THE PROCESS CURRICULUM

Psychomotor Competence

Design for a Comprehensive Curriculum

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THEORETICAL BACKGROUND: ANISA

ANISA Theory of Development: (Synopsis)

If any curriculum theory is to have sufficient coherance to provide a comprehensive framework for curriculum design it must be firmly based upon a theory of development.

The ANISA theory of development, which is derived from the philosophical view of man as "the ascending arrow of the great biological synthesis", (Teilhard de Chardin, p. 36) explicates the continuous on-going process of self-actualization--a process regarded as synonymous with creativity. The theory shows how this ongoing process is sustained by this organism's interactions with the environment. In defining development as a process of becoming--the translation of the organism's infinitude of potentialities into actualities--through interaction with the environment, ANISA assumes a epigenetic view of development. This means that there are three interrelated determinants of development in any area of potentiality at any point in time: (1) the organism with its past experience recorded in memory (immanence) and its ideals and aspirations for the future (transcendence); (2) the nature of the environment; and (3) the quality and type of interaction between them.

The notion of developmental sequence inheres in the general concept of becoming as a continuous process. Developmental sequence is defined as "the order of those changes in an organism that yield relatively permanent but novel increments not only in its structure but in its modes of functioning as well (Kalinowski, p. 2). An orderly sequence of development necessarily reflects a rhythm, the essence of which lies in both pattern (the hierarchial ordering of that sequence), and timing, as evidenced in the development of the organism, by the critical and sensitive periods underlying this orderly process of change over time. Such a rhythmic process of change implies passage through "successive stages (basic units of change) each of which presupposes its antecedent and is in turn a prerequisite to its successor". The essential attributes of any such single stage of development, relative to both the biological and psychological expressions of actualization of potentiality, are found to be the processes of differentiation and integration, with generalization a vital and necessary consideration in the psychological realm.

It is the conscious control over these three processes that constitutes learning competence, so crucial to self-actualization or becoming. This notion of learning competence is a central issue in the development of the ANISA curriculum theory, and illustrates how the validity of the theory of curriculum depends on the theory of development from which it is derived.

In summary, the combination of a genetically determined series of stages of development, together with the processes of learning as applied to interactions with the environment, guided by subjective aim or purpose, are what determine the organism's capacity for self-transcendence, for being and becoming.

ANISA Theory of Curriculum: Synopsis

The ANISA theory of curriculum, a logical derivative of the theory of development briefly presented above, provides the conceptual system for integrating curriculum in all areas of potentiality. Any part of the ANISA curriculum must be congruent with its theory of development.

Central to curriculum design is the nature of the being for whom the curriculum is intended, and therefore the transcendent nature of man has major implications relative to curriculum theory. Since transcendence is achieved by the continual actualization of potential, and since the process of translating potentiality into actuality is achieved through learning, then learning competence--knowing how to learn--becomes a major focus in the ANISA theory of curriculum.

The theory defines curriculum as two interrelated sets of goals, one concerning content (the information to be learned) and the other concerning process (the translation of potentiality into actuality) and what children do to achieve the goals. Three basic symbol systems, mathematics, language, and art, mediate information which is organized around the classification of environments (physical, human and unknown) to provide the organizational framework for content. The basic abilities of differentiation, integration and generalization are set forth as the common denominators of learning in every category of potentiality: psychomotor, perceptual, cognitive, affective and volitional; these categories provide the conceptual framework for the process curriculum. Briefly stated, these two sets of goals, together with the interactions that enable children to achieve them, constitute the major propositions of the ANISA theory of curriculum.

This synopsis of both the ANISA theory of development and theory of curriculum provide the foundation, the conceptual framework, upon which curriculum in each category of potentiality is designed. Two major criteria determine which processes are selected for inclusion in the curriculum design for any category of potentiality. One is the degree to which the process under consideration is generic to what may follow later and the other concerns the degree to which the process generates effectance in the total system. In selecting objectives from the curriculum outline relative to any given process for any particular child, and in determining the design of interactions with the environment to achieve the objectives there is one overriding principle that must be observed: the immanence of

the child is the essential starting place.

