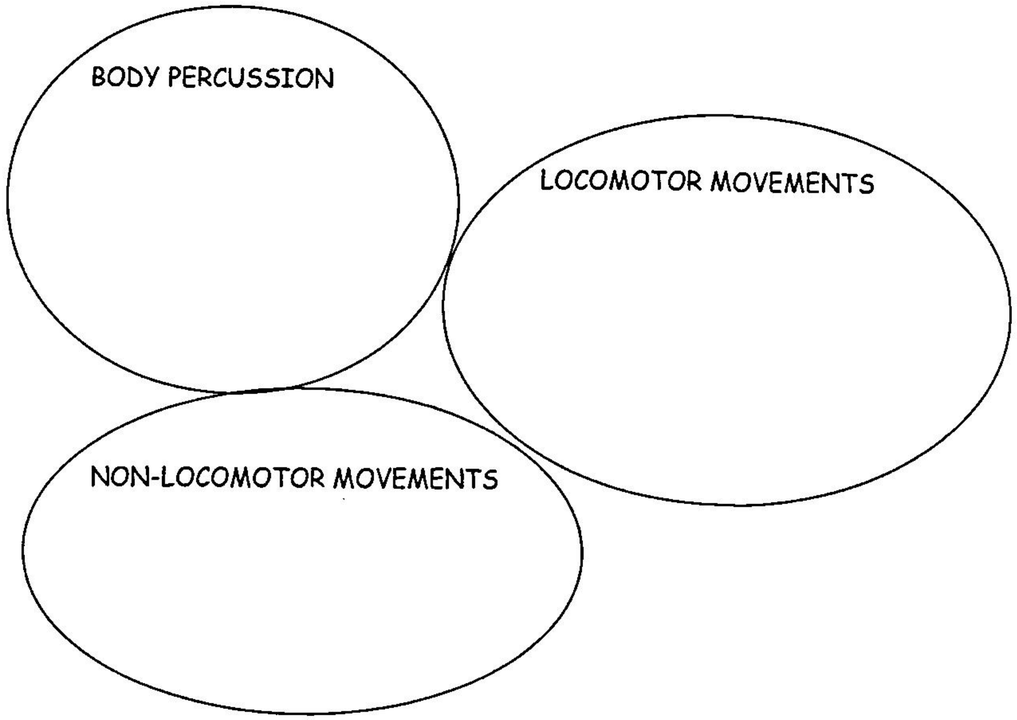
  The style of the dance is portrayed by the body carriage. When a dance from another country or culture is performed, it is very important that it be done true to style.
- **Memorising patterns**

  You should practise the dance at home so that you know the sequence of movements to be performed.

The group music teacher needs to have empathy for, and understanding of, the adolescent mind. When this truly exists, the communication between teacher and learner will be real, while the lesson activities will be presented with due consideration not only for what causes awkwardness, embarrassment and self-consciousness, but also for that which is likely to thrill, enthral and delight. In order to reach these goals, the teacher needs to be thoroughly prepared.

2.12 Read the section on movement in the prescribed supplementary material, then answer the following questions.

- Define each of the following by suggesting relevant movements:
  TRY NOT TO LOOK AT THE PREVIOUS PAGES!



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- What music from your collection can be used for the teaching of movement? Give the name of the music, as well as the movement(s) for which it can be used.

.....

.....

.....

.....

.....

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MODULE 3
MUSIC STYLES IN PRACTICE

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MUSIC STYLES IN PRACTICE

Learning outcomes

At the end of this module you should be able to:

- explain the value of group music
- identify different music styles
- emphasise the importance of the different styles in a music curriculum
- apply the different music styles in practice.

Icons to look out for:

- specific outcomes

- summary of content

- examples

- assignment

- definition

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1. What is music education?

Music civilizes us, humanizes us, harmonizes us with our world and makes us whole, thereby fulfilling us (Reimer 1989:25).

To listen has become a non-essential and comfortable activity in today`s society. We **'hear'**, but do not necessarily **'listen'**. With so much to listen to, we inevitably listen to less. This inclination reduces the complexities of life and is thus an easier way to live. Unfortunately this attitude towards listening influences music-listening activities.

In the group music class, learners should be taught the skill of listening to music. This will eventually become a life-long skill since so many learners become only listeners (of recordings and performances) rather than performers. The ability to listen does not only benefit music, but all learning aspects.

The skill of listening well, comes from learning to listen and listening to learn (Krone & Miller 1968:28).

The aim of music education is to teach learners to listen to music with sound judgement, insight and emotional involvement.

Learners should be led to grow musically from

"this music is STRANGE"

"this music I UNDERSTAND"

"this music I ENJOY"

According to the specific aims in group music syllabi, learners should be made conversant with musical concepts and skills by means of quality sound material from:

- Western art music,
- Music that forms part of learners' relevant cultural heritage,
- Folk and traditional music of other nations, and
- Music of the learners' own relevant milieu.

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In this study guide the general types of music will be referred to as:

- **Western art music**
- **Folk music**
- **Modern, popular music**

Middle Ages *Renaissance*

BAROQUE CLASSICAL

Romantic

TWENTIETH CENTURY

.....

1.1 Western art music

Western art music (or classical music as it is generally known) is characterised by a dependency on music notation and the prime role that the composer plays (Apel 1979:323).

Western art music is an architecture of sound where music elements and concepts (rhythms, melody, tempo, texture, dynamics, form, harmony and style) are used in certain characteristic ways. Notation also leaves scope for the study of the history of music.

The composer is elevated as artist and the performing artist is only an interpreter who recalls the art work with discipline and precision during the performance. This music comprises both religious and secular music and has been composed in various periods. These periods with their 'rules' of composition are the following:

EG EXAMPLES OF WESTERN ART MUSIC

Middle Ages	:	Bernart DE VENTADORN: *Be m`an perdut* Politoske 1984: 72-73; Record series Side 2, Track 5).
Renaissance	:	Thomas MORLEY: *Now is the month of Maying* Politoske 1984: 100-102; Record series Side 2, Track 11).
BAROQUE	:	George F. HANDEL: *Messiah 'Hallelujah chorus'*
CLASSICAL	:	Wolfgang A. MOZART: *The Magic Flute K 620*
Romantic	:	Giuseppe VERDI: *Rigoletto - La donna e mobile*
TWENTIETH CENTURY	:	Igor STRAVINSKY: *'The rite of Spring', Danse sacrale*

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3.1 Compile your own TOP 10 Western Art Music list:

1. ..... 6. .....
2. ..... 7. .....
3. ..... 8. .....
4. ..... 9. .....
5. ..... 10. .....

.....

1.2 Folk music

Folk music is the music repertoire and tradition of nations. The term can be applied to music of underdeveloped origin made by a community that has not been influenced by popular or art music (Sadie 1980 [6]: 693).

This musical tradition developed through a process of aural transmission and has been subjected to variation by individuals or groups. The community determined the form or forms in which the music was maintained. The composers of this music are generally anonymous (Kennedy 1980:232).

Folk music originated mainly among illiterate classes. This music is rich in tradition and exists in practically every part of the world. Popular music, composed and accepted unchanged by a community, should not be erroneously classified under this term (folk music). It is the recreation and reformation of the music by a community that gives the folk character to the music.

Folksongs

The Western folk song developed from unsophisticated poems that described various aspects of everyday-life. Thus a variety of songs originated, namely epic, religious, patriotic, work, love, sleep, drink, dance or mourning songs. Folk songs of various countries have certain characteristics that, although difficult to describe, illustrate the general national characteristics of the people.

EG

EXAMPLES OF FOLK MUSIC

♫ Italian folk:	Bella bimba
♫ Israeli folk:	Hava Nagilah
♫ South African:	Shosholoza
♫ Irish:	Cockles and mussels

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3.2 Can you name a folk song from your cultural background which deals with:

WORK

.....

LOVE

.....

RELIGION

.....

1.3 Modern popular music

The essence of popular music is that it is understood easily by a large section of mankind. It is generally accepted that the appreciation of popular music does not require any knowledge of music theory or techniques (Sadie 1980 [15]: 87). Therefore, this is music that people listen to gladly.

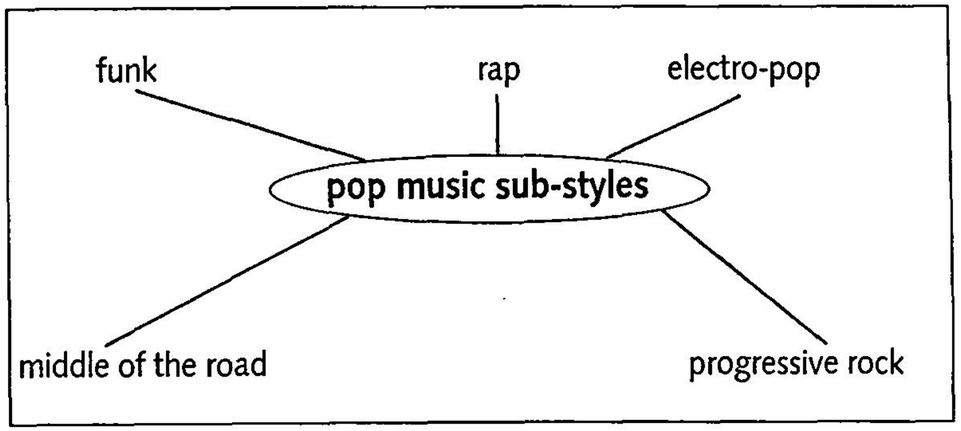
The word 'popular' embraces not only that which has general or mass impact, but also refers to the preference and insight of people in general - the general public or listeners. The popularity of this music is determined by the number of records that have been sold and the music that is requested in programmes on the radio.

Pop music

The teenager's popular music is generally known as **pop music**. The teenager experiences this music physically, sings the melodies repeatedly and hears and sees broadcasts of hits on every radio and television channel. Pop music is in truth non-literate music with a strongly acceptable, simple, emotional message that is created spontaneously. Due to the creative spontaneity, the creators of this music are continually progressing musically. The completion of one work serves as a stimulus to start on the next hit. This music is linked to a certain artist or group (Kennedy 1980:500) and the composer is generally an unknown factor.

The publicity of the singer or group plays an important role in the life of the teenager. Teenagers are exposed to the comings and goings of their pop heroes in practically every popular magazine and/or newspaper. Many of the pop music hits are at the top of the hit parade the one day and forgotten the next.

The pop music genre, that originated as Rock `n Roll, can today be divided into various sub-styles such as:



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EG	EXAMPLES OF POPULAR MUSIC
♫ MIDDLE OF THE ROAD:	ABBA: Thank you for the music
♫ ROCK:	PHIL COLLINS: Another day in paradise
♫ DISCO:	VILLAGE PEOPLE: YMCA

3.3 Make a TOP 10 list of popular songs which could be used for Group Music Classes.

1.....
2.....
3.....
4.....
5.....
6.....
7.....
8.....
9.....
10.....

2. Why different types of music?

The influence of music on the teenager

Western art music

- The **quality of life** of the learner can be enhanced through contact with the aesthetic music of proven lasting value.
- **Creative thoughts** are developed and stimulated.

Folk music

- Music from his/her native soil helps the learner **identify** with typical aspects of that race and **culture**.
- Comprehension and insight is gained in the teenager's own **musical tradition**.
- Comprehension and insight into music of **other cultures** is gained.

Popular music

- By using the teenager's music in the class, the teacher can secure a **relationship of trust** with the learner.
- Selected pop music that, for example, refers to the preservation of the environment or makes social statements, can assist the learner in relevant questions of the day.

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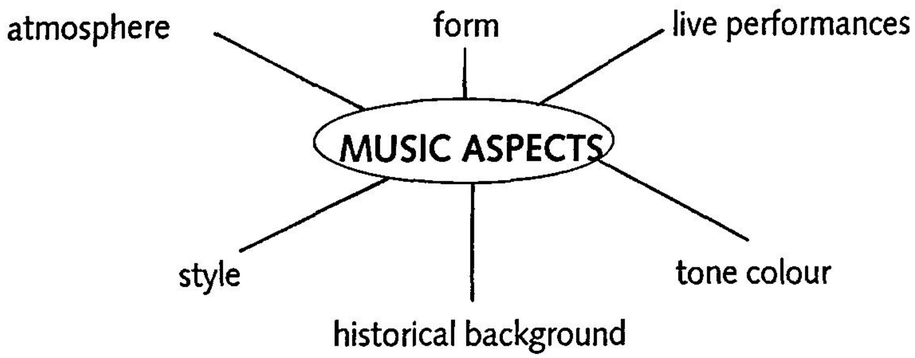
3. The value of different music types

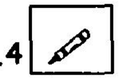
The knowledge acquired by the teenager

Western art music	Folk music	Popular music
• music concepts • composers and history	• rhythmic structure • vocal structure • enjoyment of music	• rhythm • electronic advances

Aspects that could be identified in the music



Aspects as used in this material refer to components present in the music and can also include elements and concepts.

3.4  Listen to two examples from your TOP 10 lists and answer the following questions:

EXAMPLE 1:

- Describe the atmosphere of the music with one word.

  .....

- Which instruments can you hear?

  .....

  .....

EXAMPLE 2:

- Do you have any information on the historical background of this music?

  .....

  .....

- Which elements and concepts of music can be heard ?

  .....

  .....

.....

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4. The use of pop music in group music teaching

Adolescents regard a musical diet consisting of Western 'serious' music or conventional lessons in the mould of those received in earlier grades, as identification with the 'staid' establishment (whose authority and morals they are rejecting), or 'learnerishness' (which they are attempting to outgrow). The following quotation is apt and also applies to the situation which exists amongst learners in South African schools:

> *Out of school, adolescents are enthusiastically engaged in musical self-education. They crowd the record shops at weekends. Within the range of their preferences, they are often knowledgeable and highly critical of performances. They find rhythm exciting. Some teach themselves or each other to play an instrument. Here is a vigorous popular culture which is international in its camaraderie. Yet in the schools, the contrasts are striking* (Swanwick 1968: 105).

The teacher who omits pop music from the curriculum unwittingly increases the musical and psychological generation gap and initiates the resistance to the subject which continues and grows in the secondary school years. Hostility is aimed at the teacher who is seen as the representative of the establishment: at best, out of touch with, and at worst, scorning the feelings and experiences of the adolescent.

WHAT SHOULD YOU DO?

It is suggested that the above situation can be remedied by the effective use of the developing teenager's own musical language, i.e. pop music, to serve both as a bridge of communication between teacher and learner and as a vital method of approach, or point of departure, for the teaching of musical concepts. Far from abandoning the teaching of serious music, it is suggested that the teacher use pop music as a kind of 'torch' to illuminate and make relevant, concepts which are common to all kinds of music.

Many teachers spurn the idea of using pop music in school because they consider it to be inferior, 'canned' noise and a product of the commercial market, while others dismiss pop music on moral grounds, believing that the group music teacher's chief purpose should be to educate the adolescent and pre-adolescent away from its degenerate, if not evil, allure.

More and more music educators are, however, acknowledging that there are genuine musicians to be found amongst even mainstream pop artists, and that pop music is a music in its own right, which is representative of a specific culture i.e. the teenage culture. Therefore, it has a place in the multicultural education of adolescents.

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4.1 What does the term 'pop music' mean to the average adolescent?

Pop music - a large portion of which is represented by the current Hit Parades of Western countries - is understood by the teenager to be an umbrella term for the various styles of music in the Afro-American tradition.

Since an understanding of what is meant by the terms Afro-American tradition is essential for the teacher to grasp the essence of the musical styles to which learners relate, two books are recommended:

SHAW, A. ***Black popular music in America***

This writer maintains that 'white' popular music has been erroneously described by other authors as the 'mainstream' development, while the work of black musicians was merely an influence. His convincing study reveals that black musicians were well developed and established but commercialised by whites - without whose contribution in this regard the music would very likely have disappeared into obscurity.

HATCH & MILLWARD. ***From blues to rock***

While Shaw provides a detailed and fascinating account of rock `n roll's undeniable black American roots, it is extremely useful to refer to Hatch & Millward's *From blues to rock - an analytical history of pop music* in order to trace the chronology of events since rock `n roll, including the British contribution of the sixties.

Group music teachers who reject pop music as inferior will find the seeds of both pop versus rock and commercial versus artistic traits in the fascinating account of the history of music.

4.2 Does pop music have educational value?

Lack of time and space preclude a detailed exposition on the argument of morality i.e. whether Pop is degenerate, satanic, etc. However, any teacher hesitant to use pop music for group music teaching because of suspicions such as these, is referred to:

PATTISON, R. ***The triumph of vulgarity***

This writer goes to some length to convince the reader that 'rockers' generally embrace an inherently depraved and narcissistic mythology (with which he is apparently very proud to be associated). However, read from the perspective of many other authors, some of which are *Vulliamy & Lee* (1976 & 1982), *Anderson* (1968) and *Swanwick* (1968) - the latter being a rather reluctant, resigned advocate for the use of pop - one is convinced that this depravity, Satanism, etc. may well exist, but that it is certainly not present in the vast majority of pop music.

Of great importance to the group music teacher is the fact that the mainstream, commercialised pop of the Hit Parade variety, which is especially appealing to the general adolescent culture, can be generally regarded as free from these evils. What becomes very evident in Pattison's book is the fact that he bases much of his belief about rock's mythology on an examination of only a very limited selection of lyrics. In this regard a comment from the introduction to Pop music in School is relevant:

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Here it is sufficient perhaps to suggest that there is a tendency to condemn the whole of pop culture on the basis of viewing only part of it. In addition we feel that such critics are prone to misinterpret even that part of it which they do investigate.

We are aware that many people have been highly critical of the values which they feel to be associated with pop music. Such a stance is often the real basis for opposition to or lack of interest in pop music and this is why reasoned arguments, including detailed consideration of the music itself, often fail to produce any significant changes in their attitudes. Certainly questions of moral and cultural value are of the greatest importance; it is impossible to act in a morally responsible way without having answered this satisfactorily.

However, the editors have found that the many years they have spent listening to, playing and talking about pop music have been of such significance in the development of the own responses to and thoughts about music that they have in fact provided satisfactory answers to these questions of value; the editors must therefore agree to differ from such critics (Vulliamy & Lee 1976:1).

