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# Teachers' beliefs about purposes as reflected in teaching practices: A study in elementary school physical education

Roberts, Ellen Louise, Ed.D.

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U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

# TEACHERS' BELIEFS ABOUT PURPOSES AS REFLECTED IN TEACHING PRACTICES: A STUDY IN ELEMENTARY SCHOOL PHYSICAL EDUCATION

by

Ellen L. Roberts

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Kate R. Barrett
Dissertation Advisor

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at The University of North Carolina at Greensboro.

Dissertation Adviser Kate R. Barrett

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The focus of this study was to discover how beliefs about the purposes of elementary school physical education were reflected in teaching practices. Specifically, the study sought to determine what teachers believed to be the primary purposes of their teaching and further to determine the ways and extent to which those purposes were reflected in the teachers' selection of content and interactive teaching behaviors. The theoretical base for the study is the body of research on teacher thinking, especially the relationship between thoughts and actions as conceptualized in the model by Clark and Peterson (1986).

The interpretive research paradigm was selected as the framework for the methodology. Participants were five experienced elementary school physical education specialists. All were observed teaching, had selected lessons audiotaped, and participated in both informal and semi-structured interviews.

The teachers' beliefs about the purposes of elementary school physical education reflected some common thinking yet remained highly individualized. Teachers named from two to four primary purposes but had difficulty in identifying both the purposes of their teaching and the means by which they sought to achieve those purposes. The five teachers identified 15 purposes for their teaching. They were

consistent in practicing 7 of these, inconsistent in practicing 5, and 3 were placed into a questionable category. No teacher was able to carry out practices that were consistent with all of her purposes. Differences between more consistent and less consistent teachers were identified, with the more consistent teachers characterized by their ability (a) to identify a greater number of means and more relevant means for achieving their purposes, (b) to be more verbal both during the interviewing process and during instruction, (c) to display greater interest in continued study, and (d) to use less formal class structures.

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# CHAPTER I

# INTRODUCTION

Elementary school physical education has, in recent years, espoused a variety of purposes. Sometimes identified as aims, goals, or objectives, these purposes identify outcomes to be achieved by students. A number of textbook writers in the field of children's physical education (Arnheim & Pestolesi, 1978; Dauer & Pangrazi, 1983, 1989; Fowler, 1981; Hoffman, Young, & Klesius, 1981; Kirchner, 1981, 1985; Kruger & Kruger, 1977, 1982; Schurr, 1975, 1980; Vannier & Gallahue, 1978) identify as many as six to eight purposes for elementary school physical education. Among these are such diverse purposes as (a) developing cognitive abilities, (b) enhancing physical growth and development, (c) developing a positive self-concept, (d) developing movement skills, (e) finding personal meaning in and through movement, (f) developing and maintaining an optimum level of physical fitness, (g) developing constructive use of leisure time, (h) enhancing creativity, and (i) developing desirable social qualities.

It is doubtful, and indeed it has never been shown to be true, that so many purposes can be achieved. It also remains unclear (a) whether or not teachers in the field embrace all of the purposes advocated by the writers of

textbooks, and (b) which of the purposes might be most valued. Having such varied goals advocated by leaders of the field could easily result in a lack of clear direction in some physical education programs. Although physical educators may operate under some constraints, they are often largely responsible for developing their own purposes and programs. It is likely, therefore, that the emphasis on particular goals will vary from program to program, depending on what individual teachers believe to be most important for their children to learn. Fait (1976), in discussing the historical aspects of physical education, stated:

> The emphasis in the curriculum has shifted repeatedly in response to changes in the popular concept of the purpose of physical education. Because there is currently no general agreement about the purpose of physical education, the present-day curriculum may have one of several possible focuses, or it may amalgamate different views. (p. 9)

Fait went on to express the view that the purpose of physical education is the foundation on which the framework of the curriculum is constructed and by which all elements of the planning process are directed. Similarly, Schurr (1980) stated, "The purposes of physical education have implications and give direction for content, organization, materials, experiences, process (teaching and learning), and evaluation" (p. 33).

What teachers believe about the importance of various goals or purposes thus has the power to have a significant impact on the program itself and on a variety of teaching

behaviors. While educational researchers have, since 1976, shown a growing interest in what teachers think and believe, little research has been done to determine the extent to which teachers' beliefs are reflected in various teaching practices.

## Statement of the Problem

The purpose of this inquiry was to discover how beliefs about the purposes of teaching are reflected in the actual practices of elementary school physical education specialists. More specifically, answers to the following questions were sought:

1. What do elementary school physical education specialists perceive to be the primary purposes of their teaching?

2. In what ways and to what extent are the perceived purposes of teaching physical education reflected in interactive teaching behaviors?

## Definition of Terms

For purposes of interpretation in this study, the following meanings are assigned to words used:

Physical Education Specialist - a person certified to teach physical education whose responsibilities include the teaching of physical education the majority of the school day.

Purpose - "an intended or desired result; end or aim; that which one puts before oneself as something to be done or

accomplished" (American College Dictionary, 1963, p. 984).

Content - the material or subject matter to be taught; may refer to the material taught at the lesson or unit level or to curricular offerings grouped in other ways.

Teaching Method - process by which the content of the lesson is delivered; the term includes the concepts of strategies and styles of teaching.

Interactive Teaching - refers to that phase of teaching in which the teacher is actively engaged with students (Jackson, 1968, pp. 151-152).

## Underlying Assumptions

Ideas that are accepted and are not investigated as a part of this study are acknowledged as follows:

1. The subjects' perspectives are "meaningful, knowable, and can be made explicit" (Patton, 1980, p. 196).

2. Perceptions can be revealed using the interview process.

3. The physical education specialist is honest in revealing perceptions and providing information.

4. Field observation and audiotaping are appropriate methods for gaining comprehensive information on the teachers' interactive teaching behaviors.

5. The observation of 26 to 38 classes per teacher is sufficient for determining the extent to which beliefs about the purposes of teaching are reflected in actual teaching.

## Scope of the Study

The investigation was limited to the study of five female elementary school physical education specialists in the same school system in the southeastern United States. Participants had between 9 and 14 years of teaching experience in physical education and between 8 and 12 years at the elementary level. Each participant was observed teaching between 26 and 38 classes and had 6 classes, 1 at each grade level, audiotaped. The children received physical education instruction from the specialist one day a week for 30 minutes. Observations were completed over a 10-week period in the fall semester. All data collection, analysis, and interpretation were done by the same investigator.

## Significance

The entire body of research on teacher thinking, of which research on teachers' theories and beliefs is a part, seeks to provide a better understanding of the teaching process (Clark & Peterson, 1986). Such knowledge may be especially important at this time. Efforts to identify the competencies of both teachers and students and to evaluate in objective and quantifiable ways have overshadowed the human qualities of individual teachers and students. If what teachers believe significantly influences what and how they teach, it is of obvious importance to know what teachers believe as well as the ways those beliefs are acted out in the classroom. This seems especially true of beliefs

as important as the purpose of one's teaching. This study contributes to the growing body of knowledge that examines the relationship between beliefs and teaching practices.

An examination of the literature in elementary school physical education reveals a diversity of purposes being advocated by textbook authors and other leaders in the profession. What teachers in the field believe to be most important for children to learn is not known. Neither is it known whether striving to reach so many goals obscures the means by which particular goals may best be attained. This investigation identifies those purposes considered most important to the elementary school physical educators being studied and further determines the ways and extent to which their beliefs about purpose are reflected in actual teaching.

The relationship of beliefs to practice is an area of study which has only recently received the attention of researchers (Clark & Peterson, 1986). This dissertation, which examines the relationship of beliefs about purposes in physical education to practices related to those purposes, may provide information and insights which are useful to particular individuals from the following groups: (a) elementary school physical education specialists who may identify with the participants of the study, especially those having similar purposes and working under similar time constraints; (b) evaluators of teachers or those who do research in the area of teacher effectiveness, as the

teachers they are evaluating or studying may have beliefs about the purposes of their teaching which are different from those of the evaluator and the bias of the observation instrument; (c) professional preparation programs, some of which may have dealt little with the beliefs of their prospective teachers; and (d) educators responsible for the staff development of inservice teachers.

## Organization of the Dissertation

The dissertation is organized into 10 chapters. Chapter I introduces the study. Chapter II reviews the literature on the purposes of physical education and teacher thinking. Chapter III describes the procedures followed in conducting the research. Chapters IV through VIII present and discuss findings on the individual participants of the study, including their backgrounds, beliefs about the purposes of their physical education teaching, the means for achieving those purposes, and the observed relationships between purposes and teaching practices. Chapter IX presents and discusses findings across participants. In Chapter X the study is summarized.

# CHAPTER II

# REVIEW OF LITERATURE

Three bodies of literature provide important background information for this study. The first focuses on the purposes of physical education in general and elementary school physical education in particular in the United States during the period from 1880 to 1987 and considers factors which influenced their direction. The second identifies the purposes of elementary school physical education from 1957 to 1987 through a review of textbooks in the field. The final section of the chapter presents the literature that links teachers' thoughts and beliefs to teaching practices.

## The Purposes of Physical Education

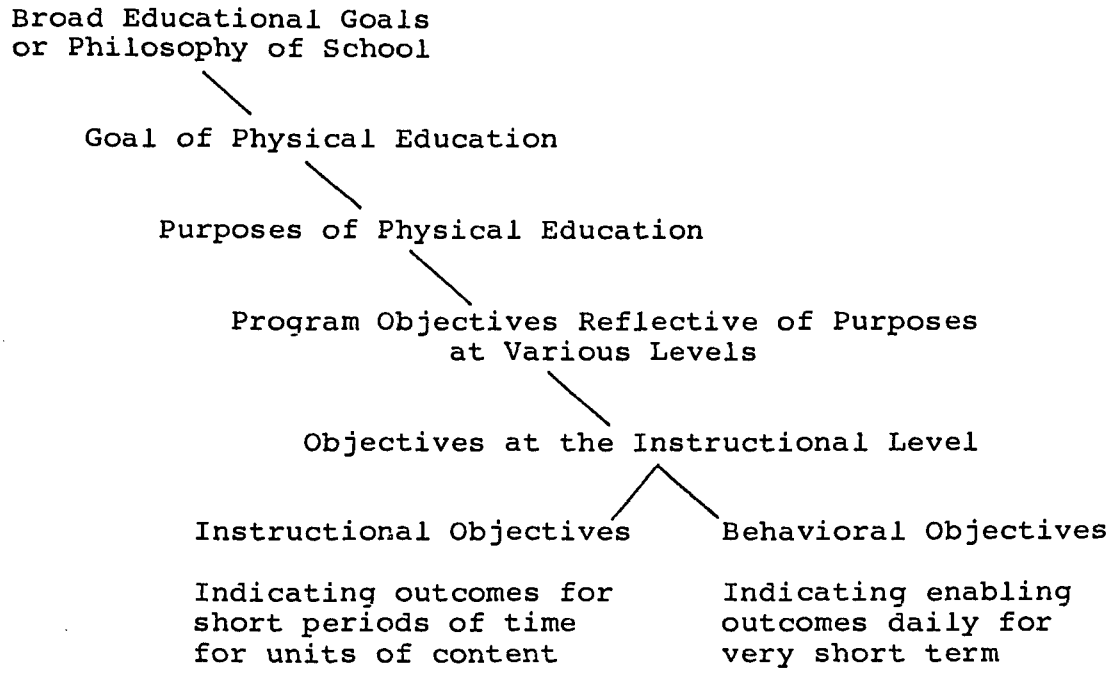
Informed knowledge about the purposes of physical education in this country necessitates an understanding of (a) the terminology used by those who write about such purposes, (b) the functions purposes serve in an educational setting, and (c) the general or specific purposes given emphasis by physical educators during different periods of our history. The material which follows is thus discussed under three broad headings: terminology, functions, and the identification of purposes.

Terminology

Physical education literature frequently includes the words aim, goal, objective, and purpose. Some authors have used the terms interchangeably, while others have established a hierarchical ordering to designate the generality/specificity of the desired outcomes to be achieved by children as the result of participation in physical education programs. Even when a hierarchy has been established, authors have not been in agreement on the ordering and assigned meanings. Most have, nevertheless, used the term objective to designate the more specific level or levels, sometimes attempting to clarify meaning by indicating that they were general, intermediate, or specific objectives. One example of the way authors have sought to make clear the meanings assigned to words is seen in Figure 1. Schurr (1980) used the diagram to illustrate the relationship between goals, purposes, and various types of objectives.

Evans, Bacon, Bacon, and Stapleton (1958), rather than beginning with broad goals and using the term objective to indicate more specific outcomes, identified general objectives of physical education and then specific purposes of physical education activities. Vannier and Gallahue (1978) used aims to indicate the most general desired outcome and became more focused in listing the general objectives of elementary school physical education. Further evidence for the overlapping meanings of these words is found in Bucher and

Figure 1. Relationship of goals, purposes, and objectives in curriculum design.




Note. From Movement experiences for children: A humanistic approach to elementary school physical education (3rd ed.) (p. 30) by E. L. Schurr, 1980, Englewood Cliffs: Prentice-Hall.

Thaxton's 1979 text: "Objectives are the aims, purposes, and outcomes that students hopefully will achieve as a result of participating in physical education and other programs in the elementary school" (p. 14).

Williams (1964) made clear the use of terminology in his own writing and provided a means for others to gain similar clarity when he wrote:

> An aim indicates direction, point of view, or goal. It is general in nature. As Dewey suggests, an aim is not really conceived unless the means are visual and organized for the end in view. Objectives, on the other hand, are precise, definite, and limited statements of steps in the procedure of realization of the aim. Between aim and objective there arises the need for statement of purposes which are not general enough to be an aim and not precise enough to be objectives. These declarations may be called platforms, purposes, and similar terms, thus avoiding confusion in terminology (pp. 324-325).

Writing a decade later, Nixon and Jewett (1974) stated:

> There is not standard acceptance or agreement concerning a differentiated definition for each of these terms [aims, purposes, objectives, goals, and outcomes]. Thus, it is indeed difficult to attempt to order one's thinking about the purposes of physical education, and to compare and contrast the many varying shades of philosophical exposition found in the vast quantity of physical education literature which has accumulated in recent years.
>
> The authors believe that a consistent understanding and use of these terms is desirable and possible (pp. 82-83).

Nixon and Jewett defined aim as the "ultimate, ideal conceptualization of the end result to be attained" and general objectives as major subdivisions of the aim that "serve the function of separating and clarifying the essential elements of the total aim" (p. 83). Like the aim,

they give direction to the educational effort. At a more specific level, the authors identified (a) instructional objectives; (b) goals, which are synonymous with specific or behavioral objectives; and (c) outcomes, "a description of actual, overt, describable behaviors exhibited by a student on the last day of instruction" (p. 84). Purpose is used by Nixon and Jewett as an inclusive term for all the concepts previously discussed, regardless of their level of specificity. An aim is thus "the ultimate purpose toward which physical education is directed" (pp. 84-85).

Ammons (1969) stated that, in addition to there being no universally accepted definition of objectives, her examination of the research on educational objectives revealed that a statement of objectives or a recommended methodology for determining objectives is almost always couched in value terms. Herrick (1965), in fact, defined objectives as "the important value statements of what the learner is trying to accomplish or what the educational program is trying to achieve" (p. 91).

Jewett and Bain (1985) have identified five value orientations which have influenced curricular practice in physical education and are reflected in various program goals. The value orientations are described as follows:

1. Disciplinary mastery places the highest priority on mastering the subject matter and acquiring important knowledge. Physical education goal statements most clearly

reflective of this orientation emphasize the mastery of movement fundamentals and sports skills.

2. The social reconstruction perspective places societal needs above individual needs and views the school as an agent of change. Physical educators holding this value position might select goals relating to the development of group social skills, awareness of others, and interpersonal sensitivity.

3. A learning process orientation emphasizes that how people learn is as important as what they learn.

4. The concept of self-actualization is one that encourages individual excellence and self-direction. It overlaps with the learning process orientation by emphasizing process skills for individual development and personal learning. Learners are responsible for selecting goals and for guiding their own learning.

5. An orientation toward ecological validity is based on the assumption that each person is unique but exists in relationship to a particular environment. There is a view of interdependence and thus an overlap with the social reconstructive orientation. Neither the individual nor society takes precedence.

Ammons noted that, while objectives may come from a number of sources, they have usually been "reasoned reflections of individual or collective opinion, not results of empirical studies" (1969, p. 908). This reinforces the

idea that a statement of objectives reflects the values or beliefs of the individuals or groups who develop it.

Functions

A further understanding of purposes, aims, goals, and objectives can be gained by realizing the functions they are thought to serve. These have been set forth by a number of educators. Herrick (1965) discussed the terms collectively as objectives and suggested that they serve five important functions. First, objectives define the direction of educational development. So strongly was this belief held that Herrrick stated:

> That learning which results in development related to or moving toward educational objectives constitutes education. That learning which results in development opposed to or moving away from educational objectives constitutes miseducation. (p. 91)

Second, objectives are the major basis upon which desirable learning experiences are selected. Third, objectives help define the scope, more recently called the horizontal continuity of learning, of an educational program. This refers to the determination of the number of different important elements to be considered at a given time in an educational program. In physical education it could refer generally to the content to be included at a given grade level or to the specific learning experiences selected for a three-week period of instruction. Fourth, objectives help define the emphasis to be made in an education program. This suggests that, beyond enumerating the objectives to be

achieved, educators must establish priorities. These are, again, reflections of their particular value orientations. Finally, Herrick suggests that objectives form one of the major bases for evaluation. They are necessary for determining the educational development of children and the success of a program.

Any examination of the purposes of physical education in the literature must therefore be done with some awareness of how the various authors have used the terms previously discussed. This enables comparisons to be made at the same level of specificity. In presenting the purposes of physical education in the section that follows, the language used--e.g., purposes, goals, or objectives--is that of the author or researcher whose findings or ideas are being discussed.

Identification of Purposes, 1880-1987

Several studies of the purposes of physical education over various time periods have already been done and serve as the foundation for the identification of purposes provided here. Particular credit is given to Price (1946) and Hess (1959), who examined objectives or purposes of physical education across several time periods. While their studies are of the purposes of physical education in general, information about the purposes of elementary school physical education comes largely from the monograph A history of elementary school physical education, 1885-1985 edited by Barrett (1985).

1880-1900. The significant history of physical education in the elementary schools begins in the 1880's and is, in many respects, interwoven with education in general. Called physical culture, physical training, or physical education, elementary school programs in existence between the 1880's and 1920's consisted largely of formal exercises usually referred to as gymnastics. In an effort to bring some cohesion to the teaching of gymnastics in the public schools, the Conference in the Interest of Physical Training was held in Boston in 1889. Through discussions at that conference many of the questions arose that are still asked by professionals today, including one of great interest in this study: What are the aims of the program? (Umstead, 1985)

Price (1946) found that prior to 1900 "there was a tendency to emphasize objectives that pertained to individual welfare, i.e., health, strength, discipline, and harmonious development of the body, rather than to social welfare. Since 1900, however, moral and social aspects have been stressed" (pp. 16-17). One leader from this period who significantly changed the content of children's physical education and influenced its direction for a number of years was Jesse Bancroft. Beginning in the Brooklyn Public Schools where she became Director of Physical Training in 1893 and extending her influence across the United States through numerous textbooks written between 1896 and 1937,

Bancroft brought about a focus on traditional games and on the development of good posture (Umstead, 1985).

1900-1919. Hess (1959) summarized the objectives of physical education for the period from 1900 to 1919 by identifying five general areas:

1. Hygiene - pertained exclusively to anatomical measurements and physiological functions; included instruction in health maintenance.

2. Educative - described as neuromuscular education or sensory training; emphasized the learning of specific skills for recreation and vocation.

3. Recreative - listed by Sargent as early as 1906; not identified by the pursuit of pleasure but rather with making it possible for the individual to have greater organic vigor for returning to work.

4. Remedial - correction of assymetry; posture correction.

5. Social-moral - learning of desirable social habits and good conduct; not emphasized until later in the period. According to Hess, "the recreative, educative, and remedial were important only to the extent that they contributed to the hygienic objective" (p. 42).

A factor which powerfully influenced physical education in the early 1900's was the impact of progressive thinking in general education. Physical education closely aligned itself with the general education goals of social

efficiency and democratic living. Lynn's (1944) study of the major emphases of physical education in the United States indicated that this shift in focus was begun slightly earlier. She said, "It was not until the decade before the present century that the social emphasis in physical education was rapidly expanded" (p. 223). Whether it began in the 1890's or the early 1900's, by 1910 the "new physical education", with its emphasis on sports and games, had been identified by Wood (Umstead, 1985), and the concept of the contributions made by physical education was expanding.

In 1918 the National Education Association developed the Seven Cardinal Principles of Education. These were identified as (a) health, (b) command of fundamental processes, (c) worthy home membership, (d) vocation, (e) citizenship, (f) worthy use of leisure time, and (g) ethical character. According to Umstead (1985), elementary school physical education teachers "faced the next decade confidently as they declared that physical education could make a significant contribution to all seven of these goals" (p. 15). LaPorte (1936) stated in the Eighth Annual Report of the Committee on Curriculum Research that by 1920 the objectives of physical education listed in order of priority were (a) recreation, (b) health, (c) character, and (d) citizenship.

<u>1920-1928</u>. Hess's (1959) examination of physical education from 1920-1928 revealed eight objectives of the

profession which could be classified under two headings:

physical objectives

1. To Promote normal growth and organic development
2. To improve strength and endurance
3. To develop neuromuscular control
4. To correct physical defects

and social objectives

1. To promote moral and socializing influences for citizenship
2. To teach citizenship
3. To develop character
4. To improve morale (p. 87)

Although advances in preventive medicine placed great importance on the health of the individual, the trend in physical education was away from the health and physical objectives and toward an emphasis on the educational and social objectives (Hess, 1959).

The most influential textbook to come out of this period was Wood and Cassidy's 1927 book The New Physical Education (Swanson, 1985). It advocated the incorporation of more natural and enjoyable activities in the program and those that would promote social, intellectual, and moral growth. The program consisted of games of low and high organization, rhythmic activities, and other forms of movement less formal than had been practiced previously. Wood felt the primary objective of physical education should be the preparation of human beings for citizenship in a democracy. As pointed out by Swanson, the philosophy of The New Physical Education influenced textbooks published over the next several decades. It should be understood that

during the 1920s and 1930s physical education was in the process of evolving from the old formal programs to the newer game- and play-oriented ones. While Wood and Cassidy embraced the social and educational aims, Clark's 1917 and 1924 texts and Coleman's 1924 course of study for elementary school physical education in North Carolina emphasized the physical objectives (Swanson, 1985).

The purposes of physical education across the time periods just discussed are summarized by Price (1946) in Table 1. He compared objectives for the period prior to 1900 and from 1900-1910, 1910-1920, and 1920-1935. It can be seen that while the earliest objectives were for individual development and emphasized health and physical development, there was a gradual shift toward social and educational objectives such as citizenship, leadership, and the aims of education in general.

1929-1945. With the onset of World War II, physical education returned for a brief period of time to its emphasis on the health and physical objectives (Fait, 1976). Social and education objectives were not forgotten but, according to Hess (1959), "The health and physical objectives, in directing the practices of American physical education during the greater part of the 1939-1945 period, emphasized the singular objective described as physical fitness" (p. 3). Hess identified the objectives of physical education for the 1939 to 1945 period as follows:

Table 1

Trend of Objectives, 1900-1935

| | Prior to 1900 | 1900-1910 | 1910-1920 | 1920-1935 |
|---|---|---|---|---|
| 1. | Health | Character | Recreation | Health |
| 2. | Harmonious devel. of the body | Health | Health | Recreation |
| 3. | Strength, Endurance | Recreation | Citizenship | Citizenship |
| 4. | Discipline | Citizenship | Character | Aims of Educ. in general |
| 5. | Correction of posture | Harmonious devel. of the body | Development of Intellect. Proc. | Leadership |
| 6. | Physical express. and grace | Correction of posture | Preparedness | Character |
| 7. | Moral Effect | Strength, Endurance | Correction of posture | Cultivation of attitudes |
| 8. | Skill | Development of Intellect. Proc. | Strength, Endurance Form good habits Skill | Joy of living |
| 9. | Recreation | Skill Discipline | | Skill |
| 10. | Development of Intellect. Proc. Self-control and Self-reliance | | | Constructive programs |

Note. Adapted from The Establishment of Principles Which Are Essential for the Realization of the Objectives of Physical Education (p. 90) by H. D. Price, 1946, Doctoral dissertation, New York University.

1. Health objective: described in much the same way as in the preceding period; included development and proper functioning of vital organs, correct postural training, and health for emotional control.

2. Socio-educational objectives: sometimes described as social fitness and included: emotional adjustment, worthy use of leisure, effective citizenship, mental health, and cultural and social growth.

3. Physical fitness objective: dealt exclusively with physical education's contribution to physical development; most emphasized, along with the health objective.

1946-1957. From 1946 to 1948 health and physical fitness were emphasized together. Throughout most of this immediate postwar period, however, uncertainty about purposes prevailed (Hess, 1959). Swanson (1985) stated that by the end of the 1940s physical education was reasonably well established in the elementary schools of many big cities and was continuing to spread into the suburbs. The concept of teaching the whole child dominated and was most often expressed, as Williams (1964) had first advocated it in 1930, as education through the physical rather than education of the physical. The socio-educational objectives that had characterized the decade before World War II were gradually emerging so that by 1950 they were the ones most emphasized by the profession (Hess, 1959).

The paper by Lumpkin (1985) also sheds light on this period. It states:

> Growing out of the new physical education of the preceding decades, elementary school physical education of the 1950s espoused the aims of complete education yet sought to achieve them through traditional programs. (p. 25)

Education was criticized in the 1950s and 1960s for being too soft and failing to stress learning. Physical education during these years sought to prove its value in developing the whole child.

1958-1972. In the early part of this period, Adams (1960) examined the writing of 33 authorities to determine their objectives for physical education for boys in grades 7 through 12. Objectives were identified under four headings: (a) organic development, (b) interpretive development, (c) neuromuscular development, and (d) personal-social development (see Table 2). Adams found there to be clear consensus among experts on the major objectives. As the study looked at only the most general level of objectives, however, the precise meanings and emphasis given to each objective cannot be ascertained. Thus, it remains unclear whether such consensus would exist at a more specific level.

In 1969 Rosentsweig reported a survey of the objectives of physical education as ranked by 100 college physical educators in Texas. His analysis was at a more specific level than was Adams' study. Rosentswieg selected 10

Table 2

Frequency of Physical Education Objectives from Authoritative Sources

| Authority | Organic Development | Interpretive Development | Neuromuscular Development | Personal-Social Adjustment |
|---|---|---|---|---|
| AAHPERD | X | | X | X |
| Bookwalkers | X | X | | X |
| Brace | X | X | X | X |
| Barnell-Hagman | X | X | X | X |
| Bucher | X | X | X | X |
| Clarke | X | | | X |
| Cowell-Hazelton | X | X | X | X |
| Daniels | X | | X | X |
| Dow-Lawther | | X | X | |
| Duncan-Johnson | X | X | X | X |
| Evans-Gans | X | X | X | X |
| Hughes-French | X | X | X | X |
| Irwin | X | X | X | X |
| Knapp-Hagman | X | X | X | X |
| Korman et al. | X | X | X | X |
| LaPorte | | X | X | |
| Lawson-Hill | X | X | X | X |
| LaSalle | X | X | X | X |
| Matthews | X | | | X |
| McCoy | X | X | X | X |
| Miller-Whitcomb | X | X | | X |
| Nash-Hetherington | X | X | X | X |
| Neilson-Van Hagen | X | X | X | X |
| Nixon-Cozens | X | | X | X |
| Oberteuffer | X | X | X | X |
| O'Keefe-Aldrich | X | X | X | X |
| Salt et al. | X | X | X | X |
| Seaton et al. | X | X | X | X |
| Sharman | X | X | X | |
| Staley | X | | | X |
| Vannier-Fait | X | X | X | X |
| Voltmer-Esslinger | X | X | X | X |
| Williams | X | | X | X |

Note. From Principles for Determining High School Graduating Procedures in Physical Education for Boys (p. 118) by M. K. Adams, 1960, Doctoral dissertation, New York University.

objectives from the literature, defined them, and had each subject in his study complete a paired-comparison opinionnaire. This technique required that each value be compared in a forced-choice situation with every other value. The following priorities were established in his study:

1. Organic vigor
2. Neuromuscular skills
3. Leisure-time activities
4. Self-realization
5. Emotional stability
6. Democratic values
7. Mental development
8. Social competency
9. Spiritual and moral strength
10. Cultural appreciation (p. 795)

There were no statistically significant differences found between organic vigor and neuromuscular skill development. Rosentsweig did find, however, that, "A comparison by sexes suggested that men and women differ significantly in their belief as to what is the most important objective of physical education" (p. 786). Women physical educators ranked skill development first and organic vigor, defined in terms of development of the cardiovascular system and other organs, second. Men listed organic vigor first and skill development second. Rosentsweig explained the greater importance of organic vigor to men by indicating its emphasis historically during periods of war. Women, he felt, had affirmed the importance of skill development since the new physical education moved the curriculum from exercise programs to games, sports, and dance.

