

## CHAPTER 3

# MUSIC AND WHOLE PERSON DEVELOPMENT: INTELLECTUAL, EMOTIONAL, PSYCHOMOTOR AND SPIRITUAL

## 1. MUSIC AND WHOLE PERSON DEVELOPMENT: INTELLECTUAL, EMOTIONAL, PSYCHOMOTOR AND SPIRITUAL

### 1.1 INTRODUCTION

The benefits of music in the lives of people at all ages, but especially in children, are a well-researched topic. The many claims which are made about music's value include intelligence and academic performance, emotional development, psychomotor development and in the last few decades spiritual development. In the journal *Teaching Music* (1999:33) it is mentioned that if Schackford's (the Suzuki educator) personal observations are correct that such qualities as self-esteem, leadership and high academic performance are learned behaviour, then music offers untold additional benefits and should be the birthright of every child, especially those born into less privileged and typically less stimulant environment. Seeing that South Africa is a country with a history of unequal learning opportunities, developing learning potential by means of music should be considered very carefully.

### 1.2 THE PRIMARY SCHOOL LEARNER

A number of important findings have been made about learning development, music and the primary school and young learners. These findings can be of great value to the South African education authorities, which are in a process of revamping the South African education system. The findings concerning the musical development of the primary school and young learner are as follows:

- ✓ Gardner (1973:188-189) maintains that most outstanding musicians are discovered at an early age, usually before six, and often as young as two or three years of age. Examples of musicians are Mozart and Nyireguházi (the Hungarian music

prodigy). Wise (1995:25) mentions Rubinstein, who as a toddler refused to talk, preferring to communicate by singing, he knew all the keys on the piano and was able to play by ear. By the age of three and a half his talent was so overpowering and fixated that his parents felt compelled to obtain formal music lessons for him. Gardner (1993:137) also later claims that in most areas of development children simply improve with age, but in the artistic spheres evidence suggests a surprisingly high level of competence in young children, followed by a possible decline during the years of middle childhood. This curve of development is evident in artistic production, but also manifest in selective areas of perception. Research has found that time spent in music increases the receptability of the brain in other areas and both intellectual capacity and emotional capacity is developed. Music has a general transfer effect on the integration of learning. The optimal phase for these general transferring qualities disappears at about thirteen years of age. Ornstein and Thomson (1994:38) confirm that transfer between the two brain hemispheres becomes less easy with age and Campbell (1997:192) confirms that it could be that after the fourth grade the basic pattern for sensory awareness is set and any other learning is remedial. It is thus the primary school learner who benefits most from involvement in the arts. Therefore, the Arts and Culture learning area should be explored to find the best possible means to develop learning during this developmental phase.

- ✓ Gardner (1993:137) mentions that preschool children acquire an enormous amount of knowledge about and competence in the arts. As in the case of language it occurs spontaneously without a lot of tutelage from parents. This stands in contrast to most traditional school subjects.
  
- ✓ It is a known fact that an individual's perceptual or comprehension capacity develops well in advance of productive capacities. In some domains comprehension lag behind performance or production capabilities and in these domains the young children must get the opportunity to learn by performing, making and doing, developing comprehension or understanding (Gardner 1993:138). Involving the young child in the active process of making music, provides the greatest benefits in developing of learning potential. The journal, Teaching Music (1999:31) claims that moving to music, dancing, playing instruments and experimentation with materials that make sounds are all beneficial in the development of young children. It is the *doing* in addition to the *listening* that offers the greatest positive benefits in all aspects of



learning, especially in music. Studies which revealed significant changes in children's spatial and cognitive development, almost all involve the child as actor, not a spectator. According to the journal, *Teaching Music* (1999:31), kindergarten classes of the school district of Kettle Moraine Wisconsin who received musical instruction, scored forty-eight percent higher on spatial-temporal skill tests than those who did not receive music training. Music instruction appears to have long-lasting benefits for children's spatial-temporal skills, skills that are needed for understanding proportions and ratios. The journal *Teaching Music* (1999:34) also mentions that after six months of piano lessons, preschool children had spatial-temporal IQ scores 34 percent higher than those who received computer training instead of music training. Bunt (1994:71) agrees and states when composing or playing an instrument all the cognitive processes are brought into music - cerebral processes involve motor control, feelings, cultural experience, social activity and intellectual activity. Bunt (1994:96) quotes the famous conductor and composer, Leonard Bernstein who said:

*'Play' is the very stuff and activity of music; we play music on our instruments just as composers plays with notes in the act of inventing it. He juggles sound-formation, he toys with dynamics, he glides and skips and somersaults through rhythms and colours - in short, he indulges in what Stravinsky called 'Le Jeu de Notes'. The Games of Notes: a striking concept of what music is.*

- ✓ Neuropsychological research indicates that specific areas of the cortex have particular cognitive foci and after early childhood there is a little plasticity in the representation of cognitive capacities in the nervous system (Gardner 1993:138). Although the cortex is responsible for the aural function, other brain areas are also stimulated when a person listens to music.
  
- ✓ Gardner (1993:29-31) explains that it is during the preschool and early, elementary years that children can discover something of their own peculiar interests and abilities. In the case of powerful talents they are likely to emerge in the domains of music and mathematics. It is important to notice that an exclusive focus on linguistic and logical skills in formal schooling can shortchange individuals with talents in other intelligences. Each child should have the whole spectrum of his or her intelligences stimulated every day.

✓ Although this study focuses on the primary school learner, even before birth the foetus is able to hear music. According to the journal *Teaching Music* (1999:23) Huffaker claims that clinically it is apparent that babies respond to sound stimuli by the third trimester of pregnancy. It can safely be argued that the influence of music on learning developing starts before birth. Bunt (1994:75) quotes research where Berendt mentions the similar shape of the embryo and the shape of the ear. The inner ear contains the organ known as the organ of Corti, which develops from the skin of the embryo. The organ of Corti is intrinsically linked to the early development of human beings. The ear develops within a few days of conception with the complete auditory system becoming fully functional at about thirty weeks. In the uterus there are sounds of the maternal heartbeat, blood circulation and other nearby sounds. Research is exploring how sound may reach the foetus and has an influence on the foetus. Gardner (1973:190) claims that in the first year of life children will alert to musical stimuli and within the first two years they will act on musical stimuli though dancing, rocking, marching etcetera. It is common for children to take a song or musical pattern and then alter various aspects of it. This kind of symbolic play in music is comparable to linguistic play in all children. It indicates musical stimuli are central to the child's perception. At about five years of age, musical stimuli activate the emotional perceptions in children.

✓ The numerous advantages of early involvement in music are recognized all over the world. According to *Teaching Music* (1999:29) young children are taught world-wide to appreciate Asian tonal structures or Corelli sonatas. The early involvement leads to an understanding of such music as well as other subjects later in life. The young child builds a basic *sound bank* from which sound can be drawn for the rest of his or her life. Bradman (1997:3) believes that the sound environment of children should include early modal music, baroque and early classical pieces, some romantic music and music of Impressionist composers such as Debussy and Ravel. Jazz and Latin American genres also provide interesting listening, while stimulating rhythmic appreciation and kinesthetic response (the brain's awareness of the position and movement of the body by means of sensory nerves in the muscles and joints). Ethnic music of various cultures stimulates dance and encourages young children to sing along and so increase a sense of happiness and well-being. Specialists have however found that loud music such as *heavy metal* should not be included in the young child's *sound bank*, because it has damaging influences on the body such as rapid heart beat, hypertension, deafens the listener and the stomach and the



intestines operate more slowly. Loud, blaring music does not have the positive attributes to develop tranquil, reflective learners who can develop and develop their learning potential.

- ✓ The journal *Teaching Music* (1999:31) mentions Sims who states that researchers have found that during preschool and the primary school years, children demonstrate very positive attitudes towards many kinds of music. Bunt (1994:73) also picks up this theme by emphasizing the importance of being aware of the curiosity and spontaneity to sound in most children, because it can lead to the unleashing of creative potential and so optimize learning potential in the learner:

*Most children develop an insatiable curiosity for sounds and sound-making during early childhood that appears almost innate. Very few children seem not to derive any pleasure from singing and making music together (Bunt 1994:75).*

## 2. INTELLECTUAL DEVELOPMENT

An inheritance of the modern era is the notion that the arts are primarily a domain of emotion, mystery, magic and intuition and, therefore do not qualify as part of the intellectual or Western Science Paradigm. The Western Science Paradigm of the modern era associated cognition with higher-order thinking such as found in mathematics and science. In the postmodern era the battle has largely been won and those questioning the intellectual dimensions of the arts are in the minority. The challenge is to explore the multiple intellectual possibilities of the arts, and in this study more specifically group music and critical thinking.

Woodford (1996:27) claims that much of the recent debate on critical thinking, revolves around whether critical thinking should be viewed as a set of general, context-free thinking that is transferable to other domains or as a diverse set of thinking, each operating within a particular domain or context-specific domain. There are however according to Ennis (1989:4-5) four different approaches, namely general (separate course where non-school problems are examined), infused (critical thinking in subject context), immersed (critical thinking is implicit, not explicit as in infusion), and combination (general critical thinking and in subject context).

Kirkby and Kuykendal (1991:8) hold the opinion that each specific discipline has its own way

of thinking and it should be taught from an early age. There are however context-free thinking that transcends subject-matter. Heuristics and general problem-solving strategies are given as examples of thinking that may be utilized in the learning environment to produce a general growth of thinking. Woodford (1996:28) adds to this opinion by stating that if the transferring of thinking skills and knowledge are possible, learners must be encouraged to apply these skills across a range of disciplines and a critical-thinking curriculum has to be implemented in the learning environment.

The versatility of music (singing, movement, playing instruments, listening, notation, performing) makes it possible for a combination approach to develop critical thinking in the music learning environment, but the thinking can be transferred to other learning areas, as well as to everyday life. In this section of the study accelerated learning by means of music, higher-order thinking in the music learning environment and the possibility of exploring the thinking process of artists to apply the strategies to the learning environment will also be investigated.

## 2.1 HOLISTIC LEARNING MODEL AND WHOLE PERSON DEVELOPMENT

The presentation of the work of Lozanov (1978) is especially apt and useful for the purpose of this study and what follows relies to a great extent on his important work. The Bulgarian doctor and psychiatrist, Lozanov, designed a holistic learning model involving the whole person. It is a holistic global way of learning, involving the right brain hemisphere and left brain hemisphere simultaneously as well as the whole person. With the Lozanov method the left brain achieves almost stupefying results, because the right brain, the body and the left brain are in harmony. Lozanov designed a method for the complex postmodern world where accelerated learning is a necessity (Oslander, Schoeder and Oslander 1979:3-12). Clark (1986:33) confirms the importance of the integration of mind and body. The integration takes place when relaxation techniques are learnt and applied. It happens when the body cooperates with the mind's energy. Different techniques are mentioned, namely autogenics, hypnotic suggestions, biofeedback, progressive relaxation, yoga breathing and meditation. Lozanov developed an own method of relaxation with music.

Oslander et al. (1979:15-16 & 26-27) explain that Lozanov had uncovered some biological secrets that lead to expanded potential. The system allows the body and mind to peak efficiently to develop superlearning. Music plays a key element in the learning system. Lozanov called his learning system *suggestopedia* which is a branch of *suggestology*.



*Suggestology* is a holistic *ology* that is used in psychotherapy to help people to open up their intuitive and extrasensory abilities. This is a way to open the reserves of the body, mind and intuition which are all holistically intertwined with learning, memory and the communication process. People do not only hear words, but also perceive on an intuitive level. The intuitive level can assist the learner in developing learning potential. It is a domain explored by Lazanov, although he was not the first and only psychologist to promote the importance of intuition in the learning environment. Clark (1986:161) quotes Jung (1933) who referred to intuition as one of the four basic human functions and Bruner (1960) who discussed intuition as an important part of education and encouraged its training. Lazanov's learning method is a method where the reserves of the body are opened up by making use of the relaxed or alpha state of the mind. There are four brain waves (table 3.1) common to all human beings. Early experiments revealed that all the brain waves are typically present at any given time, but vary greatly in terms of distribution of beta, alpha theta and delta waves. The creative process can be used as an example to illustrate the distribution of brain waves present during the creativity process (table 3.2). The creative process takes advantage of the four-quadrants or whole brain.

They are (Herrmann 1996:214-225):

Table 3.1 Brain waves of human beings

<b>Beta</b>	Aroused , alert state (13 Hertz - 30 Hertz)
<b>Alpha</b>	Calm, meditative, relaxed state (9 Hertz - 12 Hertz)
<b>Theta</b>	Open, free flow or creative state (5 Hertz - 8 Hertz)
<b>Delta</b>	Deep, dreamless sleep (0 Hertz - 4 Hertz)

Oslander et al. (1979:31-33 & 68-70) maintain that Lazanov believes that people learn faster than usual when they are in a slowed-down relaxed physical state. With body rhythms calmed, the mind grows more effective. Music is used to assist with the process. Slow classical Baroque music which has a steady beat of once per second, sixty beats per minute have the desirable effect on the body and mind. During this time body waves slow down to the alpha level and if the mind is opened up, the learning capacity is almost boundless. The opening up of the mind is done by means of rhythm. Data is chanted with different intonations (normal, soft whisper and loud commanding voice) in rhythm (ten-seconds intervals between items) in time to the music. The learner breathes rhythmically in a relaxed

state.

Table 3.2 The creative process and whole brain involvement

<b>Interest</b>	An alert consideration of problem (Beta state of mind)
<b>Preparation</b>	Gathering of information (Beta state of mind at higher level)
<b>Incubation</b>	Often when totally disengaged and relaxed (Alpha state of mind) Virtually unrecognized by educators
<b>Illumination</b>	The A-ha or eureka when ideas come to mind as solutions (Theta state of mind) Left hemisphere becoming aware of right hemisphere
<b>Verification</b>	Objective review of potential solution (Beta level of mind at high frequency) Deals with critical thinking
<b>Application</b>	Final stage of the process (Aroused Beta level)

Music by composers of the sixteenth and seventeenth centuries, written in the same tradition, has this relaxing influence on the brain. Bach composed most of his music to this relaxing simple meditative mode. Other Baroque composers are Vivaldi, Telemann, Corelli and Handel. The largo (slow) movements of the Baroque concertos with sixty beats a minute in 4/4 time have the desired effect. The music helps directing the focus of attention inward, instead of outward. The reverie state is highly ordered, because of the highly structured nature of the music with specific sound rhythm and harmonic patterns (Oslander et al. 1979:73-74).