4.3 Reasons for the inclusion of pop music in the group music curriculum

... Learners have sensed a lack of relevance to their needs and aspirations, resulting in indifference, boredom, hostility and rejection. The evidence of the many adolescents who turn their backs on musical study confirms this. It points to the inescapable conclusion that insufficient attention has been paid to the impact of youth sub-culture and the influence of the mass media on the formation of tastes, attitudes and values of young people (Peacock 1982:18).

For the average adolescent, a distinct polarisation of peer-group and adult norms and values has already occurred, of which the accompanying polarisation of 'serious' and 'pop' music is symptomatic. To suggest that a suitable enriching curriculum before this period would prevent the problem of pop music occurring, seems analogous to the unlikelihood that a learner dressed conventionally and conservatively prior to adolescence will, as a result, have no desire in the pre-adolescent or adolescent period to dress in a manner considered fashionable by his or her peers. The identification with adolescent behaviour and attitudes appears to be as inevitable and unavoidable as the intense liking for pop music which occurs at this age.

It is suggested that the wise and judicious use of pop music can and does provide the key which is able to unlock doors of resistance which the adolescent closes to some group music activities. Peacock (1982:10) refers to "...an evolutionary process rather than a revolutionary coup". When a group music teacher accords pop music due respect in terms of presenting it as a music genre occupying its rightful place amongst the different kinds of music of this world, a vital bridge of communication is formed between teacher and adolescent learners.

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3.5 You are being confronted by parents for using popular music as part of your music program. Name the advantages and learning outcomes of popular music.

ADVANTAGES	LEARNING OUTCOMES
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

Turn the page for further assignments.

3.6 Watch the video clip 'SUCCESSFUL SOUNDS' and complete the following tables.

BAROQUE

STYLE	GENRES
.....	.....
.....	.....
.....	.....

COMPOSERS	INSTRUMENTS
.....	.....
.....	.....

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CLASSICAL

STYLE	GENRES
.....	.....
.....	.....
.....	.....

COMPOSERS	INSTRUMENTS
.....	.....
.....	.....
.....	.....

ROMANTIC

STYLE	*GENRES*
.....	.....
.....	.....
.....	.....

COMPOSERS	*INSTRUMENTS*
.....	.....
.....	.....
.....	.....

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TWENTIETH CENTURY

STYLE	GENRES
.....	.....
.....	.....
.....	.....

COMPOSERS	INSTRUMENTS
.....	.....
.....	.....
.....	.....

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MODULE 4

MEDIA AND PRESENTATION

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MEDIA AND PRESENTATION

Learning outcomes

At the end of this module you should be able to:

- list different possibilities of teaching media
- demonstrate the various didactic guidelines for teaching media
- design different examples of teaching media
- arrange a class so that effective teaching can take place
- demonstrate positive and negative non-verbal communication
- know the qualities essential to a competent group music teacher.

Icons to look out for:

- specific outcomes
- summary of content
- examples
- assignment
- definition

Introduction

Modern learners grow up in an age of technology and television. It is therefore important for group music teachers to consider the use of teaching media. Moss (1983:13) already found more than a decade ago that learners spend more time in front of the television than at school.

Teachers should therefore make use of visually attractive media to ensure that learners will enjoy and benefit from the learning process - WE SHOULD EDUCATE AND ENTERTAIN!

The erroneous belief exists that teaching media can teach independently, without the input of the teacher. On the contrary, it is vital that the selected media should be integrated into the learning process as a whole so as function interactively within the lesson.

Integrate media into the learning process

- make the learning content visually attractive
- remember it is essential to educate and to entertain.

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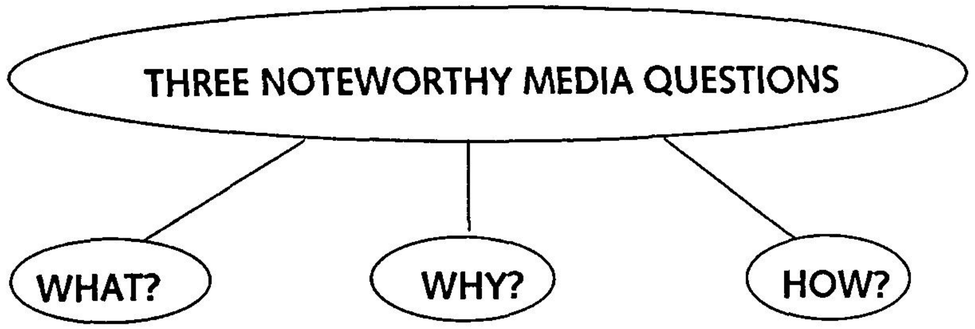
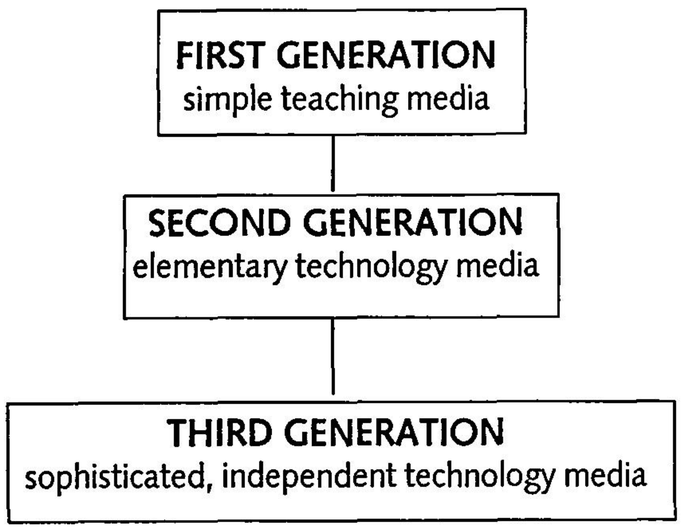


1. What are teaching media?

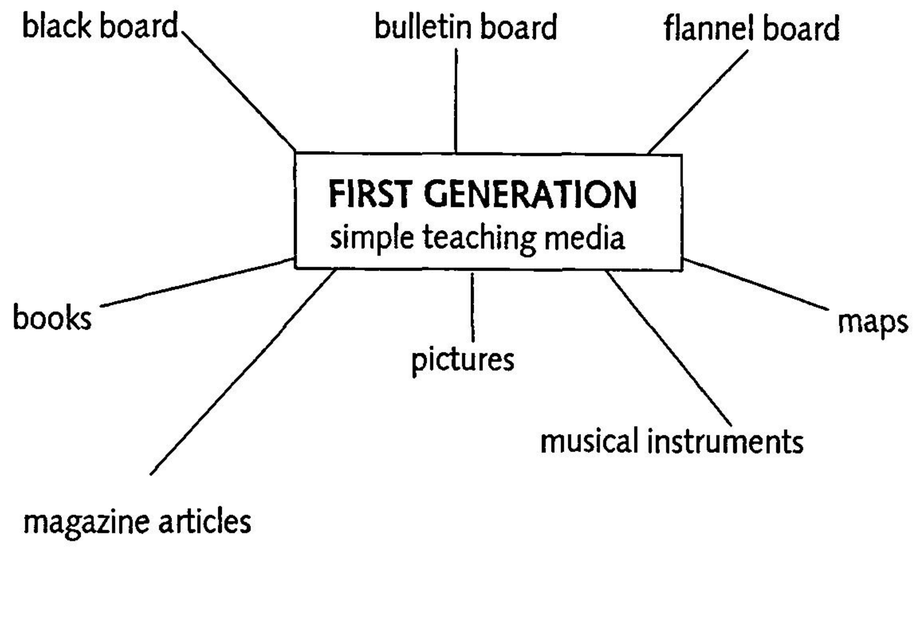
Teaching media are all the aids a teacher can utilise to ensure that the teaching content is successfully communicated to the learners. A considerable variety of teaching media is available to the teacher.

The group music teacher should incorporate a range of media into lesson presentations to prevent lessons from becoming stereotyped and to ensure interesting variation of activities. Heunis (1987:16) divides teaching media into three groups.



1.1 First generation media

First generation teaching media include readily available material. Teachers often overlook the value of these simple teaching media.



EG

A **flannel board** can be used to convey the key concepts of music to learners, while other more sophisticated media simultaneously display moving pictures or additional information. The use of **maps** is an ideal way of ensuring subject integration and of broadening learners' general knowledge about music and the lifestyle of others.

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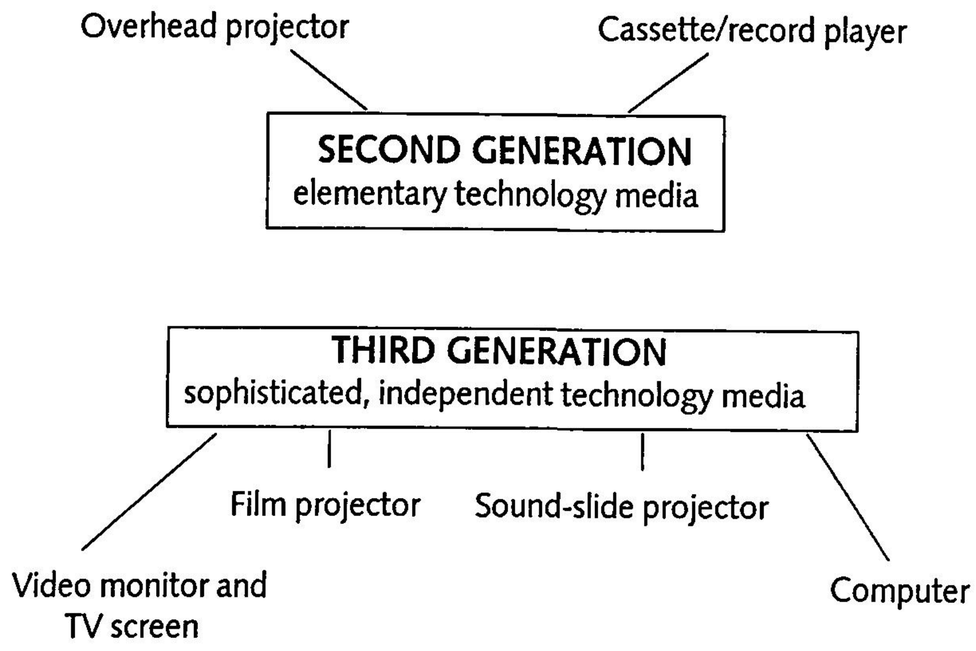
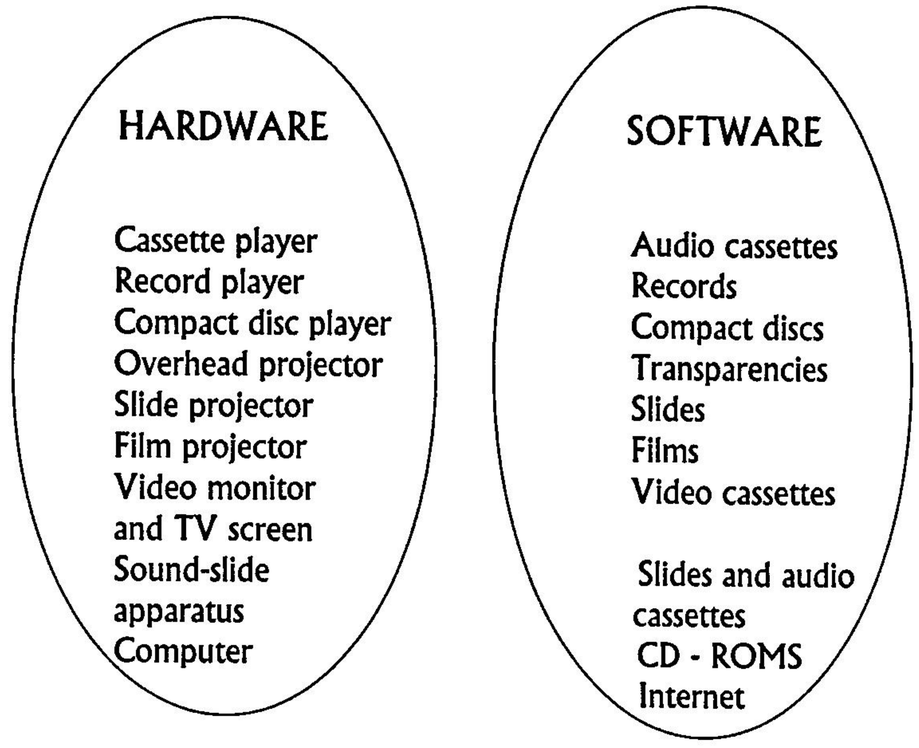
1.2 Second and third generation media

Second and third generation teaching media require greater technical skills and understanding as far as the equipment is concerned. Second generation media include electronic teaching equipment, while the third generation media include the expensive and technically advanced teaching media.



- The technical apparatus is referred to as **hardware**, while the different materials used for the lesson are referred to as **software**.
- Teaching preparation should include handling both the hardware and the software, so that the lessons will run smoothly.

The following table illustrates the difference between hardware and software:



Schools are often provided with quite a bit of hardware, but it stands idle because the necessary software is not available. Group music teachers will benefit greatly if they can fully utilise the software in the planning of lessons. They should provide themselves with the best possible advice from experts, for instance colleagues and parents, and institutions on the production of software. It is also important to find out about the excellent materials available from Education Media Services.

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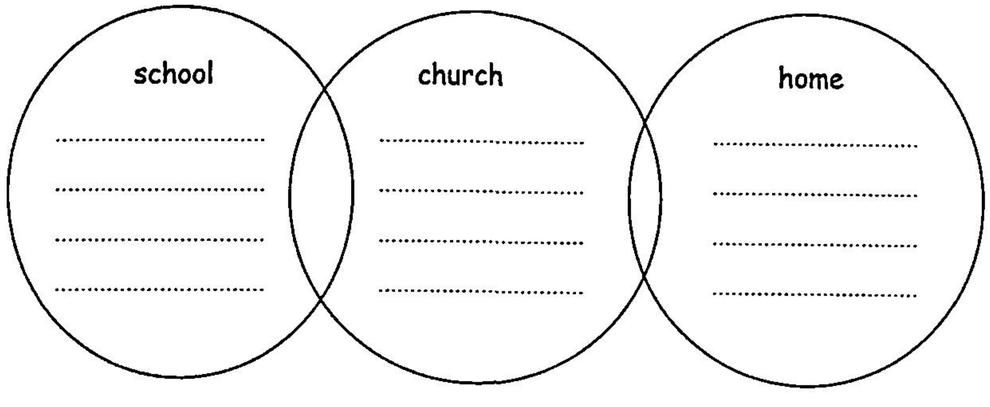
4.1 Compile a list of teaching material available in your



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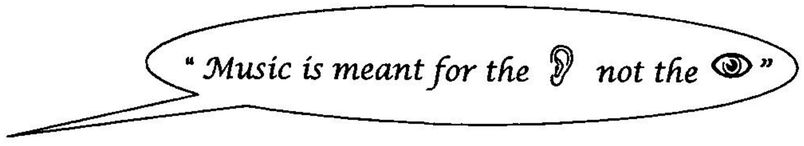
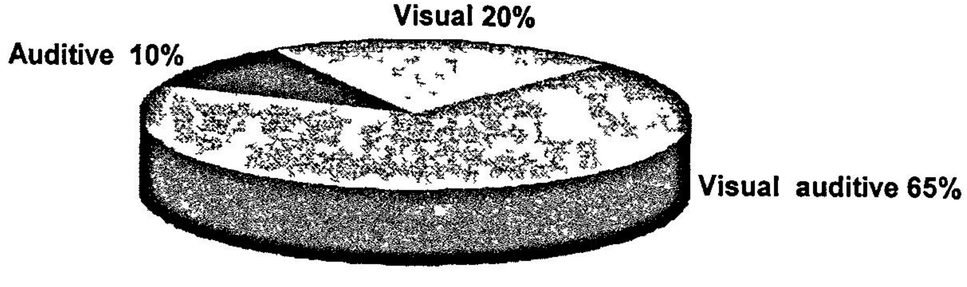
2. Why use teaching media?

The learning content of group music consists mainly of **SOUND**. As Regelski (1981:181) rightly says:



This creates a major problem for the group music teacher, as most learners have a relatively poorly developed aural sense. Research has repeatedly shown that learners` ability to remember (retention ability) is greatly enhanced if their senses of hearing and of sight are engaged simultaneously, as shown in the following diagram:



When using teaching media the teacher should aim to:

- **Develop** hearing
- **Illustrate** the elements of music
- **Involve** all senses
- **Promote** observation and concentration
- **Experience** and **apply** knowledge.

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• Develop hearing

Teachers should find it challenging to use multimedia in such a way as to place ever-increasing emphasis on the development of learners's aural sense.

EG

When watching a video, learners could be asked to describe the type of music that is used as well as the atmosphere it conveys.

• Illustrate the elements of music

The multidimensional qualities of music, which involve a variety of elements at the same time, can confuse learners. The use of *audio-visual aids* or teaching media is a very effective way of illustrating the elements of music, such as *melody, rhythm and form.*

• Involve all senses

To ensure that learning takes place during a group music lesson, as many senses as possible should be involved. In this respect teaching media can be extremely helpful. There is a danger, however, that an excess of teaching media can confuse learners and slow down their cognitive process. The use of media is only a means to an end, and not the end in itself.

EG

When listening to music it is advised that the learners look at pictures or graphic presentations of the music. Listening guides are a good method of involving the various senses.

Can you still remember how a listening guide is designed? If not, refer to Module 2 - skills.

• Promote observation and concentration

Learners' powers of observation and concentration are improved through listening to music and looking at visual aids.

• Experience and apply knowledge

The eventual outcome of each lesson should be to guide individual learners by means of various activities so that they can apply and experience what they have learnt.

EG

All the music activities involve active listening. One has to listen to music in order to dance, play on instruments or be creative.

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4.2 What are the benefits of using media as teaching aids ?

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3. How to use teaching media?

Now let us discuss the use and application of the most important teaching media in group music lessons.

3.1 Audio cassettes and CD's

The teaching contents of group music mainly revolve around sound, so quality audio equipment is vitally important. For financial reasons, it is not possible to equip every music classroom with a compact disc player and compact discs. A good cassette player is probably the best alternative.

• How to use the audio equipment

Sound quality

The sound quality of the recordings is of the utmost importance as learners may grow up in homes with the best audio equipment. It creates a most unprofessional image if poor quality sound recordings are played during music lessons.

