Chapter Sixteen

MOVEMENT EDUCATION IN PHYSICAL EDUCATION

A. O. Abass & M. O. Moses
Department of Human Kinetics and Health Education,
Faculty of Education, University of Ibadan, Nigeria.
Email: moniy152002@yahoo.com

Introduction
An education of the body or a physical education was once an indispensable part of school curricula during the beginning of formal education. Otinwa (2012) divulged that the practice of physical activities and sports before the advent of the colonials in the African continent were underpinned to the cultural fabric of her diverse ethnicities. She further pointed out that the activities included traditional sports and games like wrestling contests, swimming, and boat racing in reverine areas, horse racing, dancing, and moonlight games. Mgbor (2002) opined that the history of physical education in Nigerian schools dates back to the period of early missionary activities about the year 1842. These missionaries notably the British brought their religion, western styled education and sports into Nigerian schools (Adedeji, 1980). Ajisafe, (1978) submitted that the missionaries were the first to introduce such sports as cricket, football, athletics and tennis into schools and colleges in Nigeria. Before this period, however training in physical activities had been one of the cardinal alms of traditional African education as noted by Fafunwa (1974).

Movement education is an essential area for learning in Physical education. Ratey (2002); Ratey and Hagerman (2008) submitted that it helps students become competent movers, which in turn, builds self-confidence and lays a foundation for participation in lifetime physical activity. Its movement content helps improve cognitive function, which in turn, promotes learning in other subject areas (Ajisafe, 1973). It helps students learn about their abilities, aptitudes, limitations, and potentials. It provides opportunities for
students to: develop creativity, positive attitudes toward physical activity, assume more personal and social responsibility, and meet performance obligations as individuals and in groups (Robert Wood Johnson Foundation, 2003; National Association for Sport and Physical Education (NASPE) and the American Heart Association, 2006).

The U. S. Surgeon General’s (United States Department of Health and Human Services, USDHHS, 1996) report on physical activity and health recommended that schools reintroduce daily, quality physical activity as a key component of a comprehensive education. Healthy people 2010 (USDHHS, 2000) includes the following recommendation: increase the proportion of the nation’s public and private schools that require daily physical education for all schools. NASPE, the Centers for Disease Control and Prevention, the American Heart Association, the American Academy of Pediatrics, and the National Association of State Boards of Education recommend that all students participate in daily physical education or its equivalent (NASPE and the American Heart Association, 2006).

Ninety-five per cent of parents want physical education included in the school curriculum for K-12 students (NASPE and American Heart Association, 2006). A survey conducted by the Robert Wood Johnson Foundation (2003) found that 92% of teens wanted to receive daily physical education. Brain based research also supports more physical education and physical activity in schools since they promote cognitive development. Ratey (2002) affirmed that physical activity optimizes alertness, attention, motivation and mental health. When students learn complex motor patterns, complex synaptic connections are formed in the brain improving the brain’s ability to process new information. The brain responds to motor development like muscles do, growing with it and withering without it (Ratey and Hagerman, 2008).

European countries have found that their students who attend physical education and are physically fit, score higher on their state standardized tests, provide less discipline problems, and attend school more often than their less fit peers (NASPE, 2002; Texas Education Agency, 2009). Some countries such as Japan (Nakai and Metzler, 2005), Singapore (Wright, McNeill and Schempp, 2005), South Korea (Yoo and Kim, 2005), and England (Smith, 1993) mandate a physical education curriculum and recommend opportunity to learn (OTL) standards (i.e., standards that describe the conditions through which
teaching and learning should occur). Australia is moving toward a national curriculum (Manzo, 2009). These countries have found that the extra time spent on physical education does not adversely impact students learning in other subjects. They routinely achieve high scores on international standardized tests such as the Trends in International Mathematics and Science Study (Mullis, Martin and Foy, 2008). African countries, however, have not been able to implement these programmes in principle and have been operating fuddle and backward ones. Committed emphasize (emphasis) in terms of regulations and pedagogical approaches to ensure efficient movement education programme in physical education have received retrogressive passive attention in Africa compared to other continents especially Europe.