Oslander et al. (1997:76) also mention that the Shamans of Central Asia, the Jajouka musicians of northern Morocco and certain Indian and Oriental musicians all knew the musical methods of mobilizing altered states of mind. Current research indicates that certain drumbeats can also have the effect. Other music with a similar effect is the Brahms' violin concerto in D Major, Tchaikovsky's piano concerto in B $\flat$  minor and Beethoven's Emperor concerto for piano. Again the slow movements of the concertos should be used to achieve a relaxed state of mind.

Music is the bridge to awareness and when studying the hidden sources of music, it is discovered that the art of music was once an integrated part of the philosophy of life. It was tied to medicine. Ancient mathematicians believed that the different ratios and proportions of the universe are used in the sound of music and should resonate in architecture and enhance life. Music would be the link to the cosmos and these ideas were handed down to



Baroque composers. Musicians of that time were trained to make use of certain numbers and patterns for harmony, counterpoint, rhythm and tempo in their music. The *mathematical* Baroque music was supposed to affect people by aligning, harmonizing and synchronizing mind and bodies to more harmonious patterns (Oslander et al. 1979:82-85).

The following is a list of music suitable for learning, study and creativity, by Lazonov (Merrit 1990:158-159):

Table 3.3 Lazonov's list of proposed music

J.S. Bach	Fantasy for Organ in G major Fantasy in C minor Prelude and Fugue in G major Fugue in E flat major for Organ
Beethoven	Concerto for Piano no. 5 in E flat major Concerto for Violin in D major
Brahms	Violin Concerto in D major
Corelli	Concerti Grossi op. 6, nrs. 2, 4, 5, 8, 9, 10, 11, 12 <i>Le Pamesse et L'Astree</i>
Couperin	Clavichord Sonati
Handel	Concerto for Organ in B flat major <i>Water Music</i>
Haydn	Concerto no. 1 in C major for Violin Concerto no.2 in G major for Violin Symphony in C major no.101 Symphony in C major no.94
Mozart	Concerto no. 5 in A major for Violin Symphony in A major Symphony no. 40 in G minor Concerto no. 18 for Piano Concerto no. 23 for Piano Symphony in D major

Rameau	Pieces de Clavecin no. 1.5
Tchaikovsky	Piano Concerto no. 1 in B flat minor Violin Concerto in D major
Vivaldi	Five Concerti for flute <i>The four seasons</i>

To be able to integrate the holistic learning model as part of the learning environment, the logical left brain hemisphere and Western Science Paradigm has to change to an open postmodern view of learning. Learners must be convinced that people's abilities can change and that holistic learning, involving the whole person, should be part of the postmodern learning environment where optimal learning must be achieved. It is a reachable goal for every learner in the school. Learners do not have a supposed norm or capacity and learners do not use the whole spectrum of their intellectual capacity. The responsibility of the educators is to build self-confidence and ensure that learners believe in their own ability to optimize their learning potential. Merrit (1990:5), president of the Merrit Learning System, claims that music seems to put people in touch with their full potential of their true nature by lowering stress, increasing memory retention, stimulating creativity and opening the mind to new perspectives. Learning need not be hard work, boring and unpleasant as was popularly experienced in the modern paradigm. The learner must be motivated to enjoy learning and therefore making it easier to achieve success in a complex postmodern world.

The non-verbal and bodily cues extended from the educator must be positive to ensure a positive rapport between learner and educator. The non-verbal elements enhance teaching awareness. These elements are found in young children with all their spontaneity, receptivity and ability to memorize.

## 2.2 WHOLE PERSON APPROACH TO THE COGNITIVE PROCESS OF THE ARTIST

The challenge for educators is to make the intellectual habits of artists more accessible to the learner and to borrow from it to develop own thinking. Gardner (1993:171) explains that recent studies found that creative individuals do not have mental operations at their disposal that is theirs alone, but they make use of the same cognitive processes as other people. The only difference is that they use them more efficient and flexible in service of goals that are ambitious and risky. Kirkby and Kuykendal (1991:95) believe that:



*...thinking processes can indeed be transported from the context of the arts to other subjects. What must not be lost in transit is the power of the arts to make visible, audible, indeed palpable. It is the making we're after.*

The following are intellectual and emotional habits of artists that are beneficial for the learning environment where the educator wants to develop learning:

- ✓ An important characteristic is the total engagement and passion about work that creative people exhibit. Creative people work from abundance. Kirkby and Kuykendal (1991:54) affirm that observation and sharpened perceptions lie at the core of all arts. Artists use the whole person, body and mind with total commitment repeating the same process over and over to achieve the correct result. They are intrinsically motivated and not extrinsically motivated.
- ✓ Artists speak of being open and tentative when they start working. They make one choice after the other as the creation grows, thinking critically (evaluating and judging) all the time.
- ✓ Edwards (1986:4-5) claims that artists seem to be in a different state of awareness. They feel alert and aware, yet relaxed and free of anxiety. They experience a pleasurable almost mystical activation of the mind. There are other activities that also produce the shift of consciousness or mind, such as reading, meditation, jogging, needlework, typing, listening to music and drawing. The learning environment should make it possible for the learners to achieve this state of awareness by creating conditions to enable the learner to make the mental shift to the right brain hemisphere thinking mode. Torrance and Safter (1990:ix) quote Clark who mentions the accessibility of energy fields, the ability to tap and release unconscious and preconscious thought.

### **2.3 HIGHER-ORDER THINKING IN THE LEARNING ENVIRONMENT**

Seven critical outcomes (generic, cross-curricular outcomes) and five additional critical outcomes, have been adopted by the South African Qualifications Authority (SAQA). The critical outcomes form the rationale for each learning area, learning area outcomes and specific outcomes. The critical outcome that concerns this section of the study is the

following:

*Identify and solve problems in which responses display that responsible decisions using critical and creative thinking have been made (DoE 1997c:24).*

The education system aspires to educate all learners to display critical thinking, in the practices of their occupations as adults, in the conduct of their own lives and to the general problems of South Africa. If the educator has to incite a display of critical thinking in the learner, a clear understanding of the concept critical thinking is essential.

The term *critical thinking* supports a variety of definitions, different philosophical theories and terms used synonymously with terms such as reflective thinking, informal logic, problem solving, higher-order thinking, creative thinking, abstract thinking and other terms. Ornstein and Hunkins (1993:122) explain that the term critical thinking is today used for problem solving and related behaviour. It is an old idea under a new label.

Lipman (1991:115-116) explains that in the present day, the ancient concern for wisdom has been replaced by a concern for critical thinking. Wisdom is commonly viewed as *intelligent judgement*, *excellent judgement* and other phrases. Judgement is a crucial part of wisdom and therefore a principle characteristic of critical thinking. If the learner has to display critical thinking, knowledge and experience will have to be applied to perform good judgement. Pogonowski (1987:38-39) agrees that critical thinking is the result of experience, which embraces the cognitive and affective domain of the learner. If the learner has to come to understanding, experiences such as exploring, experimenting, improvising, composing and listening to music must be provided to engage the learner in critical thinking. The learner must also be provided with the opportunity to think about and discuss the outcome of their critical thinking.

Critical thinking can then be defined as thinking that facilitates judgement by relying on criteria, such as self-correcting and sensitiveness to context. Lipman (1988:40) explains the term "*criteria as a rule or principle utilized in the making of judgement*". A criterion is an instrument for judging and rational thinking. It must be well-founded, structured and reinforced thinking. Examples of criteria are standards, laws, specifications, norms, principles, ideals, tests, methods and others. Lipman (1988:41-42) mentions that standards and criteria are often used interchangeably, but however it should be noticed that standards



represent a vast subclass of criteria. Criteria specify general requirements and standards the degree to which these standards satisfy in particular instances. Self-correcting can be compared with inquiring, in that it aims to discover weaknesses and rectify where necessary. It is a reflecting process and includes meta cognition or the process of thinking about thinking. An example of self-correcting is when a learner acknowledges errors in own thinking. To be sensitive to context (domain) is to be sensitive to exceptional or irregular circumstances and conditions, to special limitations or constraints, overall arrangement, the possibility that evidence is atypical and the possibility that some meanings do not translate from one context to another.

To complicate the concept of critical thinking, it must be taken into account that critical thinking is a higher-order thinking structure. There are many different definitions for higher-order thinking, but according to Lipman (1991:20) the three traits of richness, coherence and inquisitiveness are significant to any definition of higher-order thinking. If these characteristics are missing, it is doubtful if it should be viewed as higher-order thinking. Lipman (1991:19) ascribes the following properties to higher-order thinking skills:

*... in general what they seem to mean is thinking that is conceptually rich, coherently organized and persistently exploratory.*

Lipman (1991:20 & 68) explains further that higher-order thinking is a fusion of critical thinking and creative thinking in which sound judgement is involved. Critical thinking involves creative judgement and creative thinking involves critical judgement.

Higher-order thinking is known to educators through Bloom's (1956) taxonomy or hierarchy of thinking skills. Bloom's approach consists of a fixed hierarchy of skills, regardless of context, with analysis, synthesis and evaluation at the crest of the pyramid. Lipman (1991:51) broadens this view by comparing the analytic and synthetic to critical and creative aspects of higher-order thinking. Evaluation is understood to be similar to judgement, and comprehension the same as understanding. Lipman (1988:40) explores the difference between ordinary thinking and critical thinking as follows:

Table 3.4 Comparing ordinary and critical thinking

Ordinary thinking	Critical thinking/reasoning
Guessing	Estimating
Preferring	Evaluating
Grouping	Classifying
Believing	Assuming
Inferring	Inferring logically
Associating concepts	Grasping principles
Noting relationships	Noting relationships among other relationships
Supposing	Hypothesizing
Offering opinions without reasons	Offering opinions with reasons
Making judgement without criteria	Making judgement with criteria

Bailin et al. (1999b:288) conceptualize critical thinking as thinking that encompasses different forms of general kinds of thinking tasks, such as problem solving, decision making, analysis and inquiry. It also includes creative thinking, where although something original is constructed, critical thinking is at the root of creative thinking.

The performing of critical thinking requires judgement and judgement can fulfil or fail to reach relevant standards of good thinking. The standard or effectiveness of critical thinking depends on the efficiency in helping learners to meet the standards of good thinking. The educational outcome must be to *“teach them to do tasks well by increasing their capacity and inclination to make judgements by reference to criteria and standards that distinguish thoughtful evaluation from sloppy ones....”* (Bailin et al. 1999a:279).

Critical thinking is frequently incorrectly conceptualized in terms of skills, processes, procedures and practice. Most educational literature refers to cognitive or thinking *skills* that can be improved through practice. Critical thinking is inaccurately perceived as such:

*Critical thinking is seen to involve generic operations that can be learned in themselves, apart from any particular knowledge domains, and then transferred to or applied in different contexts (Bailin et al. 1999a:271).*



Bailin et al. (1999a:269) admonish that critical thinking should not be perceived as skills to be taught separately in the different learning areas. It should rather be perceived as a global development of knowledge, understanding and attitudes. Lipman (1991:78 & 20) feels that philosophers have always been suspicious of the term *skills* and have insisted that *intelligent making, saying and doing* are not reducible to a set of skills. Higher-order thinking is not skills to be taught separately, but thinking that should be taught directly and immediately. The advantage of direct and immediate teaching of higher-order thinking, makes it meaningful and intrinsically rewarding for the learner and educator. Lipman (1991:29) also states that it is an enormous misconception to perceive a thinker as thinking in a linear series of simple steps. The human mind is capable of engaging in a considerable variety of thought processes simultaneously. Paul (1984:5) labels critical thinking as *skills*, but distinguish between two conceptions of critical thinking as in a weak sense and a strong sense. In the weak sense it is a set of thinking skills that can be applied to a multiple of learning areas and it is thinking that does not transform the cognitive and affective processes. The strong sense develops *emancipatory reason* in the form of dialogic thinking. It is a comprehensive critical thinking essential to a free, rational, autonomous mind.

Critical thinking is not a set of skills to be taught, neither certain *processes*. Processes are generally perceived as things like classifying, inferring, observing, synthesizing etcetera. There may be common features, but it is misleading to teach critical thinking as a process. Bailin et al. (1999a:275) argue that the most educators can do is to familiarize the learner with the concept of a valid argument, motivate the learner to make sure that the argument is valid and enable the learner to familiarize himself or herself where certain kinds of receptions are sought. Paul (1984:10) shares this view by stating that problem solving is often understood as a model of processes. It is for instance true of Dewey, who thought that problems could be approached with the following steps: identify the problem, establish facts, formulate hypotheses, test hypotheses and evaluate results. But thinking cannot be reduced to an operational procedure.

Another misconception is to view critical thinking as a *procedure*, in terms of steps, stages or phases. Some writers list eight general thinking procedures, namely concept formation, principle formation, comprehension, problem solving, decision making, research, composition and oral discourse. Each of these produces a different result. Two other different procedures which are mentioned in literature and favoured by psychologists are algorithms (step-by-step prescription - the method and in the extreme reasoning without judgement) and heuristics (discover by themselves - the result). They all characterize critical thinking as a set of

procedures to be carried out, but critical thinking is not a retrospective undertaking (Bailin et al. 1999a:276-278). Paul (1984:14) agrees that thinking is not a procedure, but governed by principles that are rational and comprehensive, thinking similarly to that in the law.

Bailin et al. (1999a:271-272) argue that it should firstly be stressed that background knowledge in the particular area (music) is a precondition for critical thinking to take place. A learner cannot analyze an instrumental piece of Orff music if he has never been involved with ensemble work or playing Orff instruments. The depth of knowledge, understanding and experience is a significant determinant for thinking critical in the specific area.

Secondly, to be a proficient critical thinker, involves the acquisition of operational knowledge of standards of good thinking. Each domain of human intelligence has its own practices, which determine the standards of critical assessment in the domain. These standards or principles of critical thinking are acquired by analyzing the practice critically. To a certain extent the standards or principles can be perceived as abstract and therefore cannot be applied in a mechanical fashion. The critical thinker has to exercise judgement in interpreting what is necessary in a specific case (Bailin et al. 1999a:292). The principles which determine the standard of critical assessment in the domain of group singing in the learning environment are attractive tone quality, aesthetically satisfying interpretation, careful intonation, a satisfactory vocal range, flexibility and agility, good breathing, control, a relaxed jaw and good diction. These principles are an integrated whole which cannot be applied in a mechanical fashion. Judgement and interpretation of criteria and standards are necessary to think critically in group singing.