Positioning audio equipment

To simplify the teacher's task, the cassette player should be situated right next to the overhead projector, so that as little time as possible is needed to change the audio and video materials.

Editing

When using cassettes, the teacher should record and edit various audio cuts in advance, so as to eliminate an unnecessary search for tracks during the lesson.

Preparation

It is also vital that the cassette/s should begin at exactly the right place when switched on, in order to ensure a brisk lesson tempo.

Fade out technique

A musical teacher will ensure that tracks are never switched off abruptly in the middle of a phrase during listening sessions; tracks should rather be faded out gradually at the end of musically satisfying phrases. We should remember that one of the objectives of group music is to train learners to become sensitive listeners. Sound should, therefore, also be treated with respect in the music lesson.

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Audio Checklist

- ✓ Good quality recordings
- ✓ Correct positioning
- ✓ Editing
- ✓ Preparing
- ✓ Fade out technique

Remember to:

- Stand to the side of the projector
- Make sure you don't cast a shadow across the surface
- Adjust the focus before the lesson
- Set the screen to an angle of 45°
- Be prepared with a spare globe
- Maintain eye contact.

3.2 Overhead projector

The overhead projector and transparencies are surely the most useful and versatile media in any teaching situation, as they allow the teacher to interact with the learners.

• How to handle the overhead projector

The overhead projector can promote effective learning if the teacher prepares and is confident about his/her ability to use it.

• How to prepare transparencies

Design

Transparencies should be designed with care, as they can be kept and used again the next time the same lesson is given. The information, for example, lyrics of a song; key concepts for a listening guide, or pictures of instruments, should be systematically arranged. The teacher should, wherever possible, use permanent transparency pens as they do not smudge, so that preparation can be done once only.

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Simplicity

Only the most important information should appear on a transparency.

Do not try to make your transparencies over into another medium - they make poor movies and even worse books .

It is important to keep the layout of transparencies simple for maximum effect.

Spacing

The transparency should be planned in advance to ensure that everything fits in and is evenly spaced. It is helpful to attach the transparency to squared paper with paper-clips to simplify vertical and horizontal spacing.

Lettering

The words on a single transparency should be few, and large enough. This cannot be sufficiently emphasised as it is highly frustrating for learners to have to try and decipher illegible scribbles on the screen. Learners lose interest very quickly, and the overhead projector becomes a source of frustration rather than an aid.

Remember that:

- the lettering should be simple and neat
- calligraphy does not read easily
- type or computer print has to be enlarged.

A good guideline for the text to appear on transparencies is that there should **not** be **more** than **seven to eleven lines** per transparency. The teacher should test his or her transparencies in advance by going to the back of the venue and making sure that the text is visible to all learners.

Colour

The application of colour is one of the most important features of successful transparencies. It can be used very effectively to highlight concepts like *form, repetitive patterns* and *texture*.

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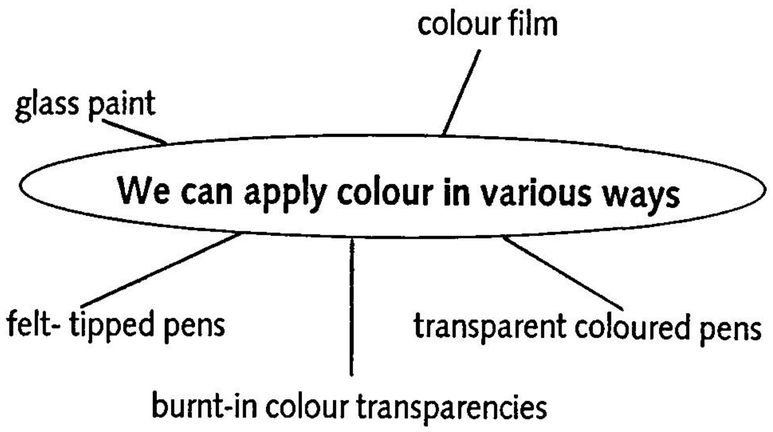

Felt-tipped pens are the cheapest method of colouring on transparencies. Enterprising teachers could use glass paint, which is easy to use and fairly cheap. Coloured transparencies can be burnt-in and are obtainable at teachers` centres. The quality is excellent, and they should last a lifetime. Unfortunately they usually restrict the teacher to one colour per transparency.

Musical notation

How do you ensure that the notation does not smudge?

1. Draw the staves on one side of the transparency;
2. turn it around, and
3. fill in the notes on the other side.

With this method it is possible to correct errors by simply erasing mistakes with a wet eraser. The most legible notation is written on a stave about 1,5 cm wide. The notation of songs should always be supplied, as a lot of incidental learning takes place this way. It also makes the notation meaningful and useful to learners.

EG

Transparency checklist

- ✓ Systematically planned design
- ✓ Only most important information
- ✓ Easy to read spacing
- ✓ Easy to read lettering
- ✓ Colourful and creative

4.3 Use the listening guide and questionnaire which you planned in Module 2 to design a demonstration transparency. Make use of the transparency checklist.

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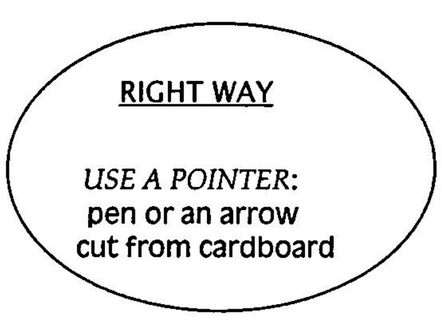
• Presentation techniques

When using the overhead projector while presenting a lesson you should remember the following guidelines:

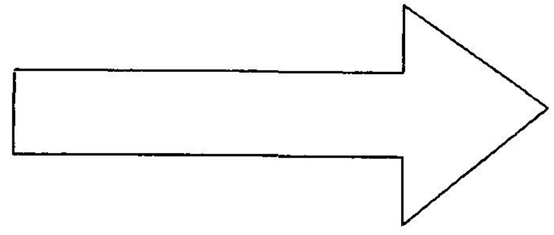
- Pointing
- Revealing
- Shadow shapes
- Movement
- Filling-in.

❶ Pointing



The pointer should be used directly on the working surface. Pointing to details on the screen is disruptive and conflicts with the purpose of the overhead projector - to enable the teacher to maintain eye contact with the learners.

4.4 Use the following model and make a pointer out of cardboard. Store for later use during presentations.



❷ Revealing

When parts of a transparency are covered with paper or card and systematically uncovered, we refer to it as the **revealing technique**. Photocopying paper is most suitable for this purpose as it is transparent for the teacher.

Strips of paper can also be attached to the frame of the transparency with adhesive tape so that certain concepts can be shown step by step during the lesson. This is a very useful technique, as it focuses the attention of all the learners on the same information on the screen. It also ensures that the teacher remains in control of the lesson tempo.

❸ Shadow shapes

A time saving technique which is also very effective is the use of shadow shapes. Various shapes such as triangles, squares and circles are cut out of cardboard and placed on the 'glass window' of the projector. As they can be moved around freely, they can also be used over other transparencies. This helps to illustrate theoretical concepts such as repetition and contrast.

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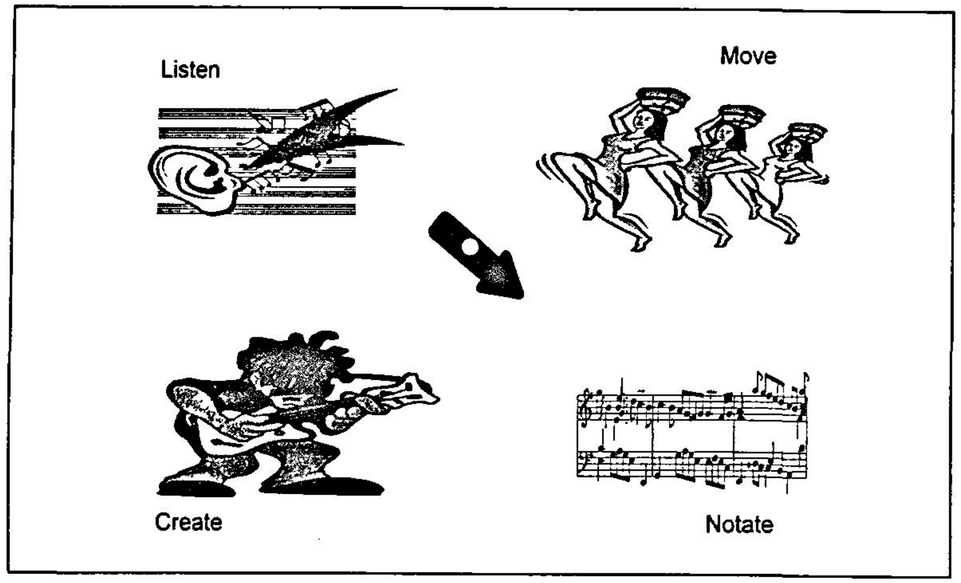
Outline sketches of musical instruments and profile drawings of composers can also be used in this way.

EG

Shadow shapes can be used to outline the form of a composition. A form structure such as **A B A** can be shown as ▲ ■ ▲.

❹ Movement

A mobile disc can be attached to the middle of the transparency with a metal pin and used in interesting ways.



❺ Filling-in

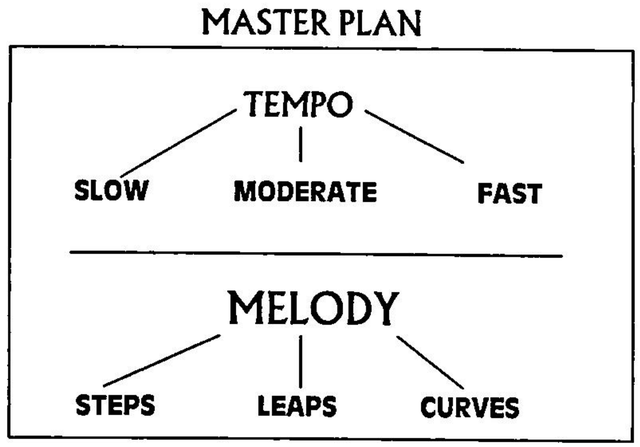
Certain information can be omitted from the transparency and filled in during the lesson. This is useful for involving learners and getting them to participate actively in the learning process. Answers can be erased with a damp cloth before the next lesson.

The teacher can use

- non-permanent transparency pens for filling in answers
- colour strips to indicate form.

Transparencies of listening guides are very useful when used in this way, and save on precious preparation time. A very versatile listening guide is the so-called **master plan** which provides a choice of key words for specific concepts.

EG



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The correct words should be chosen after listening to a particular piece of music. On a transparency, one of these guides can be used for various cuts. The teacher will be well advised, therefore, to compile a variety of 'master plans' on transparencies, covering the various musical concepts required. By doing so the teacher will always have a listening guide ready for a listening activity.

4.5 Design your own demonstration master plan using the above techniques.

MASTER PLAN

4.6 What are the benefits of using the correct presentation techniques?

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Overhead checklist

- ✓ Correct instalment
- ✓ Effective transparency planning and designing
- ✓ Professional presentation techniques.

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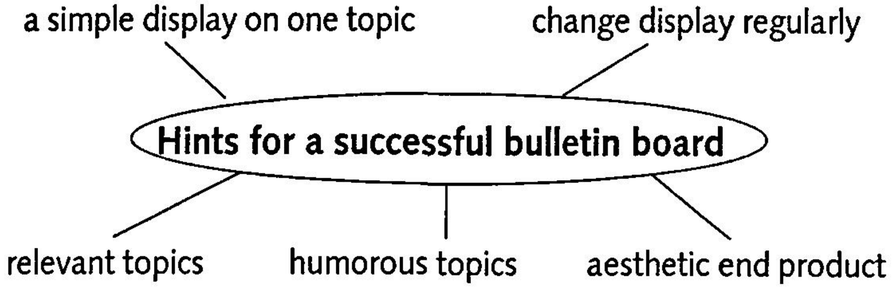
3.3 Bulletin board

A bulletin board is any available display surface **mounted** on the wall of a venue. The group music venue can be very effectively decorated with colourful displays and pictures on the bulletin board.

Free standing bulletin boards can also be used to create a 'music atmosphere' in the school hall if group music is taught there. When the illustrations on the bulletin board tie in with teaching-learning events in the lesson, we have an inexpensive but effective teaching medium with which to stimulate our learners` interest.



3.4 Sound-slide programmes

These programmes consist of a series of slides with an accompanying sound-track.

The **hardware** consists of a slide projector (which can project either outward or onto a built-in screen) and a cassette player. The slides, **software**, are put in the tray in the correct sequence and when the cassette is played, the slides change automatically according to the pre-set synchronisation. It is an ideal medium for music programmes, as the music can be heard throughout and illustrated visually by the slides.

Unfortunately, very few sound-slides programmes are available, and teachers may be obliged to produce their own software. An enthusiastic teacher can launch a project in which the learners work in groups at making sound-slide programmes. This can be a great stimulus to their creativity; it also helps to increase the prestige of the subject!

EG

Sound-slide programmes can be used to link music with other art forms. Slides of modern paintings and sculptures can be shown while music of the 20th century is played. Other suitable themes include composers, style periods, genres and programme music.

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Sound-slide checklist

- ✓ Short and simple programmes
- ✓ Show each slide for 8 -10 seconds
- ✓ Appropriate sound-track and text
- ✓ Check focus before presentation
- ✓ Check sound volume
- ✓ Involve learners actively - listening questionnaires or worksheets.

EG

Psychomotor skills can be demonstrated with exceptional realism. Learners can share a valuable experience by watching a close-up video of a conductor in action. His gestures, hand movements and facial expressions can be easily seen, which would be impossible in the concert hall. Where learners themselves have to learn psychomotor skills, they can apply them while watching the video; this is like acquiring first-hand knowledge.

3.5 Video programmes

The video is an audio-visual medium with moving images. This makes it uniquely suited to the presentation of lessons. Music addresses the emotions, and a video can arouse an emotional response in the learners. It is part of a music teacher's task to cultivate learners' affective values, and the impact of video can help to shape their attitudes and stimulate their thinking.

Most of the 16 mm films, which used to be available from the National Film Library, are now being converted to video. It is therefore important to note the advantages concerning the use of videos.

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Possible uses for video in Music Education

INTRODUCTION

- Arouse interest
- Pose problem
- Prepare target group
- Provide survey
- Do revision
- Stimulate imagination

BODY OF LESSON

- Refresh memory
- Eliminate misconceptions
- Solve problems
- Test knowledge
- Extend subject matter
- Experience

CONCLUSION

- Emphasise sections
- Inculcate certain aspects
- Target group draws conclusions
- Form relationships
- Prepare for next topic
- Summarise or complete

Although the video is a very versatile teaching medium, it cannot replace the teacher. It can, however, be used together with other teaching media to raise the quality of one's teaching.

Video checklist

- ✓ Programmes not longer than 10-15 minutes
- ✓ Select extracts from documentaries
- ✓ Study video before presenting
- ✓ Explain content and musical terms
- ✓ Set questions to be answered after watching
- ✓ Involve learners actively - worksheets
- ✓ Study video publications - *Informedia*

4.7 Make a list of video material that can be used for music teaching purposes.

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3.6 Multi-media and CD-ROMS

The term **multi-media** is used to indicate computer-based learning. Multi-media is a system that integrates a number of media, usually under computer control. This can include sound, graphics, video, animation, MIDI-files and MCI-drives - such as CD-ROM and laser disks. Multi-media also includes the rediscovering of technological aids such as the bulletin board, flash cards, overhead projectors, transparencies, sound apparatus, slide projectors and videos.

A **CD-ROM** is simply a compact disc that holds computer data instead of audio information. This data ranges from actual software programmes (which are usually included on the disk itself in order to access its own contents) to data such as text, pictures, digitised audio or video.

To be competitive in today's global economy, it is imperative that students and teachers become technologically literate. It might be that you or your school do not have computers to use as teaching media, but it is nevertheless essential that we have knowledge of multi-media packages.

Multi-media packages can store a vast amount of information. They are often used for distance education programmes where students can learn at their own pace and level of knowledge.

4. Didactic principles

Certain didactic principles should be kept in mind to ensure that teaching media are used to enrich learners. These principles should be in line with Curriculum 2005. These principles are:

The three T`s

- **T**eaching objectives or outcomes
- **T**arget group
- **T**ype of teaching material

4.1 Teaching objectives or outcomes

Teaching objectives determine what **learners should have mastered** by the end of the lesson - either concepts and/or skills. They greatly influence the choice of teaching media.

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4.2 Target group

The target group determines the **level of difficulty** and **developmental level** of the lesson content; this is very important when selecting teaching media.

EG

The Walt Disney version of Prokoviev's *Peter and the wolf* (available on video) is more suitable for the primary than the senior secondary school.

4.3 Type of teaching material

The type of teaching material determines which medium will **convey** the **message most effectively**.

EG

Successful listening classes can, for example, hardly be imagined without the use of audio equipment.

Media evaluation

- Did the teaching media contribute to the realisation of learning outcomes?
- Were the learners involved and stimulated?
- Were the hardware and software competently handled so as to ensure a brisk lesson tempo?

Remember:

Even a good lesson can often be improved. That is the challenge of teaching.

- Plan effectively
- Media does not replace the teacher
- Use of media does not guarantee a successful lesson.

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5. Classroom arrangement

The way that furniture and apparatus are positioned in relation to the teacher and learners will contribute to successful class management.

TIPS

- Make use of attractive and purposeful decorations.
- If group music is presented in the school hall, make use of movable panels to create a classroom atmosphere. These panels can also function as bulletin boards and decorations.
- Use a semi-circular seating arrangement; it creates atmosphere and is conducive to strong personal contact.
- Place teaching media as close as possible to one another, so that you can reach everything easily.

6. Communication

Communication is often considered to be a natural ability. However, in the training of teachers the development of communication skills cannot be ignored. Research has shown that communication is, in fact, a skill that needs to be developed in order to be successfully applied.

Two kinds of communication can be distinguished: **intra**-communication and **inter**-communication.

6.1 Intra-communication

When a person is communicating with him or herself it is called intra-communication. This type of communication involves:

- self-assertion
- self-exposure
- adaptability
- conflict handling
- motivational abilities.

