CHAPTER 4

PARADIGMS AND EDUCATION: A THEORETICAL FRAMEWORK

4.1 INTRODUCTION

An introduction to the major educational paradigms, methods used in Music Education and the challenges facing contemporary African Music Education should inform teaching practice in South Africa. The information in this chapter will enable the reader to develop an awareness of the critical role general education paradigms play in understanding Music Education and in setting a foundation for better teaching and providing sound, systematic bases upon which Music Education curriculum might proceed. This chapter lays the basis on which educational paradigms can be applied in Music Education in order to transform the current curriculum in South Africa.

The Enlightenment, an era of faith in reason and science as the source of truth, began with the Renaissance and reached its last phase in modernism of the early twentieth century. There is no longer faith in a single over-all embracing meta-narrative or consistency of style and idea, but rather postmodernism embraces the eclectic (Kuhn 1962). There is greater trust in humour and irony and less in staid and serious theorizing. Postmodernism reflects an emerging global perspective, of differing cultures living together on a single planet (pluralism, multi-culturalism), and an acceptance of these differences, each as valid as the other. Postmodernism validates the non-intentional. Postmodernism is not the opposite of modernism, as it is often portrayed, but is rather broader, more inclusive, and encompasses modernism within it.

For Carr and Kemmis (1989), the modern education system has been criticised from a variety of perspectives, not only about the way it has functioned in the countries where it originated, namely the West, but also in so-called Third World countries. Unless it is of a cynical inclination, such criticism normally has the reform of education in view. Lately, post-modern criticism of the school has become fashionable. Post-modernism is problematic because it represents such a variety of views that it is questionable whether a singular “postmodernist view” exists. The reason may be that almost any criticism of modernism is subsumed under the term
post-modern. The recently developed complexity theory suggests a new analysis of education transformation, which may rectify the shortcomings caused by modernist practices in education.

4.2 KUHN'S APPROACH TO UNDERSTANDING THEORETICAL CHANGE

In the course of instructing non-scientists in the theory and practice of scientific research, Kuhn became fascinated by the relationship between the theory - or ideal - of research and its actual practice. His book *The Structure of Scientific Revolutions* (1962) was to have a massive influence on how people talked about theories and theoretical change in practically every academic subject. His main argument was that all theories are ‘paradigms’. The study of knowledge could be approached by looking at how these frameworks of thinking and research come to dominate an area and establish a ‘normal science’. The normal science structures thought and how we see problems, until a crisis leads us to abandon the framework and move into another paradigm.

Thus understanding the growth of knowledge involves the analysis of:

**PARADIGM - NORMAL SCIENCE - REVOLUTION - PARADIGM**

For Kuhn (1962: 62), the nature and logic of scientific revolutions shares his views of observation being embedded in theories. Kuhn sees science as driven by paradigms which dominate how observations and research are conducted. Such paradigms are essentially the community of researchers which largely determines the ‘normal science’. The researcher considers him to be saying that science is in this sense ideological, that is, science provides the framework of understanding things. Theories are accepted because of the power of the paradigm and the scientific consensus. A revolution occurs when there is a crisis in the paradigm, and then a shift from one to another takes place.
The impact of Kuhn's (1962: 60) theory on curriculum policy in general was profound and prompted many to rethink what was involved in theories and models: could they be disproved, in an 'objective', 'positivist' sense? Were theories in social science theories in a Popperian sense, since we could not 'falsify' them? Or could theories, models and frameworks exist in relation to one another in ways which meant that, as social scientists, we confront a reality which 'exists' in the context of a multiplicity of frames or paradigms? Were all frames simply relative? On what basis could we say one paradigm was 'right' and another 'wrong'? Furthermore, if social knowledge was not composed of 'facts' so much as versions of reality, what role should/could analysis of poverty, health, unemployment and so on, have in the political process? Was all knowledge equal, and simply 'an argument' within a given framework?

The ideas of Popper, Kuhn and others regarding the nature of science and knowledge signal the dawn of a post-positivist era in which the old certainties about the issues and status of facts and theories began to look less sustainable. Several commentators expressed doubts about policy analysis as offering a basis of more 'rational'/'scientific' decision-making. On the one hand, the Popperian idea that experimentation should be the basis of policy-making, rather than big unscientific/non-falsifiable theories was developed in Campbell's metaphor of the 'experimenting society'. On the other hand, students of public policy more influenced by the position adopted by Kuhn - and subsequently Habermas - developed an approach which emphasised how reality had to be conceptualised as being framed by competing paradigms (Young 1989: 107).

Another important influence on the shift away from a positivist view of curriculum policy was 'constructivist', important sources of which are to be found in the so-called 'constructivist' approach to social problems (Henshel 1990) and the exposition of the theory that reality is socially constructed, rather than an 'objective reality', that was developed by sociologists Berger and Luckman in 1966. Subsequently, due to the impact of the theories of the French philosopher Foucault and German critical thought, most notably that of Habermas, public policy was increasingly informed by
theories which stressed the need to analyse politics and policy as modes of discourse which structure reality.

4.4 PARADIGMS OF INQUIRY

Guba (1990: 12) proposes that we may understand the current state of social science inquiry in terms of four paradigms, namely:

- Positivism;
- Post-positivism;
- Critical theory;
- Constructivism.

He contrasts (a) their ontology (what is regarded as the nature of 'reality'); (b) their epistemology (what is the relationship between knowledge and the knower) and (c) their methodology (how knowledge should be found out).

4.4.1 Positivism

- Reality exists and is driven by laws of cause and effect which we can know.
- Inquiry can be free of value.
- Hypotheses can be empirically tested.

4.4.2 Post-Positivism

- Reality exists, but cannot be fully understood or explained. There is a multiplicity of causes and effects.
- Objectivity is an ideal, but requires a critical community.
- It is critical of experimentalism, and stresses qualitative approaches, theory and discovery.
4.4.3 Critical Theory

- Reality exists, but cannot be fully understood or explained. There is a multiplicity of causes and effects.
- Values mediate inquiry.
- Proposes the elimination of false consciousness and facilitates and participates in transformation.

4.4.4 Constructivism

- Realities exist as mental constructs and are relative to those who hold them.
- Knowledge and the knower are part of the same subjective entity. Findings are the result of the interaction.
- Identifies, compares and describes the various constructions that exist (hermeneutical and dialectical).

4.5 POLICY FRAMEWORK FOR CURRICULUM DEVELOPMENT

Lincoln (1990: 84-5) argues that what needs to be abandoned is the view that knowledge about social and other problems is like a collection of building blocks. It is quite possible that knowledge is more circular or amoebalike, or that knowledge exists in clumps of understanding, with different kinds of knowledge taking different shapes. “We simply do not have the metaphors we need for conceiving of knowledge in any other way but hierarchic, pyramidal, or taxonomic... It may be that, if some forms of knowledge exist in clumps, or in non-hierarchic organisation, we ought to be talking not about ‘building blocks of science’ but about extended sophistication, or the artistic and expressive process of creatively conjoining elements in ways that are fresh and new”.

The researcher agrees with Lincoln’s beliefs that linking and bridging between areas of knowledge is important. And this theme of the need for an intermediate or linking level of analysis is a common one in policy studies, where the number of knowledge ‘clumps’ is larger than in many other fields of inquiry. If we accept the arguments of post-positivists and post-modernists, big theories and meta languages exist in multiple
versions of reality. In this case, it could be argued, we should abandon the use of paradigms, models and theories and recognise that we do not know anything. However, this carries with it many dangers. As Harvey (1990: 116-117) observes:

Post-modernist philosophers tell us not only to accept but even to revel in the fragmentations and the cacophony of voices through which the dilemmas of the modern world are understood. Obsessed with deconstructing and delegitimating every form of argument they encounter, they can end in only condemning their own validity claims to the point at which nothing remains of any basis for reasoned action. Post-modernism has us accepting the ratifications and partitioning, actually celebrating the activity of masking and cover-up, all the fetishisms of locality, place or social grouping, while denying that kind of meta theory which can grasp economic processes ..., that are becoming ever more universalising in their depth.

A post-positivist interpretation of policy analysis, if taken to the point of saying that we can dispense with paradigms, results in actually ignoring political and economic realities. In using theories and articulating different ways of seeing policy-making and policy outcomes this research is acknowledging that there is fragmentation in Music Education policy; there are many schools of thought; but in so recognising this pluralism we also recognise the necessity of making the paradigms and viewpoints clearer.

4.6 TRADITIONAL THEORY: SCIENTISTIC POSITIVISM AND TECHNICIST RATIONALISM

The science of Empiricism, the basic paradigm of science, came into prominence during the 18th century, and became known as the Enlightenment, that is, the intellectual and philosophical activity of science. It holds that knowledge is gained only through the senses.

4.6.1 Scientism

Positivism (sometimes called logical empiricism, scientific empiricism, or scientific positivism) takes empiricism to an extreme by claiming that whatever cannot be verified by sensory experience (as observable 'positive' knowledge) cannot be explained, is unknowable or unreliable, and is thus not true knowledge. Positivists
argue that the scientific method is the only source of valid, objective knowledge about reality - a claim labelled scientism by critics, including Critical Theorists. Scientific positivism, in sum, holds that non-scientific claims to knowledge are meaningless, misleading, subjectively variable and thus capricious and dubious (Young 1989: 82).

In use, positivism has faith only in the scientific quantification of 'objective' data and the corresponding use of statistics to state laws. The laws thus discovered in nature are used to make predictions: laws are true (i.e. scientific, objective, valid, reliable, 'positive') to the degree that predictions turn out as the laws forecast. Positivists hold that better, more comprehensive laws will eventually cover irregularities not predicted by present laws as they are discovered. Scientific positivism has also traditionally rejected as meaningless (in the sense explained above) statements in the social sciences, arts, and humanities about the qualities or activities of mind and human subjectivity. In particular mentalist, subjective states such as ideas, intentions and feelings are denied or devalued. Scientific behaviourism, according to Hanrahan (1997: 96), is a key example of this tendency and thus explains all human consciousness in terms of observable behaviour. It excludes reference to (covert) mental events or states, or to the subjectivism of introspection of any kind, and in radical form it even denies the existence of mental states. Thus words such as feeling, choosing, or intending, are held to have no objective referents; their meaning (a condition that positivists in general have trouble explaining) is seen only in reference to overt behaviour or dispositions for overt behaviour.

Despite its complexities, human behaviour is seen as ultimately responsive to statistically determined natural laws by scientism researchers in Music Education and by positivists in the social sciences in general. And, it follows, what is predictable is ultimately controllable through rational means, systems and 'standards'.

4.6.2 Technicism

For Jonassen (1991: 10) rationalism, the belief in reason as a source of reliable knowledge also came to full flower during the Enlightenment. Originally the use of reason emphasized by Enlightenment thinkers was opposed to authority or revelation as sources of knowledge-in particular, the authority of the Church and of kings. The
Enlightenment thus brought Western civilization out of the Dark Ages and initiated the modern era in history and the associated paradigms of what today is called modernism.

However, empiricism and rationalism converged during the Enlightenment in certain ways that excluded other possibilities. These directions ultimately led to:

- the rise in the scientific method for determining valid knowledge;
- the rise of technology and the resulting paradigm of technicism and its uncritical faith in human behaviour;
- and, above all, the belief in the rational perfectibility of society through just such management techniques or methods.