Movement Education Framework
The concepts of movement education include body awareness and skills, the space in which the body moves and the effort or quality of body movement, and the relationships among body parts, individuals, groups, and objects (Moses, 2012). Movement education can also be based on movement purposes, such as physiological efficiency and psychic equilibrium. Ohuruogu, and Orji (2008) refer to movement education as the art of human movement and has had a substantial influence on physical education programmes for young children but seems not to have been programmatically influential otherwise in African education. Moses (2012) and Erika (2006) considered movement education as a therapy for relieving muscle problems all over the body, and including certain types of pain, like bursitis, tendonitis, and carpel tunnel syndrome or other types of repetitive strain injury.

Movement education curricula are most commonly organized around three areas; educational dance, educational gymnastics and educational games. Thus human movement rather than sport or fitness defines the content of physical education. Movement educators see traditional elementary physical education curricula as too competitive, too oriented toward specific skill development, lacking in creativity and potentially damaging to the child’s developing self-concept. Moses (2012) advocates an approach that is more aesthetically oriented, focusing on a child’s individual talents with a more creative approach to teaching. Play is a behaviour that humans and animals participate to explore and learn in their environments, and it is important because it
is the natural medium for the provision of many of the experiences that children need. Moses (2012) also sees movement education as an acceptable and satisfying means of improving the physical qualities of strength, endurance, skill ability and the like, which enable the children to take part in the more complicated and difficult physical situations.

Newlove (1993) and Newlove and Dalby (2005) reported their findings on Rudolf Laban (1879-1958) movement framework where they discovered and explained four aspects of movement and developed themes of work, from simple to complex, that enable students to focus on one or more of these four aspects (body, space, effort and relationships) at any time. The movement framework’s four aspects help learners see the totality of human movement. They can be used consistently and effectively in the content areas: games, gymnastics and dance. These four aspects of movement serve as organizing threads that are woven through the programme areas allowing the physical educator to revisit key movement skills over the elementary years. This revisiting of all four movement skills/concepts helps learners build and organize their movement skills and understanding. This also helps teachers avoid instructional gaps.

In the body aspect, which focuses on what the body is doing, students become skillful in locomotor, non-locomotor, and manipulative skills. In the space aspect, whose focus is on where the body is moving, the learner develops skill in the use of personal and general space and competency in moving in varied directions, on different pathways, through varied levels, planes and extensions. The effort aspect has to focus on how the body is moving. Here, the learner develops the ability to use time (e.g. fast/slow), weight (e.g. strong/light), flow (e.g. free/bound), and space (e.g. straight/flexible) to improve the quality of movement or the “flavour” of movement. Relationship has to focus on with whom or with what the body is relating as it moves. This aspect helps students develop awareness and skill in how body parts relate to one another when moving and how the mover relates to individuals, groups, apparatus, objects, and other factors such as a rhythm, music, boundaries, and rules.

The curriculum content that comes from the movement framework helps students develop competency in locomotor skills (skipping, running, hopping, galloping, sliding, leaping, jumping and landing); non locomotor skills (curling, twisting, stretching, bending, swaying, spinning, swinging, sinking, rising, opening, closing, and
gesturing); and manipulative skills (striking, collecting, carrying, catching, throwing, kicking, dribbling and volleying). These skills are what the body does. Competency in games, gymnastics, and dance requires students to apply and improve body skills while responding to spatial demands, varying effort and maintaining appropriate relationships to others and things.

**Organization of Learning Experiences**

Organization of learning experiences has a great influence on efficiency of instruction and the extent to which changes are brought about in students. Learning experiences must complement and reinforce each other over time. This creates a more integrated and unified programme. If learning experiences are unrelated to previous and/or future experiences, learning will be short lived. Physical education programmes that are based on movement framework have a better chance of helping children reach their movement potential because the four aspects of movement complement and reinforce one another. As children work through the movement framework year after year, they learn and revisit skills and concepts in a developmentally appropriate manner, taking part in smooth progressions from the fundamental skill stage to the application stage.

As an example, in the activities approach, children may be taught the “body skill” of catching and then be challenged to apply it in a game. Using the movement framework approach, not only would children learn the basic body skill and essential components of catching, but they would also have developmentally appropriate experiences, over a series of units, throughout the elementary school years in catching a variety of objects. Learning experiences within a spatial theme focus would include: catching while stationary; while moving in different directions, and pathways; and catching at different levels. Effort learning experiences would focus on absorbing the force of slow, medium and fast moving objects and catching while moving at slow, medium and fast speeds. Catching tasks focused on relationship aspects would include the relationship of the fingers, hands, and arms to the rest of the body; catching objects from distances that are near, to a far from a thrower; and catching while moving against a defender or defenders. The cumulative effect of the employment of body, space, effort and relationship focused learning an experience is the
strength of the movement framework and is what prepares learners to
apply skills effectively and efficiently within a larger game.