Communication skills are to a large extent influenced by the person's self esteem. Under-developed self esteem amounts to communication apprehension.

EG

An apprehensive teacher would be unduly strict or vicious in his/her feedback or would cling to set rules in order to protect him/herself.

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6.2 Inter-communication

Inter-communication in education involves communicating with colleagues, learners and parents. For the purpose of this module we will focus on group communication skills.

Group communication depends to a large extent on the teacher's self esteem. A lack of self esteem could lead to serious disciplinary problems. The teacher would often react in trying to resolve the situation by using autocratic methods. The problem could, in fact, be easily solved by using the correct communication skills.

The way a person communicates to a large extent determines self-identity and affects others' perceptions of the individual

(Norton 1983: 19).

The demands on the teacher to communicate effectively coincide with the characteristics of a teacher. Under the scrutiny of the learners a teacher needs to develop the following personal qualities:

A teacher should

- explain clearly
- give appropriate examples
- know his/her subject
- be enthusiastic and energetic
- 'perform'
- be organised
- be an attentive listener
- have a sense of humour.

Knowledge and skills are as essential to group music teachers as product knowledge is to a salesperson. The **manner** in which teachers '**come across**' will to a large extent determine the success of the lesson.

Often the voice, facial expressions, gestures or body movements and positions reveal much more than words.

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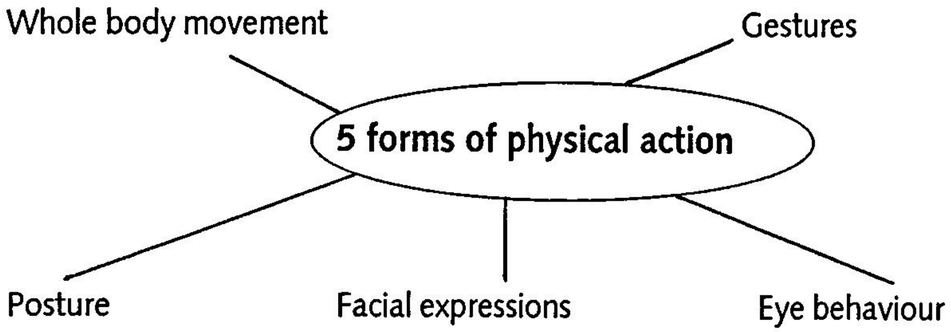
6.3 Non-verbal communication

Non-verbal communication is not to be confused with personality traits which can be described by terms such as enthusiasm, warmth, etc., but rather as part of the means by which the above or their opposites are achieved. However, the non-verbal actions or body language of the music teacher can contribute greatly to facilitating positive communication, and as such demands at least brief consideration.

Albert Mehrabian (as quoted in Pease & Gardner 1985) states that the verbal component of any speech, message or presentation, constitutes a mere 7% in terms of the impact made on the audience, while 38% of the impact is vocal i.e. tone of voice, inflection, etc. In contrast, 55% of the impact is made by non-verbal elements in the delivery. Therefore it is obvious that a great deal of the true communication between teacher and learner - i.e. dialogue expressing positive or negative feelings on a moment-to-moment basis - takes place on a non-verbal level.

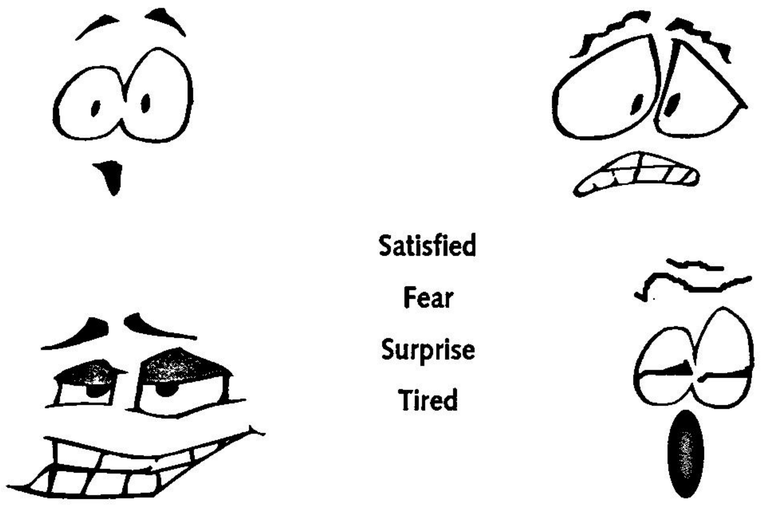
Physical activity constitutes an essential part of non-verbal communication; listeners form their impressions partly on the basis of the communicators' actions. Physical actions convey meaning, aid in holding attention and increase energy and self-confidence.



Unwritten rules for classroom behaviour exist in each class, established as a result of non-verbal signals by both teachers and learners. It is said that teachers are often unable to detect the non-verbal messages being emitted by their students or to adequately transmit their intended cognitive and affective signals (Dunkin 1986:474).

You as a group music teacher should aim to **read** and **translate** non-verbal signals conveyed by learners into their actual meanings.

4.8 Match the words to the following gestures or expressions.



Satisfied

Fear

Surprise

Tired

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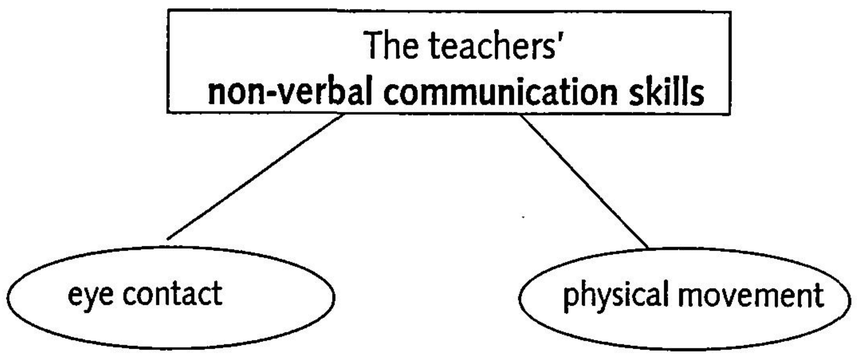
By reading learners' body language you can evaluate their

- ✓ interest level
- ✓ reactions
- ✓ opinions
- ✓ feelings
- ✓ knowledge.

6.4 Maintaining discipline

The manner in which teachers maintain **discipline** is closely related to their style of non-verbal communication.



How do I express positive feelings?

1. Lean forward and reach out to learners
2. Maintain eye contact
3. Nod head affirmatively and smile
4. Use a pleasant but decisive tone of voice

4.9 How should you react when a class is difficult or negative?

.....

.....

.....

.....

Compare your answer to those on the next page.

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Answers:

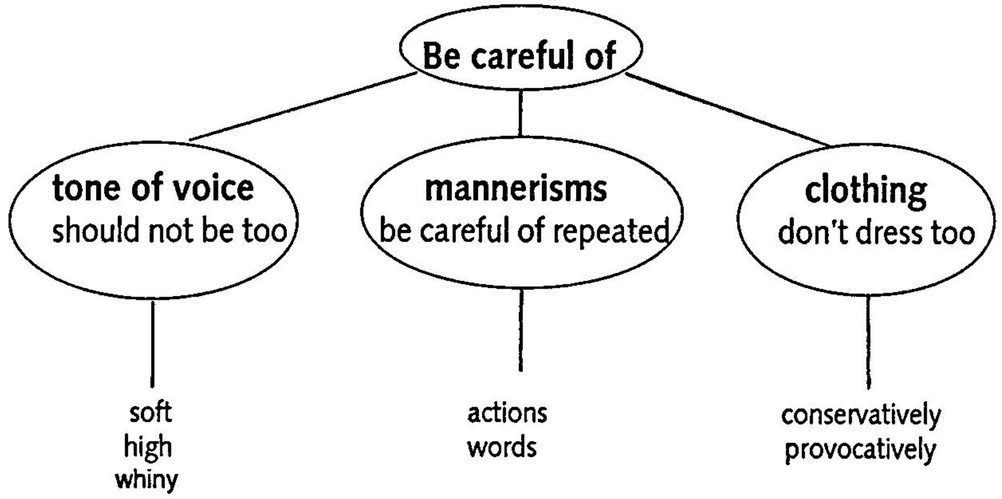
☒ Do you tend to physically distance yourself from the learners or position yourself so that a table, piano or other apparatus separates you from them?

☑ Or do you keep close to your learners, unseparated by furniture, communicating warmly?

Teachers with a dynamic, active body language style are perceived and reacted to more positively by learners. Discipline is maintained more successfully and the learners' attitude towards the subject becomes more positive.

Junior high school students preferred teachers who smiled and gestured more frequently and students learned more and liked the teachers better when the teacher was non-verbally active
(Dunkin 1986: 473).

At a typical initial meeting between a new group music teacher and learner, each non-verbal 'phrase' communicated by the teacher will be experienced and reacted to by the learners in either a positive or negative way. Gradually the entire communication - i.e. the atmosphere in the classroom and therefore the learning experience - becomes either a positive or negative one.



Tips on good communication

- Listen to yourself and try to vary the tone of your voice.
- Maintain eye contact with learners.
- Move around in class whilst teaching.
- Make use of facial expressions to convey information.
- Motivate learners for active involvement.
- Show interest in learners' personal affairs.
- Be positive.

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4.10

- What is your non-verbal plan of action when facing a class for the first time?

.....

.....

.....

.....

.....

- Which aspects of your communication skills need improvement?

1.	2.
3.	4.

.....

7. Large group tuition

The size of class groups may vary from approximately seventy to about three hundred. Presentation and learning content should take account of this.

Listening tuition can be presented successfully in single classes, but in large groups, group singing is more effective. This does not mean that listening cannot be presented. There should, however, be careful planning for large group tuition. The following points are important.

TIPS ON LARGE GROUP TUITION

- Select **supervising teachers** that can encourage positive participation from learners.
- High **quality sound equipment** is essential.
- When presenting in a large venue the group music teacher should make use of a **microphone.**
- Use mainly **songs** to highlight the lesson theme.
- Lettering on **transparencies** should be **legible** from a distance.
- Maintain **eye contact**. If a piano is being used for accompaniment, the piano should be close by.
- Plan the **placing** of **media equipment**.
- Make use of a **fast** flowing **lesson tempo** to help prevent disciplinary problems.

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MODULE 5

SUCCESSFUL PLANNING

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SUCCESSFUL PLANNING

Learning outcomes

At the end of this module you should be able to:

- design a lesson for a specific target group
- describe and explain evaluation and differentiation
- plan a music programme according to Curriculum 2005.

Icons to look out for:

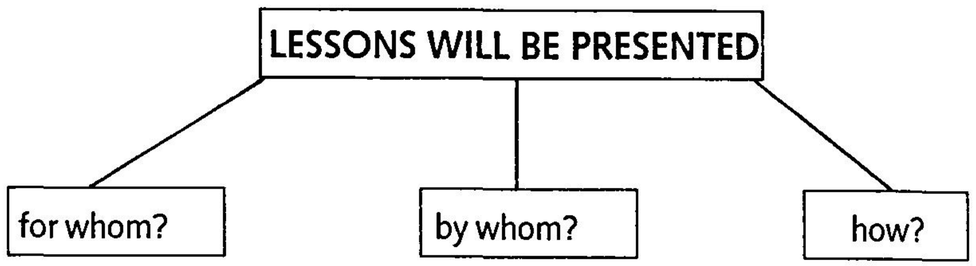
- specific outcomes
- summary of content
- examples
- assignment
- definition

1. Introduction

The creation of successful group music lessons is an important aim for the general music teacher. It presents a great challenge to compile lessons that are educative and stimulating, but also an enjoyable experience to learners. The planning and preparation of group music lessons should differ in approach from that of examination subjects, e.g. maths, history and geography.

Much of the ultimate success of a music course depends on how the students feel about the subject after the course is over (Hoffer 1983:60).

When one contemplates successful lessons, the first question that comes to mind is: **HOW should one go about compiling lessons?** It would be short-sighted to only give hints on how to compile a lesson without underlining the importance of the organisation of a music class. At the same time one should bear in mind that



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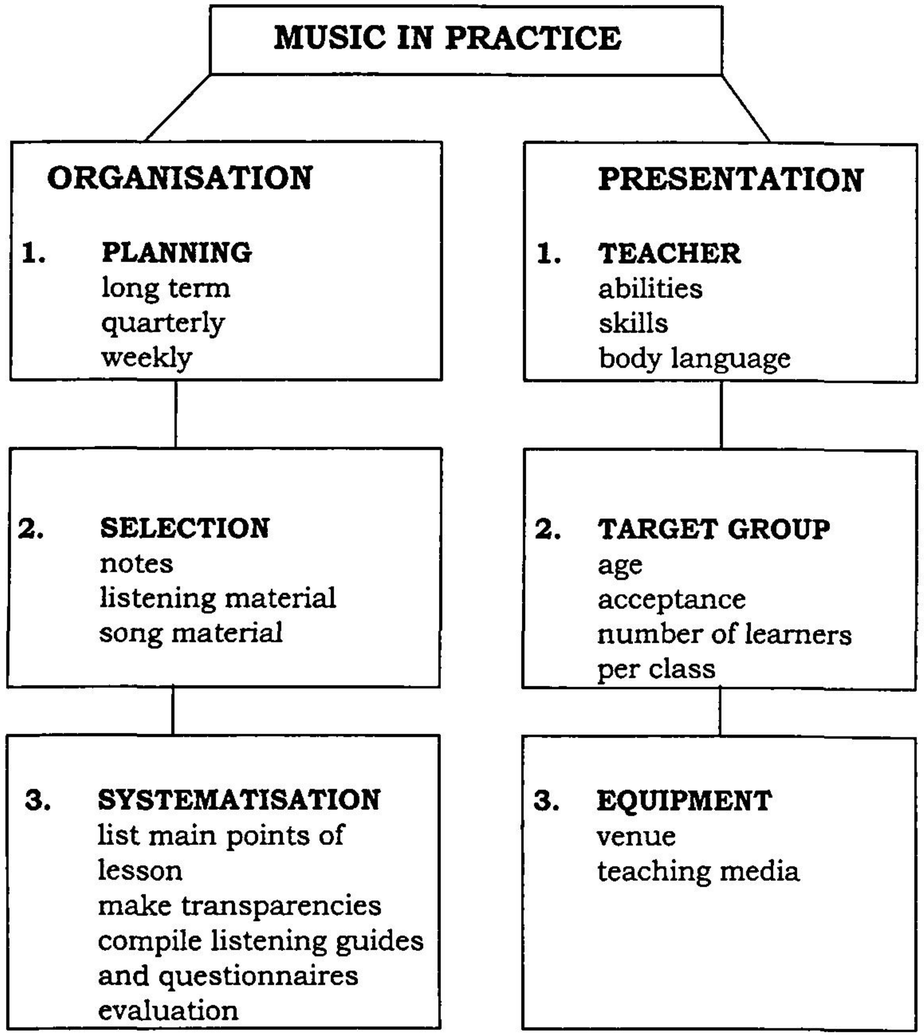
Group music:

For the purposes of this study guide, group music, class music, general music teaching and music education should be considered to be the same.

The following schematic outlay highlights the most important aspects that should be remembered when preparing group music lessons.



2. Planning

2.1 Annual planning

Planning is just as important as the presentation. The Core syllabus (Department of Education: 1995) makes it possible for teachers to plan for the academic year. The syllabus requires that fifteen modules should be done in the course of a year. A possible annual planning, which includes formal examinations during the second and fourth terms, could look like the following:

ANNUAL PLANNING

FIRST TERM *34 school days*	3 MODULES
SECOND TERM *52 school days*	5 MODULES
THIRD TERM *47 school days*	4 MODULES
FOURTH TERM *47 school days*	2 MODULES

2.2 Quarterly planning

Quarterly planning involves the selection of themes that will be taught. It is advisable that the teacher should bear the musical level of the learners in mind.

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Look at the entire topic from the learners' viewpoint, rather than from the adult or skilled musician's viewpoint (Regelski 1981:61).

It is also important to take into account the general cultural environment. The interpretation and choice of themes can differ widely, due to the fact that the style of living and viewpoints of the learners differ. The teacher should also be thoroughly aware of the learners' emotional reactions towards music and this should be accommodated in the planning.

The flexibility of the Core Syllabus (South Africa 1995b) makes it possible to make such adjustments. Start with the planning of Class Music lessons according to **themes or modules** that lend themselves to influencing learners positively towards the subject. The following is a possible way that the planning for the four quarters could be systematised:

FIRST QUARTER	SECOND QUARTER
• Mood music • Instrumental and vocal forms • Genres and forms • Descriptive music • General themes	• Mood music • Western art music • Instrumental and vocal music • Musical styles
THIRD QUARTER	**FOURTH QUARTER**
• Descriptive music • Folk and national music • Western art music • General themes	• Folk and national music • Musical styles

2.3 Weekly planning

Weekly planning determines which themes or modules will be dealt with under each of the already mentioned themes.

Questions that can serve as guidelines in the choice of the modules are the following:

Module checklist

- ✓ Is the module **relevant** to the learners?
- ✓ Which music **concepts and skills** should be
- ✓ highlighted in this module?
- ✓ What are the **learning outcomes** of this module?
- ✓ Which **teaching media** will be needed for this module?
- ✓ How much **time** will be needed for this module?
- ✓ How will the **involvement** of the learners be achieved and maintained?

It's important to remember that you cannot teach everything about any topic, so decide on the major emphasis, the most important ideas and concepts (Andrews 1971: 17).

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3. Curriculum 2005

The National Department of Education, in conjunction with a number of sub-committees, designed a new National Curriculum. This is now known as **Curriculum 2005**. The name relates to the date of full implementation of this curriculum. The value of Curriculum 2005 can only be understood once the following questions are answered:

3.1 What is a curriculum?

A curriculum forms the centre of any educational system. Learning outcomes are determined by an educator and outlined in a curriculum.