Thirdly, it involves certain attitudes. It involves the willingness to be a good critical thinker. Bailin et al. (1999b:294) list qualities like respect for reason and truth, respect for high-quality products and performances, an inquiring attitude, an open mind, fair-mindedness, independent-mindedness, respect for others in group inquiry and deliberating, respect for legitimate intellectual authority and an intellectual work-ethic. The learning area, Arts and Culture, can fulfil the important role of setting the stage for intellectual challenges, through developing positive attitudes to critical thinking. The following is the operationalizing of critical thinking in the music learning environment:

#### (i) CRITICAL THINKING IN THE MUSIC LEARNING ENVIRONMENT

Music is about sound. Critical thinking in the music learning environment assists the learners



to understand how sound becomes music. Understanding takes place where learners are mindfully engaged in musical experience and, thereby controlling own musical thinking and learning. To be mindfully engaged leads to higher-order thinking. Reahm (1986:31) claims that thinking should be part of music education:

*If music is an expression of reality by human thought, we should include the aspect of teaching the thinking process in our music classes.*

To clarify the notion of critical thinking in music, the different activities of the learner must be considered. The learner listens, performs, evaluates and creates. The educator has an operational role to play by making these activities happen, by ensuring that the learners possess a good base of background knowledge, knowledge of different music criteria and a positive attitude to critical thinking. Other components of critical thinking to be considered in the music learning environment are judgement, decision making, analysis, synthesis, evaluation and inquiring.

## (ii) DIALOGUE AND CRITICAL THINKING IN THE MUSIC LEARNING ENVIRONMENT

Dialogue between the educator and learner is essential in developing higher-order thinking. A way of accomplishing dialogue in classroom, is by means of asking questions that provoke higher-order thinking. A well-developed repertoire of questions to advance critical thinking, may be very valuable to the educator. Holliday (1993:33) explores the function of questions in music and comes to the conclusion that it helps with the transferring process of music knowledge to the different fields of music. Small (1987:37) covers another function of questions in music, by stipulating that questions should stimulate a deeper level of thinking, where the learner is invited to think through the process of thinking through a problem to reach a reasonable conclusion. An example of such a question is given - *"If Bach or Bernstein had attempted to compose an 1812 Overture, would either have been better equipped than Tchaikovsky to do so?"*. An appropriate response to the question is firstly to recall facts, but also to analyze the question in search of important issues and formulate a series of questions that will lead to the correct answer. Guided dialogue in the form of questions increases the learners' musical knowledge as well as critical thinking.

Pogonowski (1989b:37) cautions that the nature of the question is very important. Certain kinds of questions generate critical thinking while others do not. Narrow questions such as,

“When did the popular band perform the song for the first time?”, will not encourage critical thinking. It is a low-level recall question. Pogonowski (1989b) recommends seven strategies by Dillon to assist dialogue in the music learning environment. The rule is that when the dialogue is on its way, not to ask questions, but to use various alternative techniques. Too many questions may turn the dialogue into a recitation period.

Table 3.5 Critical thinking strategies in the music learning environment

Strategy	Example
Make a declarative statement	Calling this a Baroque composition is correct, but Vivaldi and Handel are also Baroque composers.
Make a reflective statement	I understand what you mean, because certain Baroque characteristics occur in the work, we can label the entire work as such.
Describe his or her state of mind	I am sorry I am not quite getting your point.
Invite learners to elaborate	I would like to hear more views on that.
Encourage learners to ask questions	Do you have a question? Any questions by any of you?
Maintaining deliberate silence	

### (iii) COOPERATIVE LEARNING AND CRITICAL THINKING IN THE MUSIC LEARNING ENVIRONMENT

Cooperative learning is an important added dimension of critical thinking. It supplies learners with the opportunity to interact with each other, to think out loud and to hear how other learners think. The opinions of others are important in critical judgement, because it gives the opportunity to compare own judgement to those of others.

Cooperative learning is valuable to learners that are less practised in active participation. They feel freer to talk about music in small peer groups. The facilitator rotates among the groups, helping to solve problems and to get them thinking on higher levels.



#### (iv) EVALUATION AND CRITICAL THINKING IN THE MUSIC LEARNING ENVIRONMENT

Higher-order thinking as discussed, is perceived as critical and creative thinking, as well as analysis, synthesis and evaluation. DeTurk (Boardman 1989:22) refers to evaluation when he maintains that one of the primary outcomes of music is that of evaluation. The evaluation of music takes place by means of cognitive and affective criteria. To evaluate music is to understand the music (background knowledge), the knowledge of "*the merits of its parts in totality*" (principles and standards of critical thinking in the domain of music) as well as affective dimensions. This view corresponds with that of Bailin et al. (1999a) in that critical thinking involve background knowledge, knowledge of principles and standards of a specific domain and an open mind towards music.

Bunt (1994:46) states that the understanding of music relies on knowledge of the different elements of music. The different elements of music are the basic tools for the understanding or conceptualizing of music. It is an understanding of the basics of music on a very simple level that the learner needs to be able to evaluate and to think critically about music. It also involves the affective dimension of thinking (open mind). These elements are interrelated with each other. They will briefly be discussed as illustration of their significance in critical thinking in group music for the learner.

- ✓ Tone colour (or timbre) - Noticing different tone colours is the first apparent difference in sound to the untrained ear. A baby quickly learns to discriminate between the sound of a human voice and other significant sounds. After musical performances people comments on voices or instrument sounds that they liked. Tone colour has been associated with making an immediate and sensuous impression on the listener, adding meaning to sound (Bunt 1994:48).

- Learners become aware of the different sound qualities of different instruments and the human voice by getting involved with different activities in the classroom. In the foundation phase activities to discriminate between different sound qualities or tone colours of instruments may result in an activity by putting the sound of the instrument to the picture.

- Later more complicated cooperative activities may be performed, where groups sing a song and add chosen instruments to change the tone colour. After the presentation, the activity is evaluated and discussed critically.

- ✓ Dynamic level - The dynamic level of music is a basic perceptual attribute of sound. It covers a continuum from very soft to very loud sounds.

- One example of making the learners aware of dynamic level is by movement. In cooperative learning groups the learners get the opportunity to construct different body movements to express the emotive quality of the dynamic level.

- ✓ Pitch - Sounds can be described as low or high. It is organized in terms of scales made up of discrete steps. Pitch is directly associated with melody and harmony.
- ✓ Duration and time - Duration and time are concerned with the physical and measurable level of the length of time a sound last. Sounds of long duration create a slower tempo than sounds of quicker duration. Duration of sound has more to do with the quality of the time than the length of time.

Bunt (1994:57) explains that it is rather striking that the durations of our heartbeat and spontaneous and preferred tempi do seem to fall within the same range. Perhaps this explains the primary relationship between human beings and music. Rock music has an inner pulse that provides an uplifting and immediate appeal. Western classical music also seems to be in touch with this physical relationship. The relationship between human beings and music has been explored by Lazanov who used Baroque music to develop learning by way of a relaxed state of mind.

- ✓ Rhythm - Rhythm is linked to duration and beat. Without rhythm there would be no music. Rhythm is the basis of all neural activity and is seen as the cradle of being. Understanding rhythm does not solely relies on the auditory pathway and mechanisms. Beethoven is an example of a person with a hearing problem with a highly sophisticated rhythmic understanding (Bunt 1994:60).

Rhythm is closely related to motor function, with the nervous system playing a determining role in the organisation and control of rhythmic patterns. It is also associated with emotional response.



- An example of developing a sense of rhythm in the primary school learner, is by making use of the music of the twentieth-century composer, Gustav Holst (1874-1934). The composer composed a suite for the orchestra. Two musical techniques used by the composer in his work, "Mars", from "The Planets", is *col legno* (playing the violin by lapping the strings with the wooden part of the bow) and *rhythmic ostinato* (a repeating pattern that continues as other parts of the music change). These two techniques may be the point of departure in developing own ostinato rhythm patterns to be performed by a group of learners.

- ✓ Melody and interval - A child is aware of melody from a very early age, but the pitch of early childhood songs tends to wander a great deal. The rhythm and contour of the melody are used to keep within the formal structure, but the contour of the melody is replaced by different pitches. Gradually the melody and interval relationship of the prevailing musical culture becomes established in the child. Researchers agree that five years of age is the approximate markers for preserving a stable tonality within the song (Bunt 1994:64-65).

Some of the pitches in the western diatonic system seem to have a prime position when placed in a melodic sequence, but it is also an observable feature in most other cultures. When exploring this characteristic of melody, the focus is moved to information on the cognitive processes that underpin music. The octave is the first reference point. The falling minor third (G to E in *Mum-my*) is often used as a call for gaining attention. The interval of a fourth is common in children's play (G,E,A,G,E as in *I'm going to tell my mommy*) (Bunt 1994:66).

The different scale systems are responsible for the different emotional responses. The five-note scale, or pentatonic scale (C, D, E, G, A) appears in a variety of guises in music of many cultures. The absence of the discordant interval of the augmented fourth, minor second and major seventh makes it popular to work with. Tuned percussions can be set for the pentatonic scale and all members of the group can take part with satisfying results. Playing in this scale frees people from the confines of the western diatonic system (Bunt 1994:66-67).

There are also other scale systems, commonly known as the modes. Here each mode is made up of a particular order of semitones and tones and has a unique emotional quality. They are called by Greek names, namely: Dorian, Phrygian, Lydian, Mixolydian, Aeolian, Locrian and Ionian, which is the western mode (C to C)

(Bunt 1994: 67-68).

- ✓ Harmony - With harmony we are concerned about sound resulting in consonant or dissonant. Harmony is the most complex element of music and absolute central to music. At a very fundamental level harmony can be used as a drone or a small repeating pattern of simple chords, over which melodies can be supported or emerge (Bunt 1994:69).

Lastly, DeTurk (Boardman1989:11) agrees with Lipman and Pogonowski that musical experience is considered as an important yardstick for evaluating the affective and cognitive dimensions of music. Musical experience provides the background to critical thinking, as well as a deeper and broader internalization of musical knowledge. A high quality supply literature and sound material in the music learning environment can be of great assistance to enhance musical experience. In the music learning environment percussion instruments, as well as melodic instruments, are essential to provide the necessary performance experience.

#### (v) META COGNITION AND CRITICAL THINKING IN THE MUSIC LEARNING ENVIRONMENT

Flavell (1976) was one of the first writers to use the term *meta cognition* and it means one's own knowledge concerning one's cognitive processes and products. It refers to the active monitoring and regulating of those processes. Meta cognition applied to a learner may be called meta learning (Biggs and Telfer 1987:16). It can then be assumed that meta listening, meta singing, meta performing etcetera is possible in the music learning environment.

Learners can become strategic meta learners with knowledge about different types of knowledge. Pogonowski (1989a:15) says the three types of knowledge is declarative, procedural and conditional. The three types of knowledge are describes as follows:

- ✓ Declarative knowledge - Pogonowski (1989a:15) states that declarative knowledge has to do with facts (knowing-that). Learners need declarative knowledge before embarking on assignments and the new knowledge is added to existing knowledge. An example is a need of basic knowledge about different listening goals, before embarking on an assignment where it is expected of the learner to listen to a set of popular songs and then to list the characteristics of popular music. The learners should also know their limitations, to know which questions to pose to complete an



assignment. The educator can then monitor the meta cognitive process of the learner. Woolfolk (1980:282) claims that declarative knowledge develops when new information is integrated with existing understanding. The least effective way to install this is by rote learning. The best way to learn is to understand and it is the greatest challenge for the educator.

- ✓ Procedural knowledge - It comes from direct experience with a variety of musical materials and the elements of music. Music activities provide the learners with operational knowledge to practice an instrumental piece with the melodic and percussion instruments, but it should also provide the learners with the procedures to follow when help is required and where to find help (know-how).
  
- ✓ Conditional knowledge - Conditional knowledge exposes the learners to knowledge of certain strategies and the reasons why certain strategies are successful opposed to others. In music conditional knowledge may be achieved through active participation and developing judgement to enhance critical thinking and meta cognition. Questions to assist learners with own thinking and conditional knowledge may be, *"When are we going to introduce the percussion instruments to change the tone colour of the piece and why at that specific point?"*. The learner displays knowledge of the tone colour of percussion instruments, but on a meta cognition level own judgement has to be displayed through knowledge about strategies in percussion band playing.

A valuable way to engage learners in meta listening, according to Pogonowski (1989a:12), is to engage learners in listening to unfamiliar music for the purpose of generating musical information from inside themselves. They will be asked what have they heard and then share their perceptions of the music and appropriate music vocabulary can be installed. Learners should also be encouraged to listen to themselves in group singing and commenting on what they think about the performance. It is not only an opportunity for meta listening, but a display of music vocabulary and music principles. DeTurk (Boardman 1989:24) agrees that the learners should be exposed to familiar, but also unfamiliar music.

Meta cognition is important to evaluate and think critical about music. Pogonowski (1989a:9-11) states that meta cognition in the study of music involves awareness of own personal thinking. It is an active process, because the learners are designers of their own learning, rather than passive receivers of knowledge. When learners are invited to solve a musical

problem, individually or in a cooperative way, it enables them to actively reflect on own musical thought. The educator may assist by asking, "*Would you do anything differently in your next performance?*" and make them aware of own thinking. It can also involve collective meta cognitive thinking when the group shares thoughts for example about a performance in class with peers. Meta cognition is an important tool to make an informed and critical evaluation about music. Meta learning may be enhanced through the following techniques (Biggs and Telfer 1987:182):

- ✓ Think-aloud - Educator and learners think out loud explaining why certain choices have been made in a performance or music activity.
- ✓ Peer teaching - Interacting with peers in a group to perform a musical activity requires meta cognition about own thinking processes.
- ✓ Reflective teaching - It requires learners to peer teach so that they reflect on own thinking. One talented learner may teach peers how to play the melody of the song on the melodic instruments.
- ✓ Self-questioning - Learners should be taught to stop at critical phases and ask questions about directions, course, effectiveness to date, possible options etcetera.