Thus, when scientistic assumptions are applied to education (Music Education in particular), learning is assumed to be subject to objective and invariable laws referred to by the misleadingly benign term 'learning theory' (Carr and Kemmis 1986). In this context, teaching comes to be considered a technology of methods by which the learning process of learners is controlled. Teaching thus becomes a technicist undertaking rather than a professional praxis.

4.7 CHAOS / COMPLEXITY THEORY

During the previous century three major scientific revolutions took place (Stavenga 1993: 68). The first two of these, namely relativity theory and quantum theory, are well known although the insights they generated are rarely reflected in educational practice. The third, chaos theory, although still novel, is already evident in a variety of sciences (Stavenga 1993: 66). As mentioned in Chapter 1, this study attempts to apply this theory to the transformation of education, with special reference to the role of values in Music Education. As it is not possible to provide a detailed discussion of chaos (Hayles 1990), the following salient points are merely listed:

- In the scientific sense chaos means something other than its common usage.
  “At the centre of chaos theory is the discovery that hidden within the
unpredictability of chaotic systems are deep structures of order” (Hayles 1990: 1).

- Complex systems, containing both order and chaos, are rich in information rather than poor in order (Hayles 1990: 6).

- Hayles (1990: 12) points out that there are two branches in chaos theory. The first is concerned with the hidden order within chaotic systems, while the second branch focuses on the order that arises out of chaotic systems in accordance with a process of self-organisation. In the latter process increased chaos leads to bifurcation, which is the manifestation of the different (higher) order.

- Complex or chaotic systems are very sensitive to initial conditions (Stavenga 1993: 74). This implies that complex systems do not come about because of a complex design, but emerge as a result of an interaction between simple initial conditions.

- Feedback refers to loops of information that contribute towards growth and adoption of an open system.

- When chaotic systems are represented on a computer, the presence of strange attractors can be seen. An attractor is defined as “any point in a system’s cycle that seems to attract the system to it” (Hayles 1990: 8). Thus, in an apparently chaotic situation, patterns eventually emerge because of some in-built attraction. Reference could be made to a culture, where the values acting as attractors draw the individuals together.

Although chaos theory is concerned with both chaos and order, its very name suggests that it is more concerned with the chaotic aspects. In order to accommodate the orderly aspects of complex systems, the term complexity theory seems to be more appropriate.

4.7.1 The application of complexity theory to education

The question of applicability of complexity theory to education is now relevant. This possibility may be traced to the anthropological level, in the fact that man is a complex being consisting of both orderly and chaotic aspects and moments. Man’s (including women for gender sensitivity) orderly aspects are well known. Culture
could be cited as an example of the fruit of man’s labours that creates order (Carr and Kemmis 1986: 198). The irregularities present in a normal beat can be seen as a manifestation of the intrinsic dynamics of the beat of the heart that make it possible for it to adapt to changing circumstances. Man’s brain is continuously involved with some high-dimensional strange attractions, which makes the assimilation and processing of internal and external information possible. Learning, or more appropriately, understanding, which forms the basis of education, does not proceed in a strictly orderly manner. Periods of order are interspersed with periods of chaos when the brain has to integrate new processes of self-organisation. In these processes strange attractions play an important role. The well-known adage that in education one proceeds from the known to the unknown, is based on the way which the brain functions, namely that when new information is encountered, it is incorporated into the complex pattern set by the existing strange attractions. If one accepts that a person only learns or assimilates ‘permanently’ that which is valuable to him/her, the question of the values is also apparent (Young 1989: 93).

4.7.2 Complexity theory and value

According to Ryan (1997: 256), the transformation of a culture, and therefore of education, happens in its deepest sense due to a change in values. Thus, when considering the transformation of education, one has to consider the relevant values. In the development of culture, of which education forms an integral part, values play the role of initial conditions and strange attractions. In other words, values are important both in the initial development of a culture, and its sustained existence. The core values underlying modernist education will now be analysed.

4.8 CORE VALUES UNDERLYING MODERNIST EDUCATION

The present endeavours to transform the past Music Education in South Africa into Outcomes-based Music Education, thereby also reforming the training programmes for educators and especially music educators, serves as a starting point for a more general discussion of the Music Education curriculum. The following sections deal with some of the core values underlying modernist education, which has an impact on Music Education.
4.8.1 Reductionism

Reductionism is represented by analytical, atomistic or mechanical viewpoints. It studies wholes by reducing them to their constituent parts. Following Descartes' view that all problems can be broken down into smaller problems and ultimately solved, reductionism became the hallmark of science, with disastrous consequences (Bosch 1991: 353). The globe’s ecological problems are seen by many to be a direct result of reductionism (Lukacs 1971:307). Even a complex phenomenon like education has been subjected to reductionism in order to study it ‘scientifically’ (phenomenological reduction).

A core value fostered by the notion of reductionism in education is individualism, both on the human and on the epistemological level. On the human level it led to people being viewed as individuals. Wielemans (1993: 7) says that in the Western world the emphasis in education is on achievement and on personal motivation. From an early age we are taught to compare our achievements with those of others and our feeling of personal worth is determined by our position on a continuously updated competition list (Wielemans 1993: 7). Similarly, Wheatley (1991: 30) laments the individualism of American culture that “leaves the individual suspended in glorious, but terrifying, isolation”. This statement above does not include the African values, and as such it is biased towards Western philosophy of education and values. In Africa, the emphasis is on inclusivity of everybody, which is a symbol of sharing. The concept “ubuntu” indicates the moral high ground embedded in African culture.

On the epistemological level the sources of knowledge are divided into disciplines that operate more or less in watertight compartments. This opened the way for teaching subjects rather than pupils. Because of man’s limited intellectual ability a certain amount of reductionism is necessary: “Science seeks uniformity among phenomena and things; it often ignores complicating factors” (Lukacs 1971: 306). The danger in applying this to education is that the complexity of education is ignored, leading to practices that militate against the true nature of education.
4.8.2 Rationalism

The Enlightenment is also known as ‘the age of reason’ and other modes of thinking are considered to be either irrational or antirational. Bosch (1991: 353) points out “The problem with scientism (rationalism) is that it fetters human thought as cruelly as any authoritarian belief system has ever done”. Scientism demands that humans must diminish their humanity in order to function as scientists (Lukacs 1971: 309).

Despite laudable ideas such as “educating the whole child”, the education of the mind is focused upon, virtually excluding other aspects of pupils’ beings. Schools largely ignore the very humanity of the child when the dominant metaphor for today’s school is that of the Newtonian machine (Sawada & Caley 1985: 14-15). A machine has to work correctly, but as Schuck (1987: 6) indicates: “Perfect order is not found in the natural world nor is it part of human nature”.

4.8.3 Objectivity

Descartes’ object division has had far-reaching consequences. On the epistemological level it has the implication that authentic knowledge about man can be obtained by measurement: “The social sciences in particular encourage us to view men as statistical entities and consequently to deal with them on impersonal terms” (Lukacs 1971: 305). Lukacs (1971: 306) quotes Roszak’s repugnance towards the detached observational procedures of social science: “I am not particularly interested in what you uniquely are; I am interested only in the general pattern to which you conform.”

Another development emanating from the notion of objective knowledge is the existence of truths expressed as facts. Scientific endeavours have to do with the establishment of a coherent body of facts (Schuck 1987: 8). Because these facts are supposed to have universal application, only empirical truth warrants attention while the role of values is relegated to the domain of faith.

Although the core values associated with objective science have been questioned for some time, inter alia with the advent of qualitative research methods, objectivity is still valued at school.
4.8.4 Optimism and progress

Optimism is an aspect of the Enlightenment worldview that has had far-reaching effects on education, especially in Africa. Optimism is defined as the belief that all problems are in principle solvable (Bosch 1991: 361). Similarly, progress is not only possible, but also valued. This view is compounded by the fact that progress is supposed to take place in a linear fashion, which indicates a positive understanding of education.

In keeping with the modernist value of optimism and progress, education is readily viewed as pivotal for the solution of societal problems. For example, in South Africa proponents of apartheid used formal education as an instrument of social engineering, with dire consequences. Similarly, the present government, which represents the broad democratic movement, also wishes to use education to achieve their own purposes like “reconstruction and redress” (Muller 1998: 14). People’s education also views education as a tool to solve social problems. Accordingly, education should help an individual to participate in the society. All these ideas are trying to make education adhere to the core values of the postmodern education system in South Africa.

4.8.5 Mechanical causality

Newton’s discovery of some natural laws had such a major impact on the development of modern science that the term ‘Newtonian paradigm’ is often used to denote the modernist view of reality.

Lukacs (1971: 296) states, “the necessarily narrow logic of mechanical causality leads to deterministic systems that have harmed our understanding of history, since in reality this kind of causation almost always ‘leaks’. But now not even in physics is this kind of causation universally applicable”.

Not only did Newton’s discoveries underpin the Industrial Revolution, it was also discovered that in the process schools came to be managed like factories (Sawada &
Another consequence of Newton’s discoveries of natural laws is the idea that nature and society can and should be controlled to achieve order. Disorder has to be abhorred. In education this led to the static, centrist planning of education systems by bureaucrats who are also technocrats (Claassen 1994a: 32). Lukacs (1971: 307) points out that technocrats’ “principle values are efficiency and order rather than spontaneity and variety, and they judge the successes and failures of social institutions in impersonal, objective, and quantitative rather than in human and qualitative terms”. Standardisation became a particular feature of formal education systems. The core values that can be identified are control, order, efficiency and standardisation.

The following question now arises: If the values indicated above lie at the root of modernist education and if these no longer satisfy the demands of the present time, which values should then be cultivated in order to transform education so that it will cater to the demands facing the school learner of the twenty-first century?

4.9 SOME VALUES SUGGESTED BY COMPLEXITY THEORY

Where the Enlightenment emphasised reductionism with its concomitant values of individualism and competition, complexity theory emphasises connectedness and operation. Wielemans (1993) analysed a number of scientific disciplines in order to substantiate his argument that Western individualism needs to be connected. Such interconnectedness does not negate the individuality of a person. As a matter of fact it is in connectedness that the individual’s uniqueness is realised, since one individual cannot simply replace another as is suggested by an atomistic view of the individual. With regard to the relationship between teacher and pupil, the new paradigm emphasises the dual interaction between pupils and teachers in which they are mutually connected to each other and in which giving and receiving are continuously intertwined (Wielemans 1993: 204). Thus, in the teaching/learning situation both the teacher and the student teach and learn simultaneously. Furthermore, this value provides a rationale for group activities in classrooms, which has long been advocated but often neglected. Finally, interconnectedness is juxtaposed with the competition metaphor in modernist education.
4.9.1 The expansion of rationality

Bosch (1991: 353-355) indicates the limitations of the rationality legacy of the Enlightenment, especially within an objectivist framework. The fallacy still persists that, through his reason, man is capable of creating order and of controlling himself and others (Schuck 1987: 3-4). Rather than overestimating order, "we must learn to understand that flux and uncertainty are neither good nor bad, but inevitable" (Schuck 1987: 7). Learners should be given the freedom to make mistakes as they learn. Again, this does mean that rationality is unacceptable, but that its limitations are recognised.