3.2 What are the aims of the new curriculum?

The aims of the curriculum could be summarised as:

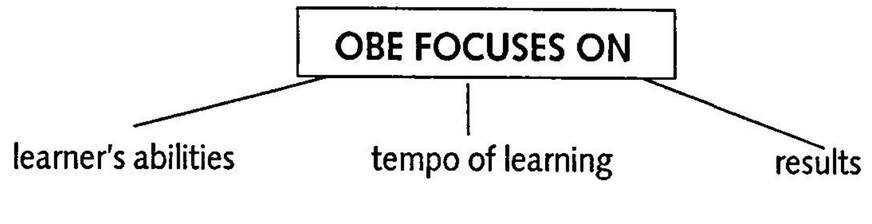
"…. To provide learnerren with opportunities to develop to their full potential as active, responsible and fulfilled citizens who can play a constructive role in a democratic, non-racist and equitable society"
(South Africa 1997).

A further aim of Curriculum 2005 is to present all South-Africans with equal educational opportunities.

3.3 What is OBE?

Lifelong learning through the National Qualifications Framework (NQF) proposes Outcomes-Based Education (OBE) as a viable curriculum model to be implemented in South Africa. OBE is similar to educational systems used in the syllabuses of New Zealand (support papers: *Music and related arts unit),* Australia (The arts framework: 1988), California (Visual and performing arts framework: 1989), and Scotland (Curriculum and Assessment in Scotland National Guidelines Expressive Arts: 1992).

This approach to teaching and learning is focused on outcomes in contrast to traditional approaches in education which were curriculum driven and primarily centred around content.



Spady (1993:7) describes *'outcomes'* and *'based'* as follows:

An OUTCOME is in fact a **culminating demonstration** of the entire range of learning experiences and capabilities that underlie it, and it occurs in **performance context** that directly influences what it is and how it is carried out. These defining elements clearly tell us that an outcome is not simply the name of the learning content, or the name of the concepts, or the name of a competence, or a grade or test **score,** but an **actual demonstration** in an **authentic context.**

BASED means to define, direct, derive, determine, focus, and organise what we do according to the substance and nature of the learning result that we want to happen at the end of the learning process.

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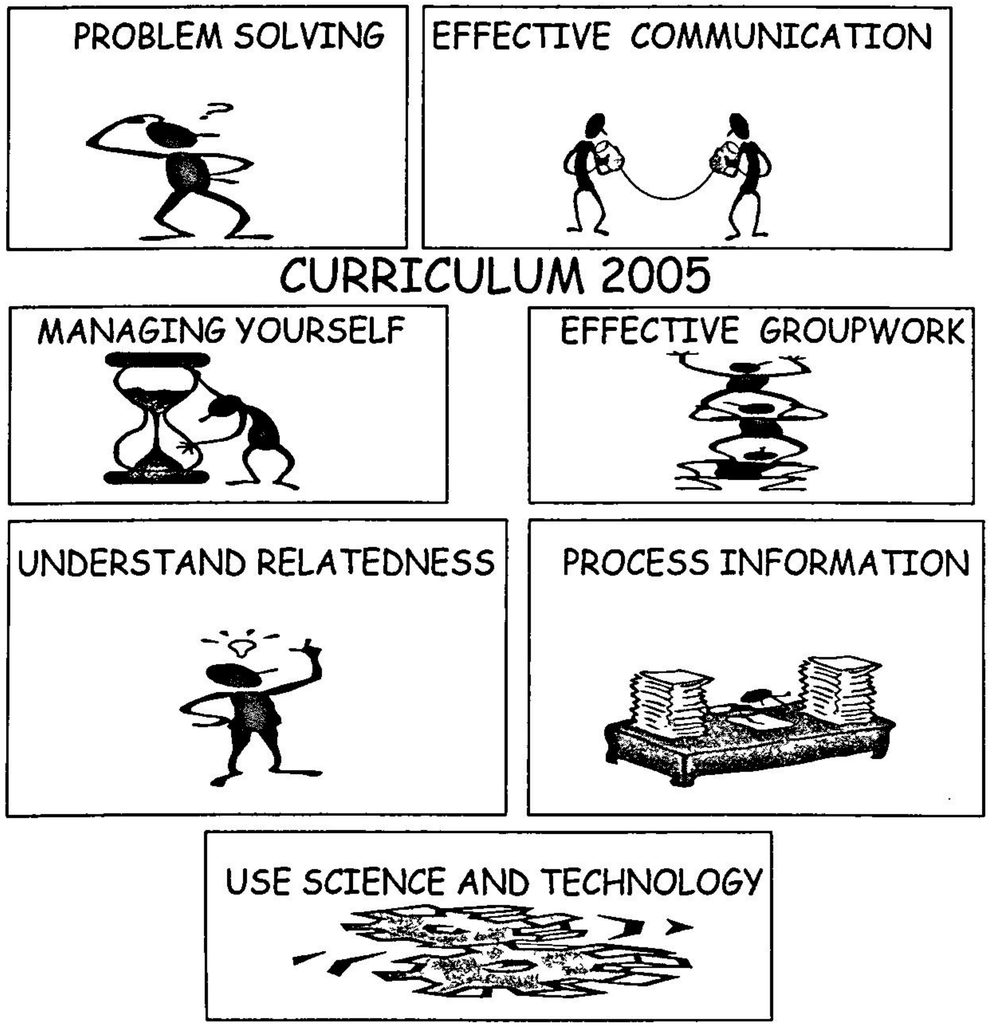
Two types of outcomes can be distinguished.

3.3.1 Essential outcomes

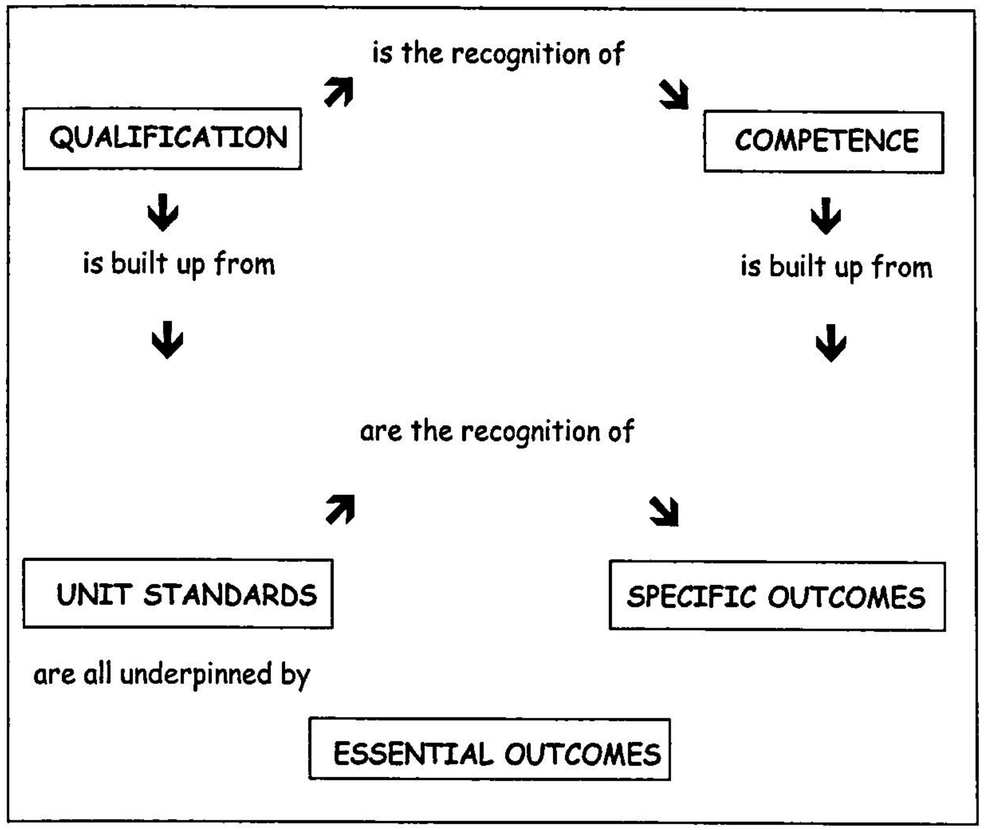
This category refers to broad based, inter-curricular, generic outcomes relevant to all learning and teaching. These outcomes are important in determining standards and the development of curricula. Essential outcomes support the Outcomes-Based process and should induce the development of insight and understanding. These outcomes are:



3.3.2 Specific outcomes

These outcomes refer to knowledge, skills and attitudes reflected by the essential outcomes, and are applicable to all fields of study.

The interaction between essential and specific outcomes can be explained as follows:



Experience gained through the implementation of OBE in various countries abroad gives rise to concern in the ability of the process to avoid becoming too narrow, prescriptive and behaviouristic.

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In the South African Outcomes-Based model, two provisos have been put in place:

❶ The specific outcomes and evaluation criteria should not be too detailed or prescriptive.

❷ The supportive role of essential outcomes should assert the necessary prominence given to conceptual development and transferable learning and should ensure the holistic perspective in the approach to learning and teaching.

The suitability of OBE in the teaching and learning of fields of study with a clearly practical nature, seems a foregone conclusion.

.....

FACT FILE

EVALUATION

To determine the value or significance of subject matter through careful appraisal and study.

CRITERIA

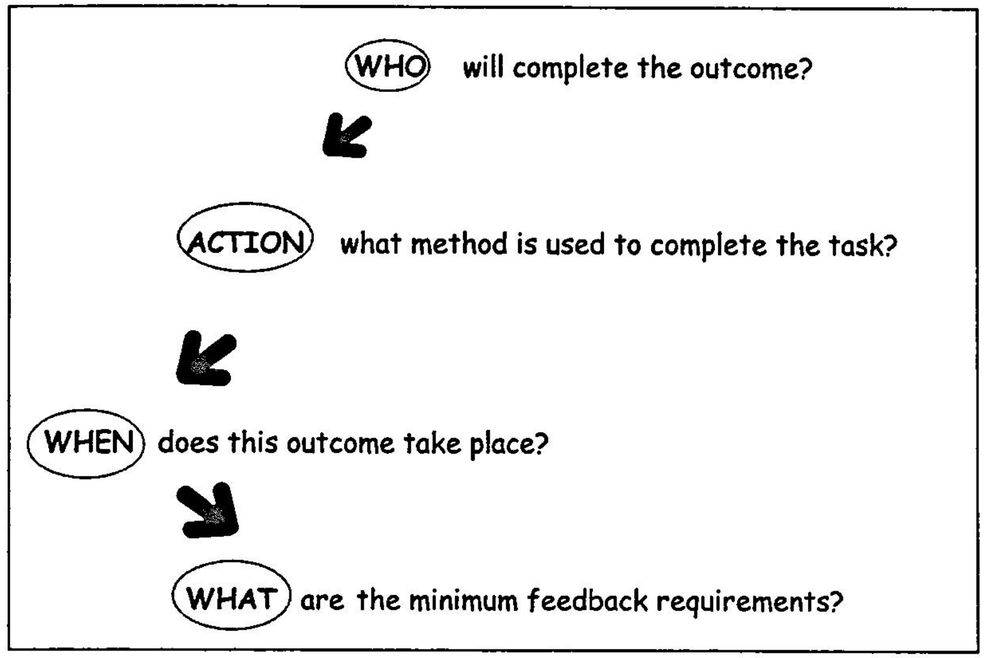
Standards on which a judgement or decision may be based.

STANDARDS

Measurement of quantity or quality.

3.4 Designing outcomes

Learning outcomes are identified to guide the learner towards knowledge. Each outcome should underline:



This means that the goals of a lesson need to be rewritten with the above mentioned four steps in mind.

EG

Goal: To teach learnerren about form in music

Outcome:	WHO?	learner
	ACTION?	understand and identify
	WHEN?	at the end of the lesson
	WHAT?	form in music

At the end of this lesson the learner should be able to understand and identify form in music.

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5.1 Can you rewrite the following goals into outcomes?

- To give learners, through music, a short historic account of South Africa.

Outcome .....
.....

- To acquaint learners with a variety of instruments.

Outcome .....
.....

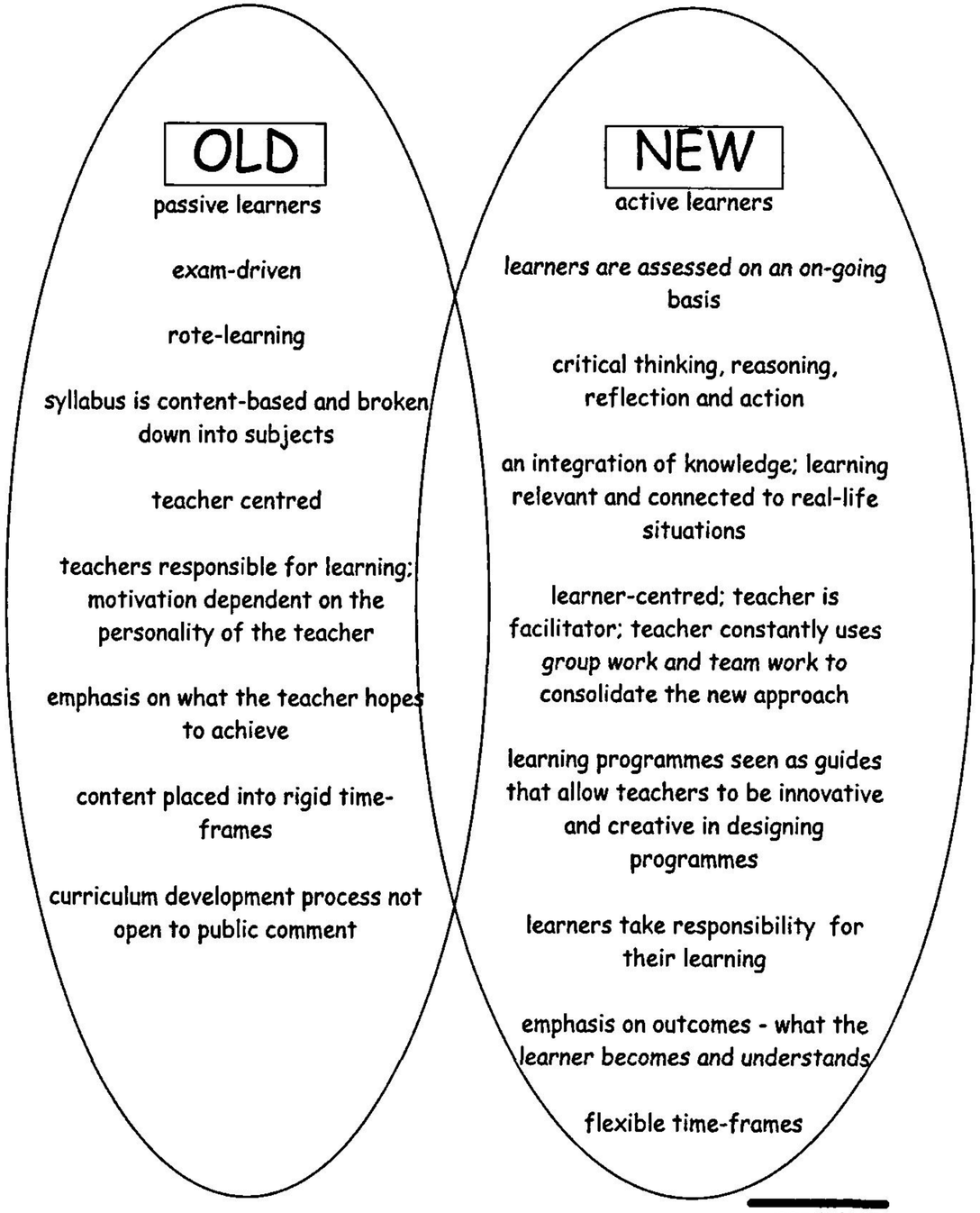
- To afford learners the experience of a variety of musical styles through singing, instrumental participation, movement and listening to music.

Outcome .....
.....

Did you remember the
- ➡ WHO?
- ➡ ACTION?
- ➡ WHEN?
- ➡ WHAT?

3.5 What is the difference between the 'old' and the 'new' curriculum?

In Outcomes-Based Education the emphasis is shifted from the teacher to the learner. The teacher's role is only to facilitate the knowledge. What other changes can we expect?



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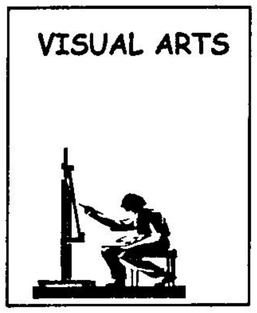
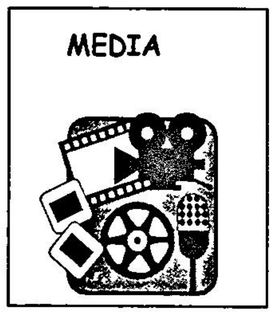
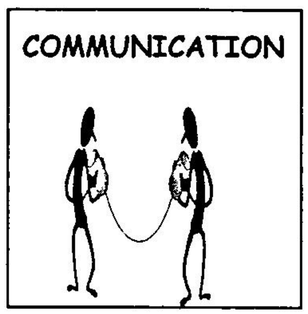
3.6 Arts and Culture

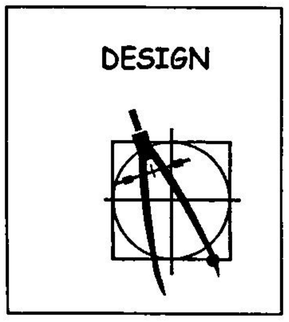
Arts and Culture are described in Curriculum 2005 as one of the eight learning areas. Arts and Culture are an integral part of life and are closely interwoven with human's spiritual, material, intellectual and emotional experience and heritage. In the past in South Africa the emphasis was on the development of Western art forms. Curriculum 2005 aims to emphasise the art of all ethnic and cultural groups of South Africa.

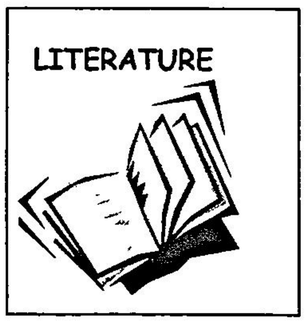
ARTS AND CULTURE INCLUDE











The Gauteng Department of Education uses the term Arts Education to indicate the subject at school level and gives the following description of the field of study:

> Arts education is any educational context in which learners have the opportunity to participate in, experience and interpret dance, creative movement, drama, music and the visual arts. Arts education shall refer to the arts in education as a specific discipline as well as a methodology.

The merit and educational worth of Arts and Culture have been documented at length, but syllabuses and support material are needed in order to achieve accountable and effective implementation. Teacher training and programmes need to be revised in order to meet the requirements of Curriculum 2005.