The postmodern methodology, which claims that the learning environment should be democratic and dialogic, should be of great meaning for meta cognition as it encourages discussions of voice, instruments, themes, motives, rhythm etcetera. Reahm (1986:31) expresses the opinion that it provides the learner with a practice to make independent judgement.

DeTurk (Boardman1989:25) extends a warning that evaluation of higher- order thinking structures are not simple and is best accomplished by confronting the learners with evaluation tasks and observing the results. The learners should display their thought processes through assignments in which critical thinking, reflecting and conceptual knowledge should be evident. The evaluation criteria should be spelt out and understood by the learners. These need not be performances only, but must include written assignments on own thought and experiences.



## (vi) THE EDUCATOR AS MODEL OF CRITICAL THINKING

Holliday (1993:34) claims that just as the learners are expected to think critically, the educator should model critical thinking to the learners. Pogonowski (1989b:37) shares the view by stating that for both learner and educator, music must become the medium that evokes critical reflection. Both have a shared commitment to critical thinking.

The modelling of questions that leads to higher levels of thinking should be displayed by the educator in own thinking. Small (1987:39) mentions the "*Who?, What?, Where?, When?, How? and Why?*" questions. **Who** is probably the popular band playing the song? **What** musical content, stylistic elements or tone quality of the band lend support for the opinion? An aural analysis of musical elements gradually leads to the identification of the band that plays the song and the learners had the opportunity of critical thinking.

Activities in the classroom often culminates in group performances or musical activities. The learners get the opportunity to perform own dances, rhythmic patterns, melodic and/or percussion instrumental pieces, songs and other music activities in smaller groups. While the smaller groups are preparing their performances the facilitator moves around, observing, listening to practising groups, advising and motivating the learners. The music educator is reflecting own training and personal insight from own experience of performing, analyzing, comparing and thinking about music. Critical thinking in the music environment is a process of reflecting upon, weighing, arguing and supporting alternative points of views. It is not focussed on picking out errors, but the search for the best alternative through logical thought, sound argument and perspective insight. By facilitating the learner experience that music symbols are on paper, but it has to be analyzed. The metric marking may be there but the relative tempo changes are left to own discretion. The tone colour produced by a performing group are not on paper, but a combination of the educator's sound preference and the playing or singing of the group. The learners learn that music is not isomorphic to its notation. The music educator owns it to the learner to exhibit own critical thinking by telling the learner what thoughts are going through the mind. An example of exhibiting own thinking as music educator, is when the group is preparing a song to be performed, an opinion and question may be posed such as, "*Children, when singing this song, diction must be very clear, because it is a humorous text, which we want the audience to enjoy. Any suggestions on possible ways?*" (Reahm 1986:30). As critical thinking develops the educator becomes more and more of a facilitator, by assisting the learners to construct own knowledge by thinking critically. The learners become active and involved in their own learning.

Holliday (1993:33) feels that the process of music making must at least be as important as the performance. The performance should not be viewed as the end, but another step in the process. What is important is that the learners must make the music their own, by exploring own interpretation and not just accept the interpretation of the educator. The educators facilitate, but the learners must make the final decision. The music educator should have a supportive approach to allow the learner the opportunity to experience that his or her ideas are meaningful and it is safe to take a risk. The learner should rather be helped to refine ideas by the flexible attitude of the educator and learner.

Attitudes are summations of experience and learning. These attitudes are sometimes positive, negative or indifferent. The music educator must be aware of own attitudes, perhaps bias attitudes, analyze them and decide if change or modification is necessary. Personal attitudes must not interfere with desired learning outcomes. There is a difference between music on a personal level and music suited for the learning environment. This kind of behaviour exhibits meta cognition to the learners (Pogonowski 1987:40).

#### **(vii) A LEARNING ATMOSPHERE FOR INDUCING CRITICAL THINKING**

Music has to a great extent to do with good judgement and evaluation. To make it happen a warm positive learning atmosphere is needed where the learners feel safe to offer an opinion. The music learning environment has the opportunity to engage the learner in critical thinking, while actively involved in music making. Critical thinking is not isolated abilities and dispositions, but initiating the learner in complex critical practices. The initiating of learners in critical thinking, begin long before they enter school. By the time they are in primary school they are already making critical judgements and offer arguments. Music educators must teach learners the important commitments and habits of mind that makes critical thinking possible (Bailin et al. 1999b:298). Lipman (1991:15) claims that these goals can be reached through converting the classroom into a *community of inquiring* in which the learners listen to one another with respect, build on one another's ideas, challenge one another to supply reasons for statements, assist one another in arriving at and seek to identify assumptions. The dialogic learning environment of the postmodern learning environment is essential to foster a learning environment of inquiring. The learner should be engaged in dealing with tasks that call for judgement or assessment, helping to develop intellectual resources to deal with these tasks and providing a learning environment where critical judgement is supported.

If the learning environment wants to produce musically sensitive consumers and performers



for the future, the learners should be helped to transfer critical thinking in the music learning environment to their daily lives. An unchallenged bias music learning environment, may result in little opportunity to think about performances of music, the effect of music and music itself (Small 1987:37). Reahm (1986:31) takes the point up by stating that critical thinking in the music learning environment serves a dual purpose, because it develops independent musicianship and also the wrestling with ambiguity in subject-matter where there is often not a single right answer. There are many answers to decide among in music. This practice of confronting equally viable alternatives will serve the learner well in making decisions outside of music throughout life. Woodford (1996:31) states that learners should be encouraged to think for themselves and to make their own informed judgements as to the quality of desirability of what is performed, composed or listened to.

## 2.4 CONCEPTUAL FRAMEWORK FOR THE INTELLECTUAL DEVELOPMENT OF THE LEARNER IN THE MUSIC LEARNING ENVIRONMENT

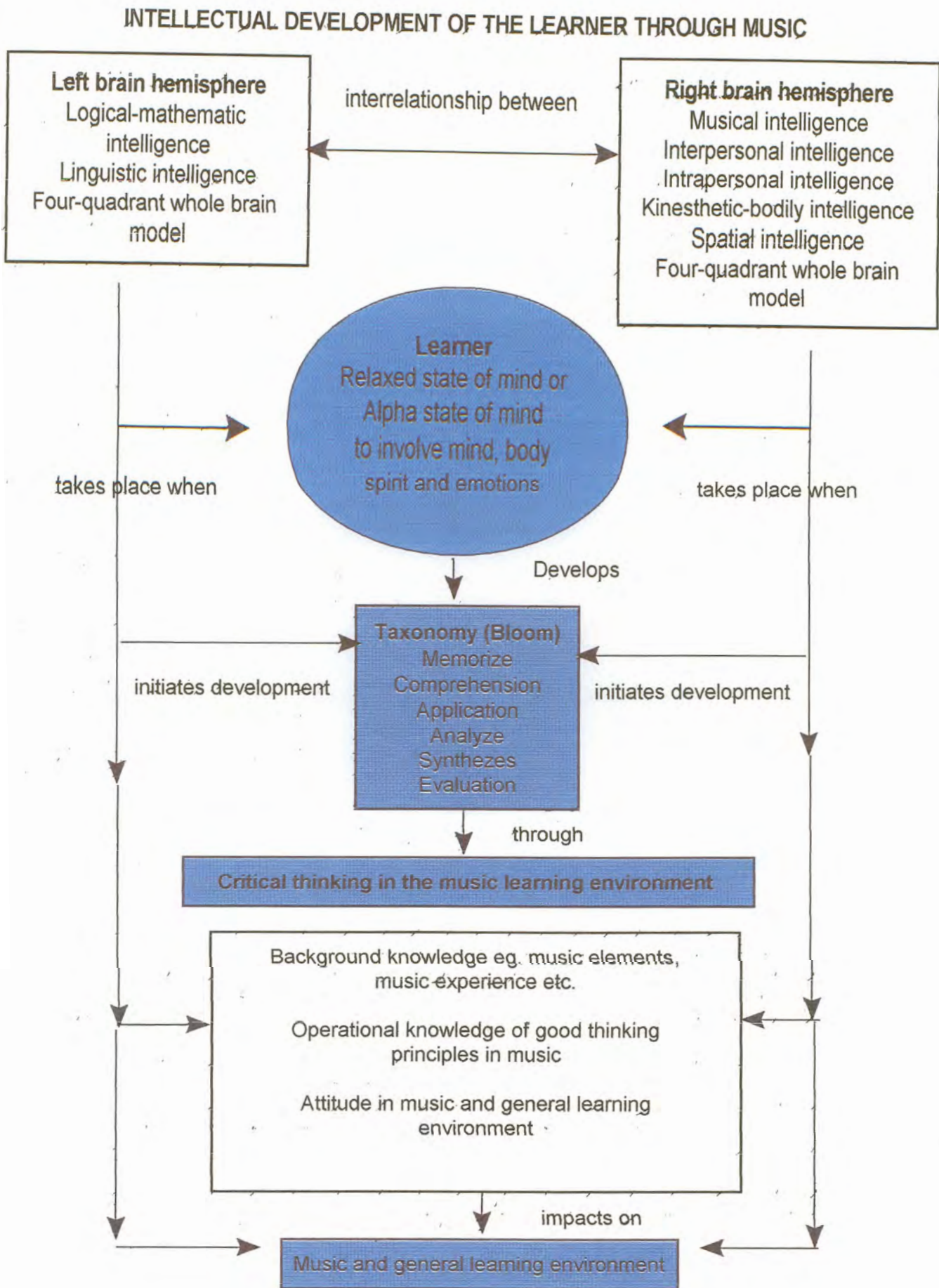
The conceptual framework illustrates the intellectual development of the learner in the music learning environment (figure 3.1).

## 3. EMOTIONAL DEVELOPMENT

### 3.1 INTRODUCTION

Jensen (1995:27 ) refers to the brain as a *box of feelings*, because in spite of all reason, logic, common sense and scientific evidence, information must be verified by own feeling before it is accepted. It gives an indication that emotions are important and powerful and the importance of emotions should be acknowledged in the learning environment. It is such a strong element that *"we do not feel that anything is true until our midbrain, the limbic portion, which deals with emotion, says that it is true"*. Upon learning about the importance of emotions, addressing only the intellectual development of the learner is limiting in the endeavour to develop learning potential. The open system of the postmodern learning environment includes the emotional aspect of learning. Emotions play a very important role in the holistic learning process, because positive emotions optimize learning and negative emotions serve as an emotional blockage. The language of the heart reaches areas of the brain, such as the right brain hemisphere of the cerebral cortex or the limbic system which do not respond to purely intellectual communication.

Figure 3.1 Intellectual development of the learner through music





Merrit (1990:146) confirms that *"music mobilizes latent memories and stimulates the emotions to create a powerful learning experience"*. To create a powerful learning experience educators have to be aware of the different levels of emotional outcomes to be reached.

### 3.2 EMOTIONAL DEVELOPMENT AND THE LEARNING ENVIRONMENT

Most educators are familiar with the cognitive taxonomy of Bloom, but fewer educators are familiar with Krathwohl's taxonomy of the affective domain. Music is closely linked to the emotional qualities in a person and the postmodern view of accommodating the emotions. It is therefore of utmost importance that music educators should be aware of the affective taxonomy of learning. Ornstein and Hunkins (1993:222) list Krathwohl's affective taxonomy, and illustrative examples in the music domain are supplied:

- ✓ Receiving - The learner's sensitivity to the existence of stimuli. This includes awareness, willingness to receive and selected attention. Example: In music education the learner becomes aware of the aesthetic qualities of different styles of music or becomes aware of the emotional content of a song.
- ✓ Responding - The learner's active attention to stimuli such as acquiescence, willingness to respond and feelings of satisfaction. Example: The learner shows an interest by bringing own examples of different styles of music to the music lesson or showing satisfaction and enjoyment in the music learning environment.
- ✓ Valuing - The learner's attitudes and beliefs of worth in acceptance, preference and commitment. Example: The learner shows an indication of the acceptance of different music styles of different people.
- ✓ Organization - Internalization of values and beliefs involving conceptualization of values and the organization of a value system. Example: The learner forms judgement about the acceptability of certain styles of music or lyrics of certain pop songs.
- ✓ Characterization - This is the highest level of internalization and it is a behaviour that reflects a generalized set of values and a philosophy of life. Example: The learner has ethical principles and won't participate in music activities that clash with these principles.

A word of warning from Ornstein and Hunkins (1993:22) is that although many educators find these categories useful there are educators and parents who view the taxonomy with concern. They feel that it is not the school's responsibility to handle the affective development of learners. Wolverton (1989:33) disagrees and believes that most schools provide intellectual and physical experience, but fail the learner when it comes to the emotional and intuitive aspects of life. Wolverton (1989:32) states that the music educator must assist the learner in achieving specific affective outcomes when for instance performing a song. Affective content of music involves emotions like joy, sorrow, fear, hate and love. Performers will not derive the same emotions from a song, but without guidance some learners will derive no affective satisfaction by performing the song. The learners have to be able to interpret the composer's intent and when the emotional content is understood by the performer the content will be communicated to the audience. Interpreting the musical text and studying the cultural context is valuable and necessary to communicate emotional qualities in songs.

The following provides an example of emotional or affective outcomes in the music learning environment by Wolverton (1989:33):

The composer, Holst, set a collection of folk songs to music. The text is a story of a young Englishwoman, Nancy, who is in an insane asylum, awaiting the return of her lover. As the young woman babbles about her misfortunes, the listener can only speculate on the reasons why the lover's parents have send the son off to sea. The text reveals how love can cause deep sorrow as well as joy. The affective outcomes are that all learners will be able to describe the emotions that they might feel if placed in the unfortunate position of Nancy (receiving level). Another affective outcome is that the learners will be able to cite differences between Victorian attitudes towards mental illness and those of today (valuing). It can be in the form of dialogues or written assignments.

This is also an example of a postmodern view on learning, seeing that it is dialogic and own emotional knowledge is created. To create emotional knowledge intrapersonal and interpersonal intelligence development need to be explored to find ways to develop learning through the emotional side of the learner.