It is important to remember that space, effort and relationships
are both skills and concepts that are always taught within the context
of a particular programme area (i.e., within games, gymnastics, or
dance environment) never in isolation, and always with selected
movements from the body aspect. For example, there would never be
a lesson just on changing directions, without a sense of why or where
the different directions are to be used. The ability to travel in different
directions would either enhance game skill or expand and improve
traveling skills in dance or gymnastics sequences.

The content selected for each unit is a small piece of one or
more aspects of movement framework called a theme upon which a
unit is planned. These themes (or chunks of movement) of content are
spread out and revisited over many units and progress from simple to
complex within a balanced presentation of games, dance and
gymnastics throughout the elementary years. The comprehensive and
integrative nature of the framework allows a particular skill or concept
to be introduced, for example, in a dance unit first, then re-visited in a
games or gymnastics unit, or introduced in games and re-visited in
dance, and so on, thus reflecting the fact that the units are meant to
build on each other and that the framework is applied universally.

Content areas: Games, Gymnastics, Dance, and Fitness
The learning experiences that result from the movement framework
are found in three content areas: games, gymnastics, and dance. These
areas, that always include body, space, effort, and relationship aspects,
are the roads of learning in elementary physical education. Physical
fitness concepts and health enhancing physical activity always
permeate travel along each of these roads. The effect of quality
traveling an equal distance along these roads many times over the
elementary years will produce effective and efficient games players,
gymnasts and dancers who are well on their way toward achieving and
maintaining a health enhancing level of physical fitness.

Games Street
Employing a movement framework approach to teaching invasion,
battling/fielding, target and net/wall educational games accommodates
learners of all developmental levels. In games units, we choose and
teach body, space, effort and relationship themes to create units and lessons creating game play competency. Again, in contrast to an activity approach whose primary focus is on body skills (throwing, catching, kicking, striking and so forth) required to play and not space, effort and relationship skills and concepts. Movement framework lessons provide learners with learning experiences that promote locomotor skills such as running, sliding (side gallop), leaping, and jumping necessary for games. Non locomotor movements such as the rotation and twisting necessary for striking with a bat or racket, or the bending and force absorption necessary to quickly change direction in an invasion game such as soccer or a net/wall game like tennis are also important experiences.

Manipulative skills are essential to game play proficiency. These skills are grouped into three categories: sending an object away (striking, kicking, throwing); gaining possession of an object/receiving (catching, trapping, collecting); and traveling with an object (carrying or propelling – dribbling). Moving students along a novice to expert continuum in games requires blending space, effort and relationships skills and concepts with body skills. Spatial learning experiences in games include: travel in different directions, pathways, and levels with and without implements and or objects. Combining space with effort can allow students to make spatial adjustments in order to create and deny space in an invasion game for example. Learners also need to be able to vary: the amount of force they use from strong to light; the amount of speed they use from fast to slow; the amount of space they use from small to large; and apply movements with the appropriate amount of force, speed and space for a particular situation. Examples of relationship aspects skill in games include: being in appropriate positions to receive passes; guarding and adjusting position when defending an opponent; or backing up a defending teammate appropriately.

Activity approaches emphasize playing games. A movement framework approach stresses how to play games. Providing learners with the skills necessary for game play competence requires careful unit and lesson planning. Here, teachers should design contexts that range from simple to complex for beginning to expert games players. Opportunities should also be provided for students to apply and reflect upon the relationship aspects of games (e.g. strategies and tactics) through a teaching for understanding approach.
Gymnastics Lane
A movement framework approach to educational gymnastics meets each child at his/her ability level, interests and unique manner in which each moves and learns. This approach helps gymnasts understand and “feel” movement. It asks students to use divergent thinking to answer movement problems so that each can be challenged appropriately. While an Olympic style of gymnastics asks children to perform specialized skills in a uniform manner. Educational gymnastics helps students learn how to manage their bodies efficiently and safely.