Lumpkin (1985) reported that in the early 1960s great progress was made in the fitness levels of school children, quickly to be followed by a slowdown and even reversal of that trend. She stated:

> Since fitness was not consistently stressed, what comprised elementary school physical education programs? Most schools and teachers offered a potpourri of activities which focused on traditional sports and games. (p. 28)

It was also during this period that a newer influence, sometimes called movement education or movement exploration, was being felt. Some programs and texts began to base all (Andrews, Saurborn, & Schneider, 1960; Blackmarr, Owens and Rockett, 1974) or part (Anderson, Elliott, & LaBerge, 1972; Corbin, 1969; Halsey & Porter, 1958) of the content for elementary school physical education on the movement theory formulated by Rudolf Laban (Laban & Lawrence, 1974) and to incorporate to varying degrees the child-centered approach and emphasis on acquiring movement knowledge often associated with movement education during this time period (Barrett, in review).

In 1969 the American Association for Health, Physical Education and Recreation published Essentials of a Quality Elementary School Physical Education Program: A Position Paper. In the foreward of the document is the statement:

> It [physical education] aids in the realization of those objectives concerned with the development of favorable self-image, creative expression, motor skills, physical fitness, knowledge and understanding of human movement. (p. 107)

The belief statement about the instructional program states:

> The instructional program should be designed to: (1) encourage vigorous physical activity and attainment of physical fitness; (2) develop motor skills; (3) foster creativity; (4) emphasize safety practices; (5) motivate expression and communication; (6) promote self-understanding and acceptance; and (7) stimulate social development. (p. 9)

The program goals identified by the profession are fairly broad and seemingly indicative of a struggle to identify its worth.

1973-1987. It was during this time period that some of the most significant research on the purposes of physical education was initiated. Approximately 30 studies have been done in order to validate and support a conceptual framework for physical education curricular decision-making. This framework, known as the Purpose Process Curriculum Framework (PPCF), was developed over a number of years under the leadership of Ann Jewett, Marie Mullan, and the Curriculum Commission of AAHPER's Physical Education Division. It encompasses two major divisions: purpose and process. The purpose framework contains 22 purpose elements and is based on the premise that "each individual person may seek personal meaning through any combination of the shared movement goals" (Jewett & Mullan, 1977, p. 4). The 22 purposes were first identified through review of the literature, logical analysis, and small group consensus-seeking (Jewett, 1987) and later validated through research. The first to do so was LaPlante's 1973 study of physical

education curriculum theorists, researchers, state directors, city and county supervisors, and teachers (LaPlante & Jewett, 1987). Since that time, research has continued to examine through a variety of methods and in various contexts the purposes and processes of physical education.

Most studies using the PPCF have examined the perceptions of participants, either of students enrolled in physical education programs or of adults participating in movement activities. A few studies have examined the perceptions of physical educators about the purposes of movement/physical education for students. Examples are (a) Dishman's (1975) study of members of the National Association for Physical Education of College Women and the National College Physical Education Association for Men, (b) the investigation by LaPlante, and (c) a cross-cultural study by Speakman (1985).

Speakman's study compared the purposes identified by 20 physical education curriculum specialists and teacher educators in the United States with those of physical educators in England and Japan. Participants completed three rounds of a questionnaire in which they rated the importance of the purpose statements as purposes of physical education for both the present and the future. The purposes of physical education in the United States were ranked as follows:

1. Circulo-respiratory efficiency
2. Joy of movement
3. Participation
4. Mechanical efficiency
5. Neuromuscular efficiency
6. Movement appreciation
7. Catharsis
8. Self-knowledge
9. Object projection
10. Teamwork
11. Leadership
    Cultural understanding
    Competition
14. Object projection
15. Expression
    Maneuvering weight
17. Clarification
18. Relationships
19. Awareness
20. Relocation
    Simulation
22. Challenge (p. 63)

Speakman (1986) summarized these findings by stating:

> Program emphasis in the USA is presently on health, fitness, and a lifelong commitment to physical activity. This emphasis is reflected by the top rankings for circulo-respiratory efficiency, joy of movement, and participation. (pp. 17-18)

Akers (1985) measured the value orientations held by classroom teachers on the importance of physical activity in their own lives and the importance of physical activity for children. Also based on the purposes identified in the PPCF, the Akers study used questionnaries and selected follow-up interviews and found that classroom teachers distinguished between their own values toward physical activity and their views of the importance of physical activity for children. In light of these findings, Robinson (1987) has suggested the need to investigate further "the distinction...between purposes as personal aims and as

institutional ends" (1987, p. 305).

In 1981 the American Association for Health, Physical Education, Recreation and Dance released a revised version of its 1969 Essentials of a Quality Elementary School Physical Education Program: A Position Paper. It appears that, while the goals of 1969 and 1981 are both fairly broad, a shift in focus took place in 1981. In the newer version, the development of creativity, expression, and communication are stated as movement-related goals rather than general goals. There is a stronger emphasis on skill development and the specific mention of health-related fitness. Two new goals for the instructional program were added in 1981: (a) "help develop an understanding and appreciation of movement as a participant as well as an observer"; and (b) "help each child learn how to handle risk-taking, winning, losing and all other challenges" (p. 9).

Three studies done in the 1980s investigated the purposes of physical education but were not based on the Purpose Process Curriculm Framework. These were (a) a 1985 study by Goc-Karp, Kim, and Skinner; (b) a 1987 study by Laflin and Johnson; and (c) a 1983 investigation by Haag. The study by Goc-Karp, Kim, and Skinner (1985) compared the perceptions and beliefs of 10 physical education faculty members and 56 undergraduate majors at one university. As a part of the interview process, each participant was asked

the question: What do you think is the central purpose of teaching physical education in K-12 settings? The students gave the following answers:

1. To develop body awareness, coordination and skill (34%)
2. To develop fitness (30%)
3. To develop lifetime sports skills (16%)
4. No idea (7%)

The physical education faculty answered as follows:

1. To develop body awareness, coordination and skill (55%)
2. To develop lifetime sports skills (35%)
3. Exposure to movement experiences (10%) (p.118)

The investigators of the study felt that the responses indicated that students were more aware of the emphasis society placed on fitness, while faculty members held a more traditional position, emphasizing skill and lifetime sports.

Participants of the Second National Conference for Physical Education Specialists for Children, held in 1984, were subjects of a study by Laflin and Johnson (unpublished manuscript). In the first phase of the study, conference participants were sent a questionnaire and asked to identify the goals of elementary school physical education. In phase two, respondents ranked the goals identified in phase one. Seven top goals emerged from the study:

1. Motor skills

2. Self-concept
3. Effective/Efficient movement
4. Physical fitness
5. Growth and development
6. Fitness attitude
7. Fun

One study of 560 physical education practioners was reported by Haag (1983) and done in the Federal Republic of Germany. Eight groups of aims and objectives were identified. Listed in order of the frequency with which they were named were the following:

1. Health and fitness (17.7%)
2. Personality and character development (17.2%)
3. Development of movement behavior (16.4%)
4. Social behavior and social learning (13.8%)
5. Affective domain (11.5%)
6. General sport specific objectives (10.1%)
7. Development of recreation behavior (8.5%)
8. Cognitive oriented objectives (3.9%)

The teachers were then asked to rank their objectives. The rankings may be summarized as follows:

1. Preparation for recreation
2. Fun and joy
3. Health
4. Physical fitness
5. Self competency

6. Movement
7. Compensation/free room
8. Development of a variety of abilities
9. Satisfaction of needs (p. 288)

It is interesting to note that some inconsistency exists between the rankings and the frequency analysis. Haag explained this by saying that teachers hold similar perceptions about the aims and objectives of physical education, but there are varying degrees of importance assigned to them.

Summary. Looking collectively at those studies done in the United States, it appears that the early emphasis on the health of the body developed into a more sophisticated and informed concept of physical fitness. With the advent of the Progressive Era in education came a focus on social-educational purposes and the belief that physical education could contribute to all of the major goals of education. As the content of physical education programs shifted from gymnastics and exercise to games and sports, skill development also became a major concern. The relative importance of each of these purposes--fitness, skill development, and social-educational development--has been influenced by various factors, such as war, the recent fitness boom, and the direction of education in general. In the 1980s, the two goals most frequently recognized by the profession are physical fitness and skill development.

There appears to be a stronger emphasis on skill development at the elementary level and among women. Men appear to make physical fitness their highest priority. Also highly valued by both sexes are the development of (a) lifetime or leisure sports skills, (b) enjoyment of movement, and (c) self-concept.

## Purposes Identified in Elementary School Physical Education Textbooks, 1957-1987

As a part of this literature review, 48 textbooks in elementary school physical education published between 1957 and 1987 were examined. The broad goals or purposes of elementary school physical education, whether called aims, goals, objectives, purposes, or outcomes, were identified. While some authors wrote paragraphs or pages about each purpose, others summarized all purposes in a single sentence. In spite of this variation, an attempt was made to discern the meaning of each stated purpose. Five of the textbooks were eliminated from the review because they (a) did not contain clear statements of purpose (Andrews, Saurborn, & Schneider, 1960; Bryant & Oliver, 1974); (b) stated purposes that were not desired student outcomes, such as goals for the teacher (Neilson, Van Hagen, & Comer, 1966); or (c) stated purposes other than their own, i.e., several sets of purposes from different perspectives or historical periods (Fait, 1976; Siedentop, Herkowitz, & Rink, 1984). Through analysis of the remaining 43 textbooks, 17 purposes in three

domains were identified. Of these, 4 purposes were in the psychomotor domain, 7 in the cognitive domain, and 6 in the affective domain. Following are examples of the terminology used and purpose statements made by various textbook authors. They are provided as a means of defining the focus and breadth of each purpose.

Purposes Identified in the Psychomotor Domain

The following four purposes were identified in the psychomotor domain:

1. Growth and development: "the development of organic systems of the body", including the digestive, circulatory, excretory, heat regulatory, respiratory, and other systems (Bucher & Reade, 1958, p. 30); body physiology, mechanically efficient posture, symmetrical growth, and physical attribute development (Morris, 1980); "the growth of healthy tissues, organs, and bones" (Nichols, 1986, pp. 4-5). This area is sometimes but not necessarily subsumed under physical fitness.

2. Physical fitness: physical efficiency (Arnheim & Pestolesi, 1978); physical foundations for effective movement (Bucher & Thaxton, 1979); physical attribute development (strength, balance, flexibility, agility, and endurance) (Morris, 1980); strength, power, endurance, agility, flexibility, and speed (Dauer & Pangrazi, 1983); health-related physical fitness components of muscular strength and endurance, flexibility, cardiorespiratory

endurance, and body composition (Nichols, 1986).

3. Skill development: skills basic to self-testing, games, and rhythms (O'Keefe & Aldrich, 1959); neuromuscular skill development (Vannier & Gallahue, 1978); motor patterns and skills (Elliott, Anderson, & LaBerge, 1978); "helping children become skillful movers" (Graham, Holt/Hale, McEwen, & Parker, 1980, pp. 14-15); competence in body management, fundamental skills, locomotor skills, manipulative skills, and specialized skills (Dauer & Pangrazi, 1983); "moving skillfully, demonstrating versatile, effective, and efficient movement in situations requiring either planned or unplanned responses" (Logsdon, Barrett, Broer, McGee, Ammons, Halverson, & Roberton, 1984, pp. 16-17).

4. Recreational skills: recreational skills and interests (Anderson, Elliott, & LaBerge, 1972); recreational behaviors (Morris, 1980); "laying the foundation for the development of many recreational skills that may be perfected in later years" (Kirchner, 1981, p. 10); development of constructive use of leisure time (Vannier & Gallahue, 1978). Some authors included recreational skills within the purpose of skill development, as did O'Keefe and Aldrich (1959) by adding the statement: "Skills for leisure time activities deserve marked consideration" (p. 45).

Purposes Identified in the Cognitive Domain

The seven purposes in the cognitive domain were described by the authors as follows:

1. Knowledge of movement principles: cognitive abilities, including the structure of movement, described as the "understanding of such movement principles as the role of gravity and force in the execution of physical movements..." (Bucher & Thaxton, 1979, p. 18); "the knowledge and understanding associated with movement concepts and the physical laws of movement" (Fowler, 1981, p. 23); "the knowledge that governs human movement," including the application of that knowledge (Logsdon et al., 1984, p. 17).

2. Knowledge of health/fitness: understanding of physical fitness (Corbin, 1969); health as it relates to physical education (Bucher & Reade, 1971); health skills (Hall, Sweeny, & Esser, 1980); "understanding and appreciation of the nature and maintenance of total fitness and health" (Fowler, 1981, p. 22); "an understanding of the importance of health-related physical fitness and the tools to assess, acquire, and maintain fitness through one's lifetime" (Nichols, 1986, p. 7).

3. Creativity: development of "creative and original movement responses to problems or tasks involving basic movement, gymnastics, games skills, rhythms, and dance" (Fowler, 1981, p. 3); under the heading of Personal Values, "the development of creativity and imaginative play should

be a goal" (Dauer & Pangrazi, 1984, p. 15); development of creative talents (Kirchner, 1985).

4. Intellectual competence/Learning to learn: the accumulation, comprehensive analysis, and evaluation of knowledge; the ability of a person to learn and to interpret knowledge (Bucher & Thaxton, 1979, p. 18); intellectual behaviors (Morris, 1980); intellectual curiosity and problem-solving (Hall et al., 1980); meeting and solving new movement demands (Schurr, 1980); intellectual discipline (Kruger & Kruger, 1982).

5. Communicating about and through movement: "primarily but not exclusively focused on nonverbal aspects of communication" (Schurr, 1980, p. 35); the opportunity for children "to think, to develop their ideas, and to communicate these ideas to others" and to "express their ideas in routines and original dances" (Nichols, 1986, p. 6).

6. Academic concepts: understanding gained through integration of movement experiences with science, social studies, mathematics, and language arts (Vannier & Gallahue, 1978); academic reinforcement (Gabbard, LeBlanc, & Lowry, 1987).

7. Rules, How to play games and sports: under Miller and Whitcomb's (1957) intellectual objective, "Knowledges involve history or background information about the activity or sport, terminology, rules governing the

activity, fundamentals and strategy of play, scoring, and records" (p. 5); divided by Arnheim and Pestolesi (1978) into (a) rules, regulations, and terminology, (b) objectives, strategies, and self-analysis, and (c) adaptations, modifications, and innovations (p. 13); rules, techniques, and strategies (Bucher & Thaxton, 1979).

Purposes Identified in the Affective Domain

Six purposes were identified in the affective domain:

1. Social attributes: the development of cooperation, competition, leadership, fair play, sportsmanship, honesty, respect, and understanding of others (Miller & Whitcomb, 1957, p. 4); sportsmanship, including the ability (a) to cooperate and take turns, (b) to win and lose gracefully, and (c) to follow and lead (Arnheim & Pestolesi, 1978, p. 13); "desirable social qualities" (Bucher & Thaxton, 1979, p. 19); "sharing the movement environment and respecting and interacting productively with others" (Hoffman, Young, & Klesius, 1981, p. 23); "citizenship and civic responsibility" and "competence in human and social relations" (Kruger & Kruger, 1982, p. 17); "developing in socially useful ways" (Kirchner, 1985, p. 10).

2. Self-concept: positive self-concept (Anderson et al., 1972; Dauer & Pangrazi, 1983); development of "one's sense of personal worth or worthlessness" (Vannier & Gallahue, 1978, p. 9); enhancement of the feelings a child has about himself (Kirchner, 1985).

3. Moral and ethical values: " meaningful experiences that help children think about ethical conduct, values, and personal integrity" (Kruger & Kruger, 1982, p. 17); personal values (Dauer & Pangrazi, 1983).

4. Meaning, Significance, Enjoyment, Appreciation: "an appreciation for physical beauty" (O'Keefe & Aldrich, 1959, p. 46); development of "an appreciation of physical activity, the aesthetic qualities of movement, and the intrinsically satisfying feeling states that result from using the body as an expressive and effective movement instrument" (Burton, 1977, p. 73); finding "personal meaning and significance in movement" (Schurr, 1980, p. 33); experiencing "the joy of discovery in learning to move" (Fowler, 1981, p. 23); "drawing relationships: significance of movement in one's lifestyle" (Hoffman et al., 1981, p. 23); awareness of "the meaning, significance, feeling, and joy of movement both as a performer and as an observer" (Logsdon et al., 1984, p. 17).

5. Safety skills and attitudes: development of safety habits (Anderson et al., 1966); development of "a regard for safety at all times in activities in which the child engages" (Bucher & Reade, 1971, p. 9); safety skills and habits and awareness of safety with respect to themselves and others (Dauer & Pangrazi, 1983, p. 14).

6. Emotional skills: emotional maturity (Halsey & Porter, 1958); emotional stability, including making

decisions and sticking to them and meeting group obligations and responsibilities (O'Keefe & Aldrich, 1959, p. 45); "a large number of cognitive and affective elements" (Hall et al., 1980, p. 11).

Discussion

The purposes identified by the authors of the 43 textbooks included in the review are summarized in Table 3. It should be realized that one purpose stated by an author is not necessarily represented by one checkmark on the table. This is true for two reasons: (a) a purpose statement in the text is sometimes broad enough to encompass two or more purposes on the chart; and (b) two or more purposes in the text may be included under one of the purposes on the chart. An example of the former is found in Kruger and Kruger's (1982) comments on the goal of self-realization and mental and physical health.

> Meaning: Physical education can help children to learn skills and concepts basic to their need for developing sound health and exercise practices; activity skills in dance, games, sport, and gymnastics; and most importantly, physical education can help children to develop a positive self-concept. (p.17)

This one goal statement is represented in the table by checks under physical fitness, skill development, and self-concept. This is true because the explanation just cited emphasizes both skill and self-concept development, and further explanation in the text indicates that fostering an optimum level of physical fitness is also

**Table 3**

**Purposes of Elementary School Physical Education as Identified by Textbook Authors, 1957-1987**

| | | | PURPOSES | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Psychomotor | | | | Cognitive | | | | | | | Affective | | | | | | |
| AUTHORS | YEAR | TERM(S) USED | Growth and Development | Physical fitness | Skill Development | Recreational Skills | Knowledge of Movement (Principles) | Knowledge of Health/Fitness | Creativity | Intellectual Competence Learning to Learn | Communicating About &Through Movement | Academic Concepts | Rules: How to Play Games, Sports | Social Attributes | Self-Concept | Moral, Ethical Values | Meaning, Significance, Enjoyment, Appreciation | Safety Skills and Attitudes | Emotional Skills | ADDITIONAL PURPOSES |
| Miller & Whitcomb | 1957 | Objective | X | X | X | | | | | | | | X | X | | | | | | |
| Bucher & Reade | 1958 | Objective | X | X | X | | | X | | | | X | X | X | | | | | | |
| Halsey & Porter | 1958 | Purpose; Objective | X | | X | | | | | | | | | X | | | | | X | |
| O'Keefe & Aldrich | 1959 | Objective | X | | X | X | | | | | | | | X | | | X | | X | |
| Vannier & Foster | 1963 | Goal | | X | X | X | | | | | | | | | | | X | | | Knowledge about life, people |
| Bucher & Reade | 1964 | Objective | X | X | X | | | X | | X | | | X | X | | | | | | |
| Anderson, Elliot, LaBerge | 1966 | Purpose | X | X | X | X | | X | | | | | | X | | | | X | | |
| Kirchner | 1966 | Objective | | X | X | X | | | | | | | | X | | | | | | |
| Bryant & Oliver | 1967 | Objective | | X | X | X | | X | | | | | X | X | | | | | X | |
| Schurr | 1967 | Purpose; Value | X | X | X | | X | | | X | | | | X | X | | | | X | |
| Corbin | 1969 | Purpose; Objective | | X | X | | | X | | X | | | | X | | | | | X | Carry over; Weight control |
| Miller & Whitcomb | 1969 | Objective | | X | X | | | | | | | | X | X | | | | | | |
| Bucher & Reade | 1971 | Objective | X | | X | X | | X | | | | | | X | | | X | X | | |
| Dauer | 1971 | Purpose; Objective | | X | X | X | | | | | | | | X | X | X | | X | | Personal and educational benefits |
| Vannier, Foster, Gallahue | 1971 | Objective | | X | X | X | | | | | | X | | X | X | | | | | |
| Anderson, Elliot, LaBerge | 1972 | Purpose | X | X | X | X | | | | | | | | | X | | | X | | |
| Arnheim & Pestolesi | 1973 | Objective | | X | X | | | X | | | | | X | X | | | X | | | |
| Means & Applequist | 1974 | Objective | | X | X | X | | | | | | | | X | | | | X | | |
| Dauer & Pangrazi | 1975 | Purpose | | X | X | X | | | | | | | | X | X | X | | X | | Personal and educational benefits |
| Schurr | 1975 | Purpose | | X | X | | X | X | | X | X | | | X | | | | | | Self-direction; Care of equipment |
| Corbin | 1976 | Objective | X | X | X | | | | | X | | | | X | | | X | | X | |
| Burton | 1977 | Goal | | X | X | | X | | | X | | | | | | | X | | | |
| Kruger & Kruger | 1977 | Goal | | X | X | X | | | | X | | | | X | X | X | | | | |
| Logsdon et al. | 1977 | Goal | | | X | | X | | | | | | | | | | X | | | |

**Table 3 (Continued)**

| | | | PURPOSES | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Psychomotor | | | | Cognitive | | | | | | | Affective | | | | | | |
| AUTHORS | YEAR | TERM(S) USED | Growth and Development | Physical fitness | Skill Development | Recreational Skills | Knowledge of Movement (Principles) | Knowledge of Health/Fitness | Creativity | Intellectual Competence Learning to Learn | Communicating About &Through Movement | Academic Concepts | Rules: How to Play Games, Sports | Social Attributes | Self-Concept | Moral, Ethical Values | Meaning, Significance, Enjoyment, Appreciation | Safety Skills and Attitudes | Emotional Skills | ADDITIONAL PURPOSES |
| Arnheim & Pestolesi | 1978 | Objective | | X | X | | | X | | | | | X | X | | | X | | | |
| Elliot, Anderson, LaBerge | 1978 | Goal; Objective | X | X | X | | | | | | X | | | X | X | | | X | | |
| Vannier & Gallahue | 1978 | Objective | | X | X | X | | X | | | | X | | | X | | | | | |
| Bucher & Thaxton | 1979 | Objective | | X | X | | X | X | | X | | | X | X | | | | | | |
| Graham et al. | 1980 | Purpose | | | X | | | | | | | | | | | | | | | |
| Hall, Sweeney, Esser | 1980 | Objective; Goal | | X | X | | | X | | X | | | | X | | | | | X | |
| Morris | 1980 | Goal | X | X | X | X | X | X | | X | | | | X | X | | | | | |
| Schurr | 1980 | Purpose | | X | X | | X | X | | X | X | | | X | | | X | | | Self-direction, Care of equipment |
| Fowler | 1981 | Goal | | X | X | | X | X | X | X | | | | X | X | X | X | | | |
| Hoffman, Young, Klesius | 1981 | Goal | | | X | | | | | | X | | | X | | | X | | | Self-reliance & confidence in moving |
| Kirchner | 1981 | Purpose | X | X | X | X | | | X | X | | | | X | X | | | | | |
| Kruger & Kruger | 1982 | Goal | | X | X | X | | | | X | | | | X | X | X | | | | |
| Dauer & Pangrazi | 1983 | Goal; Objective | | X | X | X | | | X | | | | | X | X | X | | X | | Experience with many different kinds of activity |
| Logsdon et al. | 1984 | Goal | | | X | | X | | | | | | | | | | X | | | |
| Kirchner | 1985 | Objective | X | X | X | | | | X | X | | | | X | X | | | | | |
| Morris & Stiehl | 1985 | Goal; Purpose | | | X | | | | | | | | | X | | | X | X | | |
| Nichols | 1986 | Objective; Contribution | X | X | X | | X | X | X | | X | | | X | X | | | | | |
| Gabbard, LeBlanc, Lowry | 1987 | Value, Purpose Contribution | X | X | X | X | | | | X | | X | | X | X | | X | | | |
| Graham, Holt/Hale, Parker | 1987 | Aim | | | X | | | | | | | | | | X | | | | | Self-discipline, Perceptual abilities |
| Total | | | 16 | 34 | 43 | 18 | 10 | 16 | 5 | 16 | 5 | 4 | 8 | 35 | 17 | 6 | 14 | 9 | 7 | |

included. None of the three goals is included in any other goal statement. Two purposes from the text by Hoffman et al. (1981) illustrate the latter. Because they both relate to the development of skill, "Becoming Aware: Learning about and establishing basic movement capabilities" and "Improving Quality of Response: Refining and elaborating movement capabilities for a purpose" (p. 23) are both represented in the table by a check under skill development.

The textbook analysis clearly indicates that the authors, for the most part college physical educators, emphasized development in the psychomotor domain above that in the cognitive and affective domains. This is evidenced by their unanimous selection of skill development as a purpose as well as their consistent identification of physical fitness and recreational skills. Also of great importance throughout the period was social development, named in 35 of the 43 textbooks. Table 4 lists the purposes in order of the frequency with which they were named. Further examination of the data reveals the following:

1. There appears to be a decreased emphasis on the development of recreational skills over the past 10 years, with only 6 of the 19 textbooks from that time period identifying it as a purpose. Fifty percent of the texts from 1957-1967 and 1968-1977 listed the development of recreational skills as a purpose.

Table 4

Frequency of Purposes for Elementary School Physical Education as Identified by Textbook Authors, 1957-1987

| | Purposes | Frequency |
|---|---|---|
| 1. | Skill development | 43 |
| 2. | Social attributes | 35 |
| 3. | Physical fitness | 34 |
| 4. | Recreational skills | 18 |
| 5. | Self-concept | 17 |
| 6. | Knowledge of health/fitness | 16 |
| | Growth and development | 16 |
| | Intellectual competence/Learning to learn | 16 |
| 9. | Meaning, significance, appreciation, enjoyment | 14 |
| 10. | Knowledge of movement (principles) | 10 |
| 11. | Safety skills and attitudes | 9 |
| 12. | Rules, How to play games and sports | 8 |
| 13. | Emotional skills | 7 |
| 14. | Moral, ethical values | 6 |
| 15. | Creativity | 5 |
| | Communicating about and through movement | 5 |
| 17. | Academic concepts | 4 |

2. There is an increased emphasis on knowledge of movement, with one text citing it as a purpose between 1957 and 1967, and 6 of 19 authors doing so since 1977.

3. Creativity was first identified as a purpose by the authors of texts in elementary school physical education in 1981.

4. Communicating about and through movement was first identified as a purpose in 1975.

5. There is a decreased emphasis on rules and how to play games and sports, with 4 out of 10 textbooks naming it in 1957-1967 and 2 out of 19 identifying it as a purpose from 1978 to 1987.

6. There is an increased emphasis on the development of self-concept. In the period from 1957 to 1967 self-concept was identified as a purpose in one (10%) of the textbooks studied. This increased to 5 out of 14 (36%) in 1968-1977 and 11 out of 19 (58%) in 1978-1987.

7. There is a decreased emphasis in emotional skills, with 5 of the 10 textbooks citing it as a purpose from 1957 to 1967 and only one textbook identifying it in each of the next 10-year periods.

8. Some authors made few or no changes in purpose from one edition of their text to the next (Arnheim & Pestolesi, 1973, 1978; Dauer, 1971; Dauer & Pangrazi, 1975, 1983; Kruger & Kruger, 1977, 1982; Miller & Whitcomb, 1957, 1969). Others reflected rather significant change in their thinking

Others reflected rather significant change in their thinking about the purposes of elementary school physical education (Anderson et al., 1966, 1972; Bucher & Reade, 1958, 1964, 1971; Bucher & Thaxton, 1979; Elliott et al., 1978; Kirchner, 1966, 1981, 1985; Schurr, 1967, 1975).