### **3.3 INTRAPERSONAL AND INTERPERSONAL DEVELOPMENT THROUGH MUSIC**

Interpersonal intelligence is the understanding of other people. It is a form of intelligence that is able to distinguish between feelings, emotions, values, opinions and other emotional



qualities. There are a multitude of opportunities to develop interpersonal intelligence in the music learning environment. An example of this specific intelligence in the music learning environment comes to the fore when learners have to agree on the interpretation of a piece of music to be performed. It involves interpersonal intelligence to gain understanding of the diversity of opinions and emotions of the different learners in the group. Music making is very often a cooperative activity in the music classroom.

Social communication and interaction feature very strongly in the music learning environment. The learning environment must make provision for the learner by means of appropriate opportunities to broaden his understanding of the social aspect of the reality. The learner needs activities to explore and discover his or herself in communicating with other learners.

Although the learners work in groups, the postmodern learner is a democratic learner with an own opinion. The music environment provides the perfect opportunity to voice an own idea or opinion. An example of active participating may be an assignment to practice a song in two parts, soprano's and alto's. The assessment criteria are the blending and matching of the voices. The learners work in a cooperative way with a unitary goal. Personal views on choice of songs to be sung and practice is important to get them actively involved in own learning. Feelings of trust and belonging to the group are installed, but also ways to mediate conflict that arises. Learners should learn to interact with peers in a positive way. Not only is this an exercise in developing interpersonal intelligence, but critical thinking and meta learning also takes place. It assists the learner to learn to communicate effectively in the process of making music. Music is par excellence a domain to develop the ability to understand other people, but also an understanding of the self.

Learners should also get the opportunity to develop intrapersonal intelligence and to respond to innate qualities in themselves. Gardner (1993:143) claims that:

*Artistic learning does not merely entail the mastery of a set of skills or concepts. The arts are also deeply personal areas, where students encounter their own feelings as well as those of other individuals.*

The arts, and in this case music, are a means through which the learner in the postmodern learning environment can be assisted with attaining personal understanding through introspection. The learner develops an acceptance for strong and weak qualities of the

personality. Learners should get the opportunity to work independently and privately to heighten self-concept. Personally useful values of their own culture, as well as values like diversity, tolerance, freedom and creativity, can be achieved in and through group music on primary school level.

Intrapersonal intelligence is a higher-order reasoning ability. According to Slabbert (1996:136-137) intrapersonal intelligence makes development of human potential possible, because it constitutes the interrelatedness of the intelligences manifested in the wholeness of the learner, which is embodied in meta learning.

The way to monitor intrapersonal intelligence development is by using the following strategies:

- ✓ A thinker's log - It consists of the learner's own collection of responses to own learning and class experiences. It can also be called meta cognition. It is the process of thinking about thinking. It gives the learner the opportunity to be aware of own thinking and to use this awareness in developing own learning. Kirkby and Kuykendal (1991:40) propose that the learners realize that they have mental repertoires and that they must see intelligence as a set of incremental abilities to be developed over time.
- ✓ A portfolio - The portfolio is to keep track of work done, the visible evidence of their minds' work. In the music learning environment the portfolio includes drawings of musical experiences, essays, recordings of own and group efforts, scores of own and group efforts, choreography of dances, performance planners etcetera. Holliday (1993:34) believes that the portfolio assists the learner in thoughtful reflection about what is being done in music education, about also his feelings on certain issues. The most important is that the learners learn to think critically.
- ✓ A working plan - This plan can be a map, drawings, list of steps etcetera. It is a way to accommodate different intelligences and thinking styles. The learners gets the opportunity to think before they proceed and to develop own learning. In music education a whole stage production which includes the different elements of music may serve as an example of working plans.
- ✓ Auditing - A report on progress.



- ✓ Reflecting - When portfolios are ready to be evaluated, reflection on completed work is most often missing in the process of getting the learners to think about their performance. It is an opportunity to develop learning by reflecting on different questions such as how the task was approached, what was easy and what was hard, when did they become most involved, what would they like to do more and what would they do differently next time. The postmodern world is an emotionally stressful world. It is an interesting creative world, but also an ever-changing world, which offers little security to the learner.

### 3.4 ANXIETY AND STRESS IN A POSTMODERN WORLD

According to the journal *Teaching Music* (1999:35) there is a growing evidence from music therapists and physicians that music can be used to manage the effects of anxiety and stress in the learner. Campbell (1997:69) informs that the Norwegian educator, Olav Skille, devised musical baths where learners with severe physical and mental disabilities were immersed in sound, and found that music reduced muscle tension and relaxed the learners. These methods spread to other parts of Europe. Environmental noise, ever present hammering rock music and grating commercials on the television, are the sound worlds most learners live in. Anxiety and stress can be reduced by taking control of an own preferred sound world.

Merrit (1990:84) explains that music has such a great influence on our lives, because *we are music*. The body responds unnoticed to many different sounds. These sounds resonate through us. The quantum physicists have found that matter is really energy and energy is vibration. People are in a constant state of becoming and so is music. Jensen (1995:218) confirms the statement and points out that researchers have found that music raises the molecular structure of the body. The body resonates at a stable molecular wavelength and music has its own frequency. The wavelengths may either resonate or conflict with the body's own rhythm. When both responds at the same frequency the learner learns more effectively and are better aware and alert. Educators should be aware of the symptoms of stress and anxiety and explore ways and methods to help learners relax. It will give the learner the opportunity to use the same methods in their private lives.

Fitzsimmons (1998:2) lists the stages of frustration, which leads to violent behaviour as well as solutions, as follows:

- ✓ Anxiety - Learners use nonverbal cues like sighing. The educator can respond by

active listening and non-judgmental talk.

- ✓ Stress - Learner exhibits minor behaviour problems. Educators can respond by boosting interests and providing assistance with assignments.
- ✓ Defensiveness - Learners argues and complaints. Educators can remind students of rules, use conflict resolutions and encourage learners to ask for help.
- ✓ Physical aggression - The learner has lost control and may bite, hit, kick and throw objects. Educators must escort the child from class, get help, restrain if necessary and protect safety of other children in class.
- ✓ Tension reduction - Learner releases tension through crying or verbal venting. The opposite can also happen when the learner becomes sullen and withdrawn. Educators can use supportive or punishment techniques and help the learner to gain insight into feelings and behaviour.

The learning environment has to assess and offer the learner alternative perceptions of themselves and skills for coping in a postmodern world. The school curriculum can offer a valuable contribution in the form of primary prevention. Robinson and Rotter (1991:2) proposes the following:

- ✓ The first level focus on developmental guidance with activities designed for all children to develop a sense of control, security and self-worth.
- ✓ The second level should focus on children of higher risk: Children who were exposed to traumatic events.
- ✓ The third level are those children who are experiencing a lack of effective coping regarding fear and anxiety.

An example of assisting learners in reducing stress by making use of active movement and music may be the following (Campbell 1997:70):



- For three minutes play music while the learners do stretching exercises. Spanish guitar music is excellent for this purpose.
- Now dance and move around to more active stimulating music.
- Finally, lie down to slower movement of a Mozart's string quartet or a Mozart symphony. The slower music helps the body to centre itself, feel refreshed and cool down.

Merrit (1990:126) points out that it is a misconception that music for stress management is only calm, soothing music. Releasing pent-up emotions is ultimately more relaxing. Learners need to air their anger. Musical suggestions are Beethoven's "*Egmond*" Overture, the Brahms's Piano Concerto no. 1 and Tchaikovsky's Symphony 5.

Postmodernism does not provide a complete solution to all problems, but an option for understanding the current crisis in education and society. Postmodern critics must be given the necessary recognition as western science has not come up with final answers to the many problems we face in the twenty-first century. The critics believe that a new paradigm is needed with a new way of looking at reality. We need fundamental change in our thoughts, perceptions and values. When learners listen to music they respond holistically - mind, body, emotions, which has an effect on the spirit (Merrit 1990:115-116).

### 3.5 MUSIC THERAPY

#### (i) INTRODUCTION

The postmodern world is a stressful world and the therapeutic qualities of the music learning environment is an option in developing the learning potential through touching the emotional side of the whole person. Music soothes, calms, heals and brings joy and beauty to people in the complex world. Learners may benefit from these qualities in the music learning environment - not to replace the music therapist, but to assist learners in recognizing and using the therapeutic qualities of music. The psychologist and phenomenologist, Rogers, views therapy as a method of learning to be utilized by curriculum workers and teachers. Positive human relationships enable people to grow. Interpersonal relations among learners are just as important as cognitive growth (Ornstein and Hunkins 1993:131).

It is notoriously difficult to find a definition for music therapy that will suit all people in all context. The following definition is from the Australian Association for Music Therapy (Bunt

1994:6):

*Music therapy is the planned use of music to achieve therapeutic aims with children and adults who have special needs because of social, emotional, physical or intellectual problems*

Bunt (1994:9) maintains that in the area of learning difficulties it became increasingly clear that music therapy could help maintain and develop such areas as physical skills, cognitive potential, motivation and others. Music therapy contributes more to some persons life than general enrichment only. It is not about occupying people for a short time with music or an entertaining activity. Many expressive-arts therapists, including music therapists, would agree that their work embraces such humanistic goals as *"helping individuals to realize their potentials"*. Another psychologist with views on realizing human potential is Carl Jung, who maintained that healthy personal and spiritual growths are dependant on the integration of the conscious and unconscious (Merrit 1990:161).

Merrit (1990:47) adds to the positive advantages of music therapy in the learning environment to develop learning potential. Music puts the learner in touch with own inner feelings, which can then be explored and expressed in different ways. Aggression and anger, when allowed to come to awareness and worked through, are less likely to cause disruptive behaviour. The inner process that takes place helps the learner to learn more effectively, because music has the capacity to reach non-verbal places. As learners listen to music in a relaxed receptive state of mind, it evokes positive emotions and blocks negative emotions.

## (ii) THERAPEUTIC QUALITIES OF MUSIC IN THE LEARNING ENVIRONMENT

Music as a therapeutic means, must be considered seriously and incorporated into the curriculum of the learning environment. There are different ways of drawing upon the therapeutic qualities of music, namely:

- ✓ Beginning of the day - Merrit (1990:50 & 54-55) supplies the confirmation of a high school teacher who, experimenting with starting the school day with a few minutes of music, found that the learners were more receptive to learning. If the learners seem to be unenergetic, even in the morning, ask them to put their heads down on their desks, close their eyes and let their imagination follow the music. Play four minutes of *"The four Seasons - Spring"*, of Vivaldi. Let the learners briefly share their



imagery. Other compositions for waking up are Telemann's String Compositions, the Haydn String Quartets, Grieg's Peer Gynt Suite - "*Morning Mood*", Giuliani's Guitar Concertos, Mozart's Piano Concertos and Telemann's Flute Compositions.

- ✓ Background music - During activities in the classroom when silent desk work is being done, such as reading, story telling, art or written assignments, play one of the Brandenburg Concertos. When a story is read with music an open focused state is created, because the music allows large amounts of information to be absorbed because the listener's attention is not narrowly fixed on the task at hand. It has the relaxing, soothing qualities that provide structure, grounding and balance to improve concentration. It may also be used when learners have to move around outside the classroom, as on the school corridors or entering the school hall. Campbell (1997:178) uses the example of music being played on a school bus, which lessened inappropriate behaviour of the school children. It is also reported by researchers that light pop music, especially songs by the Beatles, reduced the rate of inappropriate behaviour. It may be valuable to increase positive behaviour and result in a calm relaxed learner. It is beneficial to study and memorize with Baroque music such as Pachelbel's Canon in D.
- ✓ Resting periods - During smooth transition from one activity to the next. Campbell(1997:179) claims that music allows the sensory integration to take place, necessary for long-term memory.
- ✓ Stimulating activities - For stimulating activities such as creative writing, it is a good idea to play Mozart's "*Eine Kleine Nachtmusik*". It opens the inner creative self. Merrit (1990:54) advises the following procedure: Have learners stand up and take deep breaths. Then have them shake the kinks out of their bodies. To focus their minds, make them bring to mind an image that relates to the topic at hand, while closing the eyes and listening to the music. When the music is over, play it again and make the learners write about the experience. Ask volunteers to come and share their adventure with the class.
- ✓ Relaxed concentration - The mathematics environment needs a state of relaxed concentration. Baroque music is suitable for structured stimulation.
- ✓ After breaks - After recess or outdoor activities learners may be over excited and

hyperactive. Ask the learners to lie down or put their heads down on the desk or table and listen to three or four minutes of calming music such as Pachelbel's Canon in D, the slow movement of a Vivaldi Flute Concerto or Massenet's "*Dimanche Soir*" from *Scenes Alsaciennes*. The music soothes and the structured beat makes them feel secure (Merrit 1990:49-50).

Other suitable compositions are Bach's "*Air on a G string*", Bach's Sonata no. 4 for Flute and Harpsichord - "*Siciliano*", Debussy's "*Clair de Lune*", Haydn's Cello Concerto in C major (second movement), Mozart's Flute and Harp Concerto (second movement).

- ✓ End of day burnout - Use the fast movement of Vivaldi's "*Four Seasons*".

### (iii) CHOOSING THE MUSIC

Merrit (1990:61-62) claims that most therapists and brain scientists who have studied the effect of music on the brain, agree that classical music has the greatest therapeutic value and potential for enhancing self-knowledge and self-development. But, all classical music is not suitable for therapeutic activities. Campbell (1997:27 & 29) believes that Mozart's music has unique properties which elicit universal responses. Rhythms, melodies and higher frequency of Mozart's music stimulates the creative and motivational regions of the brain. Mozart embodied and transcended his era. Musically he stands between the Baroque era and the Romantic era. He lived in the Classical era and it was a time where Western societies were reorganising in fields like politics and religion with people like John Wesley, Voltaire, Thomas Jefferson, Mary Wollstonecraft and Goethe. It was a time of freedom of spirit and Mozart's music depicts elegance and deeply felt sympathy for the people of the time. His music is a symbol of "*the innocence, inventiveness, and promise of the birth of a new order of the ages*".