Gymnastics body skills include: travel, weight transfer, rolling, jumping, rocking, step-like actions, sliding, flight, climbing, balance, off-balance, counter-tension, counterbalance, spinning, circling, hanging, twisting, stretching, curling and swinging. Sample spatial learning experiences include performing the same movement in different directions or pathways. Effort experiences in gymnastics can include exploring how the body can produce and regulate speed, and how body parts can receive and apply force and support weight. Relationship experience examples include giving attention to the relationship of a body part to another or body parts to the floor or apparatus. Students can revisit and relearn body skills while varying: direction, levels and pathways; effort; or their relationships to a partner. This allows students to polish and refine skills without the physical educator hearing, “We’ve already done this.” Educational gymnastics units encourage students to continually adjust, improve and combine body, space, effort and relationship skills and concepts into a sequence that can be performed for an enthusiastic audience.

Dance Avenue
Educational dance helps children use the comprehensive nature of the movement framework as a medium for expression and communication. Dance is an essential part of the learner’s movement repertoire. In a movement framework approach, dance helps students learn how to dance rather than asking students to simply recall a series of dance steps.

Simple body tasks for elementary dancers include: moving flexibly through space using different ways of traveling (e.g., gallop, leap, or skip); or sinking and rising with the whole body in personal space. Effort tasks might include exploring weight, time or flow of movement themes for expressive purposes. Weight could emphasize
sudden movement which provides a feeling of spontaneity or urgency. Time related movement can be sudden or sustained. Flow could focus on free or bound movement. Space content includes using general and personal space, directions, pathways, levels and extensions to express a feeling. Relationships experiences in dance deal with the relationship of body parts to each other, the dancers position to others (e.g., leading/following, matching/mirroring, toward/away); and responding accurately to a variety of rhythms and sounds.

Movement framework dance units also include square, folk and social dances. These dance forms can be differentiated for learners by modifying their steps and patterns with the four aspects of the movement framework making them more developmentally appropriate.

The Physical Fitness Highway
In a movement framework approach we can think of the content areas - games, gymnastics and dance as three lanes that set children in motion on the physical fitness highway. Health and skill related fitness concepts and health enhancing physical activity are blended into all games, gymnastics and dance lessons. For example, the aerobic activity present in most games invites the concepts of cardio-respiratory endurance to be taught. Gymnastics provide opportunities for building muscular strength and endurance through climbing, hanging or taking the body’s weight on hands. Dance brings muscle fitness, flexibility and cardio-respiratory endurance together in one performance. Well planned fitness experiences help learners: begin to achieve and maintain a health enhancing level of physical fitness; and understand the definition and concepts of physical fitness, the benefits of regular exercise, and the purpose of fitness assessments. Through thoughtful application of the movement framework we can provide meaningful, enjoyable skill building activity and go a long way toward creating a lifelong mover.

Instruction
The extent to which the student can gain from movement framework’s learning experiences depends largely on the physical educator’s capacity to understand, interpret and implement learning experiences derived from the movement framework. First, the physical educator within a quality movement framework based curriculum must be able
to organize learning from top to bottom. This starts by identifying realistic programme outcomes; organizing movement aspect themes, unit goals and plans, lesson objectives and plans; all the way down to differentiating a learning experience for a single student.

The physical educator must be able to employ the movement framework to continually observe, analyze, evaluate, and communicate with the learner in order to improve student movement responses. An understanding of the language of the movement framework by the teacher and the learner is essential since it provides a common vocabulary for communication between them. The teacher must also know how to use the movement framework to change, extend or refine learning experiences.

In addition to the movement framework, the physical educator must also understand children’s motor development, growth and development and their learning styles. He/she must also understand teaching methodologies, management and assessment techniques; and be able to continually reflect upon ways to improve the overall programme. It is the physical educator who takes students on a ride of continual improvement through the physical education content areas of games, gymnastics, dance, and fitness.

**Assessment**

The information we gather from quality pre-assessment, formative assessment and summative assessment in games, gymnastics, dance and fitness allows us to determine student performance strengths and weaknesses. We continually translate this information into feedback, the fuel necessary for progress, and use it to improve student performance. These results also guide planning, instruction and help us gather credible evidence to prove the extent to which students are learning and achieving.