Wheatley (1991: 12), speaking of organisations in general, says: "We are refocusing on the deep longings we have for community, meaning dignity, and love in our organisational lives." This should hold even truer of the life in school. The core value suggested here is a tolerance of the learners' inherent way of learning that includes both chaos and order. Only then will learners be able to renew themselves and not be almost completely dependent on an outside source.

4.9.2 Subjectivity

The objectivity/subjectivity debate has been raging for a long time. Schuck (1987: 4) observes that while natural scientists have already agreed that we do not and cannot know absolutely, many social scientists still cling to empirical research models as a means of conformation. The value implication of the untenability of objectivity is that teachers should value their own and their pupils' subjectivity and uniqueness. The core value that emerges is man's relatedness. Instead of being an object and an atomistic individual, man is the nodal point of many relations (Wielemans 1993: 10).

4.9.3 Tempered optimism

The idea of development arose from the progress thinking of the Enlightenment (Bosch 1991: 356). Such development has a linear dimension. Without going into the debate about development theory, it is postulated that although development is possible, it does not necessarily take place in a linear way, but in all kinds of
unexpected and surprising ways. If one recognizes an education system, embedded in virtually the totality of a society's culture, as a complex structure with both chaotic and orderly moments, then unbridled optimism regarding its power to effect change gives way to a more realistic view which emphasizes education for a virtuous life and not only for development.

4.9.4 Complex order

Newton's discovery of natural laws and their successful application in technological development created the illusion that man can control virtually anything. Western man led the way in establishing order in a chaotic world. However, he lost sight of the fact that order can also be had for free, that it can emerge spontaneously through a process of self-organisation which depends "upon self-reinforcement, a tendency for small effects to become magnified when conditions are right... Positive feedback seemed to be the sine qua non of change, of surprise, of life itself" (Waldrop 1992: 34). Self-organization is possible when a complex structure, a person or an organization, is free to interact with its environment. It has to exchange matter and/or energy in this process. In an educational context, freedom is therefore not a concession to be made, but a condition for sustained renewal and transformation.

4.10 THE TRANSFORMATION OF EDUCATION

It is not suggested that modernist values should be completely rejected and replaced by those emanating from complexity theory. However, these new insights should at least be complementary to the existing ones. In the above discussion it has already been suggested that a change in values is fundamental to educational transformation. If one considers that opposition to Newtonian thought has existed for decades, then it is clear that taking an anti-Newtonian stance will not in itself change the status quo. The deterministic worldview has its roots in society and that in politics the aim is to control. Thus, opposing it requires a certain amount of courage.

The changing management of private companies is proof that there are already movements afoot which undermine the old order. Because businesses have to adapt or die, they are more sensitive than education systems to changing views. What does this
tell us about the strategies to be followed in the transformation of education? From the very nature of education as a complex structure, it can be deduced that its transformation will not be effected in a top-down fashion. While one has one clear idea of exactly what an education system that evolves along complexity lines will be like, a top-down approach would not be feasible. It is best to allow a process of self-organisation so that a new system emerges. In this process positive feedback is of major importance. For this to take place, maximum freedom in formal education is required.

4.11 CURRICULUM DEVELOPMENT

Without knowledge of curriculum development, teachers cannot make a meaningful contribution and evaluation of the current curriculum. Therefore, it is important to understand the process of curriculum development and how it affects society.

4.11.1 Curriculum Development Process

Curriculum deals with two interrelated matters: sets of questions or topics that serve as an outline or model for the way people think about curriculum, and configurations of content to be taught and its several subdivisions (Nevhutanda 2000: 90). The process of curriculum development could be standardized in three key stages: Planning, design and development; implementation, and evaluation. These three stages in the curriculum development process will briefly be explained. It should be mentioned that stage 1 comprises three components: planning, design and development, as identified by Marsh and Stafford (1988: 17).

- Curriculum planning - refers to the way in which particular aspects of life, knowledge, attitudes and values are selected from the total culture of society (for purposes of transmission) and are put into practice.

- Curriculum design - refers to the organisational pattern of the structure of a curriculum.
- Curriculum development - refers to the writing of instructional objectives, content, activities and evaluation procedures.

- Implementation - refers to the process of putting a change in the curriculum into practice.

- Evaluation - refers to the process of studying the merit or worth of the whole of the curriculum.

The stages identified above interchange themselves to give shape and meaning to the concept curriculum development. Therefore, curriculum design does not necessarily precede curriculum development in a linear fashion. Instead, the two processes work and occur simultaneously. Therefore, the curriculum development process could be described as a cyclical, reflective, interactive process as shown in Figure 4.1.

**Figure 4.1: Curriculum Development Process**

(Devroop 2002: 4-28)
This study is located within the diagram indicated in Figure 4.1 above. Prior to curriculum development, a curriculum model has to be identified, which outlines the theory of the aspects to be considered, the sequence of events and how actions should be planned. Dixon (1998: 24-30) identifies various models of curriculum design which fall under three traditional models: the objectives model (product or output model), the process model (input model), and the situation analysis model or culture-analysis model.

The researcher agrees with Dixon (1998:25) that the revised “outcomes-based situation analysis model” would comprise: situation analysis, learning outcomes, assessment criteria, range statements and performance indicators replacing learning content, learning experiences and learning opportunities and evaluation.

4.11.2 Curriculum Development and Critical Outcomes

The original eight critical outcomes proposed by SAQA (DoE 1997a: 16) are reduced to seven in the Discussion document (Technical Committee 1997: 82). The critical outcomes state that the learner will:

- Identify and solve problems in which responses show that responsible decisions using critical and creative thinking have been made.
- Work effectively with others as a member of a team, group, organisation or community.
- Organise and manage oneself and one's activities responsibly and effectively.
- Collect, analyse, organise and critically evaluate information.
- Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written presentation.
- Use science and technology effectively and critically, showing responsibility toward the environment and health of others, and
- Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation.
Devroop (2002: 4-22) notes that these outcomes are not dependent on or restricted to a specific learning content. They are only the formulations of the life roles to be performed by learners. Therefore, the developmental outcomes should be read in conjunction with the above listed critical outcomes. To enhance the full personal development of a learner, as well as social and economic development per se, any learning programme needs to make an individual aware of the importance of the following outcomes (Technical Committee 1997: 82):

- Reflect on and explore a variety of strategies to learn more effectively.
- Participate as responsible citizens in the life of local, national and global communities.
- Be culturally and aesthetically sensitive across a range of social contexts.
- Explore education and career opportunities.
- Develop entrepreneurial opportunities.

It is clear from the above that these outcomes encapsulate the real life roles that learners have to perform. Spady (1994: 21) suggests ten life performance roles that require complex applications of many kinds of knowledge and all systems. These ten life performance roles are divided into two groups of five each (suggested by the dotted line in Figure 4.2). He suggests that six of the life performance roles deal with social and interpersonal performance roles that inherently involve interactions among people (Spady 1994: 69-71). These roles are indicated in Figure 4.2 above the dotted line (Spady 1994: 70) and summarised by Devroop (2002: 4-23):

- "Listeners and communicators are to comprehend and express ideas, information, intention, feeling and concern for others in ways that are clearly understood and appreciated."
- Educators and mentors enhance the thinking, skills, performance orientation and motivation of others through the mediation they provide, the counsel they give, and the example they set.
- Supporters and contributors invest time, ideas and resources to improve the quality of life of those around them.
- Team members and partners contribute their efforts to collaborative endeavours and seek agreement on goals, procedures, responsibilities and
rewards setting aside personal preferences, anticipating obstacles, and supporting the participation of others to achieve the results.

- Leaders and organisers initiate, co-ordinate, and facilitate the accomplishment of collective tasks by perceiving and defining intended results, determining how they might be accomplished, anticipating roadblocks, and enlisting and supporting the participation of others to achieve the results.

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Figure 4.2: Fundamental life performance roles (Spady 1994: 69)

The above Figure 4.2 depicts the roles that individuals should carry out according to their potential. These include (Spady 1994: 70-71):

- Learners and thinkers develop and use cognitive tools and strategies to translate new information and experiences into sound action. They might use their repertoire of knowledge and strategies to extend their capacities for
successful action by assimilating, analysing and synthesising new ideas and experiences.

- Implementers and performances apply basic and advanced ideas, information, skills, tools and technologies as they carry out the responsibilities associated with all life roles.
- Problem finders and solvers, anticipate, explore, analyse and resolve problems by examining their underlying causes from a variety of perspectives and then develop potential solutions to them.
- Planners and designers develop effective plans, methods, and strategies for anticipating and resolving issues and problems and for charting new courses of action.
- Creators and producers seek new possibilities for understanding or doing things and who translate those possibilities into original, workable products or processes that change the working or living environment.

The political and education changes manifesting themselves in South Africa are not unique. What is significant, though, is that education reforms need to be interpreted and critically evaluated from the broader perspective of curriculum theory. The transformation of curriculum generally has serious implications for every dimension of education and the role-players that deal with curriculum.

4.11.3 Curriculum Perspectives

Following Jungck and Marshall (1992), Ryan and Shreyar (1996) provide a framework that synthesizes the wide variety of curriculum approaches that have been proposed by curriculum theorists over the past several decades into three generalized orientations: transmission, transaction and transformation. The researcher accepts the synthesis in the sense that it gives a holistic understanding of the concept curriculum. A transmission orientation to curriculum according to Jungck and Marshall (1992: 97) maintains that there is an essential body of predetermined knowledge that students must ingest in order to adapt and fulfil a position within the existing societal structure. The teacher's role is to transmit predetermined knowledge and skills to students as efficiently as possible through teacher directed instruction, and to assess learning by the degree to which children's products represent the information they have been
given. Social reproduction and social efficiency underlie this paradigm of curriculum in that the ultimate goal is to reproduce the *status quo* by replicating existing sociocultural values and beliefs through a mechanistic educational process.

Unlike the transmission orientation, a *transaction* approach to curriculum according to Jungek and Marshall (1992: 99) acknowledges that knowledge is socially constructed within the context of experience. John Dewey (1963/1968) a leading proponent of the transaction approach, viewed knowledge as socially constructed and continually evolving as the learner's belief system is transformed through transactions with the physical and social environment and by reflecting on past experiences. Within this paradigm the purpose of education is to engage students in learning that enables them to participate in the reconstruction of themselves and society. The educator is a facilitator who creates learning environments where children's previous experiences, interests, and developmental needs guide the education process. A successful learning experience from a transaction point of view is one that recontextualizes students' systems of belief, enhancing their understanding of the world.

The epistemological perspective of a *transformation* approach to education is similar to that of the transactional approach in that knowledge is seen as socially constructed. However, a transformative orientation places more emphasis on the reciprocity between thought and action and the ability of the learner to actively address social and political inequities that exist within society. As societal institutions, schools are viewed as active agents for social change. Educators encourage students to think critically about the implications of knowledge claims and to consider how, why, and by whom knowledge is constructed. Here the aim of education is to raise students' critical consciousness by providing them with the critical skills needed to analyze the hegemonic power structures that limit personal potential, and the structures that they participate in which restrict the potential of others (Grant & Sleeter 1989: 56). A transformation approach is education for social action in that it encourages students to become social activists, challenging the *status quo* that maintains the inequities in the world. As Freire states, education for critical consciousness is "learning to perceive social, political, economic contradictions and to take action against the oppressive elements of reality" (Freire 1994: 17).
In this way one would contend that curriculum implies a sequential arrangement of content units for the purpose of providing meaningful learning as the outcome. For a start, there must be plans clearly outlined in a document that maps out the envisaged function of the school, and gives direction to the teachers and other educators. This, the researcher believes, has been addressed in Curriculum 2005. However, the real curriculum — with the tacit subliminal message that the learner experiences throughout his/her schooling — only begins to come to life in the classroom at the school site. At this point the teachers and the learners and the manner in which they interact and deliberate over the content, the conditions at the school, the community within which the school is situated, and the individual family settings from which learners come, are the main factors that determine whether or not the outcomes, envisaged by those who designed the curriculum in the first place, are attained. This is the stage at which the words in the curriculum document are translated into action — the teaching-learning action.