9. Writers in the earlier part of the period under study favored the term "objectives" (7 out of 10). "Purpose" was used by approximately a third of the writers throughout the period. There was a marked increase in the use of the term "goal" (from 1 in 10 in 1957-1967 to 9 of 19 in 1978-1987).

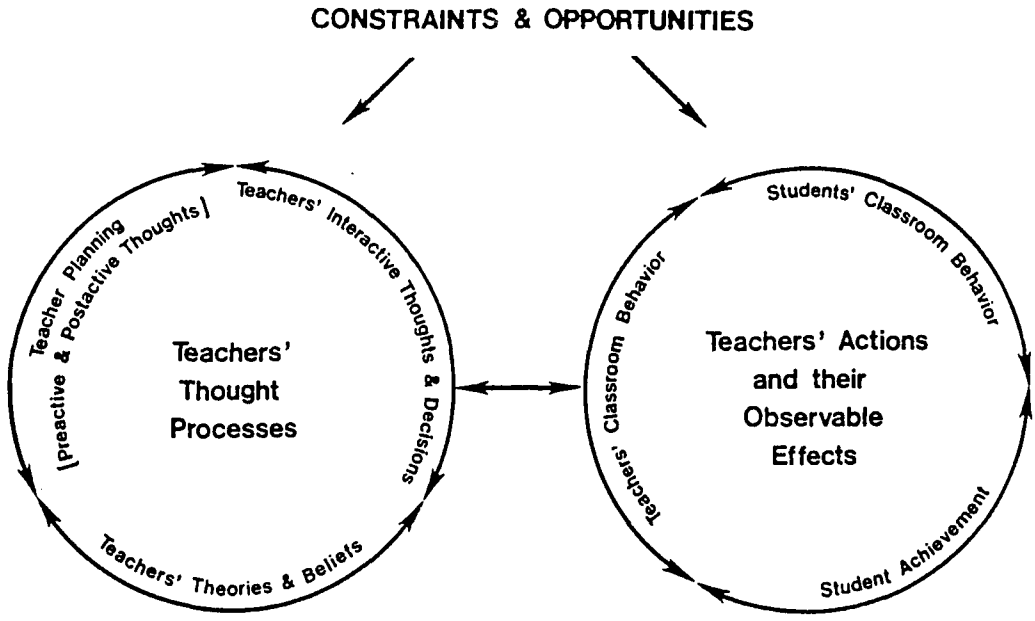
## Teachers' Thoughts and Actions

Research on teacher thinking is a relatively new endeavor. One of the earliest studies attempting to describe the mental processes that underlie teacher behavior was that of Jackson. His book Life in Classrooms (1968) portrayed the complexity of teaching and alerted researchers to the importance of understanding the thinking of teachers in order to understand teaching. Since the time of Jackson's study, educational researchers have generated a substantial body of research on teachers' thought processes. A limited number of these link teachers' thoughts to their classroom behaviors. A very small number have been done in physical education.

A Model for Teacher Thought and Action

The research on teachers' thoughts and actions can best be conceptualized through the model developed by Clark and Peterson (1986). Shown in Figure 2, the model depicts two

Figure 2: A Model of Teacher Thought and Action.




From "Teachers' thought processes" by C. M. Clark and P. L. Peterson, 1986. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed.). (pp. 255-296) New York: Macmillan.

domains important to the process of teaching: (a) teachers' thought process, and (b) teachers' actions and observable effects. The right side of the model represents the behavior of teachers in the classroom and the behavior and achievement of students. Each of the components is, to a large extent, observable. The preponderance of research in

education and physical education has been done in these areas. Most of the studies have been process-product studies which have assumed a linear relationship: teacher behavior affects student behavior, which in turn affects student achievement. The model of Clark and Peterson, with arrows pointing in both directions around the circle, indicates that reciprocity exists between the various components. A similar reciprocal relationship exists between the two domains. Teachers' thought processes affect their actions, and what takes place in the classroom influences how teachers think. It is the contention of Clark and Peterson that "the process of teaching will be fully understood only when these two domains are brought together and examined in relation to one another" (p. 258).

The left side of the model indicates that three major categories of teachers' thought processes have been conceptualized: (a) teacher planning, both preactive and postactive; (b) teachers's interactive thoughts and decisions; and (c) teachers' theories and beliefs. Again the arrows indicate a reciprocal relationship between components. Because the components interact in such a way with one another, it is difficult to examine any one area without giving some consideration to the others which act on it and upon which it acts. Thus, while the focus of this study is on teachers' beliefs about the purposes of their teaching, some attention will be given to planning and

interactive decisions as well as to research on teachers' theories and beliefs and the link between thoughts and actions.

The words "Constraints & Opportunities" at the top of the model refer to "the extent to which responsibility and participation in the decision-making process are given to teachers" (p. 258). Facilities, equipment, principals, board policies, curriculum guides, and other factors may help or hinder the efforts of teachers and certainly influence how they think and behave.

Teacher Planning

Research on teacher planning is discussed in this review under three headings: (a) studies of the planning process, (b) studies linking planning and action, and (c) studies of planning in physical education.

Studies of the planning process. Perhaps the most widely prescribed model for teacher planning is that of Tyler (1950). Described as a separate ends-means model, it suggests a four-step approach to planning: (a) specify objectives, (b) select learning activities, (c) organize learning activities, and (d) specify evaluation procedures.

In 1970 researchers began to study the planning process used by teachers and to compare that to the Tyler model. Taylor (1970) determined in his study of course planning in British secondary schools that teachers' most important focus in planning was student needs, abilities, and interests.

Other common themes, in order of their importance, were (a) subject matter, (b) goals, and (c) teaching methods. Teachers began their planning, however, by considering the context (materials and resources) of teaching and then the learning experiences in which students would likely have an interest. After this, teachers considered the purposes their teaching would serve.

Lack of ends-means planning by most teachers was supported in a study by Zahorik (1975), who found that objectives were not the most important consideration in planning. Decisions about content were made first by 51% of the teachers, with only 28% considering objectives first. The most important decision in terms of the frequency with which it was reported was pupil activities. Other research on teacher planning has also found that instructional activity is the most important focus of teacher planning (Clark & Yinger, 1979; Peterson, Marx, & Clark, 1978; Yinger, 1977). The study by Peterson et al. (1978) also indicated that the smallest amount of planning time was spent on objectives. Morine-Dershimer (1977) found in her study of 20 elementary classroom teachers that behavioral goals were rarely included in lesson plans and that some teachers neglected to put any goal statements in their plans. Shavelson and Stern (1981) pointed out that, while much of the naturalistic research reports that objectives do not play a major role in the planning process, laboratory

studies indicate that teachers do take goals or objectives into consideration.

Macdonald (1965) proposed that teachers not begin with objectives but by deciding on the types of activities they will provide. From these, children may choose their own learning experiences and pursue their own objectives. This integrated ends-means model may in some respects be closer to what teachers actually do, that is, allow objectives to arise from the activity.

It should be realized that most of the research on teacher planning has been done on experienced elementary school classroom teachers. Additional findings on teacher planning in the classroom, some based on single studies, include the following:

1. Eight types of planning in which teachers engage have been identified: weekly, daily, unit, long range, lesson, short range, yearly, and term planning. Teachers have identified as the three most important types unit, weekly, and daily planning. Only 7% of the teachers listed lesson planning as one of the three most important types (Clark & Yinger, 1979).

2. Much planning is done mentally and never put on paper (MuCutheon, 1980; Morine-Dershimer, 1977), yet teachers agree almost unanimously that student teachers should do written plans (Morine-Dershimer, 1977). Two-thirds of the teachers in the Morine-Dershimer (1977) study said the

lessons they planned while being researched were much more detailed than their usual lessons.

3. An outline or list of topics is the most typical form of plan (Morine-Dershimer, 1977).

4. The functions of plans are (a) to meet administrators' demands (McCutcheon, 1980; (b) to be used by substitute teachers (McCutcheon, 1980); (c) to meet immediate personal needs, such as reducing anxiety and creating a sense of security and confidence (Clark & Yinger, 1979; (d) to prepare the teacher cognitively and instrumentally for instruction (Clark & Yinger, 1979); and (e) to guide the interactive process of instruction (Clark & Yinger, 1979).

5. A mental image of the lesson plan is used to guide teacher behavior during routine instruction (Morine-Dershimer, 1979).

6. Teachers discuss their lesson plans in terms of the content to be covered, the activities, and the materials but rarely mention teaching strategies, specific objectives, or pupil activities (Morine-Dershimer, 1979).

7. The long-range planning that teachers do at the beginning of the school year has a profound impact on their decisions for the remainder of the year (Shavelson & Stern, 1981).

8. Major changes are made to a lesson plan or it is abandoned entirely only when activity flow is threatened

with disruption (Morine-Dershimer, 1979).

Studies linking planning and action. Some research has sought specifically to link teacher planning and action in the classroom. Three studies will be reported here. The first done was a study by Zahorik (1970) in which six elementary school teachers were given a lesson outline two weeks in advance of the lesson and thus time to plan; six other teachers were not told what they would teach until just prior to teaching the lesson. Zahorik found that teachers who had been given plans in advance were less sensitive to the students than were those who had no advance preparation. One explanation for this finding is that teachers who knew what they were to teach in advance were influenced to focus on the content, while those who did not know the focus of instruction were forced to concentrate on their students' ideas.

Peterson et al. (1978) examined the relationship of teacher planning to teacher behavior and student achievement in the social studies lessons of 12 experienced junior high school teachers. The investigators found that (a) much planning time was spent talking about subject matter; (b) a strong positive relationship existed between the total number of planning statements and a focus on subject matter in the lesson; (c) after the first day of teaching, extra planning was counter-productive with regard to student achievement and was associated with negative attitudes by the students

toward the subject matter, teacher, and themselves as learners; and (d) no consistent relationships existed between planning focused on objectives, instructional process, materials, and learners, and student achievement and attitude.

The third study examined (a) the effect of providing teachers with background information on student aptitude and motivation on the quality of teacher planning, and (b) the effect of that planning on student achievement (Carnahan, 1980). Subjects of the research were nine fifth-grade teachers, and the lesson content was mathematics. The researchers found that having information provided about students did not affect the quality of planning and that no statistically significant relationship existed between ratings of plan quality and ratings of teaching quality.

Clark and Peterson (1986) summarized the research in this area by stating:

> [The studies] suggest that teacher planning does influence opportunity to learn, content coverage, grouping for instruction, and the general focus of classroom processes. They also highlight the fact that the finer details of classroom teaching (e.g., specific verbal behavior) are unpredictable and therefore not planned. Planning shapes the broad outline of what is possible or likely to occur while teaching and is used to manage transitions from one activity to another. But once interactive teaching begins, the teacher's plan moves to the background and interactive decision making becomes more important. (p. 267)

Studies in physical education. Studies of teacher planning in physical education are limited in number. One of the first was done by Placek (1982), who observed four

secondary school physical education teachers for two weeks each and compared her field notes to the teacher's written plans and interviews. She found that the four teachers did not use the classical ends-means model for planning but used instead informal planning habits that did not reflect efforts to match objectives with content. While factors such as past teaching experiences, safety considerations, weather, equipment, and facilities influenced planning, two factors, student behavior and environmental unpredictability, were identified as having the greatest impact. The majority of teachers' statements during the observation phase and the formal interview were references to the students. Student feedback in three areas seemed to more strongly influence teacher planning than did any other factor. The three areas were: (a) student enjoyment, (b) student participation, and (c) incidents of student misbehavior. Placek found that the students strongly influenced teacher decisions about which activities to teach. In interviewing teachers to determine their conceptions of success in teaching, she concluded that teachers viewed student learning as relatively unimportant and keeping students "busy, happy, and good" as very important (Placek, 1983, p. 49). Placek commented:

> The brief amount of time spent planning, the fact that planning basically occurred immediately prior to teaching, and the major influences on teacher planning of student behavior and practical considerations, combined with the unpredictability of the environment, caused the teachers to focus on the here and now--the immediate happenings in the gymnasium, even though the ultimate aim of education is presumed to be student

> learning. Student learning or goals for students was mentioned only once...in response to a direct question by the investigator. These four teachers were much more concerned with the concrete, immediate act of teaching rather than the ultimate, but admittedly more difficult, goal of student learning. (1984, p. 48)

Goc-Karp (1984) compared the theoretical planning models of college physical education professors in the northwestern United States with the planning model used by four junior high school physical education teachers in Idaho. She found that college professors taught an ends-means model of planning which was not used by the teachers. As with the classroom teachers discussed earlier, the physical educators were concerned in their planning primarily with the activity and elements of its organization. While the teachers had been taught to write formal lesson plans, they instead wrote simple lists or planned in their heads. The maximum time spent on planning ranged from zero to three hours per week. Goc-Karp concluded that, while the theoretical model taught by college professors focused on planning for student learning, the reality model of the junior high school teachers was designed to keep students active and the lesson flowing smoothly. Teachers did not plan for particular learning outcomes. In response to these findings Goc-Karp stated, "It seems crucial that students and teacher educators understand that the role of teaching is to assist people to learn" (p. 117).

In contrast to classroom studies of teacher planning, a study of elementary school physical education specialists

by Stroot and Morton (1989) found that five out of seven teachers considered learning objectives before activities when planning their lessons. That participants in this study were effective teachers may be a critical factor. Goc-Karp and Zakrajsek (1987) found that the teachers in their study, chosen because of availability, gave little attention to formulating learning objectives, determining entry level skills, or selecting teaching methods. They concluded that, while the planning model taught by college teachers emphasized learning, the teachers in the schools focused primarily on planning for management. Housner and Griffey (1985) compared the planning and interactive behaviors of experienced teachers with those of preservice teachers. They found that experienced teachers focused on strategies that develop motor skills, while preservice teachers focused on keeping students busy. Twardy and Yerg (1987), who studied the planning and teaching of senior physical education majors, observed that only 1 of 30 teachers formulated an objective, while 13 of the 30 believed they had done so. The investigators speculated that the teachers may have thought about general goals without clearly stating an objective and specifying learning outcomes.

Interactive Decision Making

One aspect of the research on teachers' thought processes describes the thinking teachers do during their

interaction with students in the classroom. Researchers have been especially interested in (a) the content of interactive thoughts, (b) the number of interactive decisions made in a lesson, (c) factors influencing interactive decisions, and (d) the relationship between teachers' interactive thoughts and decisions and teacher effectiveness.

The most common method for studying interactive thoughts and decisions has been the stimulated recall interview. Although the interview format has varied from study to study, methods for coding and analyzing the data have been similar across studies. Separate thoughts are identified in the audiotaped responses of teachers and put into one of several categories. The number of thoughts in a category can thus be tallied and compared with other content categories (Clark & Peterson, 1986).

The content of teachers' interactive thoughts. Six studies have described the content of classroom teachers' interactive thoughts (Colker, 1982; Conners, 1978; Marland, 1977; Marx & Peterson, 1981; McNair, 1978-1979; and Semmel, 1977) and have yielded similar results. Across the studies, a relatively small percentage of interactive thoughts related to content or subject matter. The highest percentage of interactive thoughts was concerned with the learner, with another relatively large percentage relating to the instructional process. Four of the studies (Conners,

1978; Marland, 1977; Marx & Peterson, 1981; and McNair, 1978-1979) included as a content category teachers' thoughts about objectives. The researchers found that teachers reported few thoughts in this area. In the McNair and Marland studies, thoughts about objectives were mentioned less than three percent of the time. Objectives were mentioned the most (14% of the time) in the study by Marx and Peterson, but a specific question about objectives was posed to teachers in the interview. In addition to thinking about the learner, subject matter, the instructional process, and objectives, teachers reported thinking about materials.

Housner and Griffey (1985) studied the content of experienced and inexperienced teachers' interactive thoughts in physical education. They found that experienced teachers focused most of their attention on individual student performance, while inexperienced teachers attended most frequently to the interest level of the entire class of students.

Frequency of interactive decisions. Studies of interactive decision making have most often defined interactive decisions as those in which the teacher makes a conscious choice after considering alternatives (Clark & Peterson, 1986). Marland (1977) extends the definition to include deliberate action, i.e., the teacher's commitment to an alternative is acted out in the lesson. Clark and

Peterson (1986) have summarized the results of five studies that examined the number of interactive decisions made by teachers. The estimated number of decisions per minute ranged from .47 to .69. The reviewers interpreted this to mean that the decision-making demands of the teachers were relatively intense.

Factors influencing interactive decisions. Several models have been developed which attempt to describe the process by which teachers make decisions during classroom instruction. The model by Peterson and Clark (1978) focuses on whether (a) student behaviors are within tolerance, (b) alternatives are available, and (c) students behave differently. Research based on this model reported that teachers most frequently found student behaviors within tolerance, indicating that no changes were necessary in the lesson. In fact, teachers reported considering alternative strategies in only 20-30% of the cases. Shavelson and Stern's (1981) model of teacher interactive decision making, based on research by Morine-Dershimer (1978-1979) and Yinger (1977), assumes that teachers act out routines that are well established through planning and experience. In addition to incorporating the idea of a routine, the model presents decision-making as a process which becomes necessary when the routines of teaching are interrupted. Both models assume that teachers' interactive decisions are made as the result of observing student cues and determining that they

are not within tolerance. Some research (Housner & Griffey, 1985; Marland, 1977) suggests that such decisions are often the result of factors other than student behaviors.

Interactive decision making and teacher effectiveness. While much research has been done in the area of teacher effectiveness, only a few studies have linked it to teacher thinking and decision making. Although the findings are not conclusive, some evidence exists that teachers who reported student behaviors were outside the limits of tolerance but did not change their teaching behaviors were less effective teachers, as judged by their students' scores on achievement tests (Peterson & Clark, 1978).

## Teachers' Theories and Beliefs

The third major category of teachers' thought processes conceptualized by Clark and Peterson is teachers' theories and beliefs. Nisbett and Ross (1980) have distinguished between knowledge that is organized in schematic, cognitive structures and that which is propositional, identified as beliefs or theories. While attribution theory makes up the largest body of research on teachers' beliefs, of interest to this study is the research on teachers' implicit theories of teaching and learning. It constitutes the smallest and most recent addition to the research on teacher thinking, yet its importance has been clearly stated:

> While we may learn much that is interesting and useful from a technical point of view from research on teacher planning, interactive thinking, and teachers attributions, we can make sense of these findings only

> in relation to the psychological context in which the teacher plans and decides. For an individual teacher, this psychological context is thought to be composed of a mixture of only partially articulated theories, beliefs, and values about his or her role and about the dynamics of teaching and learning. The purpose of research on teachers' implicit theories is to make explicit and visible the frames of reference through which individual teachers perceive and process information. (Clark & Peterson, 1986, pp. 285-287)

Methodology. Research on the implicit theories of teachers has most often been done through use of participant observation, interviews, stimulated recall, and the repertory grid technique. The number of subjects has generally been small and the research descriptive. The topics of study in the various inquiries vary but "hold in common the view that a teacher's cognitive and other behaviors are guided by and make sense in relation to a personally held system of beliefs, values, and principles" (Clark & Peterson, 1986, p. 287). While the specific focus of studies may vary considerably, the investigations may be grouped based on their common focus on teachers' theories and beliefs about (a) the curriculum, (b) principles of practice, and (c) the aims of education.

Teachers' theories and beliefs about the curriculum. Bussis, Chittenden, and Amarel (1976) used clinical interviews to describe 60 elementary school teachers' understandings of learners, curriculum, and the working environment. Four orientations were identified which described the relative emphasis placed by teachers on the acquisition of grade-level knowledges and skills versus the

need to have students develop broader developmental and process goals. Although the teachers studied shared a commitment to open education and informal teaching, their views varied widely with regard to the importance of the two types of goals as well as the importance of (a) social interaction as a means of learning, (b) students' emotional needs and feelings, and (c) students' interests and freedom of choice in what and how they learn.

Duffy (1977) and Harste and Burke (1977) studied teachers' theories about a particular aspect of the curriculum, the teaching of reading. Harste and Burke found that teachers' theories about reading could be inferred by observing their teaching behaviors. Duffy's study is one of the few that examined the question of consistency between beliefs and practice. He began by identifying in the literature five contrasting approaches to the teaching of reading; a sixth approach was later added. In the first phase of the study, 350 teachers of beginning reading sorted 36 propositional statements into 5 categories ranging from "most like me" to "least like me". Only 37 of the teachers manifested strong "pure types" of conceptions of reading. In phase two of the study, those 37 teachers completed a modified Kelly Role Repertory Test to identify more clearly their beliefs about reading. Eleven teachers, eight of which continued to evidence clear and categorical conceptions of reading, were observed teaching reading in

their own classrooms. The intent was to compare stated beliefs with actual classroom behavior. This was done through analyzing ethnographic field notes and post-observation interview data. Duffy reported:

> Of the eight teachers who evidenced strong belief patterns, four consistently employed practices which directly reflected their beliefs; these included the two teachers who had structured beliefs, the teacher who had an eclectic view and one of the teachers having an unstructured belief system. Of those teachers whose practices did not consistently reflect their beliefs, two having strong unstructured belief systems were found to be "smuggling" elements of unstructured practices into administratively-imposed programs reflecting a structured view while two other teachers holding unstructured views operationalized these beliefs only some of the time with some pupils. Of the remaining three teachers, the two who reflected no discernable belief system operationalized very orderly practices reflecting a structured view while the remaining teacher did not evidence a strong pattern of practice due to special circumstances in the classroom. (pp. 6-7)

One of the questions clearly raised by Duffy's study concerns the degree to which innovative or imposed curriculum projects are accepted by teachers and taught as designed or modified to become more consistent with various teacher beliefs. Olson's (1981) study of the secondary science teachers in three British schools revealed that teachers significantly changed an imposed science curriculum to fit their implicit theories of teaching. So great were the changes made that important elements of the project were either ignored or redefined in more traditional terms.

Kinzer (1988) studied preservice and inservice teachers' beliefs about reading and the relationship of those beliefs

to their choices of lesson plans. Preservice teachers tended to be more consistent in their beliefs concerning reading processes and development than were inservice teachers, i.e., preservice teachers chose an explanation for how reading takes place and then tended to choose the corresponding explanation for how reading ability develops. The investigator speculated that inservice teachers were influenced by practical concerns to which preservice teachers had not yet been introduced. Both teacher groups with reader-based/holistic explanations of how reading takes place and develops tended to choose vocabulary and comprehension lessons reflecting their beliefs. Preservice and inservice teachers who held text-based, interactive, mastery of specific skills, and differentiated acquisition explanations for how reading takes place and develops did not choose lessons consistent with their theoretical orientations. No explanation was offered for this finding.

Principles of practice. Two dissertations done in Canada analyzed the transcripts of stimulated recall interviews and identified principles that guided the classroom practices of the elementary school teachers studied. Marland (1977) found that there were five principles of practice (compensation, strategic leniency, power sharing, suppressing emotions, and progressive checking) and that they dealt primarily with student characteristics. He found conceptions of knowledge or

subject matter to be conspicuously absent. Conners (1978) replicated Marland's study and identified what he called overarching principles (suppressing emotions, teacher authenticity, and self-monitoring) and general pedagogical principles (cognitive linking, integration, closure, general involvement, and equality of treatment). Principles of practice were found to serve as general guides for planning, organizing, and teaching, but they may be contradictory in nature and do not alone determine teaching behaviors.

Munby (1983) studied the role of the teacher and beliefs and principles related to the curriculum and teaching. He used a case study approach and reported wide individual differences in implicit theories, even among teachers in the same school and within the same subject matter areas. He suggested that the idiosyncratic nature of beliefs and principles explains why there are widely different interpretations and implementations of the same or similar curricula. Munby also found that only three to six principles were needed to describe a teacher's implicit theory of teaching.

Aims of education. Several studies conducted in recent years have suggested that teachers' beliefs about education in general and the aims of education in particular affect instructional decisions. Scheinfeld and Messerschmidt (1979) studied the convictions (called classroom ideals) teachers held about the desirable relationship between the

child and the learning environment and the decisions teachers made regarding the organization of the day and week, the social organization of learning tasks, and the content of learning materials. They developed a framework for the study of classroom ideals and found parallels between each teacher's ideals and view of the person-world relationship reflected in the rationale for those ideals. Sontag (1968) found that teachers' beliefs fall into one of three categories: traditional, progressive, or mixed, and that those beliefs were related to their views about desirable teacher behaviors. Nespor, McCullar, and Campos (1984) focused in their report of the Teacher Beliefs Study on how teachers' beliefs and behaviors are shaped.

Some research has examined specifically the beliefs teachers hold about the aims or purposes of their own teaching or of education in general. One large study which surveyed the opinions of primary school teachers about the aims of primary education in England reported the following:

> It also became clear that different views abounded about the aspects of children's development with which primary schools should most concern themselves. It was apparent that, for some teachers, moral development was the area of pre-eminent concern; for others, intellectual development was the major province of the elementary school, and others had still different views....
>
> Teachers' views about the fundamental purpose of primary education, the aspects of development they thought primary schools should most concern themselves with, the aims they stressed and the teacher's role they thought best, all fitted together in intuitively logical patterns. This would seem to lend strong support to the idea that, while teachers may have difficulty in stating aims, they undoubtedly have them. (Ashton, Kneen, Davies, & Holley, 1975, p. 3)

The researchers also found that teachers' beliefs about important educational goals were related to their reported use of particular teaching styles.

Two studies of the aims of teachers in primary education in England (Bennett, 1976; Taylor & Holley, 1975) reported both different and overlapping findings. Aims consistently in the top 10 were related to social and moral development rather than to intellectual development. The aims focused on the child being happy at school, enjoying school work, being careful with and respectful of other people's property, and acquiring a set of moral values. The most important aim identified in the Bennett study, however, was "the acquisition of basic skills in reading and number work" (p. 57). In the Five Towns Study reported by Lortie (1975), teachers were asked to explain what they try most to achieve. The modal response by teachers (77%) was a description of curricular responsibilities, but the teachers then went on to talk about special, personal concerns. The additional concerns could be grouped into three major categories: (a) the moral aspects of teaching; (b) the "connecting" function of the teacher who instills love of school or a particular subject; and (c) the theme of inclusiveness, of reaching all the children in one's charge.

As the studies on teachers' implicit theories are limited in number and diverse in nature, few conclusions can be drawn. It can be said, however, that teachers do seem to

have implicit theories about their work and that these may be made more explicit. Beliefs seem to be idiosyncratic, and across teachers will vary in content and orientation. Interactive teaching behaviors are explained by describing principles of practice that relate to student characteristics, teacher states, and, to a lesser degree, the structure and organization of the subject matter. Teachers are concerned about their curricular responsibilities, but their role and that of the school is seen to include a heavy emphasis on providing for moral and social development.

It should be realized that several of the cases reported used only a few subjects and that some problems with methodology existed. One study (Ashton et al., 1975) accepted the self-reports of teachers as to their teaching behaviors. The accuracy of such reports could certainly be questioned. Another (Harste & Burke, 1977) inferred beliefs from the observation of teaching behaviors.

# CHAPTER III

# METHODOLOGY

The purpose of this study was to discover how beliefs about the purposes of teaching elementary school physical education are reflected in teaching practices. More specifically, the study sought to determine what elementary school physical education specialists perceived to be the primary purposes of their teaching and further to determine the ways and extent to which those purposes were reflected in the teachers' selection of content and interactive teaching behaviors. As this necessitated understanding teaching from the perspectives of the participants in the study, the interpretive research paradigm was selected as the framework for the research methodology. A brief description of the assumptions of this paradigm follows.

## Assumptions

The most fundamental assumption of interpretive research is that reality is socially constructed, that is, that experiences may be interpreted in many ways through interacting with others. It is the meaning of the experience that constitutes reality. The researcher examining settings from this perspective faces "a series of interpretations of life, common sense understandings, which are complex and difficult to separate from each other," and

it is his goal to "share in the meanings that the cultural participants take for granted and then to depict the new understanding for the reader and for outsiders" (Bogdan & Biklen, 1982, p. 36). The researcher does not attempt to manipulate the research setting but rather "to understand naturally occurring phenomena in their naturally occurring states" (Patton, 1980, p. 41).

Burgess (1984) has stated that researchers often need to "approach substantive and theoretical problems with a range of methods that are appropriate for their problems" (p. 143). This means that researchers "cannot rigidly apply their methods but need to be flexible in their approach and utilise a range of methods for any problem" (p. 143). He suggests the term "multiple strategies" to allow researchers to use a range of methods, data, investigators and theories within any study in order to overcome problems of bias (p. 146). Various means of collecting and analyzing data were employed in this study and are discussed later in the chapter.