A pre-assessment stop is where the physical educator determines the present skill level of learners on the unit objectives we desire most. Here, we can identify their performance strengths, weaknesses, misconceptions, learning style, and interests in order to individualize instruction. Formative assessment is more like a roundabout or a learning loop (Wiggins, 1998) that we continually go through with learners in order to help them adjust and improve their performances during games, gymnastics, dance, and fitness lessons. For example, you go through a learning loop with a student by
identifying and demonstrating a body skill such as skipping, emphasizing the skill’s essential components. Students then attempt to match or even exceed your performance. You observe and analyze a performance attempt, make an evaluation of the performance strengths and weaknesses in relation to the essential skill components you demonstrated and described. Then you provide the learner with useful feedback that reveals what essential movement skill components have been mastered and what components have not yet been mastered. Finally, the learner makes appropriate performance adjustments.

When planning, guiding, or scoring movement skill performances it is helpful to use a movement framework rubric. This rubric provides a complete picture of movement competency. It can also be written in developmentally appropriate language to help students answer these questions: where am I going? Where am I now? and What do I have to be able to do in order to get there? A performance based summative assessment at the end of games, gymnastics or dance unit is more evaluative and ties together skills we have equipped students with in order to meet psychomotor, cognitive and affective (or fitness) unit objectives. This “real world” performance product such as a gymnastics sequence, dance or game play requires students to apply the same skills practiced in pre-assessment and formative assessment to a realistic situation for a respectful and appreciative audience (where appropriate).

The Structure and Methods of Movement Education
Movement Education is an approach to teaching physical education that involves an analysis of movement. Combined with the movement analysis is a method of instruction that utilizes techniques of "individualization" and "problem solving". In a traditional physical education classes, the activity itself (volleyball, track and field, or folk dance) provides the structural basis for developing a curriculum. Skills within each area are arranged from simple to complex and presented to children according to their maturity and readiness.

Movement Education utilizes the media of games, gymnastics, and dance to foster the child’s physical and emotional development through the movement concepts described as body awareness, space, qualities, and relationships. These categories of movement become the
framework of a Movement Education curriculum according to Kirchner, Cunningham and Warrell, (1978); Holt-Hale (1988); and Nichols, (1990).

I. **Body Awareness**

A. **Axial Movements (Controlling One’s Movement) (Non-Locomotor)**
   These actions can be done with isolated parts of the body or with the whole body. The actions of twisting, stretching and curling involve the body in a variety of specific shapes, which can be maintained whether the body is still or moving.
   1. Bend and stretch. Body parts moving close to or far from one another.
   2. Twist and turn. Turning involves rotation of the whole body, while twisting is defined as a rotation of one body part against another.
   3. Push and pull. Forceful movement where an object is moved away from or closer to the body.
   4. Swing and Sway. A swing is a circular movement around a stationary center with the axis above body part. A sway is a circular movement around a stationary center with the axis below the body part.

B. **Transferring Body Weight**
   1. Transfer of weight can take place from one body part to another. It can take place in a variety of step-like actions or when one body surface receives weight from an adjacent part as in rolling.
   2. Locomotor skills: walk, run, hop, skip, gallop, slide, leap, jump, start and stop, dodge, landing

C. **Balancing:** Balance skills vary in difficulty according to the number of body parts and the size of the parts that are used in a particular movement. The position of the center of gravity also makes a balance skill more or less difficult. Balanced is enhanced by lowering the center of gravity.
D. **Flight:** The body can defy gravity in a number of ways. It can jump or leap off the floor. The body can thrust into the air from the feet with the weight received by the hands (as in vaulting). When the body is in the air, it can change shape by changing the positions of the limbs and by turning along several axes. Landing from flight requires "force absorption" skill.

E. **Manipulative Skills:** Vertical throw, Underhand throw, Overhand throw, Catch and Strike

II. **SPACE:** Where the body moves
   A. Personal or Limited Space: The space the body occupies from a fixed position.
   B. General Space is the floor area that is available to the children.
   C. Directions are forward, backward, sideways and up and down.
   D. Levels are High - space above the shoulders, Medium - space between the knees and shoulders, Low - space below the knees.
   E. Pathways include on the floor and in the air (Curved, Straight and Combinations of the two).

III. **QUALITIES OF MOVEMENT** - How the body moves gives expression to movement.
    a. **Time** or speed of movement - quick or slow
    b. **Effort** or force of movement - strong or light
    c. **Flow** - "free flow" or "bound flow"

IV. **RELATIONSHIPS** - the relationships which are found in games, gymnastics and dance are continually changing: a. with apparatus; b. matching movements; c. contrasting movements; and d. simultaneous movements.