Rock music cannot give the inspiration and spiritual connection that people need. Therapeutic qualities cannot emerge from chaotic, disturbing sounds, because they disrupt the rhythm of the body and mind. A centred, almost meditative state is necessary to slow down the physiological functions to access the deepest thoughts and insights of the human being. It is not the relaxing part that is important, but also the concentration and motivation. Merrit (1990:69 & 71) quotes Diamond who has found that some kinds of rock music have a debilitating effect on the system, because it has an anapaestic beat, in which the last beat



of the measure is stressed and there is a slight stop before the first beat begins again. The rhythm is counter to the body's natural organic rhythm. The body enters a state of alarm and it causes a great deal of stress, which leads to hyperactivity and restlessness. Other symptoms are loss of energy, negativity, depression, isolation, feelings of hopelessness and aggressive behaviour. The stress in the body causes the left and right brain hemispheres to be thrown off balance and the reptilian brain takes over, which serves the instinctive part of the brain which specialized in routine and ritual. Campbell (1997:33 & 34) helps us understand that sound creates physical forms and shapes which influence our health, consciousness and behaviour. Vibrating sounds form patterns and creates energy fields of resonance and movement which interact with matter and this has an influence on the cell, tissues and organs of the human body. Sound can bring about positive, but also a negative change. Rock concerts are among the worst threats to the health of young people.

The New Age music is an emerging genre that is used for relaxation and meditation. The themes are often cosmic, global, environmental and ethnic. It is simplistic in structure, which often lacks direction or a distinct melody line, and has spatial and open qualities useful for relaxing and meditating.

According to Merrit (1990:51 & 73 & 74) no hard and fast rules exist to which music to use. There are only guidelines, because the reaction and response of the learner are the measuring instruments. Baroque music (1600-1750) is structured and ordered. It is effective for kwhole brain integration. Classical music (1750-1820) has frequent changes in tone colour, with clarity and poise. It is effective for stimulating associations in the brain, trigger memories and creativity. The Romantic period (1820-1900) has an individualism and uniqueness and is highly personal music with strong emotional polarities. It helps for an outpour of feelings. The Impressionistic period (late nineteen and early twentieth centuries) has a dreamlike quality with subtle moods. It is very powerful in evoking images. Most modern music is not used for learning or self-exploration. The reaction and responses of the learners are the measuring instrument. The following is a list of general tendencies when choosing music for therapeutic use (Campbell 1997:78):

- ✓ Gregorian chants - The rhythm of general breathing is used to create a relaxed sense. Use for study and mediation or to reduce stress.
- ✓ Slower Baroque music - Imparts a sense of stability, order, predictability and safety. Use for stimulating environment for study or work.

- ✓ Classical music - It has a sense of clarity, elegance and transparency. Use to improve concentration, memory and spatial perception.
- ✓ Romantic music - Express feeling such as themes of individualism, nationalism and mysticism. Use to enhance sympathy, compassion and love.
- ✓ Impressionist music - Based on free-flowing musical moods, impressions and dreamlike images. Use for musical daydreaming when learners are engaged in visualizing activities, creative impulses when busy with creative work and to unlock the strength of the unconscious.
- ✓ Jazz - It is dance forms that came from expressive African heritage. Use to uplift, inspire release, deep joy, sadness, wit, irony and affirms common humanity. The emotional qualities of the learners are awakened with this music.
- ✓ South American dances - These are different dances with a lively beat like the samba, rhumba, maranga and macarena. Use to get the body moving. The samba has the rare ability to sooth and awakens at the same time.
- ✓ Pop music and country and western music - Inspires light to moderate movement, engages the emotions and creates a sense of well being. Use to relax learners.
- ✓ Rock music - Stimulates active movement, release tension, mask pain and reduce unpleasant environmental sound. It can also create tension, dissonance, stress and pain when we are not in the mood to be energetically entertained. Use to reduce The language of the heart reaches areas of the brain, such as the right brain hemisphere of the cerebral cortex or the limbic system which do not respond to purely intellectual communication stress and tension in learners.
- ✓ New Age music - Has no dominant rhythm. Use to elongate a sense of space and time. Induce a state of relaxed alertness.
- ✓ Heavy metal, punk, rap, hip hop and grunge - It excites the nervous system and leads to self expression and dynamic behaviour. Use to release self expression in the learner as well as inner turmoil.



- ✓ Religious and sacred music - Leads to a feeling of deep peace and spiritual awareness. Use to help learners to transcend.

Playing music in the learning environment helps to create a dynamic balance between the more logical left and the more intuitive right hemispheres of the brain. This interplay between the two brain hemispheres is thought to be the basis of creativity (Campbell 1997:66). The following are a variety of possibilities for the learning environment. The lists provide music for the hyperactive learner, but also for the general primary school learner.

Table 3.6 Music for the hyperactive learner (Merrit 1990:57-59)

J. S. Bach	Air on a G string Arioso from Cantata no. 156 The Brandenburg Concertos
Brahms	Violin Concerto (second movement) Lullaby
Haydn	Water Music
Mendelssohn	Cello Concerto in C major (second movement) On Wings of Songs
Mozart	Concerto for Flute and Harp
Pachelbel	Canon in D
Vivaldi	The Four Seasons

Table 3.7 Music for the primary school learner (Merrit 1990:58-59)

Beethoven	Romance no. 1 for Violin and Orchestra in G major
Handel	Water Music
Haydn	Symphony no. 82 in C major Symphony no. 101 in D major <i>The Clock</i>
Leopold Mozart	Children's symphony Peasant's Wedding A Musical Trip with a Sled
W.A. Mozart	Violin Concerto no. 5 in A major Eine Kleine Nachtmusik Piano Concerto in F major

Tchaikovsky	Violin Concerto in D major The Four Seasons Twelve Pieces for Piano
Vivaldi	The Four Seasons
Bizet	The Children's Games
Chopin	Piano Concerto no. 1
Debussy	The Children's Corner Golliwog's Cakewalk On Wings of Songs
Mendelssohn	Mother Goose Suite <i>The Empress of the Pagoda</i> and <i>The Fairy</i>
Ravel	<i>Garden</i>
Schumann	Scenes from Childhood <i>From Foreign Lands and Peoples</i> and <i>A Curious Story</i> Traumerei
Villa-Lobos	The Family Dolls

It is important to note that certain writers feel that other music besides classical music, such as New Age music, can also be of help to learners. The following is a list of New Age music suitable for the learning environment.

Table 3.8 New Age Music (Merrit 1990:77-78)

Patric Ball	Celtic Harp Secret Isles
Rusty Crutcher	Machu Piccu Impressions
Deuter	Nirvana Road Cicade
Steven Halpern	Zodiak Suite Lullabies
Janalea Hoffman	Music for Mello Minds
Japetus	The Great, Great Silence
Kitaro	Silk Road Suite



Daniel Kobialka	Kobialka Performs Path of Joy
Annie Lock	Memories
Carolyn Margrete	Emerald Season
Radhika Miller	Lotus Love Call
Enya	Paradise Island
Paul Winter	Wind Shadows Fairy Ring
Andreas Wollenweider	Tropic of Paradise
Georghe Zamfir	Spirit Wind
Zeno Okeanos	Watermark
Kim Robertson	Common Ground Canyon Suite
Mike Rowland	Icarus
Soundings of the Planet	Down to the Moon
Richard Warner	Classical Zamfir

### 3.6 CONCEPTUAL FRAMEWORK FOR THE EMOTIONAL DEVELOPMENT OF THE LEARNER IN THE MUSIC LEARNING ENVIRONMENT

The conceptual framework illustrates the development of learning through the emotional side of the learner in the music learning environment (figure 3.2).

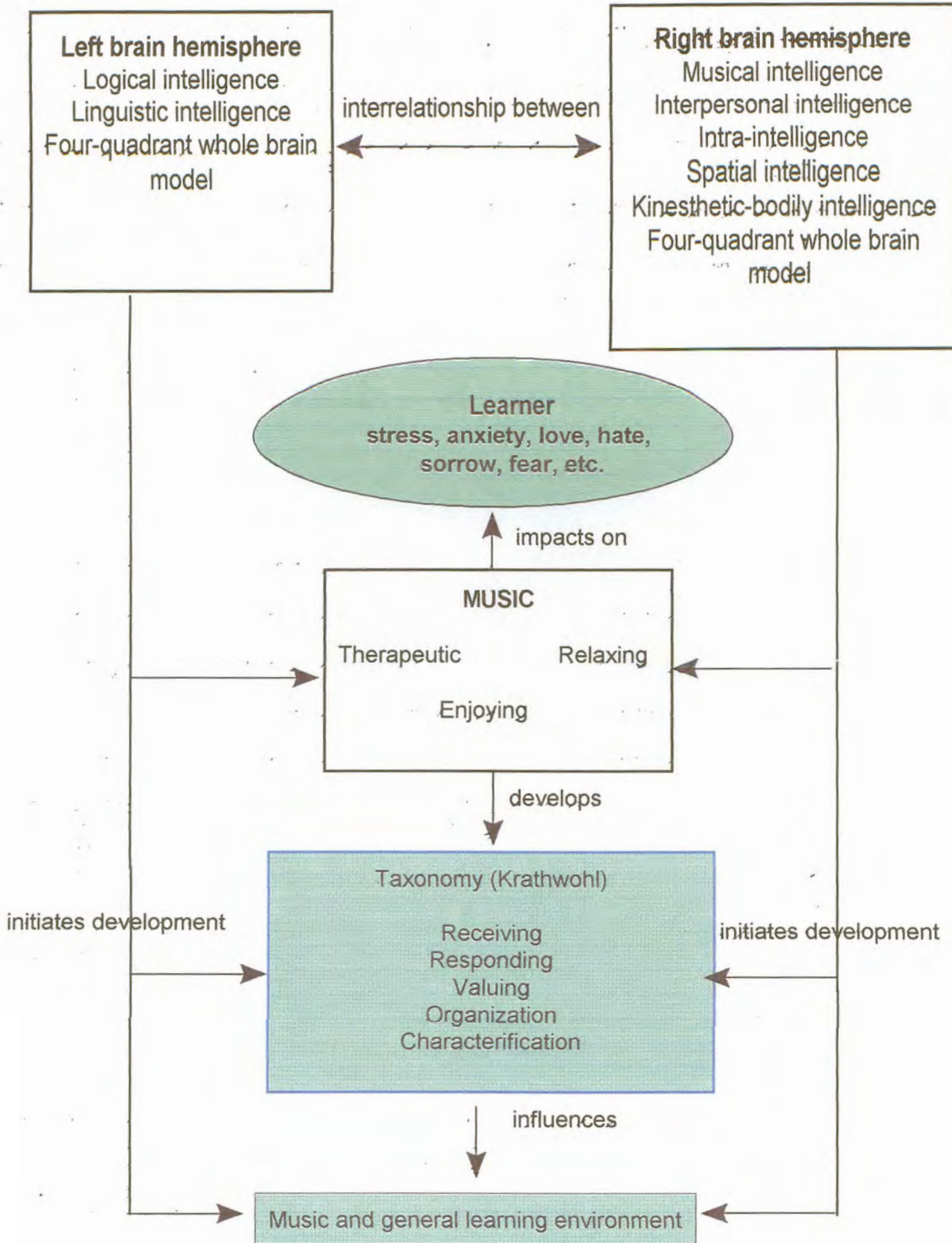
## 4. SPIRITUAL DEVELOPMENT

### 4.1 INTRODUCTION

To educators the inner or spiritual world is mostly a strange and often unaccepted world. Although people are world-wide entering a time when personal growth and spiritual transformation are slowly gaining recognition, it still is in transition:

Figure 3.2 Emotional development of the learner through music

EMOTIONAL DEVELOPMENT OF THE LEARNER THROUGH MUSIC





*There is an inner reality. There is a valid world inside our minds that is as valid as, if not more valid than, the world outside us (Meritt 1990:2).*

The left brain hemisphere focus of the modern era made people believe that what they cannot see, touch, manipulate or understand, is not significant to their lives. To function as a whole person a relaxed body is needed, a focused mind, and an unimpeded flow of emotions - the energy and perspective of our spiritual life.

The value of spiritual development in the postmodern learners are accelerated learning, higher levels of retention and recall, and higher levels of interest in learning content. Spiritual development in the music learning environment can be stimulated by relaxed conditions, silence, focused attention, receptive - non judgmental attitudes, an ability to utilize the whole brain, a stimulating learning environment and educators who encourage spiritual development. Because anxiety and stress are part of the postmodern world the learners life in, developing relaxed states in learners to develop learning potential is an essential achievement in the music learning environment. It is well known that music has a great influence on the spiritual life of people. The expressive arts will continue to be the means by which man transcends the restraints of a postmodern reality.

#### **4.2 ANCIENT WISDOM OF THE PAST**

Van der Walt (1995:47) explains that it is very interesting and important to move back into the past history of man, and to discover the remarkable insight ancient people had about the role music played in their lives and their society. To primitive man sound was an extremely stimulating experience and popular myth explains that an ancient god created the world from sound. The myth claims that everything that exists materialized into permanent form because of sound. Human beings, for example, were created by a god playing a flute or shell horn. It is believed that through the sound connection that exists between everything in the world, human beings can under the influence of music, utilize primitive power. All cultic activities, such as offerings to forefathers, adjuration of the powers of nature and animals originated here. In primitive cultures music intensified life experience and was a form of ecstasy to overcome the sublime.

In recent times, there has been renewed interest in the use of music. The ancient wisdom of the past about the use of music is being rediscovered. The role of group music in the learning

environment should be adjusted to realise its important role in the postmodern world.

### 4.3 INTUITION

People like Plato, Newton, Da Vinci, Einstein, Mozart and other great inventors, artists and philosophers were responsible for changing the culture, art, mathematics and science scene of the world. The interesting fact about these people, is that they all wrote about intuition in their great discoveries and creative contributions. Spiritual abilities were highly valued by these people, but the use of spiritual abilities is mostly ignored or inhibited in the learning environment (Clark 1986:160). Merrit (1990:165) confirms the importance by referring to Jung, who claimed that intuition, thinking, feeling and senses are normal functions of the human psyche. Ornstein and Hunkins (1993:127) agrees that intuitive thinking is not a new concept, but has been overlooked in the past. The reason may be that it does not rely on facts or rote learning and is difficult to define. Good thinkers not only have knowledge but also intuitive grasp of the subject.