One other critical factor to remember in the design of a curriculum is that theorists and practitioners not using the same language or not understanding the terminology each is using leads to conflicts and/or incoherence. Therefore there is a singular need for the conceptual framework to be clearly stated for any particular area of competence.

Psychomotor Competence: ANISA Theory

Psychomotor competence in the ANISA Model is defined as an inner awareness of all the muscles which can come under voluntary control to whatever degree, of all the differentiated movements of body parts they are capable of effecting, and the ability to execute an infinite variety of combinations (integrations) of such movements into patterns which express purposes of the organism.

Since much of the early psychomotor development of the human organism comes about through the natural means of maturation, it is difficult to refrain from speculating on the possibility of some over-riding role of psychomotor competence relative to maintaining the integrity of the organism. This question of why man moves has perhaps best been addresed by Naomi Allenbaugh who proposes that man has to move to survive, that he moves to explore and understand as well as adjust to and gain control over his environment, and he also moves to communicate. (Allenbaugh, p. 48)

Robert W. White has made an extensive inquiry into motivation theories and proposes that striving for competence is an over-riding source of motivation. Competence refers to being able to have intended effects on the environment. White therefore proposes that the motivational process which maintains the striving for competence be known as effectance. (White, pp. 297-333) The child's first dominant mode of interaction with the environment is psychomotor (in conjunction with other psychological processes). If this mode of interacting is undeveloped, impaired or suppressed, then adverse effects may be evidenced in other modes of interaction and the child's effectance may be diminished. Each of these concepts becomes central to psychomotor curriculum development as one considers the various dimensions of psychomotor competence.

In developing a psychomotor curriculum for young children the position first taken is that children move primarily to explore, understand, adjust to and gain increasing control over themselves and their environment. This can only occur through interaction with that environment. This, in turn, necessitates gaining increasing control over their own movement capabilities in order to achieve the purposes and meet the demands of those interactions. Gaining increasing control over their movement capabilities is identified as the process component of the psychomotor curriculum.

Exploring, understanding, adjusting to and controlling the environment also requires a second curriculum component, the content, which refers to any information about the environment, the movements of the body, and the interactions with the environment. The third component is identified as the interaction component; it concerns the interactions which comprise the process component of the curriculum and provide the opportunity for assimilating information which comprises the content component of the curriculum.

Process in the above context primarily concerns the increasing refinement of already acquired motor patterns, and the development of new neuromotor patterns to meet the continually changing needs and purposes of, as well as demands upon, the organism. Of course, these processes do not operate independently from processes related to other areas of potentiality. Perceptual, cognitive, affective and volitional factors directly affect the processes identified under psychomotor competence; they influence, and are influenced by, interactions with the environment.

Content concerns information about the world (environments) in which we live and includes information relating to process, leading to increasing conscious control over process. This information is not culture free and therefore will vary from one culture to another (though less so as the information becomes scientifically verifiable), whereas process tends to be more universal because it arises out of species-wide biological substrata. Culture tends to pre-determine content for each one of us by pre-establishing certain kinds of environments and interactions, providing specific knowledge and information about them, and a language by which the information can be coded and remembered. It is only upon the basis of rational consideration of this information that any individual within a given culture can become optimally functional, and can make appropriate decisions concerning his use of energy as it relates to any area of potentiality--in this case his psychomotor potential.

The interaction component of the psychomotor curriculum design concerns the actions and behaviors that are necessary to achieve the goals of the psychomotor process curriculum and related content goals. This necessitates the designing of environments to elicit appropriate action on the part of the child, and thereby making provision for optimal learning to occur relative to psychomotor competence.

Factors to be remembered in designing interactions, concerning the sequence of development of young children, are the principles determining sequence and direction of early growth and development:

1. the cephalo-caudal

2. the proximo-distal

3. the mass to specific trends

It must also be kept in mind that the fundamental motor patterns follow a reasonably clearly defined sequence that is epigenetic in nature.