4.12 COMPLEXITY THEORY AND OUTCOMES-BASED EDUCATION

Since the new curriculum (Curriculum 2005) purports to be a radical transformation of the traditional curriculum, it follows that the traditional curriculum should briefly be investigated. In other words, the roots of the new curriculum should be understood within its historical context, and its departure from the traditional curriculum. The traditional curriculum is undoubtedly a part of the modernist perspective (scientism) as objectivity, hyperrationalism, positivism, an atomistic view of reality and linear causality. This view suggests that curriculum is rigid and prescriptive. Badenhorst (1995: 330) declares, “These characteristics of Western science gave rise to a particular view of formal education with strong mechanistic overtones.” This statement applies to the curriculum as well.

The traditional curriculum is described as a transmissional approach. The teacher passes on knowledge to the learner in a one-directional way. The teacher and the curriculum are the main sources of knowledge, while the learner is “an empty vessel”, a passive recipient of predetermined content. Learning is the result of reproduction and memorization. Learning content is neatly divided into compartmentalized disciplines.
An information brochure published by the Department of Education (DoE 1997a: 6) describes the components of the “old curriculum” as follows: passive learners; exam-driven assessment; rote-learning; a content-based syllabus divided into subjects; textbook-bound teaching; a rigid and non-negotiable syllabus; teachers who take responsibility for learning; rigid time-frames; an emphasis on what the teacher hopes to achieve; a closed curriculum process. These components can readily be viewed as belonging to the modernist paradigm and its influence on education.

In the parlance of complexity theory, a modernist curriculum imposes so-called boundary conditions. The system is in equilibrium and closed, preventing constant inputs from the outside, which leads to static degeneration. Badenhorst (1995: 30) describes an open, complex system metaphorically as resembling a candle, which needs oxygen to burn. If one imposes boundary conditions on the burning candle, for example by putting a glass over it, the candle will stop burning.

OBE stands in direct contrast to the previous curriculum; in other words, it rejects the modernist roots of the previous curriculum. Thus, OBE is not a mere reform of the traditional curriculum, but a radical paradigm shift. OBE is concerned with the result or outcome of a curriculum design. Curriculum development becomes a product and outcomes oriented, and outcomes are often determined by the future-driven demands of a rapidly changing technological world. Only then are learning area and lesson outcomes determined. Thus, traditional subjects and disciplines make way for more open-ended, integrative learning areas.

The new approach is described as follows (DoE 1997a: 7): active learners; assessment on an ongoing basis; critical thinking, reasoning, reflection and action; an integration of knowledge into real-life situations; learner-centredness; the teacher as a facilitator; group work and teamwork; open learning programmes allowing teachers to be innovative and creative in designing programmes; learners responsible for their learning; emphasis on what the learner becomes and understands; flexible time-frames allowing learners to work at their own pace; comment and input from the wider community encouraged. All these components readily allow for complexity.
Teacher education for OBE also seems to allow for complexity. Outcomes-based teacher education proposes a shift away from the traditional input approach to an output approach. An input approach classified a teacher as qualified on the basis of a paper qualification that emphasized time and input (DoE 1997c: 52). The modernist roots of this approach are obvious. This approach could deliver a teacher highly qualified on paper but incompetent in the classroom.

In an output approach, qualifications will be defined in terms of their outcomes, which will be assessed in an integrated manner that emphasizes the applied competence of the teacher. Three kinds of applied competence are to be developed, namely reflexive, practical and foundational (DoE 1997c: 52).

The remarkable degree of compatibility between the tenets of OBE and complexity theory is obvious. Complexity theory "recognizes the holistic unity; totality, and interdependence among constituent parts of a system (teaching) that is characterized by dynamic interaction" (Van Niekerk 1997: 292). Even though the designers of Curriculum 2005 probably did not have complexity theory in mind, this curriculum nevertheless adheres to the tenets of complexity theory.

Self-organization lies at the heart of complexity theory. Self-organization becomes possible when "a complex structure, a person or an organization, is free to interact with its environment" (Badenhorst & Claassen 1995: 100). OBE makes ample allowance for self-organization. The curriculum is socio-constructivist, i.e., it is negotiated. Learning programmes are open-ended. Learners are encouraged to develop their own insights and solutions. Thus, OBE allows more opportunity for self-organization than was the case with non-negotiable, time framed traditional curriculum.

Complexity theory suggests an expansion of rationality. Bosch (1991: 353) indicates the limitations of the legacy of modernist rationality. The fallacy persists that humankind is capable of creating perfect order. Rather than overestimating order, complexity theory suggests "we must learn to understand that flux and uncertainty are neither good nor bad, but inevitable" (Schuck 1987: 7). Learners should be given the
freedom to make mistakes as they learn. OBE is compatible with these values suggested by complexity theory.

An example of practical instruction using the insights from complexity theory illustrates the strong link between complexity theory and OBE. In his article, Complexity in the classroom, Doll (1989) gives an example of mathematics instruction using insights from complexity theory. Problems were posed and students, working together in teams, were largely left to their own devices to solve these problems. In the lessons Doll practices “more dancing and less marching”: in other words, students were given flexibility in their intellectual and social organization. Both disorderly as well as coherent patterns emerged. The author notes that a new type of order was emerging – “progressive, constructive, personal, interactive” (Doll 1989: 66). The lessons ran counter to the reductionist, particularist and atomistic view generally applied in mathematics teaching. Self-organization and so-called disequilibrium and re-equilibrium occurred. All these insights could well have been part of a typical OBE lesson and also, specifically, a music lesson.

4.13 HABERMASIAN CRITICAL EDUCATIONAL THEORY

In the researcher’s exposition of Habermasian critical educational theory, he draws on two recent works - Becoming critical, by W. Carr & S. Kemmis (1986), and A Critical Theory of Education, by R. Young (1989). Carr & Kemmis (1986: 162) centre their ideas of critical educational theory on that of “action research”, which they describe as a form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understandings of these practices, and the situations in which these practices are carried out.

For Carr & Kemmis (1986), the first criterion of Habermasian critical educational theory is that it engenders self-reflective enquiry amongst individuals to bring about the clear articulation of arguments in an atmosphere of openness. They argue that action research can enable participants, through a process of self-critique and rational discourse, to overcome ideological distortions generated within social relations and institutions (Carr & Kemmis 1986: 162).
The second feature of their action-research programme is that which Habermas (1987) had already discussed. It is that activity which generates critical action in others and gives rise to conditions to replace one distorted set of practices with another, undistorted set of practices (Carr & Kemmis 1986: 197). The third feature of a critical educational theory espoused by these authors is based on Habermas’ theory of communicative action: critical educational theory is able to offer guidance on rational and democratic decision making (Carr & Kemmis 1986: 200).

Regarding the first feature of Habermasian critical educational theory, that is, self-reflective enquiry, Young (1989: 81) criticises traditional educational theories that foster technical interests, that is, theories which view knowledge as “historical”, “value-free” and as “a finished product”. He goes on to argue that knowledge will be characterized by “little awareness of reflectivity and problems of social independence or dependence of knowledge formation” (Young 1989: 95).

The second feature of Habermasian critical educational theory is the “organisation of enlightenments”. For Young (1989) this has two dimensions: the “ideal pedagogical speech situation” and the reform of institutions. The “ideal pedagogical speech situation” concerns the mutual communicative relationship between teacher and student, “in which the student is able rationally to assess views or, at least, come to hold them in a manner open to rational assessment” (Young 1989: 107). Hence, education is organised as enlightenment and not indoctrination. A mutual communicative relationship between teacher and student produces and reproduces the rules of the epistemological discourse (Young 1989: 121). This statement suggests the restructuring of institutions in order to allow critical thinking and creative interaction among learners and teachers.

The second dimension of Young’s “organisation of enlightenment” practice involves reforming institutions. Therefore, critical educational theory should bring about decentralising administration needs and freeing institutions from bureaucratic and technical interests (Young 1989: 152). Moreover, a critical educational theory should also re-theorise the institutional roles of members whose own technical, egocentric interests outweigh the need for greater openness (Young 1989: 152).
The third dimension of Habermasian critical educational theory relates to the organization of action, and here Young propounds the idea that commutative interaction between student and teacher should result in new knowledge which needs to be “systematically incorporated in the process of change” (Young 1989: 158).

From the above information the researcher observes that critical theorists are interested in the pragmatics of personal or critical knowledge. Such knowledge is the result of critical consciousness, which is the perpetual awareness of the criteria and conditions argued by Critical Theory. Being thus critically aware of modernist abuses of science and reason, critical consciousness provides a properly warranted source of agency in personal affairs and serves as a source of change in schooling. Such agents understand that scientific knowledge can only help people understand "things" as they are and that science can never tell them what ought to be the case (Carr & Kemmis 1986: 199). Thus any question concerning what ought to be is unavoidably a question of values that requires critical knowledge put into practice according to very ethical values and other philosophical criteria that science claims to avoid.

In schools, teachers who are empowered with critical knowledge and critical consciousness become critical educators. They help their own students rise to a level of critical consciousness and knowledge that empowers them to be more effective agents of their own personal histories (Young 1989: 123). In the case of Music Education this would involve developing in students a critical consciousness of, for example, the economic imperatives of institutionalized and media-driven "taste makers," and would promote the kind of critical knowledge that permits an enhanced range of informed musical choices.

Critical theory, in sum, seeks to recognize (i.e., re-cognize or re-think) human subjectivity and individuality as both a means and as an end of becoming fully human and fully rational. This means that if knowledge is to be valid, it must take into account subjective, contextual, situational factors. Humans are 'subjectivities' with goals, needs and intentions, not simply 'objects' controlled by natural laws (Carr & Kemmis 1986: 187). They have reason and therefore can formulate and evaluate personal and collective purposes, goals, and values (i.e., they have intentionality). They are agents who, alone and in communication with others, can act on their own
behalf or on behalf of others or society, for example, in teaching or any of the helping professions.

4.14 CONSTRUCTIVIST THEORY

Basically defined, constructivism means that as people experience something new they internalize it through their past experiences or knowledge constructs they have previously established. Jonassen et al (1995: 12) state, "Meaning is constructed by the cognitive apparatus of the learner". Therefore Constructivism can be defined as that philosophical position which holds that any so-called reality is, in the most immediate and concrete sense, the mental construction of those who believe they have discovered and investigated it. In other words, what is supposedly found is an invention whose inventor is unaware of his act of invention and who considers it as something that exists independently of him; the invention then becomes the basis of his worldview and actions. These past experiences are also referred to as our worldview.