Support material can be compiled in accordance with existing material of international stature and is of the utmost importance for successful teaching and learning.

In the present debate on the question of an integrated approach versus an approach where each one of the arts is seen individually, consensus has not yet been reached.

EG

How is this integrated approach achieved?

- Focus clearly on the outcomes. Make these visible and clear to learners, demonstrate through examples.
- Offer continuous opportunity to improve outcomes.
- Have high expectations: believe that learners can achieve these challenging outcomes. This means insisting on high quality work.
- Start where you want to end up - give the learners a picture of the abilities which you want them to have.

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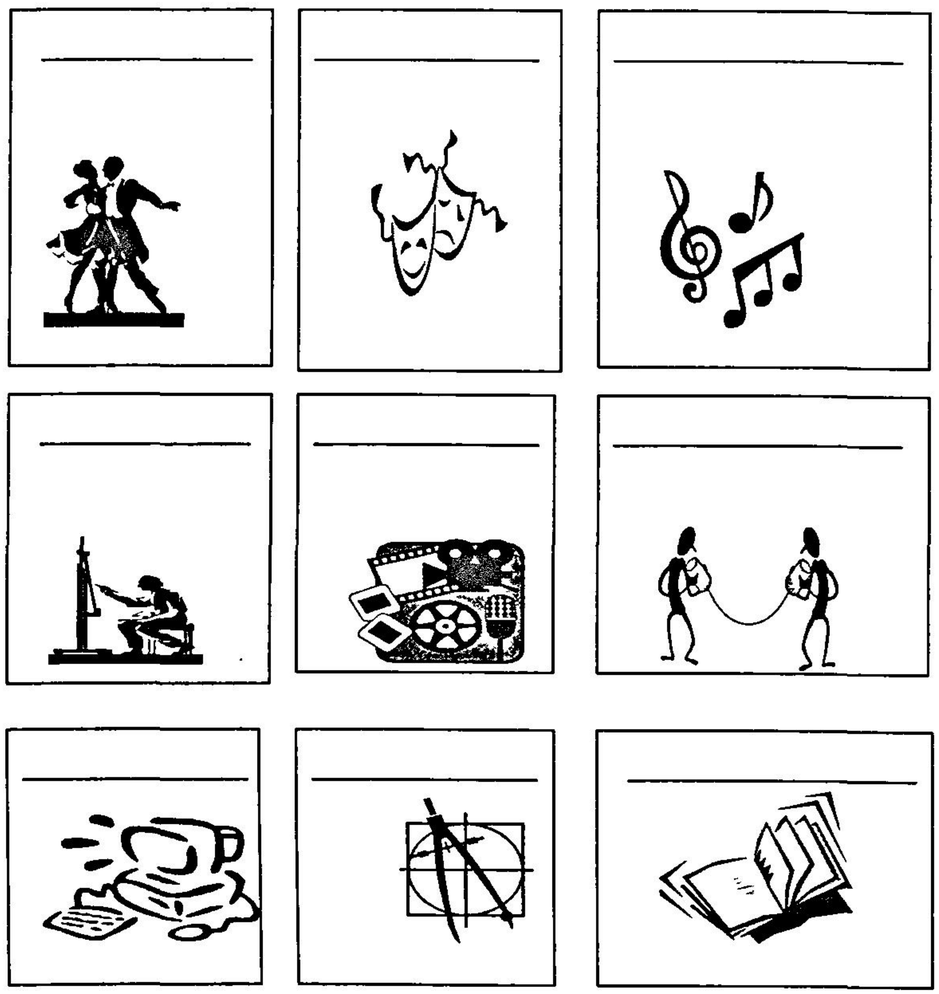
This means that, when planning a lesson, you should aim to incorporate as many aspects of Arts and Culture as possible.

.....

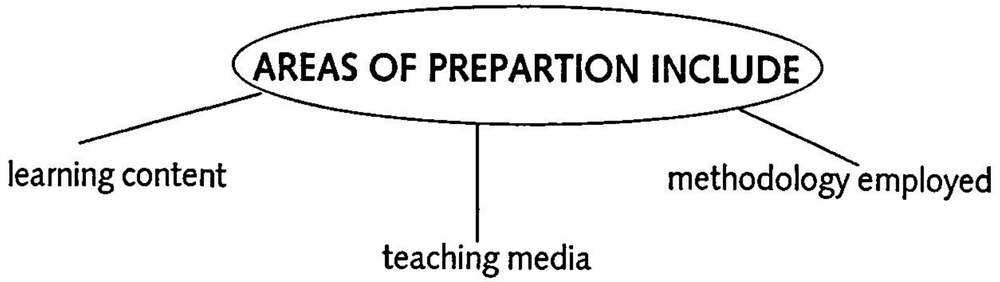
5.2 *Can you remember what the different disciplines of Arts and Culture are?*



4. Lesson planning

After the module has been chosen, the detail of the lesson can be planned. To a large extent learners` perception of group music teachers' professionalism is directly affected by the quality of the teachers' preparation. The ease and confidence of presentation of each activity, quality of materials used in the lesson as well as skill of manipulation of these materials all result from time and effort spent in preparation of the lesson.

Disciplined, enthusiastic co-operation cannot be expected from a class who perceive the group music teacher to be undisciplined and unmotivated. One of the most obvious manifestations of the teacher's self-discipline and motivation is that of thorough lesson preparation.



4.1 Learning content

The learning content of the lesson involves:

- **planning of concepts** and **skills** which are to be taught in the lesson;
- **choosing** the most suitable and varied **activities** to be used to illustrate these;
- **designing** learning outcomes
- **selection of theoretical aspects** or information to be conveyed in the lesson.

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4.2 Teaching media

The teaching media involve:

- **choosing** songs or instrumental music.
- **recording of music** in the correct order in which it is to be played in the lesson and to the precise length for each activity for which it is to be used.
- **preparation of transparencies** of the highest quality, bearing in mind the standard to which the learners have become accustomed.
- **rehearsing** with the **teaching media** so as to perform with ease and confidence in the lesson.
- **rehearsing of activities**.

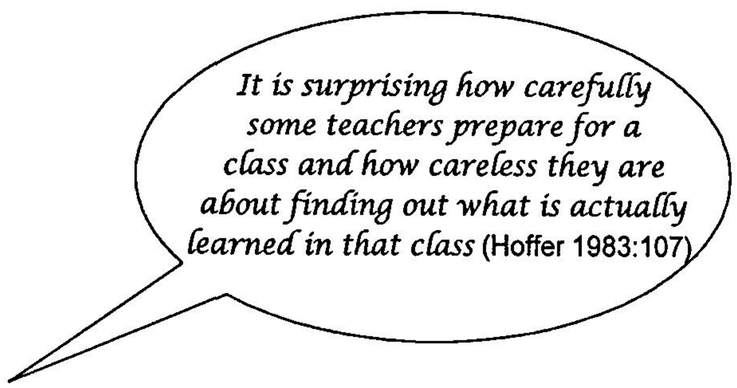
4.3 Methodology

The following indicates the methodology which can be employed:

- **planning the order** of the lesson content so as to provide maximum stimulation and enjoyment as well as enthusiastic participation by all learners.
- avoiding boredom by **varying activities.**
- **planning** the opening or **ice-breaker** moment of the lesson so as to provide a riveting and highly enjoyable start to the lesson.
- **evaluating** your planning and teaching methods so as to determine the success of the lesson.

4.4 Evaluation

Evaluation in group music occurs during the course of the lesson. The teacher should ascertain during the presentation of each module whether he/she is succeeding in the learning outcome.



There are various methods of evaluation:

- **METHODS OF EVALUATION**
  - holding discussions
  - asking questions
  - making comparisons
  - making evaluations
  - stimulating critical thought
  - completing listening questionnaires
  - completing crossword puzzles
  - testing attitudes.

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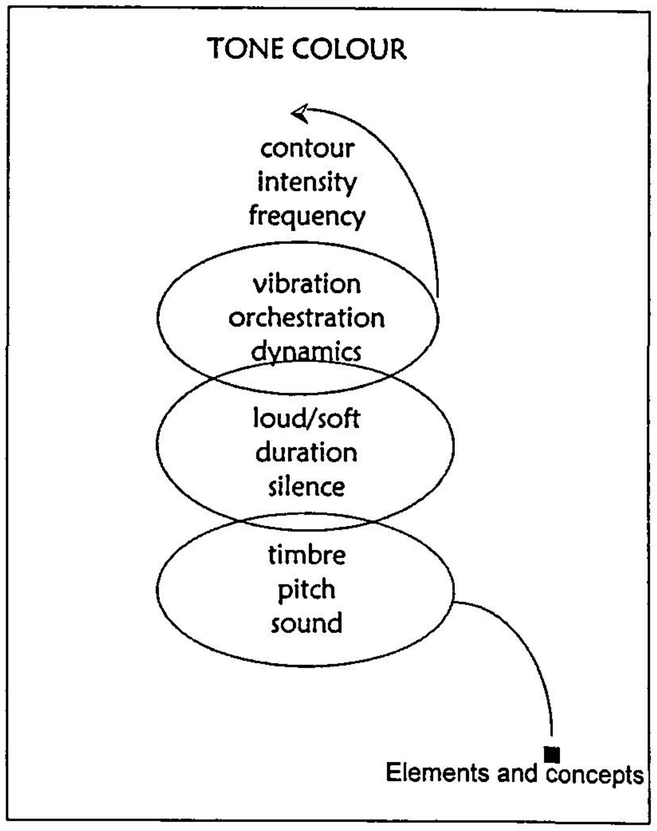
When planning a lesson it is very important to alternate between the skills performed and the information given by the teacher.

EG

a lesson scheme

1. ice-breaker
2. introductory information
3. singing
4. information on lesson content
5. listening activity
6. information
7. movement
8. information
9. evaluation

Spiral curriculum



Tuition takes place according to the forming of concepts. Incidental learning is a very important component of a lesson. A spiral of music concepts, knowledge and skills are presented in group music lessons. The teacher should therefore be able to integrate all music skills and concepts in the learning process. The spiral is read from the bottom to the top and indicates how music concepts can be integrated.

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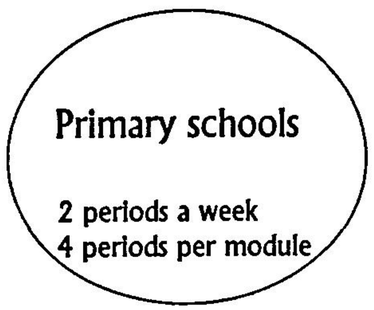
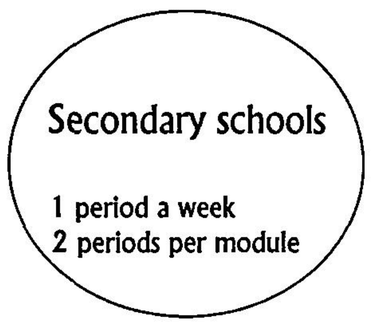
5. Teaching

5.1 Division of periods

The period allocation for group music differs in the primary and secondary schools. The primary school has two periods per week and the secondary school has only one period per week. It is suggested that primary school teachers spend four periods on a module and secondary school teachers two periods.





This division of periods per module is, however, only a guideline. Each teacher should decide on a division of periods according to the content of the module and the receptiveness of the learners.

Challenge

Teachers who are responsible for group music from Grades 8 through 12, often experience a challenge in presenting two modules of diverse nature to the junior and senior secondary phases. The division of periods is often such that the teacher is compelled to teach the diverse modules to the junior and senior secondary phases alternatively and successively on the same day.

Solution

Modules should be planned in such a way that junior and senior secondary learners could be taught with the same sound material and teaching media on the same day.

EG

Sound material of various styles can be used in the same module and some recordings can also be used in more than one module. If necessary, the learning content and presentation can also be adapted for the senior primary phase.

5.2 Differentiation

To present the same module for Grades 7-10 and Grades 11-12 learners, means that there should be skilful differentiation. The various development phases and interests of the learners should be borne in mind. **Environmental factors** and **language** play important roles in differentiation. The learning content should be adapted in Grade and class content. The following are guidelines by which to differentiate in Grade context:

- **Grade 7 learners:**
  - require an adult approach to teaching
  - learn basic music concepts by singing and listening
  - listen to Pop music.

- **Grade 8 learners:**
  - form their high school attitude towards group music in this year
  - listen to contemporary music
  - don't like long discussions - sing and listen
  - need to experience music positively.

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- **Grade 9 learners:**

- boys' voices start mutating
- prefer listening to singing
- can be taught detailed music knowledge.

- **Grade 10 learners:**

- are inhibited
- appear passive and bored
- are interested in listening questionnaires and visual material.

- **Grade 11 learners:**

- are ready for a more in-depth study of music
- are interested in the history of music and musicians.

- **Grade 12 learners:**

- are vocationally inclined
- have a wide interest in music
- need to experience music as enjoyment.

5.3 How would you summarise teenagers' general expectations of group music.

5.4 If you are teaching learner from another age group, try to find out what their preferences are.

In the planning of a lesson the following checklist should be followed:

Lesson checklist

1. Module is point of departure
2. Determine the learning outcomes for the different age groups
3. Determine the scheme of the lesson
4. Find sound material and songs of diverse nature
5. Design listening guides
6. Make neat, colourful transparencies
7. Organise all media.

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LESSON EXAMPLE 1:

The following lesson will be designed step-by-step using the checklist. It is advised that you use the same method when designing your own lessons. We have mentioned that it is important to integrate as many aspects of Arts and Culture into your lesson as possible. Can you still remember them? These disciplines will be indicated in the lesson plan so as to give you an indication of integration.

The following is an example of a teacher's planning:

PLANNING

1. Module is point of departure
   Module: Music of the Baroque period
   Target group: Grade 6

2. Determine the learning outcomes
   At the end of this module learners will:
- be able to identify music from the Baroque period
- understand the relation between music and other art forms of the Baroque period
- be knowledgeable about the stylistic features of the Baroque
- be actively involved in the learning process.

3. Determine the scheme of the lesson (see next page)

4. Sound material
   Vanessa Mae performing - Toccata in d minor (Bach)
   Bach - Toccata in d minor
   Vivaldi: Winter from Four Seasons
   Handel: Queen of Sheba
   Soweto String Quartet: Bossa Baroque

5. Design listening guides and transparencies
6. Organise all media

Hardware:	**Software:**
Overhead projector	CD's and cassettes
Cassette player	Video or slides
Video machine	Transparencies
Sound-slide projector	

3. Determine the scheme of the lesson

1. ICE BREAKER
Vanessa Mae - Toccata in d minor (Bach)
Learners perform a body percussion round to the music.

2. ORIENTATION
Learners look at the video, *Successful sounds*, where the characteristics of the Baroque period are portrayed.

3. INFORMATION
Learners give feedback on the style according to visual art, architecture, fashion and music in the Baroque period.

4. LISTENING Bach Toccata in d minor
Learners follow Transparency 1 while listening to the music.

5. MOVEMENT Queen of Sheba - Handel
Learners perform a typical Baroque dance.

6. LISTENING Vivaldi's winter from the four seasons

(Transparency 2)
In each concerto, sounds associated with the seasons are portrayed. The descriptive effects in the music correspond with the sonnets used as preface to each of the concertos.

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Sonnet from Winter

Trembling, frozen amidst the icy snow,
shivering at the harsh breath of the horrible wind.
Running whilst stamping one's feet at every moment,
teeth chattering because of the unbearable chill.

Music

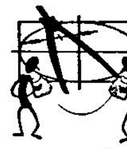
7. SINGING Any sacred round.

8. LISTENING Bossa Baroque (Soweto String Quartet)
Learners can now hear how other composers use Baroque characteristics in their music (Transparency 3).

9. CREATIVITY
Design a cover page for a journal from the Baroque period.

OR

Design a radio advertisement for a Vanessa Mae Baroque concert. The ad should refer to the composers and titles of the works that will be performed.
Choose a venue which was built in the Baroque architectural style.