The following curriculum design will address primarily the development of gross motor comtrol rather than the control of the very highly refined movements required for speaking and moving the eyes, or the finely coordinated movements required for writing or playing the piano.

A curriculum for psychomotor competence relative to gross motor activity rests on trhe major processes of balance, posture, locomotion and manipulation. The underlying processes of verticality, laterality and directionality together with the differentiation and motility of the various parts of the body, are fairly well established (as are the reach, contact, grip and release processes which underline manipulation) by the time children reach kindergarten. Repeated experience in making increasingly refined differentiations and more complex integrations of motor patterns is necessary for the further development of psychomotor competence. Such differentiations and integrations of movements can be better understood in the context of space-time-force-flow factors inherent in those movements. Furthermore, the basic attributes of strength, flexibility and endurance so criucial to efficient functioning of the organism play an increasingly significant role and all these combine to effect the gradual development of psychomotor competence.

> "The child comes to know where and what his body parts are, how they work together and what they can or cannot do. This positional and functional awareness of the body and the relation of its parts to each other and collectively to the external environment, enables the child to establish his body as a reference point around which he orders the elements of the space-time world. As the motor-base becomes more highly developed, the child becomes more sensitive to stimuli and can organize and interpret them in a more efficient and accurate way." (Streets, unpublished)

An operational analytical framework for the identification of the necessary factors governing the on-going release of psychomotor potentialities is outlined in the next section. These movement factors are inherent in the performance of all motor skills and can be applied to all movement possibilities. Since the possiblities within the full scope of human movment are of infinite variety and range, the only sensible approach is to provide a framework from which to generate objectives for a process curriculum, from which a multitude of movement variations may be conceived.

The Differentiation and Integration of Dimensions of Space

All movement takes place in space; therefore awareness of the dimensions of space and the spatial components of any movement are essential factors in the analysis.

Space is best understood by classification into two major areas:

A. Personal Space

That space into which parts of the body can extend in all directions from a stationary base. This area of space is termed the "sphere of movement" and becomes the personal sphere or personal space.

B. General Space

That space into which the whole body can move, the space beyond one's reach. It is the general space that the body may move around in, always taking with it its personal sphere, as when leaping high in the air or rolling close to the floor.

Whether into general space or within the personal space, movement can be made relative to:

1. Direction

   Up or down (verticality)
   Side to side (laterality)
   Forward or backward
   And all combinations (diagonals, etc.)

2. Level

   High or low, and
   Anywhere between

3. Range or size

   Large or small
   Near or far
   Wide or narrow, etc.

4. Pathway or pattern (air or floor patterns)

Movement through space carves a shape or pattern in that space. The shape carved in space will result from direct and flexible movement giving floor and/or air patterns. These will happen either in a:

a. straight path
b. curved path
c. angular path
d. twisted path

5. Planes of movement

In carving a pathway through space along a particular pathway relative to the center of the body, certain planes of movement are defined. The body is three-dimensional and the plane of movement highlight these three dimensions:

a. frontal plane (likened to a door)
b. sagittal plane (likened to a wheel)
c. horizontal plane (likened to a table)
d. And all combinations.

If a line is drawn dividing the body between front and back, from high to low, and movement occurs along the imaginery plans defined by points linking high over the head--to the right side--to below the feet--to the left side of the body, then that movement occurs along the frontal plane. Some movements occurs along this plane, such as the cartwheel. The line dividing one side of the body from the other defines the saggital plane and an example of a movement occuring along this plane is a forward roll. The line dividing the top from the bottom half of the body is the horizontal plane and all spins and turns occur in this plane, best expressed by spinning in an arabesque position which stresses the horizontal dimension.