## Participant Selection

After obtaining approval from the Human Subjects Committee at the University of North Carolina at Greensboro, the investigator contacted the Coordinator of Health, Physical Education, and Athletics for the _____ Schools (See Appendix A). Permission to do the study in that system was obtained and, in accordance with judgement

sampling (Burgess, 1984), the coordinator was asked to identify elementary school physical education teachers with a minimum of three years of teaching experience in-field and, from among that group, to select teachers whose years of teaching experience provided the narrowest possible range. It was further stipulated that no more than two teachers be graduates of the same institution and that none be current participants in another research study. Five teachers who fit the criteria were selected by the coordinator. All had between 9 and 14 years of teaching experience in physical education and between 9 and 12 years of experience at the elementary school level. Each teacher was sent a letter describing the procedures and the general intent of the study but not its specific focus (See Appendix B). All five teachers agreed to participate in the study and signed an informed consent (See Appendix C). The investigator further explained the procedures to each teacher and set up a schedule for observation.

## Sources of Data

Four sources of data were used in the study: (a) field notes, (b) reflection papers, (c) transcripts of lessons, and (d) interviews.

### Field Notes

Detailed field notes were taken on all classes observed, using the Observation Form in Appendix D as a guide to observation and brief summary of each lesson. Field notes were

used to describe the lesson and to capture teaching behaviors that occurred during instruction. Particular attention was given to (a) lesson content, (b) organizational patterns, (c) tasks, (d) behavior management, (e) personal characteristics of the teacher (e.g., voice, enthusisasm, warmth), and (f) the use of time and equipment. Some attention was also given to (a) non-verbal teaching behaviors, (b) student attitudes, and (c) the students' movement responses. Part way through the study, after one teacher had been observed for three days and two other teachers for one day each, it became clear that it would be useful to time some aspects of the lesson in greater detail than had previously been done. Thereafter, the actual number of seconds spent by the children in skill movement and the time which elapsed from the beginning of the lesson until the beginning of skill movement were clocked during at least two classes per day.

Each teacher was observed for five days. The first three days' observations lasted the entire school day and were done on the same day of the week for three consecutive weeks. As the children received physical education instruction from the specialist only one day a week, this pattern of observation was necessary for observing the continuity between lessons and progression. The teacher was then observed for all or part of two additional days. As some research has indicated variability in teaching behaviors

across lessons (Gusthart, 1985; Rink, 1983), these observations were done on a different day of the week and when the context of the class had changed, so that a more complete picture of the teaching might be gained. Three of the teachers were observed for two full additional days. The other two were seen for only part of the last two days because, for example, one teacher began the day with three classes at the same grade level doing the same lesson, in which case observations were made in only one or two of those classes. Teachers were observed in both of the schools to which they were assigned. The schedule for observing teachers designated here as A, B, C, D, and E, is shown in Table 5.

Table 5

Observation Schedule for Teachers A, B, C, D, and E

| | | Mon. | Tue. | Wed. | Thu. | Fri. |
|---|---|---|---|---|---|---|
| | 1 | A | | | | |
| | 2 | A | | | C | |
| | 3 | A | B | | C | E |
| Week | 4 | D | B | | C | E |
| | 5 | D | B | | A | E |
| | 6 | D | C | | E | A |
| | 7 | | | C | E | B |
| | 8 | | | B | D | |
| | 9 | | | | | D |

Reflection Papers

After the first day of observation and on other days when new insights were gained, reflection papers were written. These were reactions to conversations with the teacher and to lessons taught that day. Because field notes focused on aspects of teaching that were specific and detailed, reflection papers helped the investigator to focus on patterns that might be emerging and the meaning of what was seen and heard.

Transcripts of Lessons

Each teacher had six lessons audiotaped, one at each grade level. The teacher wore, concealed in a pocket or attached to a belt, a Panasonic RQ-352 tape recorder. A remote microphone was clipped on or near the collar of the shirt. No more than two lessons were taped on any day, and no lessons were taped the first day. Tapes were used to capture the verbal behaviors of the teacher (e.g., directions, corrective feedback, and praise). Audiotapes were transcribed by the investigator, who substituted fictitious names for the actual names of the teachers and children.

Interviews

Two types of interviews were used. One was the informal, unstructured interview (Spradley, 1979), which took place before school, between classes, and at other times when the opportunity presented itself. Questions initially were general in nature and were asked primarily

for the purpose of establishing rapport with the teacher. The unstructured interviews often provided information about the background of the teacher, the content of the program, and the lessons being taught that day. More specific questions were asked about various aspects of a lesson just observed or when the teacher offered comments on topics of particular interest to the study.

Two semi-structured interviews, guided by the work of Spradley (1979), were conducted with each teacher. They were tape recorded using both a Panasonic RQ-352 tape recorder and a Lenox Sound Am/Fm Radio Cassette Recorder. The first interview was done at the teacher's earliest convenience following the last observation. The major purpose of the post-observation interview was to identify (a) the teacher's beliefs about the primary purposes for the teaching of elementary school physical education, (b) factors that had helped to shape those beliefs, and (c) the means by which the teacher tried to achieve the stated purposes. The interview schedule may be found in Appendix E. Teachers were asked to contact the investigator if they thought of additional comments they wanted to make or if they wanted to change anything said in the interview. No teachers contacted the investigator to do this.

After a preliminary analysis of the data on each subject was completed, a follow-up interview was conducted. The main points made in the previous interview were reviewed,

and teachers were asked if they would like to make any changes or add to their list of purposes or the means for achieving their purposes. All of the teachers indicated that they agreed with the purposes named in the earlier interview and were generally unable to expand the list of means for achieving purposes. As this list of means was limited and seemed incomplete for most teachers, two things were done to expand the list. First, specific questions were asked in order to prompt additional responses. The teacher was then given a list of those behaviors which seemed, on the basis of observation and lesson transcripts, to be characteristic of her teaching (See Appendix F). She was asked to read through the list, identifying those with which she disagreed or any about which she had questions. She then went through the list again to identify behaviors she felt were related to her purposes but which she had not previously identified as means for accomplishing those purposes. She also gave her reasons for carrying out other behaviors on the list.

The remainder of the interview was spent presenting and discussing additional findings that had become clear in the preliminary analysis of the data collected on the teacher. This included findings relative to the consistency or lack of consistency between purposes and teaching practices. The discussion served as a means of verifying the analysis and of identifying the reasons for discrepancies between the

teacher's stated beliefs about purposes and actual teaching practices. By verifying the data through several sources, a process called triangulation, and by having the teachers verify preliminary findings, the trustworthiness of the data presented in this paper was increased (Lincoln & Guba, 1985).

## Data Analysis

Data collection, just discussed, and data analysis are presented separately in this paper for purposes of organization. However, because some aspects of data analysis were interwoven with the process of data collection, these two processes cannot be completely separated. The process by which the data were prepared and analyzed and by which additional data were collected, subject by subject, can best be described in six phases.

### Phase 1: Preparation of the Data

1. During the time that the process of observation was ongoing, field notes were expanded and typed, reflections on observations and informal interviews were written, and tapes of lessons were transcribed.

2. The post-observation interview was transcribed.

### Phase 2: Identification of Primary Purposes and Teaching Practices

1. The interview transcript was analyzed and the purposes for teaching elementary school physical education were identified and listed in order of priority.

2. The transcript of the post-observation interview

was analyzed to identify the means by which the teacher sought to accomplish the stated purposes.

Phase 3: Preliminary Analysis of the Data: Relating Teaching Practices to Purposes

1. Statements about teaching practices that related to the purposes were identified in (a) field notes, (b) reflection papers, and (c) lesson transcripts.

2. After a study of field notes, reflection papers, and lesson transcripts, four lists were generated: (a) behaviors or practices characteristic of the teacher over the days observed, (b) the ways beliefs about purposes were reflected in teaching practices, (c) the ways in which practices did not seem to be consistent with beliefs about purpose, and (d) practices which could not be identified as either consistent or inconsistent with purposes. The question of consistency was examined with regard to both the means for accomplishing purposes stated by the teacher and the means for accomplishing purposes as identifed in the professional literature.

Phase 4: Additional Data Collection and Verification of Findings

1. In the follow-up interview, teachers (a) verified the information provided on purposes and practices in the previous interview; (b) through prompting, expanded the list of teaching practices used to accomplish their purposes; (c) examined the list of their characteristic teaching behaviors

and verified these; (d) identified from the list of characteristic teaching behaviors those which contributed to their purposes, thereby expanding their list of means for achieving purposes; and (e) discussed their agreement or disagreement with preliminary findings presented to them.

2. Information relevant to the verification of findings, additional means for accomplishing purposes, and the reasons for discrepancies between stated purposes and teaching practices were transcribed from tapes of the follow-up interview.

Phase 5: Final Analysis of the Data

1. The means for accomplishing purposes, as stated in the follow-up interview, were compared with teaching behaviors and practices identified in (a) field notes, (b) reflection papers, and (c) lesson transcripts.

2. The lists indicating (a) the ways in which beliefs about purpose were reflected in teaching practices, (b) the ways in which teaching practices did not seem consistent with the teacher's stated beliefs, and (c) practices which could not be identified as either consistent or inconsistent with purposes were expanded to include the new information.

Phase 6: Interpretation and Discussion of Findings

1. Based on study of all data, the findings on each teacher were synthesized and described.

2. In the context of the scholarly literature and other relevant factors, findings on individual teachers were

interpreted. Central to this aspect of the discussion was the determination of consistency and inconsistency between purposes and practices. Decisions of this nature were the judgement of the investigator. Research findings and other scholarly literature sometimes guided these judgements. Where literature failed to provide clear guidance, determinations were based solely on the knowledge and experience of the researcher, in light of the data collected.

3. Data on beliefs and practices were compared across teachers.

4. In the context of the scholarly literature and other relevant factors, findings across teachers were interpreted.

It should be noted that the extent to which the scholarly literature is used in the discussion of findings varies greatly from chapter to chapter. This is true largely because there has been much research done in relation to some purposes and practices and very little with regard to others. It was very easy, for example, to discuss findings on skill-related feedback in light of research, but this was not the case with practices related to making the children feel loved. The literature also appears to be more limited because the 43 elementary school physical education textbooks reviewed by the investigator are often referred to collectively when purposes are discussed.

# CHAPTER IV

# ROBIN

## Background

Robin had been teaching elementary school physical education for 10 1/2 years when she entered the study. She seemed genuinely pleased, almost excited, to be a participant and offered her help enthusiastically. From the very first encounter, she was articulate, seemed proud of her teaching, and was comfortable talking about it. As was also true of the other subjects in the study, her time was divided between two schools in the system. Both schools had gymnasiums, one large and one relatively small, and both were well-supplied with small equipment: a variety of balls, hoops, cones, jump ropes, rhythm sticks, records, and the like. Both gymnasiums had several signs or posters on the walls, including one to remind children of the rules and one to record checks and minuses received by the class for their behavior that day. All schools in the system followed assertive discipline guidelines.

Robin explained in the following way her reasons for wanting to become a teacher of physical education.

> Because I hated it in schools. I was brought up playing kickball and dodgeball, and I was not good at either one, but I played in tennis matches from the time I was nine and have all sorts of trophies and played golf and swam. And my parents taught me that physical activity could be fun. They taught me that

> you learn to work with others and gave me the confidence to do a lot of the things you wanted to be able to do. I think because I didn't like it.

Robin's educational background included study at two undergraduate and three graduate institutions and she was, at the time of data collection, enrolled in a master's program. She had decided while still in undergraduate school that she wanted to teach physical education at the elementary school level, stating that she liked both the children and the curriculum better in those grades. "And really," she added, "I think my mothering instincts help me to relate to the children."

Robin easily identified philosophies and ideas that had been communicated to her in her undergraduate program, recent course work, or in-service training, ideas which she thought might have influenced the way she was currently teaching. Speaking of ideas communicated in two different undergraduate institutions she attended, Robin said:

> There's a professor at _____ who's the most enthusiastic educator I have ever met in my life. And she made learning fun. She did a thorough job of teaching skills, but she was enthusuastic. And she told us that with any kind of teaching, whether it was young children or adults, you needed to change the activities often or to keep moving and not stall in your lessons, so to speak. And to me, that really made an impression. And it still does. The second thing is for more of a movement education philosophy... to keep children busy individually a lot and to give them lots of chances for repetition. And to offer a variety of experiences.

From the master's program in which she was currently enrolled, Robin's belief in the value of physical fitness was enhanced. She came to believe in the importance of

offering more opportunities for children to improve their fitness in the classroom and the gym as well as at home. Inservice programs, she felt, were aimed at allowing children to be successful with skills. They provided her with ideas for activities that could be used in her own teaching.

> We don't do elimination games; we don't do a lot of competition. We do a lot of activity sessions, which is where I get most of my lesson ideas, really."

Robin was able to identify several distinguishing characteristics of her program and to discuss ways that it was like or different from other programs in the area.

> To me, human movement is the curriculum, and lessons come from, I don't know, ideas that you think would help the children learn the skill. And I can say I teach games, gymnastics, dance, physical fitness, and big field days for the whole school, and people will say, "Oh, gee, that's nice. That sounds fun." But I want the children to have successful experiences. I want them to learn how to think on their own, how to be responsible for choices. I was kind of a latch-key child of the sixties. I think children are too pampered in school. And I think, because both of my parents worked, I was made to be independent and my brothers were, too. And I don't think children have enough of that.
>
> I think I'm a middle of the road person. And I know there are people that are strictly traditional, that still have their squads set up from the first day of school. And I know there are people that are much more movement education oriented than I am. But I'm comfortable with my program, and I think it offers children such a variety of activities taught in different ways. I think it's successful. I think I put an emphasis on children, maybe not the curriculum, but on children.

Robin identified the content of her program as follows: volleyball skills, basketball skills, hockey skills, striking with paddles and balls, striking with whiffle bats

and balls, soccer skills, gymnastics, creative and folk dance, throwing and catching, and field day activities. They were not perceived by her to be units of instruction because "that means you finish up with something and don't take it up again during the year." Robin instead taught specific content in blocks of time that were most often three weeks in length (in a one-day-a-week program, three lessons), and returned to that content at other times during the year. Dance was often taught two weeks in a row, and field day activities were done five consecutive weeks in the spring. Robin emphasized that she tried to provide a well-rounded program and didn't have the time to get into anything in depth. What she taught changed a great deal from year to year to the extent, in fact, that Robin threw away her lesson plan book as each year ended so that lessons would have to be different.

Few specific books were identified by Robin for use in the preparation of her classes. Most of the ideas for lessons came from workshops, although an activity book written by someone from the state department and the curriculum guides developed by teachers in the school system were sometimes helpful. She felt there was some danger in teachers picking up a book and using a game or lesson without thinking about how it might need to be changed to suit a particular group of students or how it could be made safer.

Robin mentioned that she and a principal from one of her schools had similar philosophies. The principal believed in the importance of physical education and supported it. The children in that school never missed physical education class because the gym needed to be used for other purposes. The principal also wanted the children to be independent workers and thinkers.

Prior to examination of Robin's beliefs about the purposes of her teaching and the means by which she sought to achieve those purposes, a description of one of Robin's typical classes is presented. This serves to further acquaint the reader with Robin and portrays a more complete picture of her as a person and a teacher.

A Typical Class

Each day the class met inside, the children entered the gymnasium in a single file line and gathered in a circle, seated on the gym floor. The teacher stood at the door as the children passed, sometimes exchanging hugs or comments with them and occasionally reminding them to sit in the center of the room. As the children sat on the floor, Robin got down on one knee to talk with them. A few comments unrelated to the class were made before the teacher reviewed what had been done in the previous class and described what would be done that day. On three of the five days observed, some type of warm-up was done prior to the main lesson focus.

When children worked on skills individually, with partners, or in small groups, Robin's instructions on how to do the skill or activity were general in nature. Children were then sent several at a time to get a piece of equipment and begin working. As the children practiced, Robin circulated among the group or groups, calling children by name, often praising behavior and occasionally skill, and listening to what they wanted to say. Basic skill information was repeated several times during the lesson.

Children who misbehaved during class were warned, had their names taken, or were asked to sit out. The pattern observed most often was for the child to be warned and then receive time out. Those who sat out did so for a short period of time, and the teacher almost always found time to talk with them during the time of removal.

As the end of class neared, Robin called to the children to stop working and sent one or more at a time to put away the equipment and line up at the door. When all were lined up, Robin talked with them about their class behavior or work and then recorded or had a child record a check, check-plus, or minus on the poster on the wall. As the children filed out, Robin often exchanged hugs with them.

## Robin's Beliefs About Purposes and the Means for Achieving Them

Robin easily and quickly identified four purposes for her elementary school physical education teaching. She

wanted the children (a) to learn physical skills, (b) to develop knowledge and awareness of physical fitness, (c) to improve self-confidence and self-esteem, and (d) to feel loved. With regard to their priority, Robin stated, "They're all number one. I have high expectations of them and of me. And I expect all of us to do everything well." Under each of the four purpose headings just identified, relevant beliefs and the means by which Robin attempted to achieve each purpose are discussed.

Learn Physical Skills

Robin believed that the children in her program should learn physical skills, especially those skills they would need in order to be successful in the games and sports that are popular with children. She believed her inclusion of skill learning as a purpose was due to the influence of a physical education teacher she had in junior high and high school.

The means by which Robin hoped to achieve skill learning are summarized as follows:

1. Research it well

2. Within a given content area, offer a variety of experiences

3. Use repetition (in skill attempts)

4. Change equipment

5. Have children work by themselves, in small groups, and in large groups, and try to build on the skills

6. Give positive reinforcement

7. Provide for inherent feedback

8. Use skill clarification (positive reinforcement plus information to refine the skill)

9. Have children look at two or three who are doing a good job

10. Allow children time to practice skills

11. Identify and repeat basic information on the skill

12. Have children who sit out do so for only a short period of time

13. Talk to children who have to sit out; remind them about the loss of skill time

14. Move around the room to individual children or groups; give feedback

15. Convey the idea that physical education is work and not play

Of this list, several practices are discussed because Robin elaborated on them and in so doing revealed more about her beliefs about developing skill in children.

In speaking of two of the practices, Robin stated: "(I try to) give a lot of positive reinforcement...or give a lot of feedback about their skill." She explained that these were two different behaviors and expanded on her beliefs about them.

> I try not to give negative feedback at all. Feedback may sometimes be just inherent in the activity. If I have them working in centers, and they're throwing the ball at a target, then they know themselves if they've

> done the task well.
>
> When I talk about feedback during class, to me the children get their own feedback a lot of times, by... if a task is to knock over six cones and they don't knock over any, they know they haven't performed the skill correctly.

Robin believed that verbal feedback should be positive and that inherent feedback should be provided when possible. Inherent feedback, by nature, could provide the child with both positive and negative information about skill performance. In both examples given, Robin linked doing or not doing the skill correctly with the outcome of the skill, i.e., hitting the target or knocking down the pins, rather than with the technique or quality of movement performance.

The concepts of repetition and offering a variety of experiences were discussed in some depth. Repetition was used by Robin to mean "lots of chances to try skills" and variety of experiences to mean varied experiences <u>within</u> a content area as opposed to a variety of content areas. Although Robin clearly indicated that she wanted to provide a well-rounded physical education program, she realized that a one_day-a-week program had significant limitations.

> Let's see...we have the kids about 19 hours a year. And how much variety can you offer? There's more time than that in a day. How many different things can you do in a day?"

The discussion on skill clarification, defined by Robin as positive reinforcement plus information to refine the skill, is especially critical to understanding Robin's beliefs about how children learn skills and her role as a

teacher.

> I think...skill clarification...to say "Yes, that's good, but"...you know..."turn your body this way" or "your bounce was too high; maybe you need to throw it this way." I think give positive reinforcement first, whether it's verbal or non-verbal...and then try to refine the skill a little bit more. You know, there are some children I don't ever say those things to because I think they're not ready to hear it. But as the grades progress on, the older the children, the more skill refinement I try to get to....
>
> Now, I'd rather them think for themselves how to improve their skill than for me to stand there and say "Do it this way", but within the time frame, the time being so pushed, the more I teach the more I think I do that...the more I'll go over and say "Try this." I don't stand there and say, "Okay, everybody put the ball in their right hand and step with their left foot and turn their shoulders." I hate that, and I don't want them to learn that way.

Robin believed that skill learning required time and that it was her responsibility to reinforce positively the children as they practiced. She wanted the children to think for themselves and believed that teaching interventions, even to refine skills, were not always appropriate.

> And teaching, I just feel so rushed to get everything in. And basically, I just think I'm a good average teacher, but I don't think I'm an excellent teacher.... You know, I don't think I'm wonderful at teaching skills. I think I'm a good educator. And I care about the total child, <u>but</u>, you know, I know how different children are, too, and I know how long it took me to learn skills. And I think we...you know, they need a little time. I'm not going to go over and bother them with telling them to do it this way. I think it will come eventually.

Robin believed that both skill development and physical fitness could be enhanced through her emphasizing that physical education is work and not play, a concept she wished other teachers realized.

> And that's something that the children understand better than the classroom teachers. I think the children know, and unless the classroom teacher stays at all, (she) thinks "Oh, play time. And get rid of all the children's energy so they can sit still the rest of the day." And that's part of our failing, I think, as P.R. people. But when you have so many students a week, that doesn't leave much time for P.R.

Additional insights related to skill development are presented in the discussion of findings on the relationships between this purpose and Robin's actual teaching practices.

Knowledge and Awareness of Physical Fitness

Robin first mentioned physical fitness as a purpose by simply saying "physical fitness". Several discussions took place that clarified her meaning. One centered around two goals she was required to turn in that year to her principal. Robin had identified "the teaching of ways to improve physical fitness and a little physical fitness test" and explained that this goal focused on her teaching behaviors and on student outcomes that did not necessarily need to be documented.

> It's things I want to work on during the year, but the measurement criteria often looks at the children to see if I've done what I said I was going to do. They don't ...they wouldn't necessarily say, "You did not achieve your goal because you only had 75% of your children in better physical shape, but to look at the frequency of lessons to see if the children really have learned about physical fitness...to see if I have given little physical fitness tests. I don't believe really in giving big physical fitness tests to children because of the time factor. It would take a month to do a good job of testing 900 children. So, I need to come up with a little test I can do in one class period. And it may not even involve writing down scores for the children, but to let them know in their mind and in their body what they've done and what they can do. Uh, my second goal I can't remember. And this is my year

> to be evaluated, so I need to know that....
>
> I think the other one was to suggest computer programs that the children could use that would reinforce physical fitness or body systems and work with them in my spare time.

That Robin was speaking about fitness knowledge rather than fitness development as a purpose was something she clarified.

> I think all I can do as a physical educator with so little time is to introduce the children to it, to tell them the benefits, to work on their cognitive understanding of physical fitness, to understand how to improve it...frequency, intensity, activities that they can do at home to improve it....I don't think I can do it in p.e.

Teaching practices named as means for increasing the students' knowledge and awareness of physical fitness follow:

1. Set a good example
2. Talk about skills and activities for improving fitness
3. Talk about how nutrition improves fitness
4. Relate health to everything we do, e.g., success in p.e. and the classroom
5. Provide fitness knowledge through selected warm-ups.
6. Have learning activities that are fitness oriented
7. Make films or books on fitness available to classroom teachers
8. Harass the children about their lunches
9. Convey the idea that physical education is work, not play

Because these practices needed little clarification and Robin's discussion of them did not reveal additional insights, they are not discussed further until findings on the relationship between the purpose and actual teaching practices are presented.

Improve Self-Confidence and Self-Esteem

Although she originally began by talking about the children having "increased trust in themselves", Robin soon focused the discussion of this purpose on the development of self-confidence and self-esteem.

> Or confidence....and I guess it's just improving their self-esteem. I don't know, maybe self-esteem is pretty big, but I think through sports and through feeling successful deep down inside you, I think, you know, that just gives children confidence that they just can't get anywhere else. And I was brought up with a father who said, "Football is like the game of life. You have to learn to work with your teammates to be successful."

Robin identified the following teaching practices for improving self-confidence and self-esteem in her children:

1. Learning experiences where the children feel successful (good progression)

2. Experiences where children make decisions and try them out

3. Good social experiences (good sportsmanship, all being responsible for work, team work, sharing)

4. Positive reinforcement

5. Acceptance and encouragement when children cannot do a skill

6. Calling the children by name

7. Listening to and interacting with children

8. Talking to children who have to sit out

9. Moving around the room to individual children and groups

Robin talked about what she meant by "providing good social experiences" and identified several ingredients, the most important of which was progression.

> A lot of times, to me when activities fail, it's because they don't have the skills to do that activity yet. So I try to make sure that the children have the skills necessary before they go into the game or game activity...or skill activity. And then, once we're in the game, I emphasize good sportsmanship, their not really having one leader but everybody being responsible for what they do....Um, their just working within a group...giving people fair chances. Education isn't just for the five or six children in every class who are highly skilled to have their fun time. It's for everybody, and you just have to talk about sharing.
>
> I think the self-confidence comes from learning skills and having a good progression as you go. It seems to me the most satisfying thing that can happen is for a child to come in and say, "Hey, I really taught myself to do that at home," when they didn't. They learned how at school, but they felt good enough about it to practice at home...and realized they could do it. That was just breaking down skills enough to get it to where they could learn.

Robin was also able to further explain child decision-making and her role in bringing that about.

> I think that when I say I want the children to think through these things by themselves, I think, if I give them the starting point, if I give them the base, I want them to think from there. And I don't want them to come up with ideas on their own so much, because it has to be related to what we're doing, but if I can give them a starting point and then they would have to choose distances or force or speed or whatever to accommodate the task.

Feel Loved

Robin said very directly, "I want them to feel loved" and felt that value came from family and church as well as from "teachers I had that didn't care." She was able to identify 11 means by which she sought to make children feel loved.

1. Smiles
2. Hugs
3. Nods of approval
4. Giving respect; listening if the children have something to say
5. Spending free time talking with children instead of going to the teachers' lounge
6. Acceptance when children can't do a skill
7. Sometimes telling the children I love them
8. Speaking to the children individually as they enter or leave the gym
9. Praising good behavior
10. Calling the children by name
11. Talking to children who have to sit out

Listening to children seemed especially important to Robin. She stated, "I've known some teachers who obviously don't respect children. And they don't listen; they brush them off. And children want to be listened to, too."

Robin clearly viewed loving children as something that should be a natural part of teaching. One excerpt of the

interview conveys that idea:

> Um...to me, I'm supposed to love them and they're here and I have them for 30 minutes. But I think a lot of teachers don't take the extra effort to use their break time to be with children. So...I don't know of anything specifically I say to them. I tell them I love them sometimes and sometimes they know just by how I treat them and they treat me.

When Robin was asked if there were any additional purposes, things she hoped to accomplish that were perhaps less important than the four already identified, she related the following experience she had in talking with administrators and educators at the system and regional levels:

> ...They saw me as an educator. And my role did not stop where the gym door stops. And it deals with children in all respects. It's their physical skills, but their emotional and mental...everything, spiritual, everything else that we've been talking about for years. It's a child that needs to be educated. I don't know. I value children, and it's hard to say, "Well, gee, I do this. This is most important to me, and this comes second." To me, nothing comes second. Maybe my family sometimes, but school comes first.

## Relationship Between Beliefs and Teaching Practices

The central focus of this study was to determine how and to what extent teachers' beliefs about the purposes of physical education were reflected in their teaching practices. This portion of the paper examines the teacher's intended and actual practices and discusses them as they relate to each purpose. Findings are presented in the following areas: (a) practices related to skill development, (b) practices related to the development of fitness knowledge, (c) practices related to the improvement of self-confidence

and self-esteem, and (d) practices related to helping children feel loved. As practices related to the four purposes are discussed, consistencies and inconsistencies between purposes and practices are identified.

Practices Related to Skill Development

As previously stated, Robin identified 15 means by which she sought to bring about skill development in children. Of these, 5 practices were shown through her daily teaching to be consistent with her beliefs about this purpose, 6 practices were shown not to be present to the extent necessary for developing skills, and the remaining 4 practices either could not be examined or, for varying reasons, their contributions to skill development were found to be questionable. As findings are presented, practices from each grouping are listed; when an individual practice is discussed, its number on the list is given as an aid to the reader.

Practices consistent with beliefs. Five practices were shown to be consistent with Robin's belief that children should develop their physical skills:

1. Use a variety of equipment

2. Have the children look at two or three who are doing a good job

3. Identify and repeat basic information on the skill

4. Have the children who sit out do so for only a short period

5. Convey the idea that physical education is work and not play

In keeping with Herkowitz's (1984) recommendation that growth differences in children be accommodated by providing children with several pieces of equipment that are the same shape but differ in size, Robin used a variety of balls (#1) in the teaching of soccer. Kindergarten, first, and second grade children practiced in the three-day soccer unit with yarn balls and playground balls, while children in the third through fifth grades worked with playground balls and nerf soccer balls.