Steffe (1990: 9) explains that Constructivists view learning as the adaptations children make in their functioning schemes to neutralize perturbations that arise through interactions with our world. Wheatley (1991: 23) suggests two principles of learning through the constructivist theory:

- Principle one states that knowledge is not passively received, but is actively built up by the cognising subject. Ideas and thoughts cannot be communicated in the sense that meaning is packaged into words and ‘sent’ to another who unpacks the meaning from the sentences. That is, as much as we would like to, we cannot put ideas in students’ heads, they will and must construct their own meaning.

- Principle two states that the function of cognition is adaptative and serves the organization of the experiential world, not the ontological reality.
Tobin & Tippins (1993: 4) add to the definition of the construction of knowledge in science education and this can also be applied in Music Education. They state that the constructed knowledge of science is "viewed as a set of socially negotiated understandings of the events and phenomena that comprise the experienced universe". They further explain that in order to have new knowledge, that "knowledge is accepted by the scientific community as viable because of its coherence with other understandings and its fit with experience". An interesting debate stems from this definition of how "new" knowledge then comes about. Tobin & Tippins (1993: 4) continue to explain that "scientific knowledge continues to change over time because goals and problems of society change, leading to new experiences; technology provides new ways of experiencing; what is known continues to increase at an exponential rate; and the individuals that comprise the scientific discipline continually change".

Constructivism or a constructivist view puts the students, their interests, and previous experiences and knowledge as paramount parts of understanding in designing curriculum. This has a particular impact when exploring the implications of pedagogy and teacher training.

4.15 CONSTRUCTIVISM AND ITS IMPACT ON THE PRACTICE OF TEACHING

The theory of Constructivism has been discussed and debated by researchers such as Von Glassersfeld (1981, 1989 & 1990), Tobin (1993), Cobb (1994) and Cobern (1993), but these authors are concerned about constructivism as a philosophy and through debate leave the practitioner in the field confused. Tobin & Tippins (1993:7) warn against reducing constructivism to a set of methods and that this would "diminish its power as a set of intellectual referents for making decisions in relation to actions".

What is the practitioner to do? What do we teach and model to our teachers in preparing them for their teaching careers? The purpose of these questions is to explore what best practices are, associated with a constructivist teacher, and how we can use best practices without reducing them to a set of prescribed methods.
In 1991 Wheatley proposed a model of constructivist teaching using the problem-centered learning approach. Wheatley (1991: 152) states that "each student must be encouraged to build his/her own conceptual constructs that will permit the ordering of knowledge into useful problem solving schema". Wheatley (1991: 14) proposed that the teacher's role is to "provide stimulating and motivational experiences through negotiation and act as a guide in the building of personalized schema".

Wheatley's problem-centered learning approach has three components: tasks, groups, and sharing. He suggests "in preparation for a class a teacher selects tasks which have a high probability of being problematical for students - tasks which may cause students to find a problem. Secondly, the students work on these tasks in small groups. During the time the teacher attempts to convey collaborative work as a goal. Finally, the class is convened as a whole for a time of sharing". The researcher agrees with the statement made because it accommodates the principles of OBE and gives freedom to the learners to explore more possibilities of learning.

4.16 SOCIAL CONSTRUCTIVISM, CRITICAL THEORY AND CRITICAL OUTCOMES

Earlier, this researcher alluded to the fact that critical educational theory is a paradigm, which engenders social practices such as reflection, critique and transformation. In this way, critical educational theory is concerned with the social construction of meaning. In this section the argument is developed as to how social constructivism escapes positivist educational theory in order to develop a critical theory of Music Education, which is aimed at engendering critical outcomes in learners.

Constructivism means that knowledge of the world is the result of our discovery of how the world really is (Von Glasersfeld 1990: 12). In other words, Constructivism is a theory of knowledge underpinned by the proposition that reality is constructed or created by the individual (Yarusso 1992: 7). We create new meanings of experience that broaden the range of options for living: reality is what we make of it - a personal interpretation, rather than a discovery or observation. Now it seems as if
constructivism, which is concerned with "meaning-making", is anti-positivist. For positivists, reality is what we observe or discover external to us, whereas constructivists believe that there is no real world independent of human mental activity - we as humans arrive at our interpretation of the world.

What does all the above have to do with Music Education? For the positivists the role of Music Education is to assist learners to learn about the real world. Learners are told about the world and they are given "facts" – and are expected to replicate the world’s content and structure in their thinking. The role of the educator is to interpret events for the learners who, in turn, are discouraged from making their own interpretations of what they perceive (Jonassen 1991: 10). In the words of Jonassen et al (1995), a positivist paradigm of, say, Music Education "assumes that the world is structured, and that structure can be modelled and mapped onto the reality as interpreted by the instructor. The learner’s role is to remember and reproduce the knowledge that is transmitted by the teacher or professor" (Jonassen et al 1995: 10-11).

Constructivists are concerned with interpretations of what is perceived in terms of past experiences and value judgements whenever we construct meaning for events. Constructivists will acknowledge that there would be different interpretations of each individual’s constructed nature of reality. For instance, in constructing an explanation of Music Education in terms of constructivism, learners generate their own view of Music Education. In other words, learners interpret literature on Music Education in the context of their own subjective experiences and knowledge, and construct meaning relative to their own background and interests. For Jonassen et al, "Constructivists believe that our personal world is constructed in our minds and that these personal constructions define our personal realities ... knowledge is a function of how the individual creates meaning from his or her experiences, it is not a function of what someone else says is true" (Jonassen et al 1995: 11).

In terms of relativism, each learner and educator would have his/her own meaning of what constitutes Music Education, for the relativists hold that there is no correct meaning we are striving for, and that all meanings are products of how individuals create meaning from their own experience (Jonassen 1991: 10). The paradox is that such a version of constructivism, although claiming to be non-positivist, collapses
into positivism. The use of words such as "no" and "all" has strong roots in positivism. In this way, the constructivist draws on the very theory of positivism it wants to refute. No wonder Molenda claims the like of Jonassen "flirt with subjectivism (relativism), the true obverse of objectivism (positivism)" (Molenda 1991: 47). Of course, meanings, in some sense, must be humanly constructed and reconstructed. But this does not lead to the conclusion that we could construct the world at will.

Moreover, for Constructivists, "knowledge is viewed as beginning from the learner's activity and is mentally constructed and closely related to the action and experience of a learner" (Jegede 1991: 6). Conversely, epistemology in terms of a positivist paradigm excludes the human element. In this way, it appears as if constructivism is not subjected to a positivist view whereby knowledge cannot be "transmitted" or "communicated" from one person to another, but rather, "constructed" by humans themselves. Now if meaning cannot be communicated, then by implication, meaning becomes the reserved ownership of the Constructivist. And, considering the fact that Positivism lays claim to the idea that meaning is the proprietorship of the "expert", it seems as if Constructivism collapses into the very notion of positivism it wants to refute. This ambivalence in the constructivist paradigm is unwittingly acknowledged by Jegede, for whom constructivist meanings are "socially negotiated and determined" (Jegede 1991: 7). In other words, meanings are shared and hence transmitted from one person to the other.

How can constructivism escape from the shackles of relativism (subjective individualism)? Radical constructivism recognizes the shortcomings of a view that thoughts are completely individualistic and that all of us can interpret the world as we please, that is, relativism. To prevent intellectual chaos and the inability to communicate, radical constructivism lays claim to a social dimension, in the sense that meaning is constructed in a social context and is associated by language through "socially negotiated understandings" (Ernest in Steffe & Gale 1995: 480).

In other words, part of the constructivist belief is the notion of a socially negotiated, common construction of meaning, which depends upon the context in which individuals find themselves. Certainly for learners and educators, radical
constructivism with its claim for social constructivism seems to be a noble idea primarily because an explanation of music making does not come from outside, but evolves out of peoples' needs, background and interests. In this way, all participants involved in explaining Music Education become autonomous practitioners in socially managing and constructing explanations of Music Education.

Moreover, engendering socially constructed meanings about Music Education using the critical processes of reflection, critique and transformation, reconcile with the practice of producing critical outcomes in learners. Attaining critical outcomes is based on the principle that decisions about the learning programmes should focus on what learners “can do, that is the outcome of their studies (or experience)” as opposed to the “input-oriented” (traditional structure and content-driven) approach (Hanrahan 1997: 98-100). Also, bringing about critical outcomes in any subject involves the following: active learners; assessing learners on a continuous basis; critical thinking; analysis, interpretation, deep thinking and reflection in action; learning that is relevant and connected to real life situations; learner centredness and collaborative group work with the educator as facilitator; innovative and creative design of learning programmes; learners who take responsibility for their own learning and who are motivated by constant feedback; flexible time-frames that allow learners to progress and that the broader society is encouraged (Department of Education 1997a: 7).

Music educators in South Africa after 1994 gained several theoretical perspectives on Music Education due to seminars and workshops, which were grounded in social practices aimed at engendering critical outcomes in learners and learning programmes. Examples include their conviction that learning should be related to real life issues “that will broaden (students’) understanding of human interaction” (Pearce 1997: 23), the educator should be the facilitator using “group work” (Case 1997: 13); learners should foster “independent habits” (Case 1997: 16) and “individualisation” that is they should “take responsibility for their own learning, and should be exposed to wider issues such as “politics, labour issues (and), the natural environment” (Pearce 1997: 32). Critical perspectives such as “analysis and critical thinking” and “avoidance of dogmatism”, that is, reasoning and reflection, action research, and engendering a “culture of life-long learning” (Sass, Reed & Mchunu 1997: 17), link
more easily with critical outcomes than the objectives model of curriculum development which puts more emphasis on behavioural objectives.

4.17 MAJOR MUSICAL PARADIGMS AND MUSIC EDUCATION

Recently, there has been a counter-revolution of mixing style and form in a postmodern movement (Clark 1996: 16). These two ‘halves’ of the 20th century (modernism and early postmodernism) are the two influential ideologies of musical paradigms, which are important in understanding Music Education. Another paradigm on modernist music would greatly enhance the students’ awareness of the richness of the period, which is called modern music.

4.17.1 From Modern to Postmodern approaches to Music Education

Many school arts programmes still emphasize modernist conceptions of music and, as a result, children engage in school music activities that promote a conception of music and music-making that bears little resemblance to that of the postmodern contemporary music world (Clark 1996: 24 and Duncum 1993: 19). As Clark (1996:65) states “[t]he long reign of modernism lulled teachers into a state of artistic complacency; for decades they could keep abreast of the developments in the music world simply by familiarizing themselves with the latest -ism popular with the avant-garde elite”. Although arts curricula in elementary schools by and large remain entrenched in modernist conceptions of music, many music educators recognize the urgent need to re-evaluate Music Education in light of the issues raised by postmodern thought and practice. Consequent to the diversity of issues raised and the complex nature of postmodern theory, theoretical responses to postmodernism in art education have necessarily been diverse.

However, in Art Education: Issues in Postmodern Pedagogy, Clark (1996: 69) states that responses to postmodernism can generally be seen as representing one of two perspectives, the reformist or the reconstructionist. Notwithstanding, in practice art educators enact a diversity of approaches to art education that represent a blend of influences which do not fit neatly into one of these two positions. However, these two
perspectives provide a useful framework for understanding two general streams of influence that characterize the current climate in the field.