6. Shape

As mentioned in Section I under The Whole Body, any movement of the body parts results in a particular body silhouette or shape that has essential spatial dimensions that can be classified as:

a. Stretched or straight
b. Curled or curved
c. Twisted
d. Angular

III. How it Moves

The Space-Time-Force Factors (Kinesthetic and Cognitive Awareness)

All movement occurs in space, is of a certain duration (which when linked with the amount of space used gives a speed factor), and requires a certain degree of tension (which varies with the purpose or intent of the action and is linked inextricably with the space-time factors). These components which are inherent in all movement are referred to as the effort components and are both quantitative (measurable) and qualitative (giving expression and form) in essence. It is the qualitative aspect that is of primary concern in all dance-related activities but the quantitative aspects tend to take precedence in most competitive events. It is always apparent, however, that the overtones of the effort qualities affect the movement and appear to be expressive of the individuality of the mover. This is why no two performers of equal skill doing identical moves will look quite the same. The personal attitude of the performer will be expresed in the way he moves, how he uses the space-time-force components.

This involves differentiation, integration and generalization of the space-time-force factors as follows:

1. Use of Space

   Direct or flexible pathways
   Straight or roundabout

2. Use of Time

   Fast or slow
   Sudden or sustained
   Explosive or tenuous
   Even or uneven and any rhythmic variations

3. Use of Force (tension, effort)

   Strong or weak
   Tense or relaxed
   Heavy or light
   Hard or soft
   Ballistic or gentle
   Firm or fine touch

One factor closely linked with the space-time-force components of movement is the flow factor. This concerns the coordinated effort of all three components which can either be free-flowing or with a degree of control or tension throughout the sequence. If the movement is performed with some constraint or careful control then it is said to have the characteristic of bound flow. Bound flow movements are easily stopped at any point in the sequence and can give the impression of pausing very easily.

The easily flowing continuous movement or sequence of movements is said to be free-flowing and this free movement has the characteristic of being on-going, not easy and sometimes impossible to stop. This is very fluid movement.

4. Use of Flow

Controlled or free
Bound or unbound
Jerky or continuous

IV. With Whom or With What it Moves

Awareness of Relationships (Kinesthetic, Cognitive and Perceptual)

In the concept of relationships relative to movement there are three major considerations: (a) relationships between different parts of the body, (b) relationships to others and (c) relationships to objects. These latter relationships are essentially concerned in any interactions with the environment that an individual makes, whether in adapting to or changing that environment.

This involves differentiation, integration and generalization of the following aspects of relationships:

1. Relationships between and among different parts of the body

Symmetrical or asymmetrical
Synchronous or asynchronous
Near to or far from
Elbow to knee
Head to toe
Feet to hands, etc.

2. Relationships between and among individuals

Close together or far apart
Approaching or parting
Supported or being supported
Leading or following
Shadowing
Mirroring
Facing
Moving in opposition
Moving in unison
Moving in sequence

3. Relationships with objects (fixed)

This is concerned with adapting one's movement to any stationary object in the environment.

Over or under
Around or through
Into or out of
On or off
Along or across
Above or below
In front or behind
Supported by or suspended from, etc.

4. Relationships with small objects (manipulative)

This is concerned with controlling the movement of any object in the environment.

Grasping or releasing
Contacting
Rolling or fielding
Throwing or catching
Striking or kicking
Bouncing or dribbling

V. Physiological Attributes Affecting Movement

Strength
Flexibility
Balance
Coordination
Endurance

VI. Priniciples Underlying Movement

Opposition
Follow-through
Body-focus
Objective-focus
Equilibrium (gravity, base of support)
Total assembly
Production, application and absorption of force

VII. Laws of Motion Applying to Human Movement

Inertia
Action
Reaction
Acceleration
Deceleration
Summation of Forces
Friction
Spin

BROAD EDUCATIONAL OBJECTIVES FROM ANALYTICAL FRAMEWORK

The analytical framework given above provides a view of the vast number of variables which affect human movement. When the countless number of possible combinations of these variables is considered it is easily recognized that the scope for generating movement tasks and setting process and content objectives for developing psychomotor competence is for all practical purposes unlimited.