Having children observe other children (#2) was also a means identified by Robin for bringing about improvement in skill. This practice is supported by Rink (1985), who suggests that student demonstrations, if accurate, are not only an effective means for communicating information, but they are also preferable to teacher demonstrations. In the three days of soccer lessons, there were 17 skill demonstrations by children or by a child and the teacher. On the fourth and fifth days of observation, working on skills previously learned and on new dances, no children demonstrated skills. It seems that Robin had the children demonstrate at times she thought it helpful to the children to do so. If no demonstrations were necessary, there were none. If it was most helpful for her to demonstrate, that is what she did, for example in rhythmic activities when

children were unfamiliar with the dances being learned. It should be noted that, while the teacher demonstrated skills frequently on four of the five days, she did not identify this as a means for improving skill development.

As the children began working on a skill on a given day, Robin typically gave very basic information, one or two descriptors of a skill (#3). This was repeated as the children practiced. The following excerpt is the entire portion of a first-grade lesson in which children worked on dribbling with the feet. Robin initially told the children which part of the foot to use, reinforced this, and later added that the ball should stay close to the feet.

> The teacher tells them to get a ball and dribble with the insides of the feet.
> The children begin dribbling. The teacher reminds them not to kick the ball--to use the insides of the feet. "Stop." They all gather....The teacher asks the children to dribble the ball around the cones. (Todd, an autistic boy, is trying to take physical education with this class today.) Robin tells Todd what to do. The teacher says to the entire class: "Keep it close to your feet." The children continue working. "Stop." [Presentation of another skill follows.]
> (Day 2)

Field notes indicated that in virtually every instance in which a child was given time out, it was of brief duration (#4). Robin's intent was to keep the children from missing additional skill practice time, another means of improving skill discussed later in the chapter.

A sign in the gymnasium displaying class rules reminded the children that physical education is work, not play (#5). Lesson notes indicate that Robin also conveyed this directly

to the children.

> "Stop." The children line up behind the center cones. The teacher reminds the children of Rule 3: Stay on task. She tells them they are here to work, not to play. Play is when you go outside with the teacher for recess. "Don't waste your time. This is your skill time. Some of you are not concentrating." The groups are told where to rotate.
>
> (Grade 4, Day 1)

Practices inconsistent with beliefs. Six practices were shown not to be present in Robin's teaching to the extent necessary for developing skill:

1. Positive reinforcement
2. Skill clarification
3. Allowing the children time to practice skills
4. Repetition (in skill attempts)
5. Having children work by themselves, in small groups, and in large groups, and try to build on the skills
6. Moving around the room to individual children or groups; giving feedback

Positive reinforcement (#1) and skill clarification (#2), which Robin described as positive reinforcement plus information to refine the skill, were examined under the general heading of feedback. Analysis of the audiotape transcripts of six lessons, one from each grade level, reveals that Robin gave an average of 15.2 incidents of skill-related feedback per lesson. Using Cole's (1979) categories for teacher-augmented feedback, the frequency of types was broken down as shown in Table 6:

Table 6

Incidents of Skill-Related Feedback Per Lesson

| Type of Feedback | Frequency | % Total |
|---|---|---|
| Approval (no information) | 6.7 | 43.9 |
| Supportive (positive plus info.) | 2.2 | 14.3 |
| Convergent Questioning | .8 | 5.5 |
| Corrective (info. to change skill) | 5.5 | 36.3 |
| Disapproval (no information) | 0.0 | 0.0 |

While the two categories of feedback that provide positive reinforcement, approval and supportive, total 58.2 percent, the total number per lesson, 8.9, is nonetheless low. There is an absence of research to indicate that the use of positive feedback without information, the highest category, improves skill. Forms of feedback that provide information about the skill, supportive and corrective, make up approximately 50 percent of the total but in absolute numbers are also low, a total of 7.7 per lesson. Schmidt (1982) has stated that the primary role of feedback is to provide the learner with information about errors that occurred during a motor skill so that it might be improved on the next attempt. In the classification system described by Cole, only the category of corrective feedback fits that condition, and it was given only 5.5 times per class. In a class of 22 students, an average of only one in four would

receive information for skill refinement. The giving of such limited amounts of skill-related feedback were thus interpreted as insufficient for improving the children's skills. For this reason, practice #6, moving around the room to individual children and groups to give feedback, was also determined to occur too infrequently to promote skill development. While Robin moved around the room and interacted with the children, little feedback related to the skills was given. Consistent with Robin's belief that children should receive little negative feedback, Robin gave none in the disapproval category.

The use of time was looked at in several ways. On the three days warm-ups were done, it took an average of 11 minutes from the start of the class period to begin skill movement, in this case, to begin working on soccer skills. On the two days when no warming up was done, it took just under 5 minutes to begin skill movement. On the first day's observation, the third through fifth grade children practiced four different soccer skills in centers. While 11 to 16 minutes were spent on skill work as a class, the fact that there were five to six children in a group with one ball means that each child had an average of just over 2 minutes of skill-related practice during the class period, or a little over 30 seconds on each of the four skills. This is far less than what would be considered desirable (Siedentop, 1983). The kindergarten, first, and second

grade children worked individually or with partners the first day and averaged nearly 11 minutes of practice time on soccer skills. On the second day, all grades except the fifth worked individually or with partners and had just under 12 minutes of practice on skills. On the third and final day in soccer, all grades except the kindergarten played a soccer lead-up game. The games involved children's numbers being called so that two to six children, depending on the game formation and class size, were participating at any given time. Each child typically had one turn in the game, approximately 30 to 60 seconds handling the ball. On the two remaining days of observation, working on skills in centers and on rhythmic activities, the children practiced just under 15 minutes, above the 21 to 30 percent engaged motor time in four studies reported by Siedentop (1983). It is thus apparent that the amount of time spent practicing skills that were the focus of the lesson varied considerably, from just over 2 minutes to almost 15 minutes per 30-minute lesson. Given current research, this suggests an inadequate amount of time to practice skills. Children in the younger grades, who spent more time in individual and partner tasks and less time in centers and game play, had greater amounts of skill movement time than did the third through fifth grade children.

Closely related to providing time to practice skills is providing repetition in skill attempts (#4). As the

discussion on use of time has indicated, the two cannot be completely separated. Classes in which children were organized into groups or teams and shared equipment contained limited opportunities for children to practice skills. Robin provided for repetition of skills on one day in soccer, when the children worked individually and in partners. Little repetition was evidenced when they worked in small groups or on the day games were played. Repetition of skill attempts occurred when children worked in centers on jumping rope, shooting a basketball, and hula hooping, as each child had a piece of equipment, but the skills practiced were not those used in the unit that preceded or followed that lesson. Much repetition was required on the day children learned dances. Robin thus did not consistently provide for repetition in skill attempts.

While the children worked at times by themselves, with partners, in small groups, and in teams, the idea of building on the skill or progression (#5) was only partially present. While each day's activity may have been more difficult than the preceding day's, the complexity of some tasks and of game play was so great that for most grade levels it was obvious that progression to game play had been incomplete. Reflection notes from the second day of observation indicate that problems with progression were already apparent.

> Progression seems too rapid to me. For example, last week the children in the older grades passed the ball

> around the circle. The ball and the players were stationary. This week the children tried to run with a partner and dribble and pass. There was no practice first with a stationary ball and moving receiver. The first grade did not practice passing at all last week, yet they also tried the dribbling and passing combination today.

Rink (1985) has suggested four stages of games skills development to include: (a) the development of control under varying conditions while stationary and moving, (b) the combining of skills, (c) simple offensive and defensive strategies, and (d) modified and full game play. Looking at Robin's teaching in light of Rink's stages, it appears that Robin, working under severely limited time constraints, proceeded to the combining of skills before developing sufficient control on the individual skills and then to games play, omitting stage three altogether. Thus, while the appropriate groupings as well as progression were present, progression was incomplete and too rapid.

Practices identified as questionable. Four practices were identified as having questionable effectiveness in their contribution to skill development.

1. Research it well

2. Within a content area, offer a variety of experiences

3. Provide for inherent feedback

4. Talk to the children who sit out; remind them about loss of skill time

There was no way to determine whether or not Robin researched the skills she taught (#1). The other practices deserve further consideration.

Robin offered the children a variety of experiences (#2) within the content areas. On the three days in soccer, learning experiences varied within a lesson, from day to day, and across grade levels. The children worked on a number of tasks on several skills in various organizational patterns, and they used the skills in game play. The question must be raised, however, regarding the desirability of so many different experiences in a physical education program in which the physical education teacher saw the children for only 30 minutes each week. A second question might be raised as to whether or not providing a variety of experiences contradicts to some extent another practice identified for promoting skill, providing for repetition in skill attempts. Providing for variety suggests breadth, while repetition of skill attempts suggests depth, seemingly incompatible practices in a one-day-a-week program. Thus, while using varied tasks and organizational patterns and game play may serve useful purposes in developing a variety of skills, its value is questionable in this context.

Inherent feedback, or what Holding (1970) refers to as instrinsic feedback, is that which occurs naturally in the task. Robin identified this as the most important means for providing information to the children about their skill

performance (#3). Although such tasks existed in her teaching, Robin did not call attention to the inherent feedback that was present. She did not, for example, suggest that the children note when a soccer ball was passed too far to the side of a partner or a shot for goal was too long or too short and use this information to change the performance. Thus, while feedback was inherent to some tasks, Robin's verbal behaviors did not suggest that this was an important source of information for the children.

The fourth questionable practice was for Robin to talk to the children who had to sit out and remind them about the loss of skill time (#4). Field notes indicate that Robin nearly always talked with children who were given time out. Lesson transcripts do not indicate that Robin talked with them about the loss of skill time. Because lessons were taped in only 6 of 38 classes observed and children were not made to sit out in each of the six lessons, the failure to find references to missed skill time is seen as insufficient to say that it did not frequently occur.

To summarize the findings related to skill development, 15 practices were identified and, of these, 5 were found to occur consistently in Robin's daily teaching. Of the remaining practices, 6 were not present to the extent necessary for developing skill, and 4 were considered of questionable benefit. She was found to be consistent in

giving basic information about the skill, providing a variety of equipment, having children demonstrate, limiting the time that children were in time out, and conveying the idea that physical education is work, not play. Three of the six inconsistent practices related to the giving of feedback. The other two involved providing for sufficient repetition and skill practice time. Robin's teaching practices were thus considered to be largely inconsistent with her belief that a primary purpose of physical education is to develop physical skills.

Practices Related to the Development of Fitness Knowledge

Of the nine means identified by Robin for promoting knowledge and awareness of physical fitness, three could not be examined because they occurred primarily outside of the regular class:

1. Harass the children about their lunches
2. Make films or books on fitness available to classroom teachers
3. Relate health to everything we do, for example, to success in physical education and in the classroom

The remaining six practices were shown to occur with enough consistency to convey basic fitness knowledge and increase awareness of fitness:

1. Set a good example
2. Talk about skills/activities for improving fitness

3. Talk about how nutrition improves fitness

4. Provide fitness knowledge through selected warm-ups

5. Have learning activities that are fitness oriented

6. Convey the idea that physical education is work, not play

That Robin set a good example (#1) with regard to fitness was supported by her appearance, i.e., she was not overweight, and by her participation with the children in doing sit-ups and jumping rope. On the days these exercises were performed as warm-ups, Robin participated in them with several different classes throughout the day. It was noted that she also made healthy food choices at lunch. Robin exercised regularly at a local spa.

Two of the practices Robin identified involved talking to the children about aspects of fitness, to inform them of of the role of various skills or activities (#2) and of nutrition (#3) in improving fitness. Sometimes this information was provided by the teacher in a sentence or two, and at other times, as in the first grade lesson that follows, she took time for a short discussion.

> Robin: Today we're going to do two things. We're going to jump rope first, and then we're going to play a soccer game called circle soccer. Why are we jumping rope? Why do we jump rope? (child says something) For exercise. What does jumping rope do for your heart?
>
> Child: Makes it beat faster.
>
> Robin: Um hmm. It makes your heart beat faster. When

> your heart beats faster, is it exercising? Is it? Sure. That's a good way to tell if your heart is getting some exercise--if it's beating faster. (child says somethiing) Right. Okay, it'll just work on your physical fitness. (child says something) Okay, bicycle riding, jumping rope...what are the other two ways you can really make your heart stronger? (child says something) All right, that has a lot of what in it? Running...bicycling, jumping rope, running, and there's one more that most people can't do except in the summer.
>
> Child: Swimming.
>
> Robin: Swimming. Those four ways will really give your heart a good work-out.
>
> (Day 3)

Robin said that one of the reasons warm-ups were done was to increase knowledge about fitness (#4). She also used warm-up exercises because they (a) were activities that could be done quickly with few directions; (b) improved strength, agility, and muscular endurance; (c) taught beginning fitness behaviors; and (d) increased the level of activity when the children weren't getting enough from the regular lesson. Warm-ups were done on three of the five days of observation and, as mentioned, Robin often took a minute or two to emphasize their importance, to ensure that they were done correctly, and to provide related fitness knowledge.

The practice of having learning activities that were fitness oriented (#5) occurred to only a small extent. It was not Robin's intent, however, to develop physical fitness, but rather to increase awareness and knowledge of fitness. For this purposes, the number of fitness-oriented learning

experiences seemed sufficient. In addition to doing warm-ups, the children on one day practiced both long rope jumping and individual rope jumping as two of their four learning centers.

Finally, conveying the idea that physical education is work, not play (#6), already discussed as a practice for improving skills, was also linked by Robin to the purpose of improving fitness knowledge. This concept was communicated clearly by the teacher through a sign posted on the gym wall and through her verbal interactions with the children. This seemed to influence the climate of the class and behavior of the children as they worked on skills or in warm-up activities.

Robin's teaching is consistent with the first two objectives of a six-level Taxonomy of Physical Fitness Objectives proposed by Corbin (1976). These include understanding physical fitness vocabulary and exercising. His higher order objectives require the development of physical fitness, not a realistic goal in a one-day-a-week program. Thus, while fitness activities in Robin's classes occurred too infrequently to contribute in any significant way to improved levels of fitness, her purpose was to increase the children's knowledge and awareness of physical fitness. Her teaching practices adequately supported this purpose.

Practices Related to the Improvement of Self-Confidence and Self-Esteem

Of the nine practices identified by Robin as means for improving the self-confidence and self-esteem of her children, seven were found to be typical of her teaching. Two practices were found not to occur consistently or to occur in such a way that self-confidence was not enhanced.

Practices consistent with beliefs. The seven practices found to be consistent with Robin's beliefs were as follows:

1. Good social experiences (good sportsmanship, all being responsible for work, teamwork, sharing)

2. Positive reinforcement

3. Acceptance and encouragement when children cannot do a skill

4. Calling the children by name

5. Listening to and interacting with children

6. Talking to children who have to sit out

7. Moving around the room to individual children and groups

As Robin had said, children were provided with good social experiences (#1). They often worked in partners (part of day one), small groups (days two and four), and large groups (days three and five), and the teacher consistently emphasized cooperation, consideration, and good sportsmanship. Notes from the day the children played games show this most clearly:

The teacher asks for suggestions to improve the game. One child suggests coming to the middle after your turn and shaking hands with the other person and saying "good try." The teacher says that is a good idea, and they do it after that.

(Grade 3, Day 3)

A few children kick the ball hard with their toes. The game seems to be getting a little more rambunctious. The teacher tells everyone to sit down. She asks for a show of hands to name "one thing we can do to make p.e. better." The children's responses are written on the board and numbered:

1. It's too loud.
2. Better sportsmanship (Robin adds "towards others and towards me.")
   To help encourage your teammates.
   To not be wild.
3. Some people don't pay attention.
   Work quietly.
   More respect.
   Cooperate with others.
   Follow directions the first time they're given.

The teacher adds:

4. Practice skills at home.

(Grade 4, Day 3)

This portion of a first grade lesson transcript is also representative of her efforts to provide positive social experiences by encouraging the children to be supportive of one another.

Robin: Let's not laugh at people for trying their best. What could you do that would encourage them? Jason?

Child: We could make them feel better.

Robin: How could you make them feel better? Tameka? Kim?

Child: Say "good try".

Robin: Say "good try" or clap for them or cheer for them. Here comes Jalesa. Use your feet and not your hands. Oops. (laughter) Let's encourage her but not laugh. You can do it. You can do it.

Providing positive reinforcement (#2) and expressing acceptance or encourgement when a child cannot do a skill (#3) are closely related. Examination of the lesson transcripts reveals that, in addition to the 8.9 incidents of positive skill-related feedback given per lesson, Robin also gave 7.3 incidents of positive feedback that were unrelated to skill. These were most frequently related to behavior. In addition to these 16.2 incidents of positive reinforcement, Robin was often observed smiling at the children which, although not identified by her as a form of reinforcement, would also serve that purpose (Feltz & Weiss, 1982). As seen in the lesson notes immediately preceding, Robin not only provided encouragement herself but also led the children to do so. To further emphasize the positive, warm, accepting atmosphere created by this teacher, it should be mentioned again that there were no incidents of purely negative skill-related feedback and few incidents of corrective feedback. Robin indicated that having the children say "good try", encourage one another, and not laugh at others helped to promote sportsmanship and respect; it surely also increased the positive climate of the classroom and helped to bring about feelings of satisfaction and confidence.

The remaining four practices were also characteristic of Robin's teaching. Examination of the transcripts revealed that Robin called the children by name (#4) an

average of 30 times per class period. Listening to children (#5) was most emphasized as a means of communicating respect and helping children feel loved and is discussed under that heading. Talking with children individually and in groups (#6, #7), which Robin thought made the children feel important, was a consistent pattern observed in her teaching.

Practices inconsistent with beliefs. Two practices did not appear consistently:

1. Learning experiences where children feel successful (good progression)

2. Experiences where children made decisions and try them out

Robin indicated that "learning experiences where the children feel successful" (#1) referred primarily to the presence of a good progression that permitted learning to take place. Feltz and Weiss (1982) support this view and have stated, "When individuals achieve success in their athletic endeavors, feelings of self-worth and self-esteem result" (p. 24). They advocate instructional strategies that promote gradual increases in skill improvement as one means of accomplishing this success. As has already been stated in the discussion of skill development, it often seemed that progression was incomplete. Field notes of a first-grade class in their second day of soccer indicate that the children were unable to handle the demands of dribbling and passing while moving and yet were going to

advance to game play.

> "Come and line up behind me. Stand side by side with your partner." Two boys demonstrate dribbling and passing to a partner while moving. Instructions are to dribble five times and pass.
> The children have trouble with this. They don't run side by side. They stop, face their partners, and then pass. Some of the running is sideways, facing the partner.
> "Stop. Put your ball away and line up behind me, please." The children line up. The line starts in, then the teacher stops to tell them that next time they will play a kind of soccer game.
>
> (Grade 1, Day 2)

In addition, most game play for children in the lower grades seemed inappropriate, given the limited prior practice on skills and the emotional and cogitive development of the children. Field notes indicate, however, that children experienced success in doing certain skills, especially stationary passing to a partner and individual work on dribbling. They were noted to be most unsuccessful in running and passing, heading, and game play. As has been stated in the discussion of skill development, it appeared that Robin had the children combine skills before developing sufficient control of individual skills and also omitted one of Rink's (1985) four stages of games play. Observations thus do not support the idea that children typically experienced success in learning tasks. Robin's encouragement and the warm atmosphere of the class often kept the children practicing and seemingly enjoying the practice whether or not success was realized.

Having the children make and try out decisions about distance, force, and speed (#2) was also identified as a means for improving self-confidence. This is supported by Weiss and Bressan (1985), who identify as one means of promoting children's self-confidence in movement carefully selecting the style of teaching "that will allow children maximum involvement in decision making, yet still provide adequate structure for safe participation and efficient use of practice time" (p. 35). Field notes do not indicate that decision making used in this sense was a great part of Robin's teaching. For example, children working in partners typically chose the distance between them for passing, but they were never asked to practice by varying distances, speeds, or amounts of force. Other forms of decision making often took place, however, and these may have helped to produce positive feelings about the physical education experience. For example, children always chose their own equipment and partners.

Hellison (1973) has stated that self-esteem cannot be enhanced in the physical education setting unless three conditions are met: (a) a nonthreatening environment, (b) treatment of each student as a unique and special individual, and (c) opportunities for success. Robin's teaching easily satisfies the first two requirements, but she is inconsistent in providing opportunities for success. By frequently calling the children by name, giving praise and hugs, and by

listening to and interacting with children, a positive atmosphere is created and children are made to feel they are special. It is these behaviors, rather than those related to successful experiences with the content, that contribute to the enhancement of positive feelings of self in the physical education setting.

In the classic text Perceiving, Behaving, Becoming (Association for Supervision and Curriculum Development, 1962), the authors stated, "Too many of a child's experiences in too many school situations say to him that he is not enough" (p. 237). Much of Robin's teaching was designed to help children feel they were enough.

Practices Related to Helping Children Feel Loved

Of the 11 practices identified by Robin for helping the children feel loved, 8 were found to occur frequently in her teaching and are thus considered consistent with the purpose. Three practices could not be examined or were identified as questionable.

Practices consistent with beliefs. The eight practices shown to occur frequently in Robin's teaching were as follows:

1. Smiles
2. Hugs
3. Giving respect; listening if the children have something to say
4. Acceptance when children cannot do a skill
5. Speaking to the children individually as they enter

or leave the gym

6. Praising good behavior

7. Calling the children by name

8. Talking to children who have to sit out

While some of these practices have been discussed with regard to other purposes, others warrant further discussion.

Smiling (#1) and hugging (#2) took place frequently in Robin's teaching. Reflection notes from the last day indicate that Robin expressed her love for the children in these and other ways.

> Robin is patient and soft-spoken in dealing with the children. I would also say she is kind and protects the children's feelings. When a child is disciplined and has to sit out, Robin finds time to talk individually with that child. She smiles at and often hugs the children as they leave. During class, especially during games, she seemed to work to communicate values.

Robin emphasized the importance of giving respect to children, especially by listening to them when they had something to say (#3). Analysis of lesson transcripts revealed that she listened to a child who initiated the talk an average of 12.8 times per class. Robin's response to hearing this was, "That's why I only give 15.2 incidents of positive reinforcement {actually total skill-related feedback}. I'm listening every other time." Robin thought this talking time was important, even if it resulted in less time to practice skills.

> I'm always saying I feel so rushed and I only have this much time. I used to work to get the most amount of skill time that I could get. And I found that for me

> it was not successful. And for the children it wasn't successful because they didn't feel like we had time to talk a little bit. And I think I enjoy being with the children as much as I enjoy teaching physical education to the children. And I know there are days when we talk too much, but that doesn't bother me in the least, as long as they get the concept of the lesson. But I think that's something they need to work on.

Robin's statements reinforced those given earlier that emphasized her belief in teaching the whole child.

Conveying acceptance when children could not do skills (#4) was discussed to some extent in relation to improving self-confidence and self-esteem. Robin circulated to the children, listened and talked with them, and gave praise, usually for good behavior (#6). These behaviors collectively conveyed acceptance. She avoided completely the use of purely negative feedback.

The remaining three practices, two of which were discussed in relation to other purposes, were also practiced by Robin in order that the children would feel loved. These were: (a) speaking to the children individually as they enter or leave the gym (#5), (b) calling the children by name (#7), and (c) talking to children who have to sit out (#8). These behaviors, together with those already discussed, created an atmosphere in which the children felt loved.

Practices identified as questionable. Three practices appear in this category:

1. Nods of approval
2. Spending free time talking with children instead of

going to the teachers' lounge

3. Sometimes telling the children I love them

The first two practices named could not be examined, the former because nodding the head (#1) was not seen as important when field notes were taken and was thus not recorded, and the latter because Robin's free time (#2) during the period of observation was typically spent with the investigator. Telling the children she loved them was actually given little emphasis by Robin. In fact, she quickly added to that statement, "Sometimes they know just by how I treat them." While transcripts did not contain specific incidents in which the teacher said, "I love you," that idea seemed to be conveyed by Robin's attitude.

Summary

Robin identified four purposes for the teaching of physical education in her kindergarten through fifth grade program. She wanted the children (a) to learn physical skills, (b) to develop knowledge and awareness of physical fitness, (c) to improve self-confidence and self-esteem, and (d) to feel loved. All were judged to be equally important.

Three of Robin's four purposes were consistent with the thinking of the authors of the 43 textbooks examined by the investigator. All 43 identified skill development as an objective; 17 listed self-concept; 16 included knowledge of health and fitness. The one purpose of importance to Robin that does not appear on the list generated through the

textbook review is making the children feel loved. This purpose is consistent with Robin's view of herself as an educator who is perhaps not "wonderful at teaching skills" but who "care(s) about the total child."

Being an educator of the whole child first and then a physical educator is a concept that impacted significantly on Robin's teaching. Her commitment to these particular purposes came in part from her educational preparation and from family and church values.

Many of the practices named by Robin are supported by the literature as means for accomplishing her stated purposes. She did, it seems, know what to do to bring about the desired results and was often successful in doing so. She was aware, however, that she had very little time for accomplishing so much and had struggled with how best to utilize that time. It was sometimes true that the practices for accomplishing one purpose had to be set aside in order to meet a second purpose.

The greatest inconsistency between the stated purposes for teaching elementary school physical education and Robin's actual teaching practices occurred in the area of skill development. Corrective feedback was limited so that children could practice without interference and because Robin wanted the children to receive large amounts of positive reinforcement. Practice time on skills was limited by (a) the use of small and large group organizational

patterns, (b) participation in warm-up activities, and (c) teacher talk and listening. Robin was thought to be fairly successful in carrying out practices to enhance self-confidence and very successful in carrying out practices to increase knowledge and awareness of physical fitness and to make the children feel loved.

Robin illustrates well the reciprocity that Clark and Peterson (1986) have described between the teacher's beliefs and what takes place in the classroom. Robin's beliefs about the purposes of physical education have clearly influenced her teaching. Her teaching practices have also been changed, for example, to spending more time talking with and listening to children and less time in skills practice, because of what she saw taking place in the classroom.

# CHAPTER V

# MARTHA

## Background

Martha began teaching elementary school physical education her first year out of undergraduate school. At the time she entered the study, she had taught for nine years in the same system, all but one year in the same two schools. Three and a half days each week she taught in an average size gymnasium, well decorated with a variety of posters and signs. At the other school, where she taught one and a half days a week, the gym was old and large and comparatively barren.

Martha was easily the most talkative, energetic, and enthusiastic teacher in the study. She seemed to be both nervous and excited about being a participant. She was very cooperative throughout the period of study and was most interested in knowing the results.

Martha talked about a number of factors that influenced her to enter the field of physical education, including an active childhood, an influential teacher, and the positive feelings that came from participating with others who enjoyed physical activity.

> Well, first of all, growing up, I was around uncles, aunts and cousins, and we were always active....When we would meet, we would play games, play ball, softball, that sort of thing. And I was a little better,

> I guess, when I went back to school than the average girl, so I got chosen on teams and that sort of thing, which made me feel better about myself. In fact, I had maybe a little better than average skill in that area which made me feel good and...and enjoyed it...enjoying the field itself, enjoying participating and taking part ....I think the lady that had the most influence on me going into physical eduction was in junior high. I had a good physical education teacher there. She made me feel good as far as participating and responsibilities that she gave me, and allowing me to do more things, helping her. I guess all of that had a lot to do with it. And taking part in sports and activities throughout junior high and up to high school and...I think that's what geared me toward it. And having friends and participating with other people who were interested in the area. I guess it was kind of like a social thing, too, participating, enjoying the fellowship of...taking part with friends and...and I guess knowing that I could give back some of that good feeling that I've received.

Martha added that she originally wanted to coach and thought the junior high level would be best for her. Two of her college teachers influenced her, however, to work with elementary school children, and she was thankful she had decided to do so.

Martha talked easily about the influence her undergraduate studies had on her teaching, especially on her selection of the content.

> As far as content goes, and <u>what</u> I teach, my background has had a lot to do with it...like Dr. _____ and Dr. _____ and the movement approach to teaching games skills and gymnastics and dance. That is overwhelming. That had a lot to do with the content and the way I teach now. I guess more or less teaching the way I've been taught. Now, I didn't fully understand all of it when I was there, as far as using this in teaching, but as I've started teaching, I've seen a lot more how it relates, how it makes sense...why you don't teach basketball to kindergarten kids and why you don't tell everyone they have to be able to do a cartwheel and that sort of thing, as far as the individualization of the content....I think that's influenced me a great deal. As far as...making the

> kids feel good...I feel like the movement approach has helped me to be more aware of individual children and making them feel better about wherever they are. And it makes them try, even if they don't ever get as good as somebody else, at least they'll go out feeling good about what they have accomplished.