Clark (1986:160-161) claims that according to neurobiologists the prefrontal cortex is the most unique area of the brain, because it is not part of the animal brain, but only part of the human brain. The function of this part of the brain includes the basis for intuitive thought. The intuitive process seems to be highly synthetic and dynamic, drawing from, and integrating all other brain functions. Intuition is the least discussed, researched and most ridiculed by other intelligences. Creativity is linked to intuition and it seems to be the same human ability as intuition. It is the expression of the highest level of human intelligence. Torrance and Safter (1990:5) feel that rational thinking, intuitive and creative thinking are necessary. Educators do not have to choose between them, but if forced to choose the intuitive and creative thinking represent mankind's highest thinking ability. Gardner (1998:28) mentions that he is in the process of pondering whether other intelligences should not be added to the list of seven intelligences. It is appropriate to add an eighth intelligence, namely naturalistic intelligences, and a spiritual intelligence is being considered. Spiritual intelligence is a deep human capacity that all people have, but which some people have in abundance.

Clark (1986:161) discusses three levels of intuition, namely:

- ✓ Rational intuition - This is a level of intuitive behaviour that adjusts known information in such a way that new insight emerges. It is not new information, but known facts, seen in a new light, for example to solve a problem. This area of intuition relies on the



synthetic characteristic of the intuitive process. It combines consciously known information and processed information that are no longer consciously available and new patterns seem to emerge.

- ✓ Predictive intuition - This level enlarges upon the rational intuition level by including new information into existing patterns. The unconscious information of unknown sources becomes an important part of the new insight. Some call this process creativity, but it is also called the *ah-ha* experience and it appears when the person is relaxed or involved in something entirely differently. At this level the mind perceives in a holistic fashion and not in a linear mode. Edwards (1986:35) explains that in the right hemisphere mode of information processing, intuition produces the leaps of insight without figuring it out in a logical order. The *ah-ha* response is what Archimedes experienced as a flash of insight while bathing. It enabled him to produce the principle of using the weight of displaced water to determine the weight of solid objects.
- ✓ Transformational intuition - This is the most fascinating and awesome process of all three intuitive levels. It seems as if the person using this information picks it up through means that has defied scientific understanding. It is a transcendental level of experience and can be observed in the brain as a change of the rate of correlation between brain waves and separate regions of the brain. Eastern mystics and other religions seek this state of knowledge.

A problem in the education systems of the western world, as opposed to education in the east, is that the concept of the supra-rational, where the consciousness transcends the boundaries of the rational and enters into an altered state of consciousness, namely a holistic state of awareness, is still not fully accepted. Torrance and Safter (1990:5) quote a famous Japanese neurosurgeon who uses the terms *logos* and *pathos* in the book *The Japanese Mind*. The two terms characterize the difference between the Japanese and Western mind. The Japanese culture stresses intuitive thinking over logical thinking. Torrance and Safter (1990:6) have become convinced that the future education requires a type of education that goes beyond the development of rational thinking. In Japan the *satori* describes excellent thinking which is similar to the Greek word *eureka* and our concept of a-ha. In a certain way it differs from *a-ha*, because it takes many years of training and the highest point available is *satori*, or a sudden flash of Enlightenment.

Bradman (1997:3) explains that in a meditative state the eyes are closed and the inner hearing takes precedence. Most religions exhort the believer to *hear* as in the quote from St. John in the New Testament “*everyone that is at the truth heareth my voice*”.

Music may be used to enhance intuition. Music is immediate and moves and changes all the time. It encourages the grasping of concepts instantly, without reason or analysis.

#### 4.4 IMAGERY: NOT JUST VISUAL

Campbell (1997:156) explains that *imagery* is mostly perceived as visual, but the term embraces all the senses and kinds of sense memory. Recollections of a smell, a sound or a visual image are examples of *imagery*. Images elicit physiological and psychological responses. They set your blood racing, evoke memories, inspire visions and can transcend reality. Images are called archetypes when associated with abstract concepts such as goodness or mysteries of life. Powerful images are called *icons* such as a bust of the Virgin Mary. Many forms of prayer and meditation employ imagery as a tool to focus and concentrate energy.

Barrel (1983:45) claims that playing with ideas in the mind is the outgrowth of children's play and often results in novel ideas, new perspectives and the setting of hypotheses. It is called imaginative play and is an essential component of reflective thinking. The learning environment must learn to value imagination, intuition, emotion and playfulness. A definition for *imagination* is the following:

*Imagination is the ability to transcend conventional and accepted ways of thinking and acting to transform facts, ideas, and concepts into novel combinations. It is the ability to form, manipulate freely, and react emotionally to images in the mind. In a very real sense, it is the foundation of all thinking ... (Barrel 1983:45).*

Merrit (1990:149) mentions the names of Einstein and Leonardo da Vinci who did not rely completely on rational thinking, but turned to inner thinking for problem solving and to enrich their lives. Associated thinking and imagery are necessary for innovative and high-order thinking. Barrel (1983:45) claims that at the age of fifteen, Einstein visualized himself riding along a ray of light at 186,000 miles per hour. Ten years later his imaginary play ended in the theory of relativity. A characteristic of productive thinkers is flexibility of thoughts. It is very



valuable to place learners in a “*What if?*” situation, because not only academically strong learners, but also average learners are engaged in critical thinking. On the long term intellectual and emotional abilities are being developed (Barrel 1983:46-47).

Music enhances the power of imagery. Imagery play, with the help of music, can increase learning capacity, because the energy used for abstract thought and higher verbal skills is directed inward and connects with the emotions. Without the psychic energy emotions are vacuous and easily forgotten. Learners have to spend more time inside themselves in imaginative play (Merrit 1990:148).

Practising imaging skills may be done as follows:

- Ask the learners to make themselves comfortable.
- Explain that they should be aware of the images coming to the mind. Then ask the learners to imagine themselves in a favourite place outdoors. Turn Ravel's Introduction and Allegro or Debussy's *Prelude to the "Afternoon of a fawn"* on.
- After listening to the music write the different images that came to mind down without thinking (Merrit 1990:171).

The following activity is an example of the exploring of emotions through the use of instruments and imagery.

- Ask the learners to choose an instrument on which they want to play how they feel.
- Each learner gets the opportunity to play out his feelings, while peers listen and comments. The teacher picks up on some of these emotions that should especially be expressed - anger, depression, love etcetera.
- One emotion is picked and the learners are asked to imagine a time when they experienced this specific emotion. While visualizing the emotion, take the instrument and make sound.
- Expressing hidden feelings are very beneficial to learners.

The following is a list of music suitable for enhancing creative imagination (Merrit 1990:172, table 3.9):

Table 3.9 Music to enhance creative imagination

Beethoven	<i>Symphony no. 6 (Pastoral)</i>
Berlioz	<i>Harold in Italy</i>
Bloch	<i>Schelomo</i>
Britten	<i>Four Sea Interludes from Peter Grimes</i>
Copland	<i>Lincoln Portrait</i> <i>Quiet City</i> <i>Appalachian Spring</i>
Delius	<i>Florida Suite</i>
Dvorák	<i>Slavonic Dances</i>
Haydn	<i>Creation</i>
Hovanhess	<i>And God Created Great Whales</i>
Ravel	<i>Daphnis and Chloe, Suite no.2</i> <i>Mother Goose Suite, The Fairy Garden</i>
Sibelius	<i>The Bard</i>
Smetana	<i>The Moldau</i> <i>The High Castle</i>

#### 4.5 CONCEPTUAL FRAMEWORK FOR THE SPIRITUAL DEVELOPMENT OF THE LEARNER IN THE MUSIC LEARNING ENVIRONMENT

The conceptual framework illustrates the spiritual development of the learner in the music learning environment (figure 3.3).

### 5. PSYCHOMOTOR DEVELOPMENT

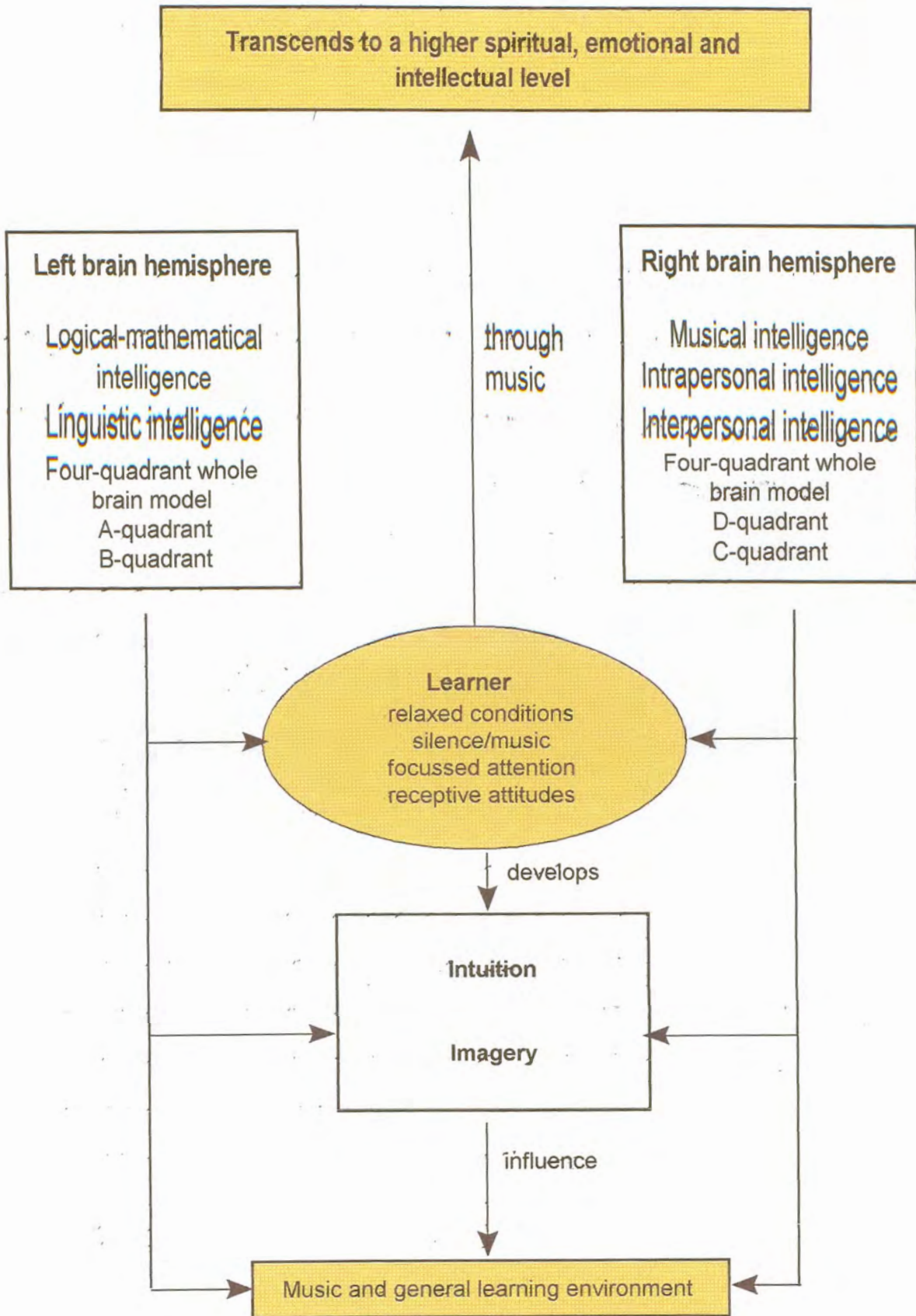
#### 5.1 INTRODUCTION

The Concise Oxford Dictionary (1995:1105) defines *psychomotor* as relating to the origination of movement in conscious mental activity. Van Walbeek (1998:30) extends the definition by adding that it is accurate, fast, flowing movements, which needs coordination and control of different muscles groups in the body. Another added dimension to the concept is that it involves cognitive and affective aspects. The development of psychomotor qualities in the learner therefore strengthens the holistic developmental approach. Shehan (1987:25-26)



Figure 3.3 Spiritual development of the learner through music

**SPIRITUAL DEVELOPMENT OF THE LEARNER THROUGH MUSIC**



explains how the different activities in the body make a musical performance possible. Sound production, using the human voice, the body or an instrument, is direct and exact movement of the performer. The brain channels messages in the form of electric impulses to certain nerves which send these codes to the muscles and the movements are performed. The performance skills are thus controlled by the brain and the motor system. The intricate motor tasks of the musician and the aural mechanism are responsible for the great accuracy needed in musical performance.

A child's movements are quite natural until entering primary school where the opportunity to move is usually restricted. An important factor to be aware of is that children learn through being physically active and it must therefore be a natural part of the learning environment. Clark (1986:34) confirms that the observation was made through brain research that physical movement is important to learning:

*The purposeful change of place, position or posture as part of the learning process, and physical encoding - the learning process which uses the physical body to transfer information from the abstract or symbolic level to a more concrete level - are integral to movement, and can produce more precise learning with a higher rate of retention.*

According to Van Walbeek (1998:29-30) movement develops various abilities in the learner: Listening ability where learners analyze sound and then react to it, intellectual development, emotional development where creative movement to music has the potential to develop affective qualities in the learner, social development, psychomotor development with cognitive, affective and an autonomous phase, somatic and creative expression.

Other educationalists agree on the importance of psychomotor development in various fields of education, including music - which entails a large component of motor abilities. Four music educationalists mentioned in this section of the study, developed learning models of movement and music. They are Dalcroze, Kodály, Carabo-Cone and Orff (Schulberg 1981:198). Wood (1987:35) claims that the motor process serves as an organizing function for perceiving, conceptualizing and understanding of music and is therefore a key element in the general music curriculum. The accomplishment of psychomotor development in the music learning environment, will now be discussed under the following headings: the psychomotor taxonomy, music and movement, music and dance.