When considering development of a psychomotor curriculum for young children, it is recognized that before focussing too narrowly in the area of any very spesialized motor skills it is better to provide these children with a wide variety of experiences from which they may later select those specializations that best meet their needs or match their abilities. Progressing too rapidly in the refinement of acquired motor skills or introducing motor skills requiring fine motor coordination too soon causes deleterious effects on later generalization of these skills to more generative motor patterns. Kephart refers to these highly refined non-generative skills that seem to exist in isolation as "splinter skills". Therefore, good body management and control in a wide variety of movement patterns, evolved in response to problem-solving tasks that allow for individual differences, is the major thrust of the K-3 curriculum (approximately ages ranging from 5 to 8)

The major over-all objectives selected on the basis of all that has been stated are as follows for K-3:

The Major Content Objectives

The major content objectives emanating from the above framework are concerned with what children should know (information) about:

1. The parts of the body and how they can move.

2. Many ways of transferring, supporting, elevating and receiving body weight with a variety of body shapes and leads.

3. The elements of space-time-force-flow and how they affect movement.

4. Spatial, individual and group relationships leading to a dance orientation.

5. Many ways of manipulating objects.

6. Some principles underlying motion, balance, posture and manipulation (simplified).

7. The maintenence of flexibility and the development of strength and endurance.

8. Safety factors concerning movement and the use of apparatus.

9. Simple rules concerning different specific games and general rules of participation in game-playing.

The Major Process Objectives

Psychomotor competence is defined in the ANISA Model as an inner awareness of all the muscles which can come under voluntary control to whatever degree, of all the differentiated movements of body parts they are capable of effecting, and the ability to execute an infinite variety of combinations (integrations) of such movements into patterns which express purposes of the organism. The following objectives pertain to the achievement of psychomotor competence.

1. To be able to differentiate and integrate muscular actions of the parts of the body.

2. To gradually develop a wide variety of efficient motor patterns appropriate to the demands and preceived purposes of particular situations.

3. To gain increasing control of the space-time-force-flow factors inherent in movement.

4. To gradually enhance powers of expression and communication through movement, particularly in dance-related activities.

5. To gradually achieve the mature and efficient forms of those fundamental motor patterns deemed maturational in nature.

6. To gradually improve and refine motor coordination and perceptual judgements relative to manipulative skill.

7. To gradually develop strength, flexibility and endurance in movement.

8. To gradually improve judgement concerning safety of self and others in movement.

Guidelines for Planning Interactions to Achieve the Objectives

Having outlined those factors most pertinent to the development of psychomotor competence, and having identified those major process and content goals that give direction to planning beneficial interactions, the next step is to plan appropriate experiences (complexes of interactions) to ensure the ongoing release of psychomotor potentiality.

Development,as previously stated, is synonymous with the process of becoming and "is comprised of any changes which have a continuous direction and which culminate in phases that are qualitatively new" (Kalinowski, p. 22). The means by which man can perceptually move beyond his present state of being is learning, the means of the "creative advance into novelty". The purpose of curriculum is to define specific process and content goals and design appropriate experiences for learning to take place, to facilitate the actualization of potential, thereby furthering the creative advance.

Unfortunately, any attempt to specify a curriculum clearly tends to result in a limited and somewhat static view of development rather than a dynamic representation of change over time. Development is essentially an orderly process, occuring on a continuum which is characterized by the hierarchial nature of the sequence of changes. Each new stage achieved provides the means by which the next new stage can be reached; completing one stage prepares the organism for the next stage in the sequence. There is a basic requirement for this steady progression to occur at an optimum rate; as Whitehead phrases it, "The art of progress is to preserve order amid change, and to preserve change amid order..." (Whitehead, pp. 339-340).

Guidelines for the introduction of change or progression into the psychomotor curriculum, in the nature of an orderly, hierarchial sequence are presented in the following section. Knowing how novelty and increasing complexity can be introduced into the psychomotor curriculum in an orderly fashion will prevent the curriculum from stagnating and also prevent any child from being locked in at a particular stage of competency.