According to Clark (1996: 73) “[r]eformers believe that traditional models of art education are resilient enough to retain traditional Western art forms and practices while embracing culturally pluralistic exemplars and concepts”. However, reformist approaches, such as discipline-based art education (DBAE), often advocate essentialist models of art education that favour interpretation methods derived from modernist aesthetics (Pearse 1992: 26). In an attempt to legitimize the arts academically, DBAE presents a curriculum based in the “disciplines” of studio art, art history, aesthetics, and art criticism that is testable, sequential, and accountable (Pearse 1992: 29). These characteristics reflect scientific rationalist thinking, characteristic of a modern perspective of education.

If we are truly to move to a postmodern orientation we cannot simply “add on” examples of art and art-making contends (Clark 1996: 28), as the above reformist statement implies, to a modernist curriculum based in Eurocentric Western traditions. Further, postmodern art does not lend itself to modernist aesthetic modes of interpretation that emphasize the formal aspects of artworks. Unlike modern art, where the focus was on formalistic concerns, postmodern art emphasizes sociocultural contexts using images as reference points for the construction of meaning. Therefore, a postmodern approach to art education should acknowledge the sociocultural contexts that influence and shape our notions of art and art-making, and the need to move beyond modernist aesthetics that are historically bound in Western conceptions of fine art.

The reconstructionist perspective, the second position that Clark (1996: 74) characterizes, is founded on the notion that art education is a means for social transformation through the critical analysis of social values that are inherent in works of art. Reconstructionists aim to provide students with the critical skills needed to analyze the hegemonic power structures that limit personal potential, as well as the structures in which they participate that restrict the potential of other social groups (Grant & Sleeter 1989: 31). The researcher concurs with reconstructionists who believe that art education should shift from a subject area to become a pedagogical
tool that can be used across the school curriculum for the purpose of critical analysis, and ultimately, social reconstruction (Freedman 1994: 16).

An approach to arts education that emphasizes the transformation of beliefs and values through a sociocultural contextual analysis of visual images should employ a diversity of images, past and present. In educating students from a variety of perspectives of the human experience, a postmodern approach to arts education emphasizes the importance of employing images that represent those voices traditionally marginalized in the art world, such as those of ethnic minorities and women. This is of critical importance. However, this is often misinterpreted as a need to leave the Western canons of art behind as they only represent the work and dominance of the white male artist. In order to teach students about the social and political forces that shape our conceptions of art and art-making, art education should include those works that are sometimes categorized as representing the dominance of the white male artist and the authority of the high art world.

The following can be regarded as examples of the modern music period mentioned above:

4.17.2 Industrialization

In chapter 1, the researcher introduced paradigms such as modernism and postmodernism, in order to legitimise the purpose of this research by providing paradigmatic challenges facing the South African education system and Music Education in particular. Thus the issue at stake here is to understand music curriculum in terms of paradigmatic perspectives. Industrialisation stands as a form of premodern paradigm which is the start of the period of enlightenment in education in general and Music Education in particular.

This kind of paradigm in music had a big effect on directing culture of the people as the period itself demanded. The following has been detected by Clark (1996: 54) from this period:

- rise of technology certainly has its effect on music making and theory.
uncertainty of the age is disarming for creative artists, and as such, they convey their discomfort.

psychology in the form of Sigmund Freud's theories has an unnerving effect of having no control over emotions and actions.

rise of the urban culture makes for a new brand of division between people.

general questioning of all tenets of science and morality is prevalent during the 21st century.

the industrial economy promotes a different kind of utility for art.

what is real and what is not?

4.17.3 Modernism

This is the collective term used for several movements in art and culture in the early 20th century which all sought new inspiration in technique and/or subject. This term includes the following concepts: cubism, impressionism, serialism, symbolism and expressionism. In the fine art, poetry, music and modernism a rich culture is found (Pearse 1992: 32), and this culture is represented in the form of:

- **Cubism** - geometric abstraction of subject matter, superimposed and juxtaposed images were often found from disparate vocabulary.
- **Impressionism** - from 1870s, trying to catch a certain quality of light using blurred margins and gentle colour choices.
- **Serialism** referring to a mathematical music. Amongst other things, it refers to the creation of a tone row using all twelve notes and using tone rows in creating music by placing them in a series.
- **Symbolism** - poetic movement which was consciously ambiguous and which used words to confuse and mix meanings.
- **Expressionism** - expression of innermost human emotion without literal imagery.

According to Harvey (1990:27), it still remains difficult to determine the essence of modernism. Harvey offers the following viewpoint for modernist reasoning in the following sequence of logic:
The ideal of a universal approach to problems exists, in other words only one possible and ultimately valid answer to each question. This means that the world could be controlled and rationally ordered if we could picture and represent it accurately. This in turn means that a single correct mode of representation, which could be scientifically and mathematically uncovered and would provide an answer to the original question, exists.

Mitchell (1997:5) describes the chief characteristics of modernism as “the attempt to take command of humanity’s destiny and this world, in the interest of moving towards a utopia of some sort.” This modernism can be found in:

- Mass production lines;
- The segregation of the individual’s activity into isolated compartments of work, leisure and belief;
- A society of individual strangers rather than communities, the elimination of difference or the deviant;
- Transformational technical achievements like the computer, television, car and aeroplane;
- The elevation of dispassionate professional judgment over that of intuition or “lay” experiences; and
- The enrichment of the rights of the individual.

Between roughly 1910 and 1920, modernist trends underwent a radical transformation. The viewpoint of a singular, fixed idea or answer was gradually and increasingly challenged, reaching “its apogee shortly before the First World War” (Harvey 1990:28). It was during this time that the arts entered a mode of experimentation and shifting of boundaries. A few of the cultural benchmarks produced during this time were:

- Literary works such as Death in Venice (1912, T Mann), Sons and Lovers (1913, DH Lawrence), and The Wasteland (1922, TS Elliot);
- Emerging importance of art works by artists such as Klee, Braque, Kandinsky, Matisse and Picasso;
- The ground-breaking Rite of Spring (1913, I Stravinsky);
Music by composers such as Bartok, Berg, Schoenberg, Varese and others, incorporating different sounds, textures and techniques.

The theory of relativity (Einstein), preparing the way for postmodernism's pluralism;

Psychoanalysis and Freud.

4.17.4 Musical changes and styles in Modernism

The music of the modern era reflected the changes in society accomplished by technological inventions, the growth of a capitalist economy, and improved transport and communication systems. An interesting perspective is provided by Russolo, composer and spokesman for a group of pre-World War I futurists (quoted by Ewen 1991: ix) to explain a new set of aesthetics with which to express the modern world in music: "Life in ancient times was silent. In the nineteenth century, with the invention of machines, noise was born".

Music as an interpretation of the machine of the industrial age, was an important theme in the modernist idiom of Western art music. Examples of this are Honegger’s tribute to the locomotive in Pacific 231 and Mossolov’s description of a factory in Iron Foundry. The incorporation of extra-musical noises such as the clinking of typewriters, the whirring of roulette wheels and the sounds of airplane motors in Satie’s ballet Parade of 191 (Ewen 1991:x) as well as sirens and machine-produced sounds such as hissing or whistling sounds in many of Varese’s compositions, were also exploited.

Furthermore, the explosive growth of popular music is another important modernist characteristic:

Popular music, as we understand the term today, was a product of the modern era, extending from the late eighteenth century through the first two-thirds of the 20th century, or from the industrial revolution through late capitalism (Hamm 1995:1).

American culture, especially with regard to popular, especially with regard to popular music, was a determining force for this culture in the rest of the
world. The roots of popular music, at that stage the antithesis of serious
music or “high art”, were laid with genres such as jazz and rock-and-roll,
which originated in America. For this reason the perspective of this
chapter will mainly focus on events happening in the USA.

After the Second World War, “musical life in America was rich and complex” and
“many people lived with music most of their waking hours”. Both light classical and
popular music flourished, and Hamm (1995:68), describes musical life in America
during this time as follows:

- School, community and regional symphony orchestras were founded in
  unprecedented numbers, as were amateur and semi-professional opera
groups. The locus of music instruction shifted dramatically from
  private instruction and conservatory instruction to music schools and
  departments of music in colleges and universities. Not only music
  majors but other students as well involved themselves in choral groups,
school orchestras, various chamber ensembles and opera, performing
  for large audiences.

- A division in the Western World between the music of the elite classes
  (so-called “high art” music) and the technically less demanding music
  of the working class (or “low art” music), was an important
  manifestation of culture in the modernist era. Because the social
  distinction between the higher and lower social classes was even more
  distinct by the end of the 19th century, these musical divisions also
  became even more rigid. In this regard, the classical genre represented
  music of a more permanent and ordered nature, while the popular
  music of the people “was taken to be regional and ephemeral”,
  sometimes passed on orally more than being notated and preserved
  (Hamm 1995: 3).

This period produced new styles such as:

- **Pentatonic** - 5 note, later part of jazz

- **Whole-tone** - whole steps between each tone
Octatonic – alternating whole and half – which became Stravinsky’s favourite (Pearse 1992: 22).

The above musical styles are connected to great composers of the time whose names follow hereunder:

4.17.4.1 Claude Debussy (1862-1918)

- great pianist and composer
- impressionistic writing for the piano and then for orchestra.

His famous piece of work includes amongst others, Prélude to the Afternoon of a Fawn which became an amazing piece of the time (Sadie 1980).

4.17.4.2 Igor Stravinsky (1882-1971)

- Greatest of all modern dance composers because of his rhythmic drive and unusual harmonic/melodic sense. He became the great colourist as well.
- real stylistic collector and closet musicologist who was very accurate.

Rite of Spring became one of his greatest piece of work (Sadie 1980).

4.17.4.3 Arnold Schoenberg (1874-1951)

He became well-known for his system of tonal equality called Serialism referring to a mathematical music. Amongst other things, he:

- created a tone row using all twelve notes.
- used tone rows in creating music by placing them in a series – serialism (Sadie 1980).

4.17.4.4 Béla Bartók (1881-1945)

- Wrote much music which remains buried in obscurity.
- Very interested in ethnic music and folk song.
- Was a highly regarded ethnomusicologist.
Wrote for unusual combinations of instruments and used mixed idioms (Sadie 1980).

4.17.4.5 Charles Ives (1874-1954)

During his time he wrote an outstanding piece of work called Unanswered Question which had the following characteristic features according to Sadie (1980):

- fragmentation at its best.
- fertile mind which could not be categorized.

4.17.4.6 Aaron Copland (1900-1990)

He wrote extensively: symphonies, film scores, ballets, operas and idiomatic works for piano, string quartet and voice. In his work, he used a very appealing tonal system and the Shaker hymn and therefore became a tireless promoter of modern music (Sadie 1980). An example of his work is 'Tis a Gift to be Simple' in variations.

The radical nature of change that took place within this short space of time is notable. A sceptical approach to previously set ideas and formulas came to the foreground. Harvey (1990:29) provides two reasons for this changed perspective:

- Political upheaval instigated by a class struggle resulted in a gradual loss of faint in the Enlightenment mode of thinking. Furthermore, the effects of capitalism made the disparities between rich and poor more and more evident. In some instances art and artists were directly involved with radical political parties, in this way casting doubt over the idea of "auratic art" (art and shrouded the artist with a certain exclusive aura), and the artist as individualistic. Political parties, such as the Communist Party, also strove to mobilize culture in the service of their aims.