## 5.2 TAXONOMY : THE PSYCHOMOTOR DOMAIN

Although Ornstein and Hunkins (1993:222) claim that the psychomotor domain has received much less emphasis than either the cognitive or emotional domain, different psychomotor taxonomies have been developed to accommodate the psychomotor domain. The value of the taxonomies is the support provided to educators to order knowledge, to initiate structured development and as a diagnostic tool. Psychomotor skills are not isolated within the organism, but interact with the intellectual and the emotional. Two of the psychomotor taxonomies under discussion in this section of the study are, Simpson's work, and Harrow's, which is a hierarchy of development. Peters and Miller (1982:162-170) discusses Simpson's psychomotor taxonomy which consists of five different levels with subdivision. The levels are as follows:

- ✓ Perception - The process of becoming aware of objects, qualities or relations by means of the sense organs, through sensory stimulation from the six sense organs. Music receives all the stimuli except perhaps smell and taste. Stimuli are received, selected to relate to the motor-skill to be executed and translated into meaning. Example: In playing the glockenspiel in group music the learner selects the auditory stimulus of the sound of the instrument he or she is playing. It is filtered to the domain that concerns the correct handling of the mallets and then translated into meaning to provide the correct dynamic touch when playing.
- ✓ Set - This involves mental set (knowledge that is a prerequisite for physical action), physical set (pre-condition to motor activity) and emotional set (attitude and emotional disposition). Example: The learners must know the starting pitch of the song, correct posture when singing and a willingness to sing. When playing the glockenspiel the learners must be acquainted with the instrument, correct posture when playing the instrument and willingness to play the instrument.
- ✓ Guided response - Imitation and trial and error play an important role in psychomotor activities. Example: Young learners imitate the sound quality of the choral instructor and practice a phrase repeatedly until it is satisfactory. The glockenspiel player imitates the educator and practice until playing it correctly and fluently.
- ✓ Mechanism - At this level of the taxonomy motor actions have become automatic. Example: Correct breathing for singers, holding the mallet for glockenspiel players.

- ✓ Complex overt response - This is the level of real musical performance. The response is made with the minimum expenditure of time and energy. It is related to emotional set on a higher level where the performer feels the task at hand is in his grasp. It depends on the performer's mental picture of the task and sequence in its entirety. It is finely a sophisticated muscular control. Example: The musician concentrates on the aesthetic elements of the performance.

Ornstein and Hunkins (1993:222) quotes Harrow who developed a psychomotor taxonomy with several categories. The taxonomy is arranged in a hierarchy where the levels increase in complexity. These taxonomies are useful to the music educator and should be kept in mind when planning learning outcomes.

- ✓ Reflex movement - It includes segmental reflexes and intersegmental reflections. Example: Contracting of a muscle when playing an instrument.
- ✓ Fundamental movement - Walking, running, jumping, pushing, pulling and manipulating. Example: The learner will react on a variety of music stimuli by walking, skipping, running galloping etcetera.
- ✓ Perceptual abilities - These abilities include kinesthetics, visual, auditory tactile and coordination abilities. Example: Dancing.
- ✓ Physical abilities - Endurance, strength, flexibility, agility, reaction-response time and dexterity. Example: The learners improve their flexibility through more complex body movements.
- ✓ Skilled movements - Games, sports, dances and arts. Example: dances.
- ✓ Non-descriptive communication - Expressive movements through posture, gesture, facial expression and creative movement. Example: Create own movement sequence and perform it to music.

Peters and Miller (1982:155-161) proposes five influences on the development of psychomotor skills which in turn may result in developing learning potential.

- ✓ Physical preparation and warm up - For the optimum development of motor skills, muscles must be operating at a functioning level. The advantage of this activity is the



enhancing of the coordination of mind and muscle prior to undertaking the motor task. Example: Before group singing start with low, slow and soft singing.

- ✓ Practice allocation and scheduling - The practising sessions should be distributed rather than one concentrated practice. Place instruments for easy accessibility and a practising schedule is essential.
- ✓ Feedback schedules - The learner must receive information concerning the physical act. Without feedback practising is almost a waste. It increases retention and the learning of psychomotor skills. Making use of a tape recorder or a video tape of the learner's performance is a positive way where learner and educator critically analyze the performance.
- ✓ Task analysis and sequencing - The series of tasks that compromise the motor skill have to be analyzed as well as the ordering of their complexity level. A movement or dancing sequence needs careful analyzing and sequencing.
- ✓ Learning environment - Practice area enables the learner to execute the task properly. For musical work a comfortable, well-lighted and quiet area is necessary or other facilities for group activities like eurhythmics and dancing.

Music is inseparable from movement. There are a variety of movements such as rhythmic movement, external gestures of the performer, internal rhythms of the brain and neuromuscular structure, mysterious movement within listeners such as changes of heartbeat, rate of breathing, attention arousal and deliberate movement to music in dance. Music has therefore to be taught as an activity with a variety of aspects.

### 5.3 MUSIC AND MOVEMENT

Shehan (1987:25) claims that:

*The very basis of our profession and the foundation of music as pedagogy and performance is ultimately and intimately entwined with the physical self. Music the aural art is music the kinesthetic art.*

Gardner (1973:190) states that a characteristic of the young child is the active involvement

with music. Movement is primarily a bodily-kinesthetic experience for the young child. Gardner's theory of multiple intelligences proposes kinesthetic-bodily intelligence as one of the intelligences of human beings. Kinesthetics is the brain's awareness of the position and movement of the body (Concise Oxford Dictionary 1995:746). Kleinman (Moody 1990:127) describes the kinesthetics as sense perception or a sense of space. Every experience is a kinesthetic act - an expression and comprehension of an idea. It includes components of general awareness, space awareness, actions and relationships. Important to this study is the interaction of the kinesthetic-bodily intelligence with other intelligences, such as musical intelligence. Musical intelligence includes kinesthetic, spatial visual and verbal intelligence. Shehan (1987:26) identifies other overlapping categories - the relationship of rhythmic aspects of music to physical responses, the application of movement as an instructional approach (including eurhythmics, clapping, walking and other natural rhythmic behaviours), the development of psychomotor skills and the expressive function of movement in choral and instrumental ensemble performances. Notwithstanding interrelations between different intelligences and overlapping categories of music and movement, rhythm is the underlying element of music and movement.

Rhythm is the most fundamental characteristic of music. The Harvard Dictionary of Music (1983:729) defines *rhythm* as in its primary sense the whole feeling of movement in music. *Rhythm* is movement in time as opposed to *motion* as movement in space (pitch). Shehan (1987:26) explains that the word *rhythm* comes from the Greek word *rhythmos* which means measure. Plato described it as the order in the movements of the body. Rhythmic responses may be intrinsic, but important to teaching and learning is the fact that it may be developed through instruction.

Jacques-Dalcroze employs the natural movements to teach specific concepts such as beat, metre, tempo, patterns and accent. Jacques-Dalcroze found that the body needs to develop with the mind at an early age. The primary appeal to children is rhythm and they respond to music comes naturally. It is physical and the body should be the child's *first instrument*. Jacques-Dalcroze's method is built on certain intrinsic characteristics of the pleasure of rhythmic movement, the confidence it gives, the abilities to hear, comprehend, to interpret music in movement and the invitations to learners to improve and develop individual own ideas. Music is vital and inseparable from eurhythmics and additional to its educational value is its therapeutic value (Schulberg 1981:199). Faber and Parker (1987:44) explain that eurhythmics and dancing have corresponding elements - both are physical training, concern the self in relation with the music, both depend on technique, knowledge and experience,



have a visual component, involve improvisation, composition and evaluation, but the difference is dance is that an art, while eurhythmics is a course of study.

An example of a eurhythmic activity (Faber and Parker 1987:44) is where the learner having to move in space uses certain guidelines.

- Music is improvised on the piano or a recording may be used while the learners shape their activities to fit the nature of the music. Tempo, dynamics, texture, style and other elements of music are expressed. A simple, but fundamental task for the young learner is to step to the beat of music. While walking they express different elements or qualities underlying the music such as legato and staccato.

The following is an example of an activity where eurhythmics may be used successfully. There is an abundance of suitable music, but in this example Bach's Gavotte 11 from the English Suite no. 6 are used as an example as a piece with an ABA form.

- Arrange the learners in two groups. After familiarizing the learners with the music, each group is asked to go outside and create own movements on their chosen section. After the practising section the groups return and the dance is done with the music. The learners have to conduct three mental actions. They have to remember their practised steps, concentrate on when to dance and concentrate on the music. The learner does not learn steps as in dancing, but learns to use his body to solve problems, to enact particular musical meanings in physical space and the challenge is deepened understanding and the ability to produce music (Faber and Parker 1987:45).

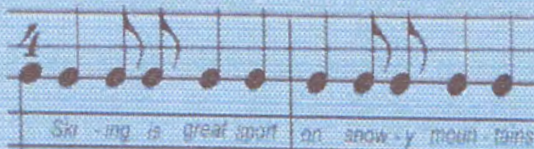
Orff (1895-1982) developed a system, the Orff Schulwerk training, where rhythm, raplike speech, gestures, movement and improvisation with playing simple percussion and melodic instruments are used. Wood (1987:36) claims that movement is fundamental in the Orff process. Feeling precedes intellectual understanding, because free movement is a natural part of a child growing up and should be incorporated into Class Music. The free movement exploration leads to more directed activities that reinforce musical elements. Movements are used in combination with other concepts or elements of music. An understanding of the different elements of music takes place through body movement such as clapping, stamping, finger snapping and patchen. It differs from the method of Jacques-Dalcroze in that it is a combination method of speech, movement and music, with above-mentioned activities.

An example of an echo patchen, stamping, clapping and finger snapping for the higher




grades is the following (Wheeler & Raebeck 1979:14-15).

**Skiing is great sport on snowy mountains**




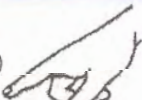






Ski - ing is great sport on snow - y moun - tains

Snap fingers  
 Clap  
 Patchen { left knee  
           right knee  
 Stamp



Kodály applied movement as a natural accompaniment to the singing of the young learner. Movement is used to help the singer understand the relationship of pitches to tonalities and movement is used to facilitate music reading. Movement is used in the form of hand signals (Van Walbeek 1978:28). An example of the hand signals as visual aid is the following (Wheeler and Raebeck 1979:xxv).

**Chart of hand signals**

	<b>Do' or 1'</b> (arm's length above head)		<b>Fa or 4</b> (shoulder level)
	<b>Ti or 7</b>		<b>Mi or 3</b> (even with chest)
	<b>La or 6</b>		<b>Re or 2</b>
	<b>Sol or 5</b> (even with eyes)		<b>Do or 1</b> (waist level)



## 5.4 MUSIC AND DANCE

In prehistoric times and in primitive cultures dance was primarily ritualistic. Dances were performed by the medicine man or a selected group of warriors. Women were only allowed to beat the drums. In other cultures such as Spain, Frisian and the American Indians some dances were performed by women only. The ancient Egyptians and Chinese had highly stylized ceremonies of dances and the Greeks developed dances into a form of art. Dance became an expression of beauty. In the last century of the pre-Christian era there appeared an influx of Oriental dances that were strongly erotic and frequently obscene. It became the occupation of prostitutes. Little is known about dancing in the Middle Ages, because the church opposed dancing very strongly. In the 14<sup>th</sup> century convulsive dances expressed the fright and despair of a population tortured by plague, fire, wars and religious scruples. In the 15<sup>th</sup> century dances were courtly entertainment and more than two hundred court dances from the 15<sup>th</sup> and 16<sup>th</sup> century were preserved. A large variety of dances reflect the 17<sup>th</sup> century - allemande, saraband, jig or gigue. The 18<sup>th</sup> century cultivated particularly the minuet and one of the most famous dances of all times, the waltz. Other dances of the time are mazurkas, polka and galops. These were often launched in Paris the city of entertainment. In the early twentieth century the Americans made their contribution to dancing with ragtime, jazz, conga, rumba, tango, samba and others (Harvard Dictionary of Music 1983:222-224).

Shehan (1987:26) claims that movement as a method of teaching is largely a twentieth century phenomenon. Physical activities and dance were initially perceived as diversion from academic study. Gradually motor activities have been accepted by music educators who recognized their potential in the development of rhythmic understanding. The Art and Culture learning area emphasizes music and movement as an essential part of the learning programme. It is mentioned that dance is part of the interdisciplinary approach and each cultural group has its own form of dancing and movement. Music and dance are closely related and often difficult to separate. Many different forms of dancing may be practised in the music learning environment, such as folk dancing, square dancing, social dancing, modern dancing, creative dancing and mirror dancing to mention a few. When the learners say, "Shall we dance?, Who leads?" the South African music educators had better know the step and tune to the new beat of the twenty- first century or postmodern music learning environment.

## (i) MOVEMENT AS EXPRESSION AND ENTERTAINMENT

Movement need not only represent pedagogical devices, but may be used to enhance the performance of choral groups and add an interesting and enjoyable aspect to singing in the music learning environment. Movement may add to the expressiveness or entertainment of a musical work. There are two forms of musical expression in choral work, namely choralography and choreography. Choralography (Hylton 1987:34) is by definition subservient to the vocal presentation of the musical selection. When designing a movement sequence with a performance, the ultimate goal must always be the aesthetic aspect of a performance. The movement must serve this purpose and should not be too active. A choir or learners in the music environment, bowing their heads to indicate a pianissimo section in a choral performance can be highly effective and involves the learners mentally in the music.

A step beyond choralography is choreography. It uses larger movements, is more entertaining and the visual aspects of the performance become nearly equal to the aural aspect. Recent practice in music circles features a greater visual animation to complement the aural presentation of choir performances and again may be used with excellent results in the singing repertoires of the music learning environment. It offers the viewer a more complete theatrical experience. The significance of this practice is nonverbal communication with the viewer. This adds to the power of the choral performance. Choral groups use movement as an expressive device from subtle swaying to gestures that portray the text to song and dance presentations (Hylton 1987:34).

This can also be a valuable method in the music classroom to elicit desired musical responses to illustrate musical ideas, such as snapping, finger snapping, feet tapping or tapping on the shoulder of a neighbour. It provides motor activities to reinforce musical ideas and psychomotor development. An appropriate pose - seated or standing with no movement - may also be effective in slow ballads. The learner-centred approach in the music learning environment makes it possible to interact with the learners using their ideas or even employing a professional choreographer.

## 5.5 CONCEPTUAL FRAMEWORK FOR PSYCHOMOTOR DEVELOPMENT OF THE LEARNER IN THE MUSIC LEARNING ENVIRONMENT

The conceptual framework illustrates the development of the psychomotor skills of the



learner. In the music learning environment (figure 3.4)

## 6. CONCLUSION

Music has the innate quality to develop both brain hemispheres, as well as also the whole person - intellectual, emotional, spiritual, and psychomotor. Chapter 2 and 3 form the background against which the rest of the study will be conducted.

Chapter 4 explains the research methodology chosen for the study, the research design, sampling procedure and the collecting of the data.

Figure 3.4 Psychomotor development of the learner through music

PSYCHOMOTOR DEVELOPMENT OF THE LEARNER THROUGH MUSIC