As Martha was currently enrolled in her first graduate course, there had been little time for it to influence her teaching. The information she had gained on the importance of good nutrition and physical fitness had renewed her interest in that area and would, she felt, influence her program in the future.

Martha described her program by first identifying three areas of the curriculum: games, dance and gymnastics. "And the approach that I take would be the educational approach or the movement approach." She explained that gymnastics moved a bit toward the traditional with the older grades and that dance the last year or two was also more traditional or more structured. Martha tried to place an emphasis on fitness by including some specific fitness activities and by talking to the children about fitness and nutrition. In the spring of each year Martha had the children participate in field day activities.

Martha thought her program might be similar to those of some other teachers in the area, especially those who went to the same college she did, and that they would have in common the educational approach. Those who went to another college had "more of a traditional approach." Martha didn't see this as a distinct dichotomy, because both might use

lead-up games or activities, seen as borderline between the two approaches. She acknowledged, however, that she used lead-up games very little. A description of one of her typical classes follows.

A Typical Class

Prior to the time the children entered the gymnasium, equipment was spread out on one side of the room. The children entered in single file and then sat in two rows on the stage steps or gym floor. Martha began that day's lesson by identifying one bone or muscle for the children to learn. Using either a skeleton or her own body, she touched the proper location. The children located the bone or muscle on themselves and in unison repeated its name. The teacher then reviewed previously learned bones or muscles by pointing to their locations and having the children give their proper names.

Martha typically asked the children what thay had done in the previous lesson and then told them what they would do that day. She presented information on concepts related to the content of the lesson and asked the children questions about those concepts.

The children were sent, usually by rows and sexes, to get equipment and find personal space. Martha always gave a thorough explanation of the task and often cued children through it or made suggestions as they moved. During the lesson, Martha circulated throughout the room to individual

children and groups, often calling the children by name. During the portion of the lesson that the children worked on skills, Martha gave high rates of skill-related feedback. She frequently stopped the class during practice on tasks and made comments designed to further develop skill or promote cognitive understanding of the content.

At the end of the lesson, Martha called the children together into a group and again asked questions related to the content of the lesson or to material covered in previous lessons. The children lined up single file to leave the gym, and the teacher asked them individually as they exited to name the bone or muscle studied that day.

## Martha's Beliefs About Purposes and the Means for Achieving Them

Martha identified three purposes for her physical education teaching and saw them as equal in importance. She wanted the children in her program (a) to enjoy physical activity, (b) to gain knowledge of the way to do skills, and (c) to have what they learned in physical education carry over into other areas of their lives. Under each of the three purpose headings relevant beliefs and the means for accomplishing each purpose are discussed.

### Enjoy Physical Activity

Martha wanted the children to enjoy physical education and physical activity in general. She explained that the concept included more than having fun in class.

> ...To enjoy the...to learn how good it feels to be active and how good it feels to participate in a game ...no matter what the outcome, just enjoy the participation part...and feel good about themselves... whatever level they are, and know that they can accomplish more. They can achieve more, you know, by putting more time in it....I want them to enjoy what they do, but learn something at the same time. That's why we do take time to explain, to give examples, and how this would be used and how they could apply this to outside activities....I've tried in the past, just like when we're throwing and catching to different levels or different spaces around them, instead of just telling them to do that....it makes more sense to me and it's helped reinforce my understanding of it by explaining to the kids why you need to catch high, why you need to catch low, why the space around you is important to be able to feel comfortable moving in, whether it's gymnastics, dance, games, because it's a cross-over to everything that they do. There's a relationship what they do in p.e. into other activities that they might take part in....

Martha's comments indicate that she wanted the children not only to enjoy physical activity but also to understand its importance in their lives. This significance was gained, she felt, when physical education was enjoyable, when children felt good about what they were able to do, and when they knew why they were doing it. Bain (1980) has suggested that physical educators not be embarrassed by their commitment to enjoyment and has proposed that "student enjoyment of movement participation is in fact the central purpose of physical education programs" (p. 48). Martha believed it to be equal in importance to the other purposes of her program and emphasized that she did not equate this purpose with simply having fun when she added, "To be honest, I don't know if I specifically plan to make something fun...to set out, to say, `I'm gonna make this fun.'"

The practices identified by Martha for achieving the purpose of having children enjoy physical activity reflect the broader concerns she had expressed and may be summarized as follows:

1. Tell the children what they'll do that day
2. Do not allow complaints, boos, or put-downs
3. Relate what they'll do to what they've done before
4. Tell the children why they're doing something
5. Give positive reinforcement
6. Give encouragement
7. End by bringing the children together and giving them a chance to answer questions
8. Omit learning experiences the children won't enjoy or feel successful at
9. Challenge above-average children

Several times it was necessary for Martha to make clear the relationship that existed between the practices she identified and the stated purpose. Telling the children what they would be doing that day, for example, would create interest in the lesson. Answering questions at the end of the lesson made them think about what they had done and why and allowed them to feel good about being able to answer. Martha explained that she omitted content that she or the children might not enjoy, that would be too difficult for them, or that seemed too competitive.

> I want them to enjoy what they do. And a lot of times, if I don't feel comfortable with it and if I don't

> enjoy it myself or if I don't think they're going to, if it's something that's too difficult for a particular age level or I feel that it is, or there's a loss of control or they're in a situation where some kid's gonna put down...or there's too much stress as far as making...If it can't reach all the kids, I may not pursue it. For example, specific basketball skills where they're in a competitive situation or where selection of teams or something that may make a child feel that they're not as important or they're not as good because they're selected last...I try to stay away from that sort of situation. I try to keep in mind all the kids when I select these activities.

Finally, Martha explained that she challenged the above-average students in three ways: (a) by giving them examples of what can be done; (b) by having skilled athletes come to the school to perform, e.g., in gymnastics; and (c) showing films of more advanced skills, such as rope-jumping tricks.

Knowlege of the Way to do Skills

Martha first talked about this purpose in vague terms, saying that she wanted the children to "learn something". She expanded that response by giving an example in which the knowledge of how to throw and catch is developed and applied by the children to games play.

> Well, taking games, for example...say throwing and catching....We may start them off throwing and catching to each other and may not be specific about where to catch and all this. Then, we'll go to maybe mechanics, where you take the ball on the left, we want to step out on the right. We say, "You need to know how. You need to know this." And knowing the right way...can help them when they're on their own. When something's not working right, they can use information we have given them to go home and practice, to figure out why it's not working or why a game falls apart when they're playing with their classroom teacher. Say playing kickball or playing dodgeball, these traditional activities that the classroom teacher may work with, if

> they understand... why the ball keeps going past Mary, because Mary doesn't reach to the side or Mary doesn't know how to catch above her head. When they can under- this, that's something they can work on.

Six practices were identified for helping children gain knowledge about skills:

1. Relate what the children have learned to what they will be doing

2. Give examples of things the children know and relate them to that day's content

3. Ask questions and get feedback

4. Review at the end of the lesson

5. Give the overall picture of the skill and then break it into parts

6. Teach the basics of some skills (mechanics)

The practices are of two types. The first four listed are ways to help the children understand and remember information. The final two practices tell what kind of skill information is imparted: the whole idea of a skill, its parts, and the mechanics.

At one point in the discussion of purposes, Martha began talking about the skill development of the children. As it had not been identified as a purpose, the teacher was asked to explain if or how that might fit in with her purposes. Her reply clearly defined the relationship between skill development and skill knowledge.

> I think the skill development comes by having the knowledge. I think that's...a by-product of knowing how. If they have the desire to do, to become better,

> and they know how to, that will improve...the skill development. If they've got the self-discipline to practice and they know how it's supposed to be done, then that skill development will come, or it'll come faster because of their interest in it or their desire to become better themselves. But I think they need to know the right way or how to...that gets in the knowledge. Then the skill is a by-product of having the knowledge.

Carry-Over into Other Areas

Martha wanted much of what the children learned in physical education to carry over into other areas of their lives. This was the most difficult purpose for her to clarify because of its breadth and because it seemed to be less clearly defined in her thinking. She explained the idea of carry-over, in part, in terms of self-discipline and attitudes learned in class and applied outside of it.

> I think a lot of times just by the discipline... or what I'm trying to get them to do, there is a carry over in a way that they can apply. Not just the skill development or not just the feeling good while they're in there, to know that there is a... something about how they feel about themselves will carry over in other things that they do throughout the school....I want that to inspire in them or to give them that...have them to develop a self-discipline to achieve more for themselves....Our time is so limited; we can't go into as much detail in developing skills. ...I want what they do to light a fire or...I don't know how to word it exactly, but to inspire them to want to do more on their own, to create a self-discipline outside of school, where they'll become more involved in skills, activities, and be aware, like when they go to games, not to boo the other team because everybody else is out there booing. Not to show this bad sportsmanship...attitude, outside when I'm not around. I want it to be something that carries over and it has an influence on other aspects of their lives by what they learned or feel while they were in my class.

Martha named eight practices for achieving carry-over:

1. Inspire the children to want to do more on their own

2. Ask, "What can you do to make it better?"

3. Let the children know they are responsible for their own health, skill level, etc.

4. Encourage the children not to give up but to say, "I'll try."

5. Ask questions about their understanding of skill and fitness activities to be applied outside of school

6. Emphasize fitness and good nutrition as an important part of one's lifestyle

7. Use children's suggestions in fitness lessons; use examples of things they know about in their own lives

8. Let the children talk about what they are doing at home that is related to fitness or skill development

Martha's explanation of many of the practices related in some way to fitness. She mentioned, for example, that she tried to inspire the children by asking them what kind of exercise they should be doing every day or what kind of exercise would burn the most calories. As Martha's focus in the discussion of this purpose shifted from attitudes and self-responsibility in general to one of fitness, she was asked again to clarify the purpose. Her response emphasized the value of all types of physical activity.

> I think all the physical activity that we do...is good, and it does make you feel good and it is good for you. I guess I want them to be active in some type of activity continuously as a part of their life, whether it is Little League soccer or...I guess the main thing is not so much to go home and throw and catch a ball in your personal space. Work with a friend. Get that activity. You know, exercise. I guess that, as far as the carry-over, you get it through these activities. That's part of it. And then specific things that you have to take time for...you know, relating to fitness, the stretching, the muscle-building, and the aerobics.

## Relationship Between Beliefs and Teaching Practices

This portion of the paper examines Martha's intended and actual teaching practices and discusses them in relation to each of the purposes she identified. Findings are presented with regard to (a) practices related to the enjoyment of physical activity, (b) practices related to knowledge about skill, and (c) practices related to carry-over value. As findings are presented, consistencies and inconsistencies between purposes and practices are identified.

### Practices Related to the Enjoyment of Physical Activity

Of the nine practices identified by Martha for helping the children learn to enjoy physical activity, seven were found to appear consistently in her teaching; two did not appear consistently. As findings are presented, practices from each grouping are listed; when an individual practice is discussed, its number on the list is identified in parentheses.

Practices consistent with beliefs. The seven practices found to be consistent with Martha's belief that children should enjoy physical actovoty were as follows:

1. Tell the children what they'll do that day
2. Do not allow complaints, boos, or put-downs
3. Relate what they'll do to what they've done before
4. Give positive reinforcement
5. Give encouragement
6. End by bringing the children together and giving them a chance to answer questions
7. Omit learning experiences the children won't enjoy or feel successful at

As Martha had stated, the children were told what they would be doing each day (#1) and, when pertinent, new content was related to what had been done previously (#3). For example, after presenting information about the parietal bone and reviewing the children on the bones learned in previous weeks, Martha introduced the movement focus of her second grade lesson on soccer dribbling by relating it to the striking lesson done the previous week.

> Martha: Last week, what did we work on? Anybody remember? We worked on balloons. What were we doing with the balloons? Kevin?
>
> Child: Stretching.
>
> Martha: Stretching.
>
> Child: Striking.
>
> Martha: Stretching while striking. What did we have to do when we struck them at low levels?

Child: Bending.

Martha: Bending. We did some bending. What's the other non...

Child: Twisting.

Martha: Twisting. Very good. So we used three non-locomotor movements in our personal space. That means we did not travel anywhere....Now. We're gonna be working with the soccer balls. We worked at all three levels when we were striking the balloons, using different body parts. We're still gonna be working on striking using different...using body parts, but the body part we're gonna concentrate on will be the body part you use mostly in soccer. So what body part is that gonna tell you?

Child: The foot.

Martha: ....Now different parts of the feet...toes, sides, tops, insides, outside, and heels. What level will that confine our working in?

(Day 2)

Martha's introduction continued for some time after this, as she reinforced cognitive aspects of the lesson and related the current lesson to previous work. Related also to the cognitive learning Martha expected of the children, the lesson always ended with the children gathered together to answer questions (#6). These practices, she felt, increased the level of interest in the lesson and made the children feel good.

Martha did not allow children to relate to one another or to her in negative ways, such as complaints, boos or put-downs (#2). It was observed that children who were disrespectful were made to apologize to her and that children who were unkind to one another were asked to sit out or were quickly reminded, "Don't be ugly" or "Be nice." This may

have helped to make the atmosphere a more positive one.

The two practices that Martha demonstrated most frequently were providing positive reinforcement (#4) and, closely related, giving encouragement (#5). Lesson transcripts reveal that she gave an average of 25.5 incidents of simple praise and supportive skill-related feedback per lesson. In addition there were 14 incidents of positive feedback that were not related to skill, usually praise for correct responses to questions that were asked at the beginning or end of the lesson. A short excerpt from notes of a kindergarten lesson illustrates Martha's frequent use of positive reinforcement.

> "Let's try. Use your hands, Thomas. Beautiful, Jacob. Nice. Good. Don't let it touch your chest. Good extension. Jamie, extend the arms, too. Nice, Jeremy. Thomas, nice catch. I saw just hands on that." The teacher keeps moving. "And catch your ball. Hold them still. Super." She praises them for not throwing the balls too high and for remembering what they learned last week.
>
> (Day 3)

Bain (1980), in advocating the enjoyment of physical activity as the central purpose of physical education, has emphasized that the program include activities the children find enjoyable and at which they can be successful. Martha echoed this thinking when she stated that she tried to help her students enjoy physical activity by including in the content of games, dance, and gymnastics only those experiences the children would enjoy or at which they would feel successful (#7). She specifically stated that she avoided competi-

tive situations and having the children choose teams. In the five days of observation there were no team activities or any forms of competition except what might be called self-competition. Tasks seemed to be either appropriate to the abilities of the children or a bit too easy for them, but not too difficult. Success, therefore, was easily within the reach of most children.

Two behaviors not named by Martha but exhibited by her throughout her teaching were enthusiasm and calling the children by name. Martha always exhibited a high level of energy, and she called the children by name an average of 58 times per class period. Surely this contributed in a significant way to increasing the children's positive feelings about the class and perhaps indirectly to physical activity in general.

Practices inconsistent with beliefs. Two of the practices named by Martha were carried out infrequently or not at all:

1. Tell the children why they're doing something
2. Challenge above-average children

Martha sometimes but not often told the children why they did particular tasks (#1). At no time was she observed challenging the better students (#2) in the ways she had identified, i.e., by giving examples of what can be done, bringing in outside performers, or showing films of more difficult skills.

While many of Martha's behaviors may have contributed to the children's enjoyment of the class, a very low level of movement time, an average of 3 minutes and 37 seconds per lesson, surely detracted from it. Bain (1980) stated that the elementary school program should provide exposure to a range of movement activities but that these should be limited to those activities that allow for mass participation. Taking turns and waiting affect adversely both skill development and enjoyment. Martha's selection of content did not limit participation, but her emphasis on cognitive learning dramatically reduced the children's movement time. While this would seemingly detract from their enjoyment of the lesson, it does not necessarily follow that it would detract from their enjoyment of physical activity.

Figley (1985) obtained critical incident reports from 100 college students on experiences which positively and negatively affected their attitudes toward K-12 physical education. The two factors most frequently named as determinants of both positive and negative attitudes were the specific content of the class and positive reinforcement by the teacher. Martha saw these as important as well, and her practices supported her beliefs that the content should be enjoyable and the children reinforced positively. She also did not allow the students to ridicule one another, a practice ranked fourth as a determinant of negative attitudes in the Figley study. Martha's practices thus seem

to be consistent not only with her belief in enjoyment as a purpose of physical education but also with determinants students have identified as being important to their enjoyment of physical education.

Practices Related to Knowledge About Skill

Five of the six practices for developing skill-related knowledge were found to appear consistently in Martha's teaching. A sixth practice did not appear frequently in her teaching.

Practices consistent with beliefs. The following five practices were found to be consistent with Martha's belief that the children should develop knowledge about skills:

1. Relate what the children have learned to what they will be doing

2. Give examples of things the children know and relate them to that day's content

3. Ask questions and get feedback

4. Review at the end of the lesson

5. Teach the basics of some skills (mechanics)

Martha's classes were very knowledge oriented. This was, in fact, the strongest impression gained from watching her teaching. Reflection notes after the third day of observation begin:

> Martha continues to spend a great deal of each class period developing cognitive abilities: the names of the bones; identifying non-locomotor movements, levels, and directions; emphasizing skill technique; and sometimes going over fitness concepts.

Relating what children had previously learned to that day's lesson (#1) has been discussed with regard to the enjoyment of physical activity. The other practices are discussed further.

In the following portion of a fourth grade lesson, Martha gave an example of something the children knew, sports moves, to teach them that day's lesson content (#2), the non-locomotor movements of twisting, bending and extending.

> The teacher tells them they will get a partner and go to personal space to do sculpturing. The teacher reminds them that they worked also last time on non-locomotor movements: stretching or extending, twisting and bending. With partners they are to extend some body part, twist some body part, and bend some part.
>
> Designated children choose partners and move out on to the floor....To all: "Make a decision. Who is the sculptor and who will be the model." She demonstrates with Sam. "Good, Sam." She continues giving suggestions and names a number of sports figures. The children are to think also about levels and non-locomotor movements and whether body parts are in front, to the sides, or in back. "Go ahead and put your model in a position." The children begin slowly. "All right, freeze." She uses as a example one boy who had been put in the shape of a football player catching a pass. She suggests trying a low level the next time. (Day 1)

As the lesson continued, Martha asked more questions (#3) to determine the children's level of understanding.

> She has the children change roles and reminds them to try low levels. "Good. You're doing it nice there, Teddy." "All right. Very good. Very good. That's a low level now....The teacher helps two girls. She talks to them about balance. Two boys have stopped working. The teacher suggests a new idea. "Don't forget twisting. Nice, Derrick, good! What is extended?" The teacher keeps going from group to group: "What's twisted? Show me what's twisted?

> What's extended?" She offers praise.
> "Now we're going to move from sculpturing to mirroring." She asks what that means. A boy replies that it is copying.
>
> (Day 1)

Lesson transcripts reveal that Martha asked questions related to the content of the lesson an average of 48 times per class. This more than adequately focused the attention of the children on the knowledge to be learned.

As with each lesson she taught, Martha called the children together at the end to review what was covered (#4), in the lesson just mentioned to go over the three different levels, the non-locomotor movements used, and aerobic principles.

The following excerpts of a kindergarten lesson illustrate again Martha's use of questions (#3) and an emphasis on the basics or mechanics (#5) of catching and tossing.

> "What part of the body do we catch with?" (hands)
> "Hands and chest or just the hands?" (just hands)
> "Apart or together on the ball?" (apart)...
> They will practice catching the ball at low, medium, and high levels. They will twist, bend, and extend to catch. They should catch with two hands on the sides of the ball....
> The teacher keeps giving feedback on the use of space, catching with just the hands, etc....
> "Find one person who's close to you and sit down beside them. In an empty space. Quickly." She has one partner stand and put the extra ball away.
> The teacher gets one girl to help with the explanation and demonstration. The task is to toss to make your partner extend to the sides and up and bend to catch low. She talks about catching and pulling the ball to the side of the body, on the throwing side. She uses the example of a left-handed thrower bringing the ball to the left side of the body. She tells them to step when they throw.
> They begin....Martha tells them the hands should point to where you throw....She keeps giving feedback on the

> throws and catches....
> They put the balls away and gather in the center of the room....The teacher reviews stepping with the opposite foot as you throw. She asks why. A child replies that it is to keep balance.
>
> (Day 3)

It is fair to say that knowledge about skills was often conveyed to the children in two ways Martha failed to mention: repetition of information and demonstration. Information about concepts and tasks was repeated many times throughout the lesson and was, in fact, one reason the movement time in her lessons was so limited. Although she did not often have children demonstrate, Martha did so herself frequently.

Practices inconsistent with beliefs. One practice, giving the overall picture of the skill and then breaking it into parts, was not typical of Martha's teaching. The overall idea of the skill was frequently conveyed through demonstration when the skill was taught as a whole. In these instances, such as when balloons were struck with different body parts, the skill was not broken down. When children designed dance sequences, they learned the component skills first, for example, opening, closing, rising, and sinking, and then combined them into a sequence. The children were not given the overall picture of a sequence first.

Practices related to carry-over value

Martha identified eight practices for developing self-responsibility and self-discipline that would enable what

children learned in physical education to be carried over into other areas of their lives. Four of the practices were found to be consistent with her purpose, one was found to be inconsistent, and three practices were identified as questionable.

Practices consistent with beliefs. There were four practices that appeared frequently in Martha's teaching:

1. Let the children know they are responsible for their own health, skill level, etc.

2. Ask questions about the children's understanding of skill and fitness activities to be applied outside of school

3. Emphasize fitness and good nutrition as an important part of one's lifestyle

4. Let the children talk about what they are doing at home that is related to fitness or skill development

Field notes indicate that each of these practices took place at the beginning or end of the lesson while the children were gathered together. In the following excerpt of a fourth grade lesson, Martha lets the children know that they must be responsible for their own level of fitness (#1):

> One girl raises her hand and asks, "How come when we play games, we don't run too much?" The teacher says it hasn't been called for yet. She tells them they should be doing 20 minutes of vigorous exercise three times a week on their own to get fit.
>
> (Day 5)

As has been discussed with regard to the development of knowledge, Martha asked many questions in her teaching. This portion of a kindergarten lesson illustrates her use of

questions to discern the children's level of understanding of fitness activities to be applied outside of school (#2). Martha also emphasizes fitness as an important part of one's lifestyle (#3).

> "Stop. Walk to the center and have a seat." The teacher praises Michelle for using curved pathways. She reviews them: What kind of exercise should they do every day? Stretching. Aerobics uses oxygen. It exercises the heart muscle the most. How long should you do aerobic exercise? At least 20 minutes. Do sit-ups for the stomach muscles. Chin-ups are mentioned. The teacher asks how many have tried some of the exercises. About six raise their hands. During this review time, the teacher usually asks a question, the children or a child responds, and the teacher repeats the answer.
>
> (Day 1)

Martha also allowed children to talk about what they were doing at home that was related to fitness ((#4), as is seen at the beginning of this third grade lesson.

> One child raises her hand and says she has lost weight. The teacher quickly talks about how to do that. Another boy says he has lost 10 pounds. The teacher asks since when, and he says this week.
>
> (Day 3)

Practices inconsistent with beliefs. Only one practice was placed in this category: Ask, "What can you do to make it better?" No field notes or lesson transcripts indicated that Martha asked this question.

Practices identified as questionable. Three practices were identified as questionable in their contribution to promoting carry-over:

1. Inspire the children to want to do more on their own.

2. Encourage the children not to give up, but to say, "I'll try."

3. Use children's suggestions in fitness lessons; use examples of things they know about in their own lives.

Martha clearly emphasized physical fitness in discussing the purpose of carry-over, yet the lessons observed were in educational games and dance, not fitness. Some emphasis was given to fitness, but not to the extent it would have been had fitness activities been a part of the lesson focus. Martha named, for example, using the children's suggestions about fitness in her fitness lessons (#3). There was no opportunity to observe this. She also named inspiring the children to want to do more on their own (#1). She hoped this might be done, in part, through her questions about daily exercise, but whether or not the children were inspired and whether or not it created a carry-over in the form of out-of-class activity could not be determined.

Whether or not Martha encouraged the children not to give up but to say, "I'll try" (#2) was difficult to determine also. On one hand, she was constantly interacting with the children as they moved, usually to praise, correct motor performance, or give information. These behaviors might motivate children to keep trying. On the other hand, there was no specific emphasis on not giving up or trying hard. In addition, movement time was very short and the tasks were

not difficult, so the children had little reason to give up. Encouragement to keep trying simply did not seem to be needed.

While several of the practices named by Martha for promoting carry-over value, especially those related to physical fitness, were present in her lessons, others occurred infrequently or could not be observed during school hours. The evidence for carry-over value exists, after all, in what takes place outside the physical education class. The inability, then to verify that physical education had an impact on the children out of class and the absence of clear evidence for consistency between stated practices and those actually observed, leads to a conclusion which is actually no conclusion. It simply could not be determined whether Martha's teaching was consistent with this purpose.

Summary

Martha described herself as a movement educator, one who had been greatly influenced by her undergraduate program. She identified three purposes for her elementary school physical education teaching. She wanted the children (a) to enjoy physical activity, (b) to gain knowledge of the way to do skills, and (c) to experience a carry-over value in the attitudes, knowledge, and behaviors learned in physical education.

Martha was unique in the study in that the purposes she identified as most important in her teaching were not those

most frequently named by the authors of elementary school physical education textbooks. None of Martha's purposes were, in fact, in the eight most frequently named by the authors. Also, she did not identify skill development, named by all the authors of the 43 books reviewed. She believed that neither skill development nor physical fitness could be accomplished in a one-day-a-week program. Two of the purposes identified by Martha, enjoyment of physical activity and knowledge about skills, were named in 14 and 10 of the textbooks respectively. The third purpose, carry over, was listed only by Corbin (1969), who also applied it to skills, fitness, and attitudes as well as to knowledge.

Martha identifed nine means for helping the children learn to enjoy physical activity, six for developing knowledge of the way to do skills, and eight for promoting carry-over value. Observations of her teaching revealed consistency between practices and purposes related to enjoyment and skill knowledge. There was insufficient information for determining consistency with the third purpose, promoting a carry-over value.

# CHAPTER VI

# ADELE

## Background

Adele had taught physical education for 14 years, 12 at the elementary school level, when she entered the study. Her undergraduate coursework had been completed at one institution, and she was currently enrolled in one graduate-level class. Her teaching assignments were in two elementary schools in the system, one in which she taught three days a week and the other, two days a week. At one of the schools her indoor teaching space was a small-to-average size gymnasium; at the second school she taught on one end of an auditorium and space was quite limited. There seemed to be an abundance of equipment at both schools, at least for the units of instruction that were observed.

Adele was one of two teachers in the study who verbalized very little, both in her classes and in interviews. She was cooperative throughout the period of study, but it simply was not characteristic of her to offer information or to give lengthy explanations for information that was sought.

Adele's professional preparation was in physical education K-12 and, although she had taught older children, she preferred teaching at the elementary school level. When

asked why she originally wanted to teach physical education, she explained that, because she disliked physical education when she was growing up, it was not a decision that was made until she was in college.

> Actually, I don't know. I made that decision when I got in college....In school, I did not enjoy it, believe it or not, I guess because of the way the program was set up. It was set up for the most skillful people, and only a few people, really, would enjoy physical education. The rest of them took it because they had to. They played a lot of competitive games, and if you were not skilled in those activities you (unintelligible)....I liked what they were doing there [in college]. I think gymnastics is really what put me in it. I like tumbling and doing gymnastics. At one time I did. And I think that's what really motivated me to go into the field.

Adele did not think that her undergraduate preparation had influenced her teaching in any significant way. She did identify ways in which her teaching style had been influenced in recent years through workshops that had been conducted.

> But I think I got my style, teaching style from working here. I did a lot of things from trial and error before. It's nothing that I think I learned in college. Things that I just feel now, and they work well, I think, and I continue to do them....I will say that this school helped me to improve on the things I had been doing in the past....Mrs. _____ has a lot of workshops and she does a lot of teaching styles. And here we use the Madeline Hunter teaching theory, and it helped me a lot.

When asked if graduate coursework had influenced her teaching in any way, Adele replied, "None at all." She talked about the school system's frequent in-service programs with mixed feelings:

> Sometimes I get some good ideas, and sometimes I don't. It depends on who's giving the workshop. You know, sometimes if it's a person that's within the system, it's usually things that I'm already doing, because from time to time...we have met so many times that we are all basically doing the same things. And when they present a workshop, it's like...run of the mill, I call it.