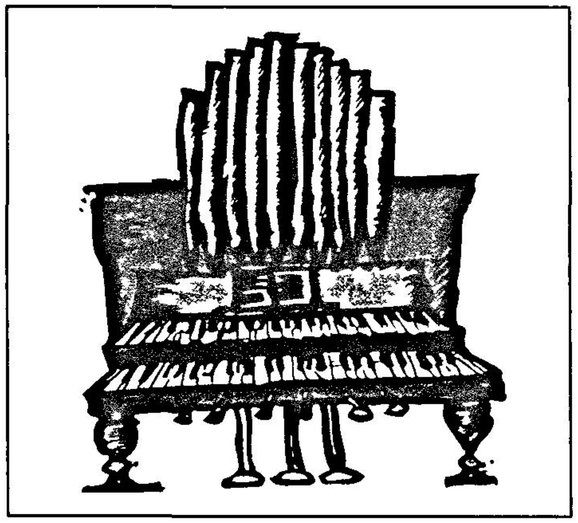
communication

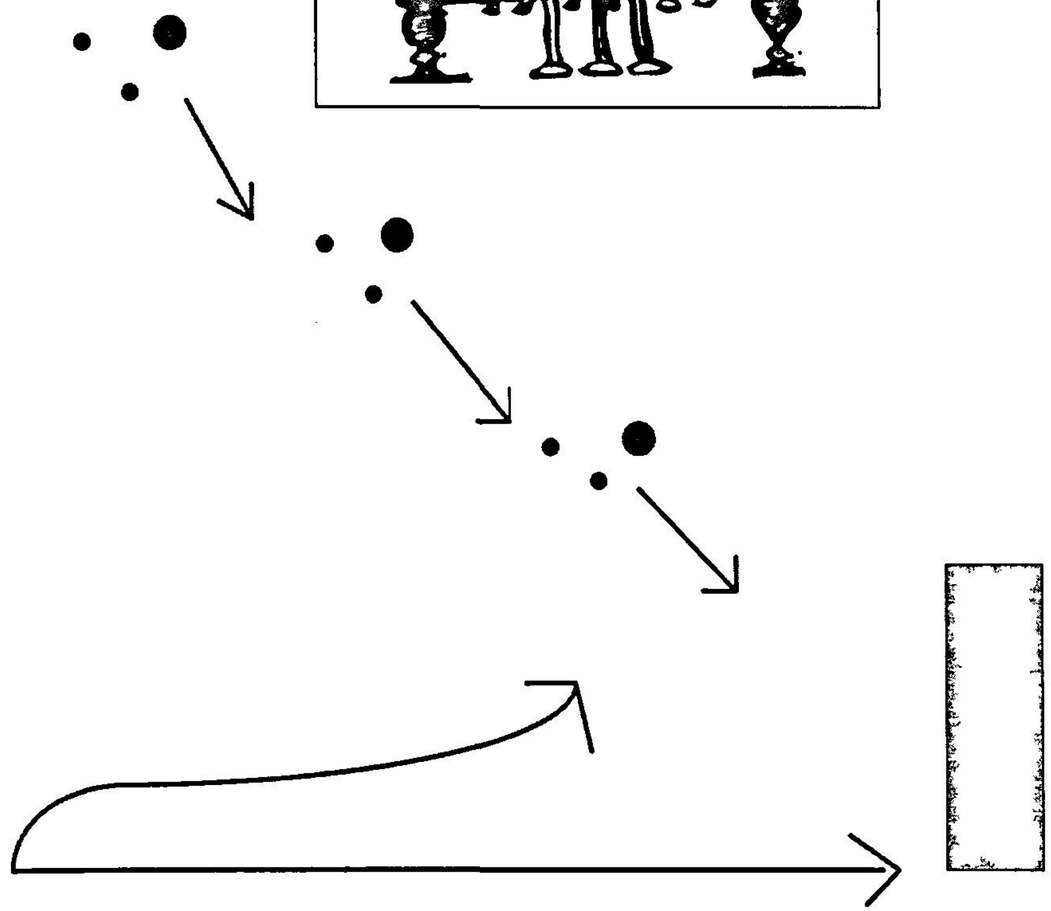
OR

media

Transparency 1

BACH TOCCATA IN D MINOR





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Winter from the Four Seasons

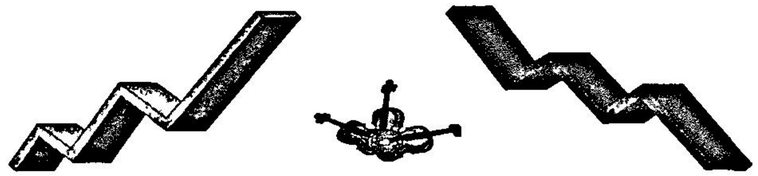
Ritornello 1:

1 2 3 4 5 6 7 8

Solo 1:

1 2 3 4 5 6 7 8

Ritornello 2:

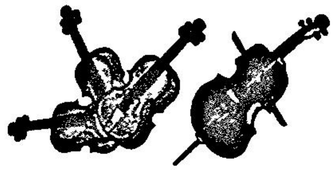


1 2 3 4

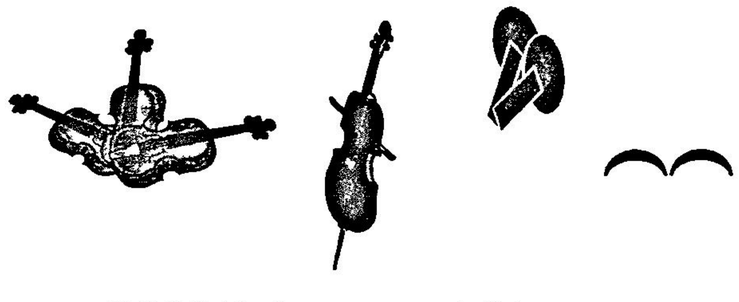
BOSSA BAROQUE - Soweto String Quartet

A

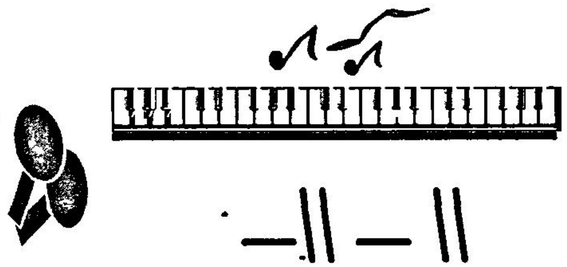
BACH



A



B



C

JAZZ

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BAROQUE

One of the characteristics of the Baroque period is the lavish use of ornamentation in music, architecture and art.

The music can be divided into church and chamber music. Dances include the Gavotte and Minuet and are characterised by gracious movements.

LESSON EXAMPLE 2:

All music is on the cassette that you have received with your study material

MODULE: GENERAL MUSIC

1. TARGET GROUP:
Grade 7-9
Theme: What is music?

2. LEARNING OUTCOMES:

At the end of this module learners will:
- be able to perceive sounds optimally
- be knowledgeable of music concepts
- be familiar with a wide variety of sounds including Western art music, Folk and traditional music and music from their learner's own milieu.

3. TEACHING MEDIA

Hardware:
Overhead projector and transparencies
Cassette player and cassettes
Piano
Orff instruments

Learning content: Musical elements and concepts
- rhythm
- accents
- tempo
- texture
- melody
- tone colour
- dynamics
- form
- style

(continued on next page)

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Sound material:

♫ Erasure	Lay your love on me
♫ Whitney Houston	I have nothing I will always love you
♫ Eric Coates	The Dam Busters
♫ Emile Waldteufel	The Skater's waltz
♫ Queen	Radio Ga Ga I want to break free Innuendo
♫ Johann Strauss	Wiener Blut
♫ Jannie du Toit	Droommensie Madeleine
♫ Boyz II Men	End of the road
♫ Toto	I won`t hold you back Africa
♫ Antonin Dvorak	Carnival overture
♫ JS Bach	Badinerie
♫ Andrew Lloyd-Weber	Memory
♫ WA Mozart	Violin Concerto no 1 Clarinet concerto Rondo Horn Concerto no 4
♫ M Faure	Pavane op 50 Sicilienne
♫ J Haydn	Trumpet concerto
♫ J Offenbach	Can-Can
♫ Michael Kamen	Robin Hood Overture
♫ ABBA	Thank you for the music
♫ Simon and Garfunkel	Sound of Silence
♫ Placido Domingo	An American Hymn
♫ Dave Brubeck	Take Five
♫ Theme song	Chi Mae
♫ Johann Strauss	Pizzicato polka
♫ Camille Saint-Saëns	Symphony no 3

(continued on next page)

4. SONGS

- ♫ When I'm feeling blue
- ♫ I'm gonna sing
- ♫ Thank you for the music
- ♫ My favourite things
- ♫ Bly by my
- ♫ Sweef soos 'n arend
- ♫ Havah nagilah
- ♫ Close every door

5. LEARNER ACTIVITIES

Singing
Listening
Completing questionnaires

This module will extend over two periods (secondary schools) or four periods (primary schools). The module can be broken up by inserting another shorter module. If the learners` attitude allows it, the module can be completed as one whole.

"What is music? This question occupied my mind for hours last night before I fell asleep. The very existence of music is wonderful. I might even say miraculous. Its domain is between thought and phenomena. Like a twilight mediator, it hovers between spirit and matter, related to both, yet different from each. It is spirit, but is is spirit subject to the measurement of time. It is matter but it is matter that can dispense with space (Heinrich Heine 1797 - 1856)".

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Lesson scheme

ICEBREAKER: ♫ Lay your love on me
Learners stand and copy body percussion movements from the teacher. Four basic movements are used.

INFORMATION:
Teacher: What did we experience?
Answer: Beat.
Teacher: Music is alive. It moves and has a pulse. Just as your heart beats regularly, music also has a beat. The beats/pulses of music usually move in groups of two or three.

MOVEMENT: ♫ I have nothing
Learners, sitting, do patschen to the beat of music using their fingers and hands on their laps.

INFORMATION: ♫ The Dam Busters (Bennet 1988 & Potgieter 1993)
The difference between duple and triple times is most easily discernible in a march and a waltz. Listen to the following march and read the listening guide (T1). Eric Coates composed this march for a film, The Dam Busters, in 1955. Learners are encouraged to conduct the beat/time.

SINGING: ♫ Any song with a clearly defined duple meter.

LISTENING: ♫ The skater's waltz (Bennet 1988 & Potgieter 1993)
This waltz was composed for skaters.
Teacher: It is December in France and it's bitterly cold. The lake's surface is frozen hard and is an ideal skating rink. The music is played by a typically French instrument, the accordion. Among other instruments you can also hear a hurdy-gurdy (T2).

During the last part of the excerpt the learners beat the time.

SINGING: ♫ Any song in triple metre e.g.
My favourite things, Sweef soos 'n arend

INFORMATION:
Your heart beats are more or less the same all the time, but the pulses of music are usually accented at regular intervals. Some music moves along without clear accents and some has clearly noticeable measures.

LISTENING: ♫ Radio Ga ga
♫ Wiener Blut
♫ Madeleine
♫ End of the road

Listen to each track and encircle the correct answer depending on the number of pulses per measure. Also indicate if you hear accents or not. (Questionnaire)

INFORMATION:
Teacher: What is tempo?
Answer: Speed. Music is performed at different tempos: fast, faster, moderate, slow, slower.

SINGING: ♫ Havah Nagilah
What happens to the tempo in this song?
Answer: It increases.

INFORMATION:
Just like fabric, music also has a specific texture. For instance, feel the difference between the texture of your cardigan and your shirt. In music, when you hear a few individual sounds at a time, we describe the musical texture as THIN. When many instruments (sounds) are heard, the texture is described as THICK.

LISTENING: ♫ I won`t hold you back -Toto
♫ Badinerie - JS Bach
♫ I will always love you - Whitney Houston

Listen to the following music and decide whether the tempo is fast, moderate or slow and whether the texture is thin or thick.

Use the texture and tempo balloon to indicate your answers.

LISTENING AND SINGING: ♫ When I'm feeling blue
At the conclusion of the singing, the teacher indicates the melodic contour of the first verse while the music is sung or played again.

When I'm feeling blue

all I have to do

Is take a look at you

then I'm not so blue

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LISTENING: ♫ Sicilienne - Faure
♫ An American Hymn - Domingo
♫ Pizzicato polka - Strauss

Teacher: Take your work-books and draw a diagram of the movement of each piece of MELODY you will hear. Each piece will be repeated and you must indicate with your diagram whether the melody moves upward, downward or in curves.

INFORMATION:
Teacher: Let us see how well you know each other. Four learners are selected to stand where the others cannot see them. Any one of the four is asked to say something and the other learners must try to identify him/her.

Musical instruments also have 'voices' which can be identified. The two main groups are ACOUSTIC INSTRUMENTS and ELECTRONIC INSTRUMENTS.

ACOUSTIC INSTRUMENTS

- **strings**: Violin, viola, cello, double bass
- **woodwinds**: Flute, piccolo, clarinet, oboe, bassoon
- **brass**: trombone, trumpet, French horn, tuba
- **percussion**: timpani, xylophone, glockenspiel, celesta, bass drum, snare drum

Illustrate the different acoustic instrumental groups by using transparencies and music examples.

LISTENING:
Can you identify the following solo instruments which are accompanied by the orchestra. You are going to listen to two examples of each instrumental group. Indicate the appropriate answers in the balloons.

Strings: ♫ Memory - A. Lloyd-Weber
♫ Violin concerto - WA Mozart

Woodwinds: ♫ Clarinet concerto - WA Mozart
♫ Pavane op 50 - Maurice Faure

Brass: ♫ Horn concerto no 4 - WA Mozart
♫ Trumpet concerto in E flat - Joseph Haydn

Percussion: ♫ timpani, xylophone, glockenspiel, celesta, bass drum, snare drum

LISTENING: ♫ Can-can - Offenbach (Bennet 1987 & Potgieter 1993)
Naturally there are many other instruments to which we haven't listened. At some future time they will be discussed. See if you find it easier to identify the different instruments now On the transparency being displayed you will be able to follow the prominent musical themes and recognise the instruments (T3).

INFORMATION:
Teacher: Electronics have given music new dimensions. Synthesisers, electronic keyboards, music computers, electric guitars, electric basses and electronic organ are all part of this group which is increasing daily as technology improves and produces more and more sounds. Amplifiers and loudspeakers are an integral part of the equipment of electronic music.

LISTENING: ♫ I want to break free - Queen
♫ Innuendo
Listen and see if you can recognise the following sounds in the extracts.
Teacher writes the names of the instruments on the transparency using a water soluble pen. Instruments: synthesisers, cymbals, electric guitar, side drum.

SINGING: ♫ I'm gonna sing
If possible make use of Orff - instruments to provide a basso - ostinato accompaniment.

INFORMATION & LISTENING: ♫ Robin Hood overture
Music can be performed loudly, gradually louder, softly, gradually softer, and so forth. Loudness/volume has an important place in the interpretation of music. Listen to the overture of Robin Hood Prince of Thieves in which suspense is created by increasing the volume (*crescendo*) to a *forte* and then decreasing (*diminuendo*) it to *piano.*

INFORMATION:
What mood did the music portray?
A building has a specific shape. Take, for instance, the Cape-Dutch architecture where repetition of the structure is the basis. Music is also planned according to a certain structure. Repetition is used frequently. In songs the repetition usually occurs in the refrain/chorus.

LISTENING: ♫ Droommensie

The teacher points out the repetitions.

SINGING: ♫ Bly by my
♫ Close every door
At the conclusion the learners should decide what form structure was used.

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INFORMATION:

If you think of style you can think of motor-cars, fashion in clothing. A motor-car of the sixties and one of the nineties do not look or sound alike, or operate in the same way. Usually the year of manufacture is the deciding factor. Similarly in music you will notice a difference in composition, arrangement, orchestration. Here, again, the year is important for the identification of the style. Let us listen to the following styles:

Classics - Western art music
Folk - folk music or a simple melody, usually with guitar accompaniment.
Jazz - a style that developed during the early twentieth century. In this style improvisation plays an important role.
Pop - commercial music that emerged in the seventies and is still with us.

Listen to the following four examples and identify each style in the balloon.

- Sound of silence - Simon and Garfunkel
- Symphony no 3 - Saint-Saëns
- Africa - Toto
- Take five - Brubeck

EVALUATION: Chi mai (the life and times of David Lloyd George)

Now you have been introduced to the concepts of music. See if you can recognise them in the following example:

Questionnaire 1

Listen and circle the correct answer

example 1

metre 2 3

tempo fast slow moderate

melodic line downwards upwards curving

Instrument group playing the melody

strings woodwinds

brass percussion

form
ABA AB

dynamics
loud soft

style

jazz pop

folk classic

example 2

metre 2 3

tempo fast slow moderate

melodic line downwards upwards curving

Instrument group playing the melody

strings woodwinds

brass percussion

form
ABA AB

dynamics
loud soft

style

jazz pop

folk classic

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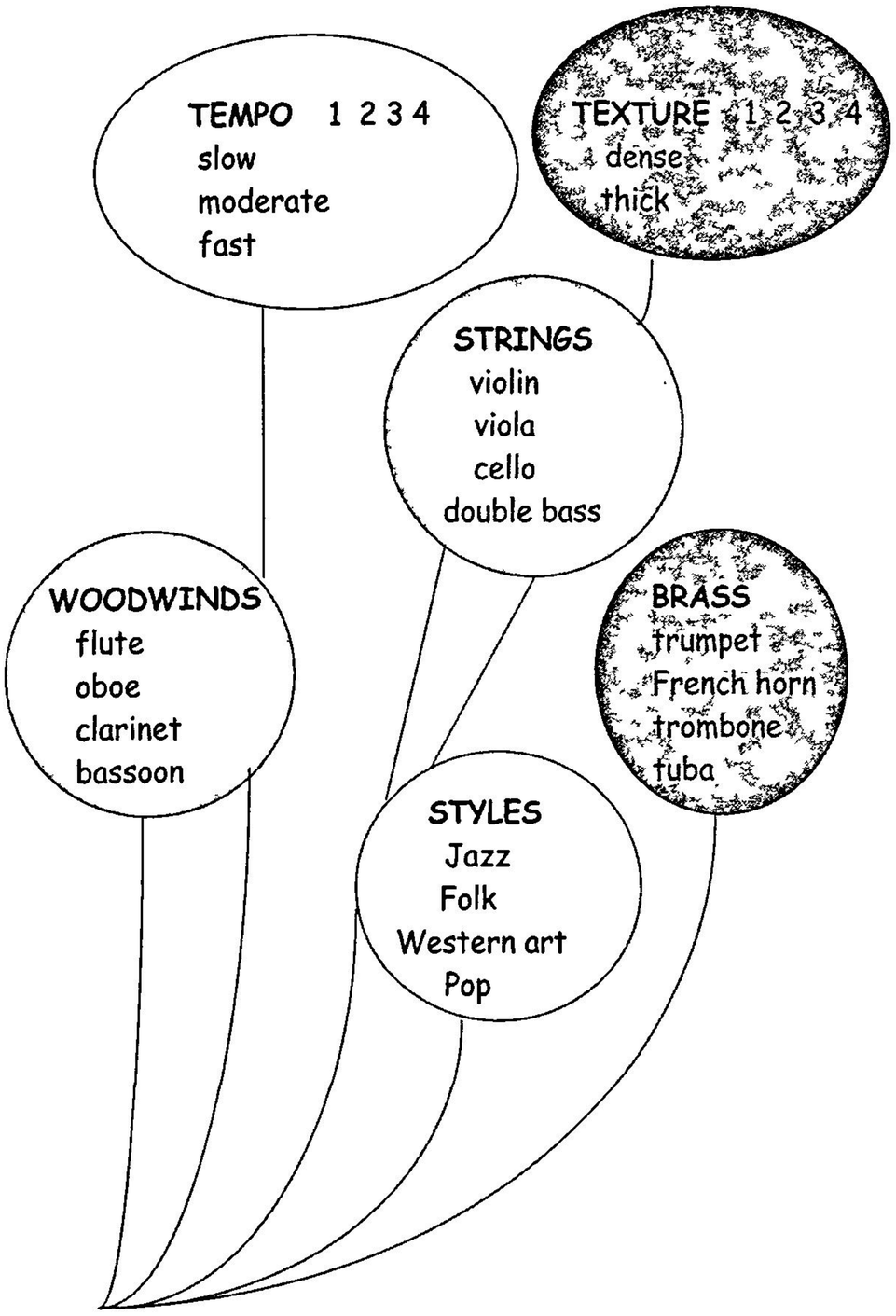
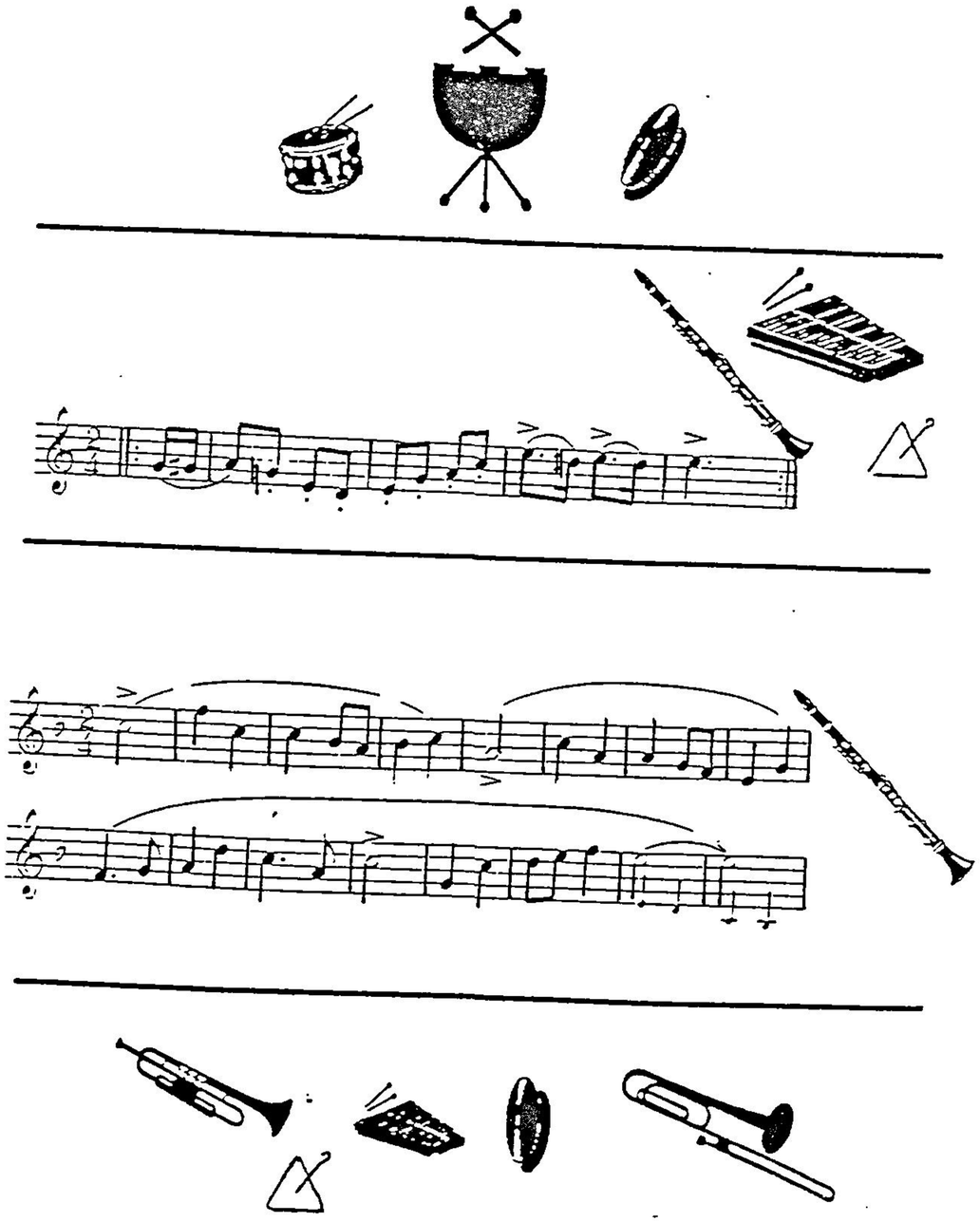
Questionnaire 2

Listen to the following music examples and indicate the correct answers.



THE DAM BUSTERS

ERIC COATS



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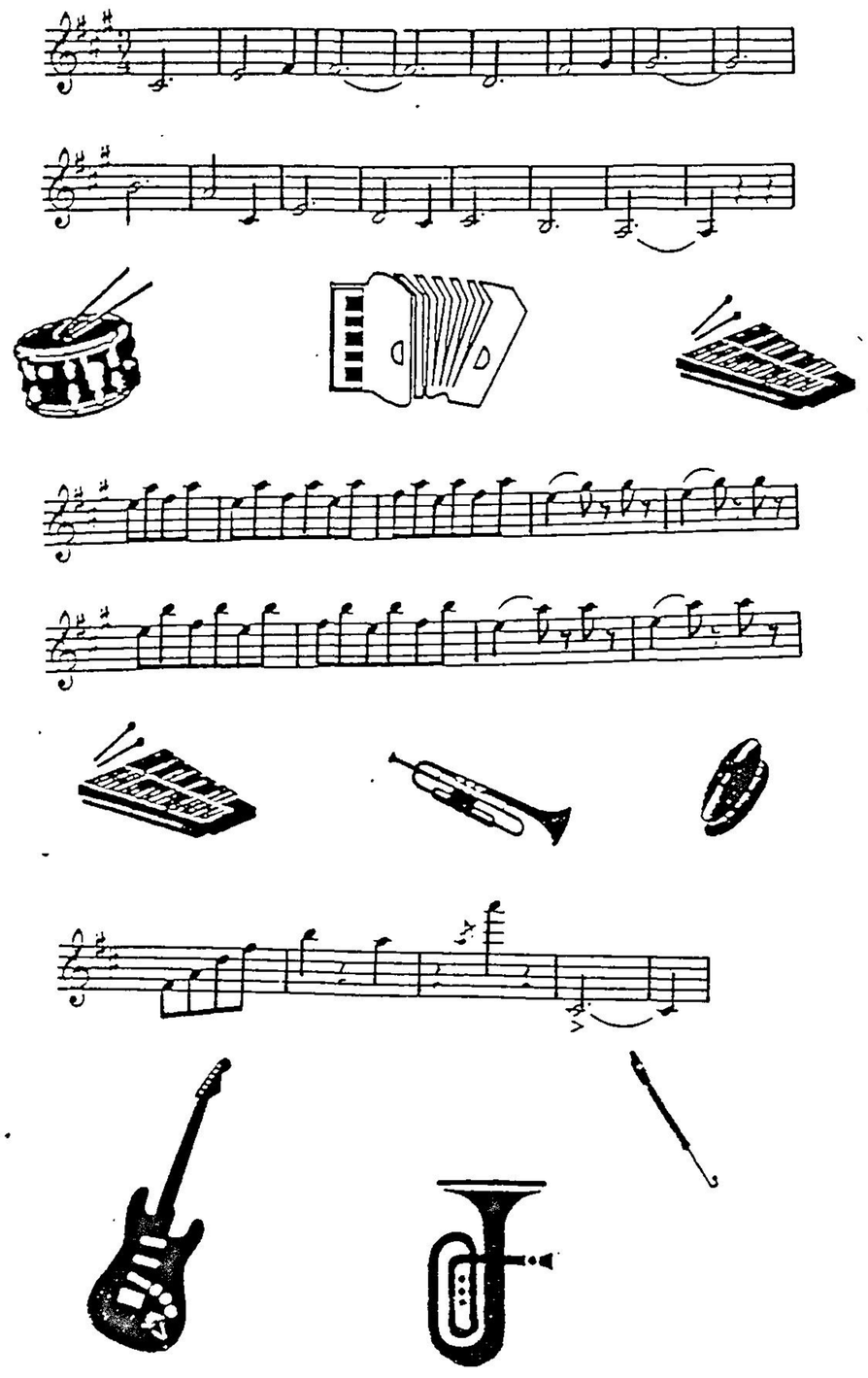
THE SKATER'S WALTZ

EMILE WALDTEUFEL

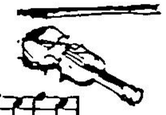


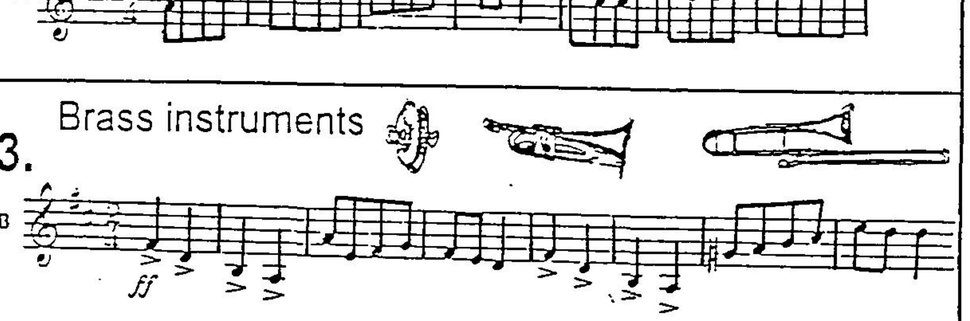
Can-can music

OFFENBACH

1. INTRODUCTION: violins and wood instruments
(call) (answer)

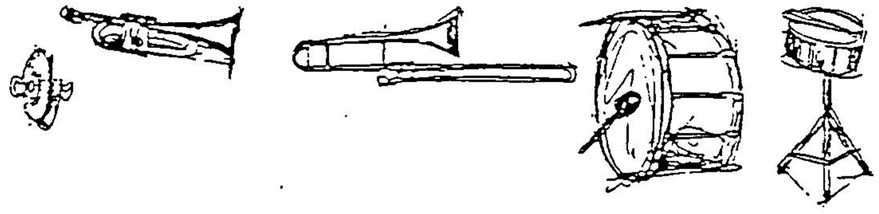
2. Dance begins

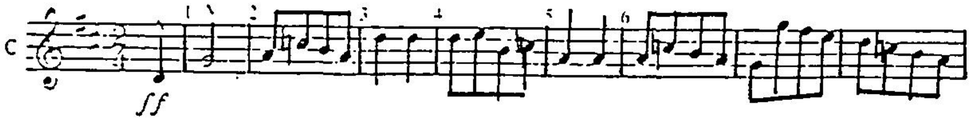




3. Brass instruments

4.





5. Repetition of Theme A

Can-can ends with the music becoming louder and faster.

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5.5 Complete the lesson plan by using the given outlines.

1. TARGET GROUP:

Theme.....

2. LEARNING OUTCOMES:

At the end of this lesson the learners should be able to:

- .....
- .....
- .....

3. TEACHING MEDIA

Hardware: .....
.....
.....
.....

Software: .....
.....
.....
.....
.....
.....

4. LEARNER ACTIVITIES

....
....
....

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ANSWER-WIZARD

- **Assignment 1.1 and 1.2**

  Select your own choice of answers.

- **Assignment 1.3**

  You should name the elements and concepts of music introduced in this module. If you can identify the elements and concepts you should write them in a circle. See if you can get an answer for each circle.

- **Assignment 2.1**

  If you are not sure, look at the section on WHY listening activities are important.

- **Assignment 2.2**

  Look at the sound example checklist on page 24. Draw up your own list according to the criteria given.

- **Assignment 2.3**

  Use the given blocks and design your own listening guide and Questionnaire.

- Listening guide:
  1. Listen to a piece of music.
  2. Decide which elements and concepts of the music you would like to highlight.
  3. How are you going to portray these?
  4. Are you going to use words, notation, pictures?
  5. Draw or paste these pictures onto the paper.
  6. Listen to your music whilst following the guide. Can you follow the music more easily?

- Listening Questionnaire:
  1. Listen to another piece of music.
  2. Decide which elements and concepts of the music you would like to highlight.
  3. Formulate questions that will lead the listeners to the correct answers.
  4. Write down these questions on the paper.
  5. Listen to your music whilst reading the questions.
  6. Can you give the right answers?

- **Assignment 2.4**

  The choice of songs should consider the age of the learners. The words and range of the song should fit the age group. For the didactic guidelines you should refer to the methods used to teach a song.

- **Assignment 2.5**

  In your experience, what are the reasons why learners do not want to sing?

- **Assignment 2.6**

  If you have difficulty answering this question you should read the section on singing in the supplementary material once again.

- **Assignment 2.7**

  It would help you to find the correct answer if you think how the different instruments are played.

- **Assignment 2.8**

  How would you be able to utilise instrumental playing in your teaching or working environment? Refer in your answer to the guidelines given in the supplementary material.

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- **Assignment 2.9**

  Make use of your body or materials in your home to portray these sounds.

  Your learners will also be able to give you some suggestions.

- **Assignment 2.10**

  Take your learners' preferences into consideration.

- **Assignment 2.11**

  1. solfa notation
  2. staff notation
  3. graphic notation
  4. rhythmic notation

- **Assignment 2.12**

  The following are examples of the different movement types:

  Body percussion: finger clicking, hand clapping, stamping of feet

  Locomotor movements: walking, running, skipping, jumping

  Non-locomotor movements: swaying, bending, rocking.

- **Assignment 3.1**

  It could perhaps help you to go and visit a CD-shop and listen to the new releases.

- **Assignment 3.2**

  Most folk songs tells the story of everyday happenings. It would also be interesting to find out about these types of songs in other cultures.

- **Assignment 3.3**

  If you are teaching teenagers you could ask them to bring you some of their favourite music and have a discussion on its musical value.

- **Assignment 3.4**

  Your answer should include words similar to the one's given below:

  Atmosphere - is the music happy, sad, energetic?

  Instruments - do you hear guitars, drums, synthesisers?

  Historical background - when was this music composed?

  - was it written for a specific event?

  Elements/concepts - read module1 again to make sure what the elements and concepts of music are.

- **Assignment 3.5**

  As with the other, more traditional music styles incorporated in group music, pop music can also be a valuable means of introducing learners to and nurturing their love for music. All the elements and concepts found in other music styles are also present in pop music. Learners could therefore be introduced to these elements and concepts through the music that they prefer to listen to. Pop music can then later be compared with other music styles.

- **Assignment 3.6**

  Look at each style period shown on the video clip 'Successful Sounds'. While watching the video try to complete the table by summarising the characteristics of each period.

  STYLE: What is characteristic of the style of the different periods?

  GENRE: Refer to the types of works written, e.g. symphonies, operas

  COMPOSERS: Name a few composers of the different periods.

  INSTRUMENTS: Which instruments did you hear on the video?

- **Assignment 4.1**

  Make a list of all the hardware and software that is available at your school, church or home.

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- **Assignment 4.2**

  You should also consider what the benefits of media in your teaching environment are. Even the simplest bulletin board can brighten up a class room and enliven a group music lesson.

- **Assignment 4.3**

  The following steps will help you to compile a transparency:
  Listen to a piece of music.
  Decide on the concepts that you would like to highlight.
  Can you identify the manner in which this concept is presented e.g. are the dynamics loud, soft or moderate? Is the tempo fast, slow or moderate?
  Write these concepts on your master plan.

- **Assignment 4.4**

  After cutting out the pointer you should use it in your presentations so that you become accustomed to working with it.

- **Assignment 4.5**

  This transparency should be designed so as to be used with various music examples. You should therefore indicate different concepts of music.

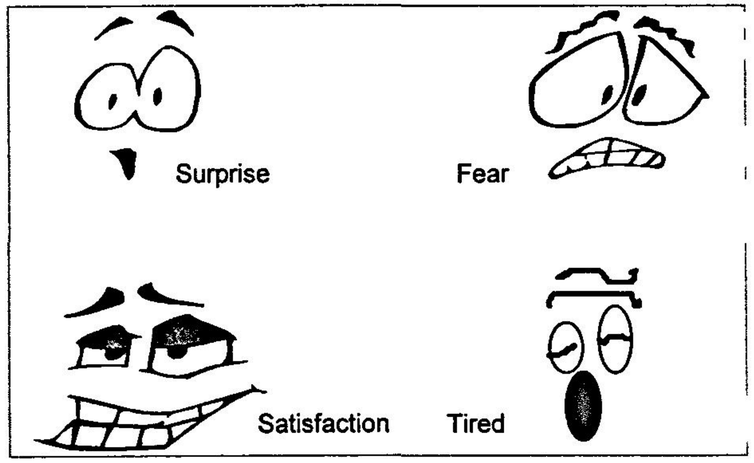
- **Assignment 4.6**

  The incorporation of the correct presentation techniques will amongst others:
  - build your self-confidence
  - structure your presentation
  - ensure that knowledge is successfully conveyed.

- **Assignment 4.7**

  This material could include:
  - Home videos of your local community music events.
  - Television programmes.
  - Music movies e.g. Sound of Music, The Lion King.
  - Cartoons.

- **Assignment 4.8**



- **Assignment 4.9**

  From time to time it is good to evaluate your reactions in class. Analysing your reactions in a difficult situation will enable you to deal with them, perhaps more successfully in the future.

- **Assignment 4.10**

  It is important that you stand your ground when facing a class for the time. You should be confident, friendly and in control of the situation. Learners will then know what is expected of them and how they should behave in your class.

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Aspects of most people's communication skills needing improvement include:

- eye contact;
- avoiding 'um' and 'OK';
- unnecessary fiddling with hair or hands; as well as
- standing straight and firmly etc.

- **Assignment 5.1**

To give learners, through music, a short historic account of South Africa.
Outcome: *After completing this lesson the learner should be able to give* account of the history of South Africa:
- playing on instruments
- singing a song
- *moving to music.*

To acquaint learners with a variety of instruments.
Outcome: After completing this module the learner should be able to identify *and play on a variety of instruments:*
- accompanying a song
- imitating sounds
- listening to recorded instrumental music

To afford learners the experience of a variety of musical styles through singing, instrumental participation, movement and listening to music.
Outcome: After this session the learners should have experienced *musical styles through singing, instrumental playing, movement* and listening activities.

- **Assignment 5.2**

The pictures were chosen to assist you in making your decision.

Dance	Drama	Music
Visual Arts	Media	Communication
Technology	Design	Literature

- **Assignment 5.3 and 5.4**

In order to answer this question, the opinions of groups of learners should be taken into consideration. It would be interesting to compare the outcomes you have drafted with the ones that they expect.

- **Assignment 5.5**

If you have trouble completing the planning you could have a look at some other examples in the library or design your own system.

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