DEVELOPMENTAL CONSIDERATIONS: PROGRESSION

> "Assuming that adequate space and apparatus is available... children will developing skill, confidence and versatility just by being given the opportunity. One has only to witness city children using an adventure playground or country children climbing trees to realize there is little need for each movement to be analyzed and explained by a knowledgeable adult. The children, permitted to make their own discoveries, will choose to work at their own level, and as time goes on they will progress and become more adventurous and confident."

So states Don Buckland in his book titled, Gymnastics.

This is a pertinent observation about the development of motor patterns in young children. Unfortunately, few children have the means available to further the development of their movement abilities in as wide a variety of ways as they should, and therefore the role of the teacher to assist progress in the movement realm (as in all other realms), is vitally important. By provision of a continually changing and increasingly challenging environment, by the setting of more and more difficult movement tasks and by encouraging the children to think imaginatively about their responses to those tasks, the teacher can and does help in this natural development of psychomotor competence.

All too often, the teacher and the children are left stranded in the exploratory stages of movement. Other than encouraging the children to try more and more different ways of responding to a task, the teacher does not know how to elicit greater quality of response or how to move the child ahead to more advanced developmental levels.

The purpose of this section is to identify several means of establishing a sequential progression in the development of basic movement skills. Certain principles can be applied which will guarantee flexibility in the development of children's work relative to their individual abilities, needs and interests. From these guiding principles, the psychomotor curriculum should truly be evolved, maintaining some continuity in its sequential development.

Primary grade children are usually in the initial stages of gaining some understanding of the simple concepts of the elements of movement in activity primarily of an exploratory nature. After ensuring that the children can and will follow directions, that they can use space well without interferring with others, and that they can stop and start with control, the teacher may begin to introduce new movement problems to

enhance their movement abilities.

The conceptual framework for a series of experiences can become progressively more challengeing by refining differentiations and introducing more complex integrations and generalization of movement patterns. The following framework is presented as an example of a sequence of experiences incorporating some concepts that are a hierarchial nature in terms of degree of challenge and some concepts that are introduced to provide novelty with less challenge. Any new movement task may be integrated with any previously introduced movement theme or themes to provide hierarchial challenges for skill development. In these ways psychomotor competency is increased by providing the added challenges of more complex movement integrations followed by generalizations.

1. Use of space with change of direction.
2. Traveling on different parts of the body.
3. Changing levels.
4. Balancing on different parts of thebody.
5. Curling and stretching.
6. Changing and making different body shapes.
7. Lifting parts of the body high.
8. Twisting and turning.
9. Moving fast and slow.
10. Moving strongly and lightly.

Besides establishing progression through the introduction of increasingly more challenging movement problems, the use of apparatus can increase thedifficulty of thechallenge.

1. Balance beams to move along.
2. Small apparatus to jump over, move under, through, or around.
3. Larger apparatus on which to climb, or from which to hang and swing.

Further development of basic movement concepts to increase the difficulty and establish progression can be brought about by:

1. Combining simple concepts such as direction and level, i.e., moving forward high and backward low; or curling fast and stretching slowly.

2. Asking children to repeat movements exactly, to develop a movement memory.

3. Developing increasingly complex sequences of movement such as--run and jump--run, jump and roll--run, jump and make a shape in the air --run, jump to make a shape in the air, land and roll.

4. Gradually introducing partner and then small group work.

5. Asking for greater control and continuity in movement.

6. Increasing the difficulty of balance and introducing the challenge of height.

These latter means of increasing the challenge and developing progression in the acquisition of psychomotor competence apply equally well to children in the upper elementary grades. The following are suitable for development of movement ideas or themes:

1. Symmetry and asymmetry in body shape.
2. Strength and lightness.
3. Balance and continuity.
4. Parts of body meeting and parting.
5. Symmetry and asymmetry in variations of leg postures.
6. Body parts leading movement.
7. Flight--the feeling of suspension in air.
8. Taking or sharing a partner's weight.
9. Group patterns and pathways.