   The five body actions listed below have direct relevance to the teaching of games, gymnastics, or dance, although the emphasis and intention of the actions will be different. 1. Jumping and landing; 2. Traveling or locomotion; 3. Twist & turn; 4. Stretch & bend; and 5. Balancing.

   In gymnastics PE is concerned with the manipulation of the body in a variety of settings; on the floor and with small and large apparatus. The following categories are added: hanging, climbing, pushing and pulling and swinging. In dance, in addition to the four
categories, are: gesture and rise and sink. In the games lesson, manipulation of objects are often used. PE emphasizes: rolling, catching, throwing, bouncing, kicking, hitting and dodging

Methods of Teaching Used In Movement Education

Direct Method
Teacher centered. The teacher structures the lesson, chooses the activities and prescribes what and how each child shall perform. This method has many short-comings with respect to developing initiative and self-direction, however:

1. It allows the teacher to introduce specific skills or rules to all the children at the same time
2. It is recommended to use when teaching safety concepts.
3. It is relatively easy to observe the class for assessment.

Limitation Method
Teacher designs the lesson; however problems are given to the student that may have several correct responses. For example: "Find a way to balance on three body parts". The following advantages seem to support the use of this method in movement education:

1. It allows for some direction to be given by the teacher, yet the inventiveness of the child is not stifled.
2. It provides for differences in physical ability
3. In spite of individual differences, the general response will fall within certain limits for evaluative purposes.

Indirect Method
The child has the opportunity to choose the activity or movement to be practiced. The indirect method: recognizes individual differences in abilities & interests, encourages initiative and self-direction and gives the teacher the opportunity to learn about his/her students.

Teaching by Themes
A movement theme may be defined as a concept or an idea which becomes the main focus of the lesson or a series of lessons. Having selected the concept to be stressed, the teacher may add interest and variety by introducing one or two sub-themes. These themes will be devised from the concepts within the movement analysis. To illustrate, the main theme could be flight with an emphasis on jumping and
landing. A sub-theme could be shape (the body can assume a variety of shapes when it is in flight). As part of the theme, the five basic jumps, hops and leaps should be explored. Flight can also take place to the hands.

**Examples of Movement Education Themes**

1. Traveling in a variety of ways emphasizing the use of general space, different body parts and change of direction.
2. Traveling in a variety of ways emphasizing change in speed.
3. Traveling in a variety of ways emphasizing the use of the feet.
4. Traveling on different body parts with emphasis on quick, light movements.
5. Traveling with emphasis on contrasting speed.
6. Traveling with emphasis on changing levels of body parts.
7. Traveling with emphasis on changing levels; high to low.
8. Changing relationships with others emphasizing leading with different body parts and traveling in different pathways.
9. Running and dodging with emphasis on change in speed, pathway and direction.
10. Traveling and balancing with emphasis on stretched and curled positions.
12. Combining movements of jumping, landing and rolling.
13. Twisting and turning.
14. Manipulating a ball with different body parts.
15. Manipulating a ball with the hands.
16. Manipulating a ball with the hands emphasizing change in speed and catching.
17. Striking a ball with different body parts.
18. Striking a ball with the hand or forearm.
19. Adjusting the body position to strike and catch a ball.
20. Controlling a ball with the feet.
21. Furthering manipulative skills of throwing and catching.
22. On and off balance as applied to catching.
24. Movement emphasizing strong and light qualities.
25. Movement emphasizing slow and quick qualities.
26. Controlling the body when landing from a height.
27. Creating and accompanying own movement sequences.
28. Creating and accompanying movement sequences in partners and small groups.
29. Examining relationship of body parts - near and far.

Conclusion
Movement education should be embraced. The emancipation of African countries from colonial rule to independent status ushered in a change in the organization and the teaching of movement education from primary to tertiary levels. This change did not impact the teaching of movement education in a sustainable manner into the 21st century because of the Western model adopted in the African school curriculum. For movement education in physical education to progress from its present status of passiveness to the standard recommended by the United Nations Education, Scientific and Cultural Organisation International Charter, there must be an evolution of an indigenous curriculum that will be nurtured in Africa to meet the health needs of her people.

References