In describing her physical eduation program, Adele first mentioned what all the teachers seemed to see as their major limiting factor, seeing the children one day a week for 30 minutes. She then talked about "some of the activities that we do" and about starting each class with jogging. She also described the end of class, which sometimes varied:

> We come to a stop, and I will close the class with a song or something, rather than just saying "Line up, boys and girls." Sometimes I will try to review...not often...what did we do today. And I will sometimes try to tell them what we are going to do next week, if I had it, a long range plan, which I am supposed to have.

Adele described the content of her program by listing seven types of activity: (a) striking, which included volleyball and softball; (b) throwing and catching; (c) kicking/soccer; (d) dribbling/basketball; (e) rhythms, which included folk and square dance, lummi sticks, tinikling, and movement exploration using mirroring; (f) gymnastics; and (g) track and field events. Some activities were taught in units of three to six lessons, and others were scattered throughout the year. The major change in content from one year to the next was in the length of time spent on the various units.

Although she could not identify them, Adele said she used a number of books as resources, including a handbook

published by the state's Department of Public Instruction. She did not use the curriculum guides provided by the system.

A Typical Class

Prior to the beginning of class, equipment was placed on the edge of the stage or stage steps. Children entered the gym single file and then stood on a line at one end of the gym. The teacher greeted the children by saying, "Good morning [or afternoon], boys and girls." She then told them what they would be doing that day. The children were directed to turn and face counterclockwise before running two laps around the gym floor as part of a warm-up. Adele always reminded the children not to talk, push, or pass when running. When the children finished running, the teacher led them in calisthenics, rope rumping, or exercises to music. During the warm-up time, Adele usually did the exercises with the children and counted.

When equipment was needed for the warm-up or the lesson focus, Adele demonstrated the proper way of getting it and finding personal space. She then had one or more children demonstrate the procedure. The children lined up to get out and later to put away equipment.

In introducing activities, Adele described games, songs, and records as "fun". When skills were to be practiced during the lesson, Adele demonstrated the skill several times. Children were frequently called upon to demonstrate also. The teacher circulated to individual

children or groups throughout the class. She often praised good behavior. The children were usually not called by name and were most often referred to as "young ladies" and "young men".

When children were off task or caused disciplinary problems, they repeated the task, were given a verbal reprimand, or were made to sit out. Children who sat out typically did so for the rest of the class period.

In game play, the children were required to be relatively quiet and lost points for yelling, cheering, or failing to follow the correct game procedures and rules. The teacher sometimes ended class with a song or simple exercise. The children lined up single file to exit the gym.

## Adele's Beliefs About Purposes and the Means for Achieving Them

Adele named two purposes for her elementary school physical education program. She wanted the children (a) to learn physical skills, and (b) to learn to interact with one another. Learning physical skills was seen as the more important of the two purposes.

### Learn skills

Adele began talking about this purpose by stating that her most important objective was "to have them to learn to catch." She explained that she concentrated on a particular skill each year and gave volleying as an example of another

skill that had been emphasized. She agreed that, across the years, her most important purpose was skill learning "because in a game, all games, you have to know the skills."

Initially, Adele named only the first two means listed for promoting skill learning in children but eventually expanded the list to include all of the following:

1. Practice the skill alone with varied tasks
2. Work in groups of two or three and eventually in a game situation that uses the skill
3. Demonstrate the skill
4. Have a child demonstrate the skill while others watch
5. Tell the children how to do the skill
6. Refer to how a sports star does it
7. Give individual feedback on how to do the skill
8. Select content to develop skill
9. Praise a child who is doing a skill the correct way

Martha talked little about the practices she had named but briefly expanded upon or explained some of them. She used the skill of catching to illustrate practicing the skill alone with varied tasks:

> I have them to get a ball, to toss and catch to themselves, to toss to the side, perhaps, and reach. We'll do the catching with extension, catching and moving the entire body...those types of skills we do.

She then put them in "groups of twos" and eventually in a game situation that would "bring out the same type of skills

that they have been practicing." Demonstrating was done so that the children would "see what I want them to do." Telling the children how to do the skill meant describing, for example, the hand position for catching or what part of the hands to hit with in volleying. The information would be given to the entire class and then repeated for individual children who were not doing the skill correctly. Praising a child for doing the skill the correct way was seen as important so that the child would know he was doing it correctly and also because others might want to copy him.

Social Interaction

In naming this purpose, Adele said only, "It's important that they learn how to interact with other boys and girls." She could not elaborate. She also had difficulty in naming specific practices to bring about improved interaction among the children. Four means were eventually identified.

1. Put the children in groups (twos, threes, teams)

2. Let the children choose their own partners

3. Let the children talk for a few minutes before class

4. Let the children play a social game

Adele explained the value of letting the children talk for a few minutes by relating a recent instance in which this had been done.

> Sometimes, not often, I let them talk. Like in the beginning of class yesterday we had a good little rap session. I let them comment. They tell me things. And we get to just have a little time if they want to

> tell me something (unintelligible). Then we move on to the class. But it's not a 30-minute talk. About 5 minutes. And they like that. We get to learn about each other.

She gave as examples of games that promoted social interaction, "Duck, Duck, Goose" and "The Farmer in the Dell".

> Not often also, we play games that...I call them social games, such as, for the little ones, I might let them play a Duck, Duck, Goose type game. And on yesterday, prior to our class, we played The Farmer in the Dell. And you learn a lot about kids when you play games like that. You see who their friends are and how they relate to each other.

It is interesting that in the discussion of these, the teacher really did not talk about how the children's ability to interact would improve. In the first instance she talked about the children's comments to her, not with one another. In the second example, she discussed what she learned from the children by having them play social games.

## Relationship Between Beliefs and Teaching Practices

This portion of the paper examines Adele's intended and actual teaching practices and discusses them as they relate to the two purposes she identified. Findings are presented with regard to (a) practices related to skill development and (b) practices related to the development of social interaction skills. As practices related to each purpose are discussed, consistencies and inconsistencies between the teacher's purposes and practices are identified.

Practices Related to Skill Development

As previously stated, Adele identified nine means by which she sought to bring about skill learning in children. Of these, three practices were shown through her daily teaching to be consistent with her beliefs about this purpose, and the remaining six practices were found not to be present to the extent necessary for developing skills.

Practices consistent with beliefs. The three practices found to be consistent with Adele's belief that the children should learn physical skills were the following:

1. Demonstrate the skills

2. Have a child demonstrate the skill while others watch

3. Tell the children how to do the skill

Adele's teaching style was typically very direct and included frequent demonstrations by herself (#1) or by the children (#2). Motor learning research supports the use of demonstration to facilitate motor skill acquisition (Schmidt, 1982). While demonstrations in Adele's classes were often related to classroom procedures like getting out equipment, some were also given to convey the idea of a skill. This portion of a fifth grade lesson is typical of the skill-teaching segments of Adele's lessons and illustrates her use of both teacher and student demonstrations to teach soccer skills.

"And freeze."
The children are to switch to use the left foot

to tap the ball.
"Before I say `go', watch me." She shows them how to put one foot on top of the ball to stop it.
They begin. The teacher circulates. She helps one girl: "Use the inside of your foot. Show me the inside." She changes the ball from plastic to foam. The girl is still unsuccessful.
"This time use either the inside or the outside." (She meant to say "use either the left foot or the right, I believe.) She helps one girl: "Use little taps."

"And freeze. Put both feet and the ball inside the hoop. Rotate the ball around your ankles." She shows them how. "And freeze."
"This time tap the ball forward...stop it with your foot. Tap it back to your circle and stop it."

"And freeze. You are going to give your ball some short taps using the insides of your feet...and go to a hoop the same color as yours."
Adele demonstrates--emphasizes "One, two, three, tap... one, two, three, tap."
She demonstrates a kick. "Raise your hand if that was a tap."

"Go." Not all end up in circles of the same color; they cannot find one to go to. (I think the teacher does not realize that if there are three red hoops and two of those children trade places, the third child won't have a same-colored hoop to go to.)
She has them repeat the "drill".
She asks a boy his name. It's Charles. She asks him to demonstrate.

(Day 1)

When the children worked individually or with partners on skills, the teacher demonstrated skills an average of three times a class period. In addition, she had children demonstrate one to two times a lesson. Although skill demonstrations rarely occurred on game-playing days, the use of demonstrations as Adele introduced skills indicates consistency in this area between the stated and actual practices and consistency with her purpose.

Adele identified telling the children how to do the skill (#3) as another means of improving skill. Field notes reveal that children were told in the simplest of terms how to do the skill and that explanations were accompanied by demonstrations. This is illustrated in the field notes of a kindergarten class which follow. Adele explained tapping the ball with one foot and stopping it by trapping it with the foot.

> The teacher asks what parts of the body can be used to stop the ball instead of the hands. A girl says the foot.
> The teacher demonstrates stopping the ball with the foot.
>
> The children are to give the ball a soft, light tap, stop it, then tap it again back to the circle and stop it. They begin.
> The demonstration is repeated. She emphasizes using the inside of the foot to tap, not the toes, and not using the hands.
> They try again.
>
> (Day 1)

In the following lesson segment, also of a kindergarten class, Adele explains passing with the inside of the foot and again reinforces this information with demonstrations.

> The teacher demonstrates with one boy who had no partner. Both people take five steps backwards away from each other and the cone:
>
> X || X
>
> Adele turns sideways to kick. She emphasizes using the leg far away from the pin....They start. The teacher helps two boys who were slow in starting.
>
> "Stop. Everybody stop. Freeze."
> Adele talks to the group about using the inside of the foot instead of the toes.
> The children begin working again. They love it when they knock over the paper roll.

> The teacher moves around, backing children up, reminding them to use the inside of the foot (sometimes turning the leg out, touching the foot on the inside, or having the child touch the inside of the foot.)
> (Day 3)

Practices inconsistent with beliefs. Six practices were found not to be present in Adele's teaching to the extent necessary for developing skill:

1. Practice the skill alone with varied tasks

2. Work in groups of two or three and eventually in a game situation that uses the skill

3. Refer to how a sports star does it

4. Give individual feedback on how to do the skill

5. Select content to develop skills

6. Praise a child who is doing a skill the correct way

Adele had stated that having the children practice skills alone while varying the task (#1) and working in groups of two or three and then in a game that used the skills (#2) were done to promote skill learning. In the four days (for younger grades) or five days (for older grades) observed in soccer, only one was spent in individual practice. One day was spent working with partners. When games were played, children met with poor success, seemingly because the skills practice was either too dissimilar to the ways skills were used in games or because there was too little skills practice beforehand. Rink (1985) has stated:

> Preparation for complex games play requires that the individual be able to combine skills together, use

> skills in more complex ways, and relate to others in both offensive and defensive relationships. These abilities must be developed. (p. 129)

In Adele's classes, such development was not observed. Field notes of a class of fourth and fifth graders playing Lane Soccer indicate their lack of skill and failure to understand the strategies involved.

> Adele tells the children how to start the game with a pass from the center forward to another forward.
> "This game is supposed to help you stay on your part of the field."
> "Let's get started. Ready? Go."
> The center forward passed the ball to the wrong team.
> The teacher starts play over. One person moves down court with the ball. The other five forwards stand still. They start again....
> Somebody scores; most of the forwards were still in the middle of the floor.
> They rotate. Six girls play. They are not able to control the ball and don't seem to know where to move.
> They rotate again. A girl scores, but she went out of her lane to do it.
>
> (Day 5)

Although Adele's list of activities for the year made her selection of content (#5) seem consistent with the purpose of skill development, the content of the lessons within the unit observed was often inconsistent with that purpose. The use of game play on two out of five days in the kindergarten through third-grade classes and three out of five days in the fourth- and fifth-grade classes did not promote the development of skills. As Rink (1985) has stated, when the progression to games play is not complete, "play is not continuous and the skills seem to fall apart" (p. 135). The lack of both continuity and skillfulness is evident in the Lane Soccer game just described. Another

practice, referring to how sports stars perform skills (#3), was not demonstrated in any of the lessons observed.

Two of Adele's means for improving skill were forms of feedback: (a) praise for a child who is doing the skill the right way (#6), and (b) feedback on how to do the skill (#4), i.e., corrective or supportive feedback (Cole, 1979). In reality, Adele gave an average of less than five incidents of skill-related feedback per lesson, in which an average of two were positive and two were corrective. There was no supportive feedback given in any of the six taped lessons. As studies of feedback have long shown it to be one of the strongest and most important factors controlling performance and learning (Bilodeau, 1969; Magill, 1980; Schmidt, 1982), Adele's very low level of skill-related feedback represents a major inconsistency with her purpose.

The use of time is also an important consideration if one is to understand Adele's difficulty in bringing about improvement in skill. Classes were very structured, and children lined up to receive and put back their equipment. Demonstrations were given on these procedures in each class each day, often by the teacher as well as by a student. The children warmed up by running and doing exercises or jumping rope in each class before doing skill work or playing games. As a result, more than half the class period, 16 minutes and 44 seconds on the average, would be gone before the children actually began practicing skills.

The following first-grade lesson illustrates this use of time prior to the start of practice on skills which were the focus of the lesson.

12:23 The children enter and stand on the line. They run two laps around the inside of the gym. Adele reminds them first not to pass, talk, or push. They finish and stand on the end line. "Breathe in...breathe out...in...out...in... out...in...out." She tells them that they will find personal space on one end of the gym only. "Each young man walk out and find your personal space." The "young ladies" do the same. "All eyes on me."
Those who went to the far end of the gym come back.

12:27 The music starts. It is Hap Palmer's "Isolations". The teacher cues them through most of it. They do much better at following it when she does this. The song directs the children to move different body parts and travel.

12:29 "Stand nice and tall. Make sure you're not near anyone."
If the teacher points at a child, that child has to go and sit on the step.

12:30 A second song begins: "Simon Says". During portions of the song in which the teacher decides what to do, the children are less active: touch the head, nose, back, etc.

12:33 "And freeze." The teacher reminds them that the last time they played Space Soccer.
"This week we are going to play another fun game working on knocking a pin down. It's called a direct kick." She tells them they will use the inside of the foot and has everyone touch the inside of the foot.
Once they start working, they are not to use their hands. Stop the ball by putting one foot on top of it.
The children get partners by looking at someone who looks at them.
The teacher sends the children to different areas of the gym. One child stoops and the other stands.
She praises them for listening.

The teacher demonstrates getting the equipment. Those standing walk over and get a ball and a paper roll.
The teacher and her partner demonstrate how to kick the ball to knock over the paper roll. This takes a while. She turns sideways to kick with the inside of the foot. She emphasizes using the leg that is not nearest the pin. Jeffery, her partner, is left-footed.
The partners face each other and take five steps back.
Spacing in the gym is a problem. Some partners need more room.

12:43 "Ready...make sure you're not criss-crossing anybody." She gives them several reminders (use the inside of the foot, no hands, etc.) "Ready, go."

(Day 3)

In the lesson just described, more than 20 minutes of the lesson had passed before the children began working on the skill, although skill development was identified as Adele's highest priority as a purpose for her teaching.

Because of frequent demonstrations and explanations and the inclusion of nonrelated closing activities, practice time in the remainder of the lesson was also limited. It was true, in fact, that when children worked individually or in groups of two or three, an average of 7 min 8 sec of class time was spent in skill practice. Siedentop (1983) pointed out that this is the upper limit of the time in which children might actually improve their skills, but that not all motor-engaged time leads to learning. Siedentop reported that students spend an average of 25 percent of their class time, 7.5 minutes of a 30-minute lesson, engaged in physical education activities and suggests that this is too low.

Adele's students were engaged in movement longer than that because of the time spent on warming up, but the time spent on skills was less, far less when games were played. In the class previously described, the remainder of the lesson in which children tried to knock down a paper roll with a soccer kick was conducted as follows:

> The teacher tells one girl: "Look at the orange thing." (the paper roll)
> To another girl who knocks the pin down: "Good."
> The child smiles.
>
> 12:45 "All right, stop."
> The teacher tells them they aren't thinking.
> Try to keep the ball in their own space. She will look to see who is thinking.
>
> 12:46 They start working again. The teacher moves on around the room. All the children are working. The boy without a partner knocks the pin down, chases the ball and pin, and then goes again. The teacher keeps circulating. I cannot hear a lot of what is said to the children.
>
> 12:49 "All right, stop. Everybody sit down. Freeze."
> The teacher praises those who sit.
> Two boys demonstrate the skill they just worked on.
> Jeffery, the boy without a partner, demonstrates.
> Two more boys demonstrate. They use their hands to stop the ball; the teacher doesn't comment on this.
> "Let's see who's sitting nice and tall." The teacher praises Sam for doing so.
> Sam demonstrates putting the ball and paper roll away and lining up beside the teacher.
> One child is to stand and one stoop. The children must decide which partner does which.
> Two girls can't decide and are sent to line up.
> Those standing put away the equipment and line up. Those sitting line up.
>
> 12:55 They hold hands in line. One person is sent to sit out for pulling. The teacher leads the class in a snake chain. It gets a little wild. The teacher has the children clap their hands in the same rhythm she uses.

1:00 They file out.

(Day 3)

Metzler (1989) has reviewed research on time in teaching physical education and reported that at least 11 studies show moderate to strong correlations between some construct of students' functional time and increased learning. Having the time to practice skills seems to be critical to learning. In Adele's classes, it would seem that no matter how clear her explanations and demonstrations might have been, too little time was spent on practicing skills to allow the children to show any real improvement. In light of the research, this represents a major inconsistency with her purpose.

Practices Related to the Development of Social Interaction Skills

Of the four practices identified by Adele for helping the children learn how to interact with one another, all either failed to occur with any frequency or occurred in a manner that severely limited the amount of interaction that was possible.

1. Put the children in groups (twos, threes, teams)
2. Let the children choose their own partners
3. Let the children talk for a few minutes before class
4. Let the children play a social game

Adele allowed the children to choose their own partners (#2), but partners were chosen without there being

any talking. The following directions, given to a kindergarten class, describe this process.

> I would like for you to look at one other person while you are yet sitting on the floor. Look at one other person. Now the person you are looking at has to be looking at you. Everybody stand up. When I say so, I want you to walk over and stand beside the person that you are looking at. I do not wish for you to touch the person, nor do I want you to talk to the person. Walk over now and stand beside the person that you are looking at. That's going to be your partner. Super kids, right there; right away got their partner. Right away. They were there first, so you have to go to another partner. Right here is fine; that's a partner for you. And here's a partner for you; how about that? Can you came stand beside Ms. _____? Can you come stand beside me? Each person has a partner now. (Day 3)

This means of getting partners was consistently practiced, and talking was never permitted. The no talking rule was a general one for the class and was especially emphasized before the children ran each day and when they were in game play. Thus, although the teacher frequently had the children working in groups (#1) and choosing partners (#2) as she had stated, observations revealed that very little interaction actually took place.

The remaining two practices were (a) to let the children talk a few minutes before the lesson (#3), and (b) to let the children play a social game (#4). Neither of these practices took place in any of the lessons observed.

Research has indicated that social interaction skills in physical education may be enhanced when the teacher uses such practices as talking with the students about expected behaviors, modeling the positive behavior traits students

are to demonstrate, and using a point system to evaluate behaviors (Austin & Brown, 1978; Giebink & McKenzie, 1985). Adele did not identify any of these behaviors, and their practice was not apparent in her teaching.

Summary

Adele sought first to improve the physical skills of the children she taught and second to improve their social interaction skills. Both are thought by the writers of elementary school textbooks to be important purposes. Adele had difficulty in identifying practices for accomplishing these purposes but eventually named nine means for improving skill and four for promoting social interaction. Observations revealed, however, that her practices failed to support those purposes and that they, in fact, sometimes worked in direct opposition to the them.

The reasons for this inconsistency are difficult to explain, partly because Adele had fewer purposes on which to focus her attention than did other subjects and partly because she was not very verbal. When Adele was presented with the list of her characteristic teaching behaviors, her response was, "This is typical of me. Those are my characteristics." A few of the behaviors on the list were not intentional ones, for example having children who sat out for discipline reasons do so for the remainder of the period. Adele wanted to bring them back into the lesson after 5, 10, or 15 minutes but said she simply forgot about

them. However, most of Adele's teaching behaviors were intentional but were carried out for reasons other than developing physical or social skills. She liked, for example, an established routine with the children lined up, and she believed in the value of warming up.

When findings were presented indicating that there was little opportunity for children, especially younger children, to develop skills during game play because their skills were insufficient for those demands, Adele's response was, "I agree with that." She suggested that game play was important for other reasons:

> But when we get into a game situation, that's when I think they're really interacting with one another. That's why I think it's important to progress to that stage....Because you can work on a skill all day long, and if you're not working with another person, you wouldn't know how you're going to react with the skill nor how you are to react with another person.

There were, then, instances in which Adele's two purposes came into conflict. It is interesting that the decision to include frequent game play was done at the expense of skill development, considered the more important of her purposes.

A possible explanation for Adele's lack of consistency between her beliefs about the purposes of her program and her actual teaching practices might be a failure to devote much thought to her teaching. Schon (1983) has emphasized that teachers can improve their practice by reflecting on what they do and on the knowledge, beliefs, and values that they hold. As Adele had taught for a number of years, it is

possible that, without reflection, established routines, new teaching styles and means of disciplining, and ideas from workshops on skill development might have become amalgamated without necessarily fitting together with one another or with her beliefs about what children should learn.

# CHAPTER VII

# CAROL

## Background

Carol, by nature, seemed very relaxed and calm, the kind of person who took most things in stride. She really enjoyed her teaching and invested a great deal of herself in it. She cared about the children as people and about what their futures would be like. Former students sometimes came back to see her, and she took pride in following their progress. As Carol talked about her students, program, and teaching, she chose her words carefully but typically had a great deal to say, often giving examples or stories that were brought to mind by the question or its response.

Carol had attended two undergraduate schools in her preparation for teaching K-12 physical education. Her original intent was to teach at the secondary level, and she did that for 3 years before taking a position at an elementary school. At the time she entered the study, she had completed 11 years in the system as an elementary school physical education teacher. She had also completed a master's degree in physical education at a nearby university, one which she had not previously attended.

Carol believed that the greatest impact her undergraduate program had made on her teaching was through its

humanistic philosophy. She commented:

> Now, when we got into more of a teacher prep program, where all elementary and secondary methods classes were thrown together, humanistic kept coming through. That was one theme area that you always heard. I guess you'd say it was almost a school philosophy. Certainly the people who were teaching it felt that way....I would say that if you were going to _____ at the time, humanistic was the one thing that...really stands out. I always heard, "Be professional. Dress professional. Act..." I don't know if they said act it, but I'm sure when they said be professional, you are a professional person, so carry yourself that way. Be on time. Do your homework. And Lord knows, you never got through _____ without being able to write a behavioral objective.

Carol thought that movement education was an important concept at the school she attended her junior and senior years. As she had already taken an elementary methods course in junior college where movement education was not taught, she missed much of its impact. The exception was during her student teaching, when one of the doctoral students served as her supervisor and challenged Carol's thinking.

> ...I was teaching in a junior high school. My gymnastics class...we started in the gym and somewhere during the semester we had to be moved to the stage....uh, 30 some odd people, with equipment and with mats and...and she was challenging me in my thinking as, you know, if you have them working on this piece of equipment, why can't you have something else going on and smaller lines. And, you know, I really knew no other way. Traditional thinking was that "now we're going to do forward rolls." Even if you had seven mats, they were all doing forward rolls. "And this is the way we're going to do them."

What impact movement education had, then, was in the methodology it sometimes employed and not through the use of the themes developed by Laban (1963). Carol thought she

might have intentionally resisted the influence of movement education because of earlier experiences in dance which she did not enjoy.

> I think my experience earlier as a person in dance, where we talk about levels or, you know, fast and slow, rising, sinking...I just wanted to throw up....If someone told me to be a butterfly and go across the room and used words that would...you know, when you look at a butterfly flying across, it's nice, it's soft, it's delicate and whatever, and I was not gonna do that.

Carol's master's program had contained no courses in elementary school physical education, and she felt that it had not significantly influenced her teaching of K-5 children. In-service programs conducted by the local system were seen as useful for picking up ideas for specific class activities.

It was through the influence of two physical education teachers at the junior and senior high school levels that Carol was encouraged to pursue physical education teaching as a career. She had always enjoyed physical education as a child but felt she was not highly skilled. The teachers took time with her and helped her to see her leadership capabilities. While Carol enjoyed teaching physical education at the elementary school level, she thought she might one day want to do administrative work or college level teaching.

Carol described her program as one that provided variety:

> Well, I probably would say it was pretty versatile, well-rounded, something there for everybody, or every-

> body's likes and dislikes. I know that every student isn't going to like everything that I teach, and I like some things more than I do others. But I teach every ...no, I don't want to say everything, but...I try to expose them to many different things, just so maybe there's something that someone likes that didn't like something beforehand. I don't know that I would say much about my own teaching. I think I'm a good teacher, but I don't think I would say anything more than that to somebody else.

When she talked about how her program differed from others in the same system, Carol said very little except that her program and style of teaching differed from Martha's, who she believed emphasized fitness and creative dance, and that there were some differences in how people disciplined. Carol's classes were allowed to earn points for working well in physical education. Classes that were exceptionally good over a period of time were rewarded with an extra physical education class one week.

The content of Carol's program remained basically the same from year to year and was identified as (a) soccer; (b) beach ball volleyball; (c) rhythms, which included routines with lummi sticks, line dances, square dance, and aerobics; (d) ball-handling skills, which included throwing and catching, dribbling, rolling, and striking; (e) flag football; (f) tumbling and gymnastics, seen as a combination of traditional and educational gymnastics; (g) relays; (h) games, described as "maximum participation games, like Bonus Bucket Ball and Spider Ball; and (i) field days. While the content changed little each year, the amount of time spent on each varied. Two areas of the curriculum probably had

less time devoted to them than the others. One was dance, which Carol didn't always feel comfortable teaching. The second was gymnastics. For safety and health reasons, Carol wanted the children working barefoot rather than in the variety of shoes they often wore to school. This meant sending a note home to the parents, who frequently voiced safety concerns and asked that their children be excused from participating. Carol thought it often was not worth the trouble. She mentioned several books including the school system's curriculum guides that were sometimes used as resource books, but none in particular were used "a lot".

A Typical Class

Prior to the time the children entered the gymnasium, the equipment needed for the lesson was out on the floor in the places where it would be used. As the children walked in, Carol spoke to some individually. They sat down in one long line on a stage step. Carol sometimes gave the children an opportunity to make comments at the beginning of class. She then told them what they would be doing that day. If new skills or activities were a part of the lesson, she or selected children would demonstrate. The children chose their own partners.

Prior to the beginning of practice, the teacher identified one or two key elements of the skill or the general rules and procedures of the game or activity. She then circulated to individual children or groups as they

worked. She interacted with many children individually in the course of the lesson, frequently touching them and calling them by name. She often praised good behavior and performance.

Children who misbehaved were generally reprimanded verbally. This was done without harshnenss or an increase in the volume of Carol's voice. For repeated problems, the child was made to sit out for a part of the class period.

The children most often worked individually, with partners, or in centers. Skills used in group or game play were practiced first individually or with partners. Carol frequently gave the children choices, e.g., to play Two Square or Four Square, to keep score or not keep score, or to let the ball bounce once or twice. She emphasized cooperation and getting along in game play and sometimes played right along with the children. She frequently visually scanned the class to look for problems with safety and to see how the children were doing.

At the end of the class, the children lined up to leave the gym. Carol commented on the general behavior of the class and gave points for cooperation and lining up. The children then filed out.

## Carol's Beliefs About Purposes and the Means for Achieving Them

Carol was able to identify three purposes for her teaching of elementary school physical education. She

wanted the children (a) to learn as many physical skills as possible, (b) to enjoy and appreciate physical activity, and (c) to learn the importance of specific direction-following and cooperation. Although she at first responded by naming only the first two purposes, Carol soon added the third and stated that she saw them as equally important.

Learn Physical Skills

Carol wanted the children not only to learn skills, but to learn "as many skills as they can, which are possible for themselves." She explained the purpose by giving examples of the skills she wanted children to learn.

> Okay, let me give you...I'll give you a range: tossing, catching, throwing to a target, striking, propelling, running, jumping, basic locomotor, keeping a beat, moving and stopping on a signal.

When asked if she sought a particular degree or level of skill learning, Carol found it difficult to respond but concluded that children needed to be able to do the skills well enough to apply them for some purpose, or as she originally stated, "well enough to play a game."