Concurrently with the development of good body management and control in a wide variety of situations and increasingly challenging environments, the development of manipulative skill takes place. In kicking, bouncing, catching, throwing, dribbling, volleying and striking are elicited together with the constant application of space, time, force concepts to the skills in question. By continual application of these basic concepts, the fundamental motor patterns are enhanced and greater efficiency and control of the movement can be gained.

The progressive refinement of these motor patterns and the introduction of the more specialized skills of the traditional sports occurs over the total K-6 span of curriculum. The sequence of progression will be fairly constant but flexible enough to meet the varying demands of each individual. The means of developing progression by increasing the difficulty of the challenge should follow these principles:

1. Move from simple to more complex motor patterns, i.e., rolling a ball is easier than throwing which is easier than striking.

2. Moving from using a large ball to a smaller one when catching and the opposite when throwing.

3. Progress from standing still to perform the skill, to doing it while moving.

4. Progress from using a large target to a smaller one.

5. Progress from being near your target to being far away.

6. Progress from using a stationary target to using a moving one.

7. Progress from hitting a stationary ball to hitting a moving one.

8. Progress from working alone, to two's, to three's, etc.

9. Progress from single skills to combined sequences of skills.

A teacher should try to plan with these things in mind, but remembering that essentially there is no set sequence of activities that can be laid down for every teacher to follow. Where the teacher goes, how he goes, how far he goes depends primarily upon the children, on the teacher's ability to observe them, together with knowledge of the children and their movement capabilities--as well as the situations which exist at any given point in time.

EDUCATIONAL OBJECTIVES AND PROTOTYPICAL LEARNING EXPERIENCES FROM "WHAT MOVES" SECTION OF ANALYSIS

Since the range of possible learning experience that can be generated frm the curriculum framework is practically unlimited, it is necessary to identify specific content and process objectives that can be met within each category of movement possibilities. Defining objectives makes it possible to choose experiences that will most appropriately enhance a child's competence for a particular aspect of movement. In this section, objectives and experiences are suggested for the first category ofmovement factors concerned with the body (Body Awareness) and its action (the what) which illustrates the way in which activities can be generated from each of the other parts of the framewrok. It must be remembered, however, that the objectives stated are by no means exhaustive of all possibilities. For every process objective there is corresponding information about that process and the environments of which it is a part, which comprises the content objectives. Also, for every kinesthetic process there are many corresponding cognitive, perceptual, affective and volitional processes that are inevitably a part of the activity and upon which attention could be focused. While recognizing the wide range of possible objectives, it is necessary that the teacher limit and define the objectives very specifically so that any selected activity is clearly focused and purposeful and therefore not confusing to the child.

Body Awareness

Identification, dfferentiation and Integration of Body Parts

One factor crucial to the development of psychomotor competence is the child's kinesthetic and cognitive awareness of parts of the body and how they can move. A primary consideration in being consciously aware of any part of the body is being able to identify it. Bringing it to conscious awareness and under conscious control is enhanced by knowing it in terms of some symbolization stored in memory. In this instance it means labelling a part of the body, recognizing the label and responding in movement with the appropriate part of the body when it is referred to. To ask a child to touch his thigh, or put his forearms on the floor when he cannot identify these parts of his body precludes his being able to make the appropriate response, i.e.,have, in this instance, the necessary information to complete the task (unless it is demonstrated).

It would be easy to make an academic exercise out of this matter of identification (cognitive awareness) of parts of the body. However, in order that children not only name the part but gain kinesthetic awareness by learning to control movement of that part, many experiences can be designed to elicit appropriate motor responses to verbal instructions.

Content Objectives

The child should know that:

(a) Parts of the body have labels, what the labels are and the parts of the body they refer to.

(b) Parts of the body can move in isolation.

(c) Parts of the body can move together.

(d) Movements and their qualities have names and what these names are.

Process Objectives

Kinesthetic discrimination and differentiation

The child should be able to:

(a) Discriminate parts of the body in movement.

(b) Isolate or differentiate parts of the body in movement.