- The seeds of disorder and despair sown by Nietzsche, the scenario of political restlessness and instability between the two World Wars, and the articulation by Freud of "erotic, psychological and irrational needs" (Harvey 1990:30),
further necessitated a shift in the tone of modernism. Gradually a position of multiple perspectives and relativism started to emerge, laying the foundation for a postmodern view of the world.

The above section indicates among other things the role played by great composers whose works form the basis of understanding Music Education and how music changes with time from pre-modernism, modernism up to postmodernism.

4.17.5 What is Postmodernism?

According to Constas (1998: 26) postmodernism is a concept in flux. The nature and description of postmodernism has changed over the past few decades as the movement has developed. This researcher does not intend to launch into a critique of the literature or even a summary of it, since it is only likely to confuse rather than illuminate. Instead, a simplified and straightforward view will be given of some basic concepts that have made us aware that we are no longer living in the Modern age, with a modernist aesthetic. Modernism has become a relic of the past. Thus, people are living in a new world, a world that does not know how to define itself by what it is, but only by what it has ceased to be. This change of paradigm is what educators now call “postmodernism”, which has become the accepted rubric by the South African public. The paradigm shift of postmodernism was seeded by two potent factors which are:

- a disenchantment with Enlightenment dogma, and

As Sadie (1980) puts it, modern music is generally considered to be a period from about 1910 to 1960, with 1960-70 being a transitional stage. Modern composers include Schoenberg, Bartok, Varese, and Stravinsky. Postmodern composers include John Zorn and Frank Zappa. But Charles Ives was, in some ways, a proto-postmodernist who lived early in the century, which demonstrates that dates cannot be relied upon completely.
With reference specifically to postmodernism and music, Kramer (1995:13) is of the opinion that modernist conceptions of music are profoundly at odds with the postmodern ethos. The author agrees with this statement, in so far as the legitimization of a variety of genres, styles and traditions is concerned. This perspective is characterized by the three genres of music as illustration of postmodernism in music, namely classical music, rap and punk. Music in postmodern culture is, typically of this condition, fragmented in style and of various genres as mentioned above. An example of this period, in the opinion of the researcher, is the combination of pop songs, opera arias and Gregorian chant on the same Top Twenty list of hits. “While fusion seemed to dominate the jazz market in the 1970’s and early 1980’s there were other developments as well. Some performers started borrowing from 20th century classical music as well as African and other forms of world music” (Sabatella 1992:14).

An important change of direction was to allow musicians to merely co-exist in a performance, defying any order imposed by aspects such as structure, bar lines, key or traditional tonal structures. In this respect John Cage, according to Bernstein (1991:1), played an important role in “Postmodernising” music. He started as an exponent of the avant-garde, but, according to Hamm (1995:xi) and Bernstein (1999:1), a transition from modernism to postmodernism occurred later in his work. Elements such as the co-existence of events, which came to be typically postmodern, are characteristic of his oeuvre (Hamm 1995: xi).

New directions in classical music, however, started to emerge towards the 1970s and 1980s, with many composers investigating sounds, structures and tonalities different from those explored during the period of high modernism, as well as pre-modernist styles presented on the same magnitude of popular music concerts (for example the successful concerts of the Three Tenors). One of the trends is explained by Adams (1997:2) as the “unsecularization” of the world, while Stephens (1999:134) calls it the creation of a timeless quality in surveying human culture. Modernism, the search for new and sometimes radical approaches in music and the arts, was constantly seeking new language and purity of vision. Postmodernism, in contrast, deviates from this singular stance and embraces elements from high and low culture, future and past.
secular and religious traditions. The revival and renewal of traditional religious are undoing the rule of reason insisted upon by modernist philosophers and scientists, and Adams (1997:2) even states that there is a direct relationship between the decline of modernism and the rise of traditional religious.

This last category includes styles that signify, according to Steinberg (1992:6), the return to sacred foundations, some of which are influenced by religious such as the Russian Orthodox Church. The English composer John Tavener (born in 1944) is one of the major exponents of this last-mentioned style. A brief overview of the titles of some of his compositions will illustrate the nature of this music:

- Two Hymns to the Mother of God (1985);
- Magnificent (1986);
- Akathist of Thanksgiving (1988);
- Song for Athene (1993); and
- The Lord’s Prayer (1999).

The following chart or table, garnered from various sources with some additions, is meant to contrast modernism with postmodernism, but any such chart or table is bound to be an oversimplified generalization. Nevertheless, distinctions are necessary and useful. The contrasts between the two are rarely clear-cut, and postmodern thought normally embraces modernism within it.

**Table 4.1: Comparison between Modern and Postmodern paradigms**

<table>
<thead>
<tr>
<th>Modern</th>
<th>Postmodern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monism</td>
<td>Pluralism</td>
</tr>
<tr>
<td>Monotheism, atheism</td>
<td>Pantheism</td>
</tr>
<tr>
<td>Authoritarian, totalitarian</td>
<td>Democratic</td>
</tr>
<tr>
<td>Utopian, elitist</td>
<td>Populist</td>
</tr>
<tr>
<td>Patriarchal</td>
<td>Non-patriarchal, feminism</td>
</tr>
<tr>
<td>Hierarchical</td>
<td>Anarchical</td>
</tr>
<tr>
<td>Totalization</td>
<td>Non-totalized, fragmented</td>
</tr>
<tr>
<td>Centralized</td>
<td>Dispersed</td>
</tr>
<tr>
<td>European, western</td>
<td>Global, multicultural</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Master code</td>
<td>Idiolects</td>
</tr>
<tr>
<td>Uniformity</td>
<td>Diversity</td>
</tr>
<tr>
<td>Determinist</td>
<td>Indeterminant</td>
</tr>
<tr>
<td>Objectivism</td>
<td>Anthropic principle</td>
</tr>
<tr>
<td>Objectivist values</td>
<td>values from nature</td>
</tr>
<tr>
<td>Detached</td>
<td>Participatory</td>
</tr>
<tr>
<td>Separation from and control of nature</td>
<td>Ecological, harmonious with nature</td>
</tr>
<tr>
<td>Staid, serious</td>
<td>Playful, ironic</td>
</tr>
<tr>
<td>Formal</td>
<td>Non-formal</td>
</tr>
<tr>
<td>Purposeful</td>
<td>Playful</td>
</tr>
<tr>
<td>Intentional, constructive</td>
<td>Non-intentional, deconstructive</td>
</tr>
<tr>
<td>Progress</td>
<td>Dynamics</td>
</tr>
<tr>
<td>Theoretical</td>
<td>Practical, pragmatic</td>
</tr>
<tr>
<td>Reductive, analytic</td>
<td>Synthetic</td>
</tr>
<tr>
<td>Simplicity, elegance, Spartan</td>
<td>Elaboration</td>
</tr>
<tr>
<td>Logical</td>
<td>Spiritual</td>
</tr>
<tr>
<td>Newtonian mechanics, relativity</td>
<td>Quantum mechanics, chaos</td>
</tr>
<tr>
<td>Cause-effect</td>
<td>Synchronicity</td>
</tr>
<tr>
<td>Control-design</td>
<td>Chance</td>
</tr>
<tr>
<td>Linear</td>
<td>Multi-pathed</td>
</tr>
<tr>
<td>Harmonious, integrated</td>
<td>Eclectic, non-integrated</td>
</tr>
<tr>
<td>Permanence</td>
<td>Transience</td>
</tr>
<tr>
<td>Abstraction</td>
<td>Representation</td>
</tr>
<tr>
<td>Material</td>
<td>Semiotic</td>
</tr>
<tr>
<td>Non-communicative</td>
<td>Communicative</td>
</tr>
<tr>
<td>Anti-symbolic</td>
<td>Pro-symbolic</td>
</tr>
<tr>
<td>Anti-metaphorical</td>
<td>Pro-metaphorical</td>
</tr>
<tr>
<td>Non-narrative</td>
<td>Narrative</td>
</tr>
<tr>
<td>Nonhistoricist, cult of the &quot;new&quot;</td>
<td>Historicism</td>
</tr>
<tr>
<td>Mechanical</td>
<td>Electronic</td>
</tr>
<tr>
<td>Analog</td>
<td>Digital</td>
</tr>
</tbody>
</table>
4.17.6 Implications of Modernism and Postmodernism in Music Education

The above table indicates the comparison between modernism and postmodernism paradigms with regard to Music Education. It is important now to look at the implications posed by these paradigms on Music Education.

4.17.6.1 Modernist views on meaning in music

When one is looking at so broad a period as the modern era (approximately the last five hundred years), it is difficult to give an exact definition of modernist musicology. Most of those who theorized about music over this period were, in fact, not musicians but predominantly philosophers, such as Descartes, Hegel and Nietzsche. What is common to most of them is their search for a universal meaning of music inherent in the musical object itself. Value and meaning were therefore seen to situated in the form and process of the musical object itself, rather than the apprehension of that object by the people involved in the musical event. Prior to this era (during the Middle ages) music has been valued mainly for its place in the mass and as a practical trade but with the rise of humanistic philosophy and Protestantism during the renaissance, music came to be appreciated more for its ‘intrinsic beauty and worth and for being naturally expressive of religious feelings’ (Leonard and House 1972: 51).

Much was written about the link between music and human emotion by people such as Descartes (1596-1659), Hegel (1770-1831), Schopenhauer (1788-1860), Nietzsche (1844-1900), and Wagner (1813-83), but music itself was portrayed as the conveyer of meaning and human beings as the passive receivers of its massage(s). Kepler (1571-1630), Descartes and Hegel, amongst others, believed the essence of music to be rhythmic (Leonard and House 1972: 63). These theories were based on those of the ancient Greek philosophers, Pythagoras (who first linked music to the movement of the planets) and Plato (who proposed that temperate rhythms and melodies were to be preferred in order to avoid immoral, imaginative and exciting effects produced by music of any other nature). Hegel was unique in his belief that music, unlike the other arts, has no independent existence in space and is therefore not ‘objective’ in this sense. Rather, the fundamental rhythm is experienced in each listener.
4.17.6.2 Postmodern views on meaning in music

Although postmodernism really started to come into its own during the 1960s in the writings of people such as Saussure, Baudrillard and Lyotard, among many others, its implications only impacted on music scholarship from around the late 1970s. The shift made is quite clear in the quotation from Lawrence Kramer’s *Classical Music and Postmodern Knowledge*, where he speaks of the need for the

Deconstruction of the concept “the extramusical” (Kramer 67), created when “form” is regarded as music’s essential center. The concept of “a music itself”, a “music” wholly accounted for in structural terms, generates a residue comprised of everything not structural: a domain located, by definition, outside music proper (Quoted in Bowman 1998: 403).

As indicated above, “form” in the modern era was regarded as the essential center of music and the bearer of musical meaning. This emphasis on structural meaning neglected to take into consideration any ‘extramusical’ factors that may have been involved in the meaning-making process. Within postmodernism, the idea of a dualistic tension existing between extramusical and internal structural forces is seen as another of modernity’s ‘pernicious oppositional fantasies’ where truth is presumed to be purely objective and every subjective influence is seen as defiling (Bowman 1998: 403). The idea that a formal structural core of music exists to which everything else is merely a response or a context within which the real meaning-making takes place has been largely rejected as inadequate. By placing form at the center of meaning, extramusical forces were dualistic relationship between extra- and ‘intermusical’ forces is deconstructed. Through this process of deconstructing modernist views on musical meaning, postmodernist suggest that ‘contingency and situatedness, partiality and fallibility, are not contaminants, but basic conditions of all human experiences and understanding’ (Bowman 1998: 403). In so doing, the chasm between meaning in music itself and meaning related to the experience of music created by modernist thought begins to fade.

The process of meaning construction is also now viewed as being open-ended and infinite rather than event- and context-bound. Both human response and musical form are seen to be temporary limits in this ongoing process. By valuing music
according to its form, certain types of music were privileged above others in
disciplinary studies and idealized canons emerged with other forms of music being
regarded as useful for ‘lower’ pleasures but not for aesthetic contemplation. It is no
longer an issue of what is foundational but of whether foundations are possible or
desirable. The danger here is a collapse into nihilism as the postmodern attitude
increasingly becomes one not of defiance of modernity but of indifference:
‘Postmodern foundations are fluid, temporary constructions; prismatic, kaleidoscopic
affairs whose rejection of binaries, boundaries, and hierarchies means that even its
own convictions must admit to contingency and submit to continual reevaluation’
(Bowman 1998: 405).

As mentioned in the introduction, concerns for multiplicity and the uniqueness and
situatedness of cultural values and norms have emerged in the postmodern and
multicultural movements. Evidence of this can be seen in the subtle change of the
singular form of the over-arching term music, which previously referred to the music
of all times and places, to the plural musics, which implies diversity in musical styles,
uses, forms, and contexts. This has forced any proposition of particular musical
values inherent in all musics to give way to diverse values relative to each music and
even to each individual’s experience of a particular music. With no agreed-upon
overarching values with which to compare musics with one another, it follows that no
musical culture or practice can be proven innately better than any other. Musical
values, and therefore, musical standards, are seen to lie within the function and
meaning attributed to music in a particular culture or by a particular individual.

The postmodern ethos is more immediate in that it focuses on how musics and
musical meanings are being forged here and now. It also seeks to expose and
investigated the dimensions and meanings of music that are invisible as a result of
their familiarity. It is here that encounters with musical values different from those
that are familiar are seen to be particularly helpful: ‘The best and perhaps the only
sure way of bringing to light and revivifying... [our] fossilized assumptions, and of
destroying their powers to cramp and confine, is by subjecting ourselves to the shock
of contact with a very alien tradition’ (David Elliott quoting Harold Osborne, in
It is in this process of deconstructing belief systems that music is uncovered as a social, cultural and political agent. From here it is possible to reconstruct musical meaning that is more human-centered in that it is socially situated, temporal and recognized in power relations. The modernist belief in a progression towards a distant, more advanced state is rejected as a fantasy of abstract thought.

A postmodern musical ‘aesthetic’ reflects the postmodern shifts in cultural forms of representation ‘from text to image, from linearity to simultaneity, from coherence to rupture, from argument to story, from the universal to the particular, from the “voice of authority” to populist heteroglossia’ (Suzanne de Castell, in Bowman 1998: 401). It is fragmentary, full of juxtapositions, and is engaged with disjunctly in a manner reminiscent of ‘net-surfing’. Unity, authenticity, stylistic integrity and profound depth are no longer qualities to be striven for because they help to establish imperialist, modernist hierarchical ideologies. Instead, playful, artificial, ‘carnivalesque’ spectacles and ‘sonorous surfaces’ are upheld with an indifferent acceptance of the commodification of music (Bowman 1998: 403). There is no clear line between art and popular music, for this too reflects hierarchical ideologies. In its radical plurality and fluidity, music is seen as an important part of the technological media employed by humans to generate and allocate privilege and power in society. As such, it is a socializing influence with immense political force, active in the construction, deconstruction and reconstruction of social and personal identities.

4.17.7 Transforming Music Education through arts partnership programmes

Since modern ideology pervades our social-cultural institutions and individual values and beliefs at many levels, shifting to a postmodern perspective is a formidable task. One means of bringing a postmodern perspective of artistic practice to art education in schools is through the introduction of arts partnership programmes with reconstructionist commitments. Arts partnership programmes with such commitments may offer a way of narrowing the contextual gap that exists between contemporary art theory and practice of the art world and school based art theory and practice. As Sullivan (1993: 16) states: “To get a realistic perspective on what is authentic practice there is a need to cast a net beyond the classroom to incorporate the wider realm of professional art and the local context of everyday experiences”.

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According to Ryan and Shreyar (1996: 347), "authentic" learning experiences are those which resemble real life practices and encourage learners to engage in the processes of practitioners. The value of such learning experiences is supported by research demonstrating that when learners are provided with authentic learning situations, meaningful learning occurs. Teaching through authentic activities complements other educational methods by providing learners with opportunities to access practitioner knowledge and skills, and to gain an understanding of the contextual influences that shape artistic practices. The artist should not be viewed as modeling artistic practice in general, but rather as providing an in-depth account of a single perspective of artistic practice. By experiencing the work of a practising artist, students may gain a better understanding of how artistic practice is actualized within the cultural context of a contemporary artistic community.

However, when implementing arts partnership programmes it is important to consider the positions from which participating artists work, as these have immediate consequences for the type of learning that will take place. If partnership programmes are to connect schools with the artistic practices of the art world, it is paramount that artists who work from a postmodern perspective of art participate in these programmes (Ryan and Shreyar 1996: 402). By bringing postmodern artists into the schools it may be possible to challenge the modernist status quo approach to art education that is dominant in art education programmes today. An artist who works from a postmodern perspective of art may challenge students to question their assumptions about the function of art in society by engaging them in new ways of looking at art and the many roles that art can play in society. By sharing postmodern works with students, and encouraging a postmodern mode of interpretation that acknowledges the subjective and sociocultural contexts that shape interpretation, students can be exposed to new ways of making meaning from their encounters with art.

To showcase the paradigm shift in Music Education in South Africa, Hoek (2001: 1-13) provides a well documented Qualifications Map of Music in South African OBE, extracted from SAQA. The table below explains:
Table 4.2: Qualifications Map: Music (Hoek 2001: 1-13)

<table>
<thead>
<tr>
<th>Generalist Qualification</th>
<th>Generalist Qualification, with some specialisation</th>
<th>Specialized Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQF 8</td>
<td>Masters and Doctoral Degrees in Music</td>
<td>National Diploma and Postgraduate Diplomas in:</td>
</tr>
<tr>
<td>NQF 7</td>
<td>National Degrees, Diplomas and Certificates in Music</td>
<td></td>
</tr>
<tr>
<td>NQF 6</td>
<td>Composed of Unit standards drawn from (among other possible areas)</td>
<td></td>
</tr>
<tr>
<td>NQF 5</td>
<td>Creating and Performing, Music Contexts and Analysis</td>
<td></td>
</tr>
<tr>
<td>NQF 4</td>
<td>Includes Level 4 Standards drawn from Creating and Performing, Business and Technology and Music</td>
<td></td>
</tr>
<tr>
<td>NQF 3</td>
<td>Includes Level 3 Standards drawn from Creating and Performing, Business and Technology and Music Contexts and Analysis, towards achievement of FETC</td>
<td></td>
</tr>
<tr>
<td>NQF 2</td>
<td>Includes Level 2 Standards drawn from Creating and Performing, Business and Technology and Music Contexts and Analysis, towards achievement of FETC</td>
<td></td>
</tr>
<tr>
<td>NQF 1</td>
<td>Unit Standards at NQF 1/ ABET or GETC</td>
<td></td>
</tr>
</tbody>
</table>

Includes Level 3 Standards drawn from Creating and Performing, Business and Technology and Music, towards achievement of FETC.
Table 4.3 below sets out future work contexts and job roles for learners obtaining music qualifications in NSB 02 as set out by Hoek (2001: 1-14):

**Table 4.3: Work contexts and Job roles**

| Performing and Creating: Performers, musical directors, instrumentalists, vocalists, writers/arrangers/orchestrators/copyists, instrument technicians and tuners, artists and repertoire specialists, recording artists, studio session musicians, and jingle writers. |
| Music Business: artists, managers, booking agents, stage producers, stage managers, transportation personnel, record producers, copyright and contract specialists, promoters and marketers, performing rights specialists, marketing staff, sales and merchandising personnel, buyers, wholesalers and distributors, catalogue compilers, copy-right/licensing specialists. |
| Music Technology: mixer/audio engineers, designers and technicians, lighting designers and technicians, studio engineers, technicians, radio plugging, programmers and designers of music software packages for composition, performance and learning applications, programmers and designers of multi media packages, artists and creators, licensing specialists, sample editors, sourcing, music video specialists and sampling. |
| Miscellaneous: musicologists, researchers, music archivists, music librarians, music educators, music therapists, music entries and journalists. |

4.18 **SUMMARY**

Critical Theory is a particular body of literature committed to a particular agenda of human freedom or empowerment; a particular way of analyzing and dealing with a wide range of social problems. Unlike many other philosophies and theories (such as postmodernism's concern with linguistics and literary interpretation), most of the social issues addressed by Critical Theory have considerable relevance for schooling, education in general and teaching. It is not claimed here that Critical Theory alone can serve to reform and redirect Music Education. However, the increasing relevance John Dewey and other pragmatists have for Habermas puts the current literature of Critical Theory directly in touch with and makes it relevant to current issues in education. Similarly, the importance to Critical Theory of the need for pragmatic strategies for social change, that is, the importance of not being just another theory that cannot be put into practice, recommends it as a basis for change agency in Music
Education. Given its concern with issues central to music and to schooling, and because it already serves as the basis of a growing body of educational philosophy and theory (much of which is unknown to music educators), Critical Theory provides an important component for professionalizing Music Education that cannot and should not continue to be overlooked.

Critical teaching is especially well suited to serving as a basis for needed change in Music Education today. It requires teachers to remain current with regard to changing bases of research, theory and praxis and to engage regularly in ideology critique. In particular it requires systematic reflection upon teaching praxis where success is judged in terms of the benefits for students. This self-correcting feature prevents a Critical Theory-based teaching praxis from itself becoming an ideology and its self-critical spirit also prevents it from becoming part of the problem that it criticizes. In sum, to be professional in terms suggested by Critical Theory means a never-ending quest to insure and improve music teaching as praxis for bringing about the “good results” of personal musical praxis on the part of students throughout their lives.

Teaching as praxis also means teaching music for praxis: that is, for the purposes of using music as lifelong personal praxis. Seen from the curricular point of view, Critical Theory points to the importance of music itself as praxis: music’s value or good and thus its reason for being in the general education of all students is to be put into action to bring about pragmatic benefits of a kind that only it can contribute to lives well-lived. Music is thus not an abstract or inert subject or discipline studied in school; it exists to be put into action for its fullest potential in enhancing life.

In conclusion, teaching as praxis is guided by action ideals that judge success in terms of the musical benefits brought about by musical praxis; by music in action in the lives of students as a direct result of their musical schooling. Music in this view is an important and basic humanizing praxis because through it, “human beings become human in coming to know themselves as human” (Wartofsky 1979: 27). Teaching music is, therefore, doubly engaged as praxis where curriculum as a theoretical and ideal claim comes to life musically for students to the degree that they can put music into action in their lives. Music Education, then, is action for a change in the musical lives of students now and in the future as adults.