Carol identified 13 practices she thought contributed to the development of physical skills in the children she taught:

1. Demonstrate

2. Have children demonstrate, alone or with the teacher

3. Give opportunities for decision-making

4. Cue children on the key elements of the skill

5. Use humor to correct children whose behavior is undesirable

6. Tell the children what not to do

7. Identify some students as models for skill performance (after practice)

8. Put children in different grouping situations

9. Provide, within a unit, a variety of experiences

10. Provide opportunities to practice skills

11. Use a variety of equipment

12. Play with the children

13. Use an analogy; relate some aspect of the skill to something else the children are familiar with

Carol was asked to clarify the meaning of several practices and seemed able to do so easily, usually by giving examples. An example of using humor to correct children (#5) was telling them they looked like a grandmother or grandfather when they dribbled the ball.

> That's the grandmother and grandfather club...the ones that bounce the ball all bent over. If there's one thing I try to do consistently in my classes, it's to put humor in the class....Going back to the grandmother and dgrandfather type thing...that given them an idea of, you know, that they're down here. Sometimes I use certain words that they can only relate because they're words that they just hear all the time.

When asked to talk about the relationship of decision-making to skill development (#3), Carol again had an illustration ready.

> If you throw the ball to the wall and you go to catch it, your decision is, one, where on the wall do I throw it...two, how hard do I throw it. Okay? As a teacher,

> I can't come and throw the ball for you, unless I want to see you catch it, and I control the speed of the ball and I control where it goes.

Children were also given choices, she explained, in how to practice a skill, for example by choosing to play Two Square cooperatively or competetively or to play Four Square. Playing with the children (#12) was something Carol did in part because she enjoyed it, but she also thought that when she played individually with a child, her skill might be used to help the child become better.

Different grouping situations (#8)--large group, small group, centers, and teams--put the children "in different situations that they need to respond to." Using centers, which Carol often did, would give children an opportunity to practice a variety of skills or one skill in a variety of ways.

While the selection of appropriate content was not specifically listed as a means for promoting skill development, Carol tried to teach a "well-rounded program" and hoped that through it her three purposes were being met.

> I think I try to pick a variety so that if someone isn't successful at one, they might be successful at something else, which makes them, you know, it goes back to the appreciation of or carry-over to...I think I do try to pick things, activities, content areas where these three areas are seen. In a way I'm hoping that one would carry over into the other. If you just take a game, for example, a game of Spider Ball... very easy directions. The children have to learn the directions to play the game. They are also getting a very good aerobic work-out. In the game there are throwing and dodging skills. And they love it. And

> we can play it quickly, so that...there isn't a lot of negativism in the game. And that's an example of one activity that is taught that I'd say 99 percent of the children enjoy it and get to use the skills involved in it.

When asked if that was a conscious process that took place when she selected activities, Carol replied, "I don't think I think about it."

Enjoy and Appreciate Physical Activity

Several distinct but related ideas were discussed by Carol that together are represented by the purpose of enjoying and appreciating physical activity. She began by saying:

> And probably the other thing would be that, if they learn anything else that they learn that...maybe that they had a good time while they were learning. It was fun for them, but the learning was fun also.

She added that she wanted the children to appreciate physical activity and explained why.

> Too many children, when they get past the stage where it's required, quit...for many different reasons. If they can have a good experience with me, then maybe that'll at least let them try to have another good experience in 6th, 7th, and 8th grades.

To Carol, having a good experience meant the children also felt good about themselves.

> I want them to feel good about themselves....There are times that I think maybe they could be personally successful at something that would give...that would maybe make it a good experience for them and a fun time.

Carol was able to identify 10 practices she used to help the children enjoy her classes and come to enjoy and appreciate physical activity:

1. Use humor

2. Give praise

3. Be active with the children

4. Remind the children they can do things as they get older or outside of school

5. Verbalize a lot; get excited during a game

6. Use body language

7. Smile a lot

8. Give the children choices

9. Identify some students as models for skill performance

10. Use music while children practice skills

Carol gave as examples of things she might tell children they could do outside of school (#4), joining a soccer group or gymnastics. She believed that getting excited (#5), using body language (#6), smiling (#7), and other practices that indicated she was "getting into it" were necessary. "I have to be a salesperson," she said, "or...they think it's a drag....They think you're a drag." Using humor (#1), a means Carol had identified for improving skills, was also seen as helpful in making the lesson more enjoyable. Identifying students as models for skill performance (#9) served as a "pat on the back". Using music during skills practice (#10), she said, was for "atmosphere".

Learn the Importance of Specific Direction-Following and Cooperation

Carol's third purpose was stated as follows:

> And my third thing...is that they learn the importance of specific direction-following, whether that pertains to the specific task involved, or whether that takes a safety focus or a cooperation focus...or social skills, and that's all involved in the direction-following because they are given and they should be or at least try hopefully to be followed.

Twelve practices were identified for achieving this purpose:

1. Repeat directions
2. Use time out
3. Give reprimands
4. Use other students as models for behavior
5. Give praise for following directions
6. Try to find two positive things for each negative one
7. Raise level of voice
8. Use humor
9. Sometimes give a put-down in front of the class
10. Tell the reason for the directions given
11. Use music as the starting and stopping signal when working on skills
12. Tell the children what it's going to be like in the middle school

Carol explained that if she raised her voice (#7), she tried to do so without sounding like a screamer; if she put a child down in front of the class (#9), it was usually

because she had lost her patience. The intent was not that the class hear, but sometimes that occurred. Using humor in getting children to follow directions (#8) helped, she thought, to keep from making "a big deal out of certain things." Carol also tried to prepare some of the older students for the middle school by telling them what it would be like (#12), that they would be expected to get from place to place on their own and be on time and that listening to and following directions would be expected of them.

Although Carol briefly mentioned cooperation in presenting the idea of direction-following, she did not mention practices which seemed related to cooperation. For that reason, and because there was an emphasis on cooperation in her teaching, she was asked specifically whether cooperation was a purpose but perhaps a less important one than the others she had named, or whether cooperation was a part of a purpose already identified. Her response was, "Isn't that already in there? The listening, following directions... cooperation, I just assume, goes with that."

## Relationship Between Beliefs and Teaching Practices

This portion of the paper examines Carol's intended and actual practices and discusses them as they relate to each purpose, and thus to Carol's beliefs about what children should learn. Findings are presented with regard to (a) practices related to learning physical skills, (b) practices

related to the enjoyment of physical activity, and (c) practices related to direction-following. As practices related to the three purposes are discussed, consistencies and inconsistencies between purposes and practices are identified.

Practices Related to Learning Physical Skills

Of the 13 practices named by Carol as means for developing the skills of the children, 9 were found to be characteristic of her teaching and consistent with her belief that children should develop their physical skills. Four practices did not occur with sufficient frequency to be considered consistent with this purpose.

Practices consistent with beliefs. The nine practices found to be consistent with the purpose of developing physical skills were as follows:

1. Demonstrate
2. Have children demonstrate, alone or with the teacher
3. Give opportunities for decision-making
4. Use humor to correct children whose behavior is undesirable
5. Identify some students as models for skill performance (after practice)
6. Put children in different grouping situations
7. Provide, within a unit, a variety of experiences
8. Provide opportunities to practice skills

9. Use a variety of equipment

Three of the practices Carol frequently used involved demonstration. She sometimes demonstrated (#1) several times within the class period, as in the unit on ball-handling, or throughout most of the class period, when leading a line dance. The children also frequently demonstrated (#2). In working on the game of Two Square, Carol called a child out to demonstrate with her. Often in the older grades, she had two or four children demonstrate instead. After the children had an opportunity to practice the skills, she might stop the class to have the children observe a group that was doing especially well, using them as models for skill performance (#5). These behaviors are supported by the literature as contributors to skill learning (Rink, 1985; Schmidt, 1982; Siedentop, 1983). Carol utilized all three forms of demonstration in the following segment of a fourth grade class learning to play Two Square.

> Carol tells the children they will play Two Square or Two Pointer. She gets one boy to help her demonstrate keeping the ball going. The other children comment and ask questions. They finish the demonstration, and the teacher says, "Thank you, Jimmy."
>
> "Find a ball and a partner. Walk, please." The teacher pairs two boys without partners. She quickly eyes what is going on, then works with one girl. The children try to work on task (a warm-up, hitting the ball back and forth) but their skills are not very good. Two boys take one-arm swings. The teacher blows the whistle. She gets the children quiet. She makes two suggestions: (a) don't hit the ball too hard, and (b) move your feet more. Two girls demonstrate, then two boys, then two more boys. The teacher says again

> not to hit the ball so hard. Two girls demonstrate. "That's it; good. Good. Keep moving. Move to get to the ball. Good. Good job. Okay, let's all begin again, trying not to hit the ball too hard." They begin again.
>
> A few are getting wild, punching with their fists. Whistle. "Whoever does not have the ball, sit down." It is time for individual workouts on striking against the wall below the colored rectangles.
> The teacher demonstrates hitting against the wall.
> (Day 1)

Opportunities for decision-making (#3) were also given frequently, more often for older children than younger ones. All children were allowed to select their own partners. Older children were often given choices about whether to play a game cooperatively or competitively, whether or not to keep score, and whether to play with two or four people. Roberton (1982) supports the use of options in games teaching as a means of accommodating the different developmental levels present in children of the same age. Carol's explanation of the practice also focused on decision-making within the task, as in an open skill. She gave as an example a task in which the children had to toss a ball so that it rebounded from the wall before landing in a box. The children, in order to be successful, had to make decisions about how much force to use and how far above the box the ball should contact the wall. This task was utilized with the older grades when they worked in centers. A similar requirement for decision-making was present in one-on-one dodgeball and in both cooperative and competitive Two Square and Four Square.

Children worked in a variety of grouping situations (#6). They worked individually on ball-handling skills at the school that had enough equipment to permit individual work. Otherwise they worked on ball-handling in partners. They worked with partners again in Two Square and in meeting and parting in dance. Square dance and Four Square required small-group work, as did working in centers. The class was taught as a whole in the line dance. During the time of the study, there were no team or large-group activities that required interaction or teamwork, but other grouping patterns were common.

Variety was present in the equipment used (#9) and in the types of learning experiences (#7) provided within a unit. While only playground balls were used initially for dribbling with the hand, underhand striking in Two Square, and rolling or bouncing and catching, using other types of balls was not feasible either because they were inappropriate for the tasks or were unavailable in sufficient quantities to warrant their use. A variety of balls was present when the children focused on skills in centers. There they used playground balls, beach balls, different sizes of foam balls and, for the second through fifth graders, basketballs. This practice of using various sizes of the same type of equipment is supported by Herkowitz (1984) as a way of accommodating the different developmental levels present in children of the same age. Various targets

were used at this time also: basketball goals, boxes, moving people, and bowling pins or paper rolls. These provided for a variety of experiences in rolling, tossing, and throwing to targets which were either stationary or moving. Other stations focused on underhand or overhand striking with the hands.

In talking about providing a variety of experiences, Carol did not mention progression, yet some progression was evident in her teaching of the games and dance lessons observed. In moving toward the game of Two Square, children practiced individually against the wall, cooperatively with a partner, competitively with one other person, cooperatively in teams, competitively in teams, and finally competitively in Four Square. Not all children did all of these, however. It depended upon whether or not they and the teacher thought they were ready for competition and keeping score. Riley (1982) made several suggestions for teaching original games which seem appropriate for teaching many types of games to children:

1. Let partner or group work develop naturally. This includes allowing children to select partners and group members or to work alone.

2. Observe carefully for signs of games readiness. The teacher should observe for growing competence, confidence, and self-direction as well as the ability to work safely and to challenge oneself.

3. Early partner or group work usually is for the purpose of skill improvement. Don't force a "game" too soon.

4. Organizing for group work should be related to the objectives of the lesson. Whether the teacher or the children determine the size of the group depends on the teacher's objectives for the lesson.

5. Start with an emphasis on cooperative relationships. Working against someone calls for greater skillfulness than working with him.

Carol's teaching typically adhered to these guidelines and seemed to enhance the quality of the lessons by providing for progression and allowing children to practice tasks for which they were developmentally ready.

Corrective feedback, while limited, was often given in the form of humor (#4). In a kindergarten class, for example, a girl who was bent over the ball in dribbling was told, "You look like an old lady over there. Look. Make the ball come to you. Stand up. That's right. You may have to push it a little bit more." An older boy who dribbled too hard was asked not to dent the floor.

The focus of Carol's lessons seemed clearly to be on developing skills, but two factors were primarily responsible for keeping the 13 minutes and 54 seconds each child spent, on the average, in skills practice (#8) from being higher. One was the amount of time the teacher spent talking and

demonstrating at the beginning of the lesson, an average of 8 minutes and 15 seconds. While this time could be decreased, it is perhaps not an unreasonable amount of time for greeting the children, making general class comments, explaining and demonstrating the task or activity, and getting the children with partners and out on to the floor. The other factor which resulted in decreased movement time was the limited equipment at one school, which sometimes caused children to alternate turns at practicing instead of practicing throughout the time allotted. This was outside the control of the teacher, however, who seemed to use well the equipment that was available and to keep the children working on task. There were no games or relays that required the children to share a piece of equipment or to spend long periods of time waiting for turns. The children in Carol's classes were engaged in skills practice for greater periods of time than were those in four studies reported by Siedentop (1983), who ranged from 21 to 30 percent of the time motor engaged. Skill movement time in Carol's classes ranged from a low of 8 minutes on the day first graders began station work to a high of 18:22 with the fourth grade in Two Square.

Practices inconsistent with beliefs. Four of the practices named by Carol were carried out inconsistently or did not contribute to the learning of skills:

1. Cue the children on the key elements of the skill

2. Tell the children what not to do

3. Play with the children

4. Use an analogy/relate some aspect of the skill to something else the children are familiar with

Cueing the children on the key elements of the skill (#1) was done minimally. It was typical of Carol to identify one or two of the key elements of the skill, but she was often inconsistent in doing so. What was emphasized in one class was sometimes not mentioned in the following class, or key elements of the skill were identified at the beginning of the lesson and then not reinforced during the lesson as the children practiced. For example, one kindergarten and two first-grade classes practiced rolling a large ball to a partner on the first day of observation. In the first class of the day, a first grade, the children were directed at different times (a) to keep their hands close to the floor when rolling, (b) to take a step, and (c) to roll the ball from the side of the body. The kindergarten class that followed was told none of these things, although a few children were told individually to roll the ball from the side. In a later first-grade class, the only description the class was given was to "face your partner as you roll the ball." Reflection notes following the first day of observation also suggest that Carol had an emphasis on skill development but lacked consistency in providing skill-related information.

> The teacher seems to be very skill-oriented. Her comments and tasks today indicated that. She seems, however, to be somewhat inconsistent from class to class in providing skill-related information. For example, in rolling, one class may be told to swing the hand close to the floor; in other classes it may not be mentioned. The teacher, in preparing the children for Two Square, demonstrated using two-hand underhand hits and sometimes said to individual students to use two hands, yet she never said it to the group.

Telling the children what not to do (#2), seen as a means of conveying initial information about the skill, and using analogies (#4) were practiced rarely and were not seen as significant contributors to skill learning.

Finally, Carol identified playing with the children (#3) as a means for improving their skills. While playing with particular children was helpful to the children involved, it was not beneficial to the remainder of the class. As notes at the end of one lesson indicate, "The class works better and stays on task more when the teacher circulates instead of playing." Rink (1983), too, indicated that the teacher playing with the class does not directly contribute to the goals of the lesson. She stated:

> A teacher might participate for short periods of time to illustrate a point or motivate student performance. When the teacher participates with only a small part of the class, however, the remaining members of the class have no teacher. (p. 236)

The practice of playing with individuals or small groups of students, as Carol did in Four Square and when the children worked in centers, prevented her from engaging in behaviors that might have more directly affected skill performance.

Notably absent from the list of practices is the giving of skill-related feedback, identified by motor learners to be one of the most significant factors controlling performance and learning (Bilodeau, 1969; Magill, 1980; Schmidt, 1982; Singer, 1980). Schmidt (1982) suggested that it is only when information is provided about how to change the movement response that learning is produced. While Carol gave more skill-related feedback than other teachers in the study, an average of 39.0 incidents per lesson, 21.2 incidents were simple praise that provided no information. A total of 17.7 incidents contained information about what was done well or what needed to be changed to improve the skill. This was second highest among the teachers studied but is still less than one bit of information per child and therefore an area in which the teaching practice is not entirely consistent with the purpose. When Carol was given these findings, she stated that she had not mentioned feedback in her list of practices because she did not think she did it enough.

In summary, while Carol was consistent in carrying out a majority of the practices she had identified as means for promoting skill learning, her inconsistency in other areas, especially in providing skill-related information and feedback, leads to a questionable conclusion regarding the support her teaching practices give to the development of physical skills.

Practices Related to the Enjoyment of Physical Activity

Of the 10 practices named by Carol as means for helping the children learn to enjoy and appreciate physical activity and physical education, 7 were frequently evident in her teaching and 2 were not. One practice, using body language, was thought too vague to examine and did not seem in retrospect to have been a significant part of her teaching. It is not discussed further.

Practices consistent with beliefs. Seven practices were found to be consistent with Carol's belief that the children in her program should learn to enjoy and appreciate physical education and physical activity.

1. Use humor
2. Give praise
3. Be active with the children
4. Smile a lot
5. Give the children choices
6. Identify some students as models for skill performance
7. Use music while children practice skills

Most of the behaviors just named (#1, #2, #5, #6) were also thought by Carol to be important to skill development and have been discussed with regard to their contribution to that purpose. Carol's humor (#1) was typically low-key, and the class atmosphere positive but calm. She smiled at

(#4) and often touched the children, calling them by name an average of 63 times a class period. Praise (#2) was also evident in her teaching, given an average of 36 times per class period in the form of skill-related and non-skill-related feedback. Being active with the children (#3) was seen as something broader than just playing with them, discussed earlier. Carol was an active teacher in that she was always moving around the room, moving children or targets closer together or farther apart, interacting, setting up equipment, playing at times, checking on scoring, changing partners, and monitoring behavior. Her presence and her behaviors indicated that she was involved with the lesson and the children. Music (#7) was used for lessons in dance and also during a part of one lesson when the children practiced dribbling with the hand. These seven practices collectively contributed to the children's enjoyment of the class.

Practices inconsistent with beliefs. Two of the practices named were not seen as typical of Carol's teaching:

1. Remind the children they can do things as they get older or outside of school

2. Verbalize a lot and get excited during a game

While Carol may have talked to the children about things they could do outside of school (#1), this was not done during the period of observation. Because Carol

maintained a calm voice and attitude throughout her teaching, getting excited during game play (#2) seemed inconsistent with her actual teaching. Reflection notes from the first day describe the atmosphere and attitude conveyed.

> She is extremely patient and relates to the children in a very consistent way. There is verbal correction of individuals or the group, but it is not harsh and seems to work well. Carol seems to have a very even temperament. There is enthusiasm, but it is controlled. She creates a calm but positive atmosphere.
>
> (Day 1)

While reminding children they could do things outside of school and getting excited during a game were not observed to be characteristic of Carol's teaching, the absence of these practices did not seem to detract from the children's enjoyment of her lessons.

In talking about this purpose, Carol said she wanted the children to have good or "successful" experiences, yet she did not identify practices linked to experiencing success. Her classes did, however, seem to contain tasks which were appropriate for the abilities of the students and, as discussed, progression was evident.

Bain (1980), in writing about the enjoyment of physical activity as the major purpose of physical education, identified several practices which contribute to this enjoyment at the elementary school level:

1. A range of role models should be provided for the children. The physical educator should be active and

participate with the children.

2. Students should be provided with a daily program that encourages participation of all children in a wide range of activities they enjoy.

3. The program content should be limited to movement activities which allow mass participation. These activities should provide for success for children with a wide range of abilities. This can be accomplished in part by having children set personal goals, adjusting competition to ability levels, and providing for participation in group efforts.

4. The program should include some activities that are currently popular leisure activities of the children in that community.

Carol's teaching seemed to closely follow these guidelines. She was an active and apparently fit and skilled teacher. Her program provided varied content, which the children appeared to enjoy. Content selection promoted participation by all rather than waiting and taking turns. Competition was introduced slowly and was typically made an option for the individual student. Finally, Carol considered the children's out-of-school interests when she decided to include in her teaching of dance a line dance to a currently popular song. In light of these behaviors and the consistency which existed between her actual teaching and a majority of the practices named, it can be stated that

Carol's teaching in general was consistent with the purpose of having the children learn to enjoy and appreciate physical activity.

Learn the Importance of Specific Direction-Following and Cooperation

As has been discussed, Carol identified 12 means for helping the children learn the importance of following directions and cooperating. Of these, 9 were found to be supportive of Carol's belief in this purpose and 3 were not.

Practices consistent with beliefs. The following practices were found to occur frequently in Carol's teaching:

1. Repeat directions
2. Use time out
3. Give reprimands
4. Use other students as models for behavior
5. Give praise for following directions
6. Try to find two positive things for each negative one
7. Raise level of voice
8. Use humor
9. Use music as the starting and stopping signal when working on skills

No practice was used predominantly for keeping the class in control and teaching the children direction-following. Rather, Carol used different ones at different times and through their collective use seemed to enhance this purpose.

Using music as the starting and stopping signal when the chilren worked on skills (#9) was done one day with younger children as they worked on bouncing the ball. The following investigator comments on behavior management were made at the conclusion of individual lessons and illustrate the use of (a) time out (#1), (b) verbal correction or reprimands (#3), praise (#5), and emphasizing the positive (#6).

> Behavior management was virtually all positive. There was some mild verbal correction. Several children were praised for following directions.
>
> (Grade 1, Day 1)

> There is verbal correction of individual children or groups. It is not harsh and seems to work well.
>
> (Grade 4, Day 1)

> The teacher gave verbal reprimands to two boys in particular. This was done gently. She took the ball from one boy periodically.
>
> (Grade 2, Day 2)

> Two children had to sit out for a minute. Numerous comments were made to the class about their behavior and noise.
>
> (Grade 5, Day 3)

> Four children who could not work together had to sit on the side.
>
> (Grade 2, Day 4)

While humor (#8) was not mentioned in those instances, the transcripts of several lessons indicate that Carol used humor occasionally for improving behavior as well as skill. For example, she told a boy who had gotten on the floor to roll and catch the ball that they didn't really need him to mop the floor. To those who got on the floor when it was a partner's turn to dribble the ball, she reminded them they were not in a break-dance class. When a fourth-grade boy

ran for a spot on the floor, Carol responded, "Jacob, we don't want you to become a part of the wall."

Because the children usually were good about following directions, Carol did not often have to repeat them (#1), nor was it often necessary to use students as models for behavior (#4). Still, both of these practices were used from time to time and emphasized the importance of following directions.

Carol had stated that when she raised the level of her voice (#7), she tried to do so without sounding like a screamer. Carol's voice was virtually always calm. Reflection notes from the third day of observation state, in fact: "She seems to me to show extreme patience, not in that she ignores disruptive behavior, but that her voice doesn't rise or show anger or irritation." Carol felt that she did raise her voice, and it is true that there was probably some increase in its volume. Because the tone remained calm, however, and because the increase in volume was not a great one, it certainly was not perceived as yelling or screaming. This use of the voice likely contributed to an increase in direction-following without detracting from the positive atmosphere of the class.

Several other practices related to teaching the children to follow directions were observed in Carol's teaching. In addition to the means already identified, she (a) waited until the children got quiet before she gave

instructions, (b) ensured that all children were watching before giving a demonstration, (c) used a whistle as the stop signal when balls were bouncing, (d) moved close to and frequently touched children who tended to be inattentive or disruptive, (e) gave warnings about the consequences of behavior, (f) had children put equipment down while she talked, (g) took equipment temporarily from children who could not keep it still while she talked, (h) scanned the room to monitor behavior, (i) talked with the entire class about their behavior, and (j) clearly stated rules or expectations. Many of these behaviors and the practices identified by Carol typically appear in the literature under headings such as discipline, class control, or management (Rink, 1985; Siedentop, 1983) and not in relation to the purposes of the program. Nonetheless, Carol believed that learning the importance of specific direction-following was an important outcome to be achieved by her students.

Practices inconsistent with beliefs. Three practices were found to occur too infrequently to contribute to learning to follow directions:

1. Sometimes give a put-down in front of the class.

2. Tell the reason for the directions given.

3. Tell the children what it's going to be like in the middle school.

The practice which seemed most uncharacteristic of Carol's teaching was losing her patience and putting a child

down in front of the class (#1). Carol insisted that she did this, but in the 38 classes observed this behavior was observed only once and, even then, there was no anger present. Telling the children what the middle school would be like (#3) was not observed at all. While Carol occasionally gave the children a reason for the directions she gave (#2), this did not occur often and therefore was not considered typical or characteristic of her teaching.

Carol did not name practices associated with teaching the children to cooperate with one another, although this idea was present when she first identified the purpose and was reinforced by her when preliminary data were presented in the final interview. In commenting on the teacher emphasizes cooperation and getting along in game play, which appeared on the list of those behaviors characteristic of her teaching (see Appendix F), Carol stated: "It's important. It's part of what I think is an everyday value. I value it. I can't say everybody values it, but...." She also stated that she thought listening, following directions, and cooperation all fit together. Although specific practices associated with cooperation were not identified, Carol's teaching clearly emphasized cooperation. Reflection notes state:

> As you come in the door, to the left there is a large chart labeled "Who's Cooperating?" on which the teacher records the number of points each class earns for cooperation or behavior. There is some emphasis in her teaching on cooperation, too, and on good sportsmanship or getting along in competition. For example,

> if two people can't agree on whose point it is, they are to play it over. The warm-up for Two Square was cooperative hitting to see how many consecutive hits the two could get. Even when they were competing, the teacher referred to players as partners.
>
> (Day 1)

> In competition (older grades, 4th and 5th) the teacher allowed the children to choose their own partners, choose variations of the game, and decide whether or not to keep score. She emphasized that when people couldn't agree on a point, it should be played again. In checking game scores, she always checked to see if the losing team agreed on the score, or if they at least agreed that the other team had won.
>
> In a general sense, as well as in competition, there is an emphasis on cooperating. The teacher frequently comments at the end of class on how well the children cooperated or worked together.
>
> (Day 3)

As Carol was consistent in carrying out a majority of the practices she had identified, especially those which seem most relevant to the purpose, and because she in other ways demonstrated behaviors which, although not identified by her, contributed to the furtherance of the purpose, it was concluded that her teaching practices were consistent with her purpose. In other words, Carol's teaching practices supported her belief that children should learn to cooperate with one another and to follow directions.

Summary

Carol identified three purposes for her elementary school physical education program and ranked them as equal in importance. She wanted the children (a) to learn as many skills as possible, (b) to enjoy and appreciate physical education and physical activity, and (c) to learn the importance of specific direction-following and cooperation.

Skill development, as previously stated, was a purpose identifed for elementary school physical education in all 43 of the textbooks examined by the investigator. Enjoying and appreciating physical education and physical activity was listed as a purpose in 14 of the textbooks. Having the children learn the importance of following directions was not named in any of the textbooks, but learning social skills, which includes cooperation, was named in 35 of the texts.

Carol identified 13 practices for helping children develop physical skills, 10 practices she thought contributed to their learning to enjoy and appreciate physical activity, and 12 practices that would help the children learn the importance of following directions. Observations of Carol's teaching revealed that her teaching practices contributed with a high degree of consistency to two of the purposes, those related to the enjoyment of physical activity and to direction-following. While an emphasis on skill development was clearly present, some of Carol's teaching behaviors detracted from that end. Included among those behaviors were (a) playing with the children, and (b) providing limited amounts of skill-related information and feedback.

# CHAPTER VIII

# PAT

## Background

Pat did not talk more than necessary in her teaching and was even less communicative during the interviewing process. Many of her responses were one-word answers and ones which she often could not or would not expand upon. She was not seen to be uncooperative but rather as someone who had perhaps thought and talked little about her beliefs and her teaching.

As the study began, Pat was enrolled in a graduate course in physical education, her second since completing an undergraduate degree in physical education a number of years earlier at a nearby college. Pat's teaching experience was varied. She had been an elementary school classroom teacher and had taught physical education 12 1/2 years, 10 1/2 of those at the elementary school level. Pat had taught 5 years at the two schools to which she was currently assigned.

Pat indicated that there was no way in which her undergraduate preparation in secondary school physical education had influenced her teaching. She felt the same about the graduate courses she had taken or was taking. Inservice programs conducted by the school system, however, especially those conducted shortly after she reentered the system after

a period of time away, had been influential. She was especially impressed by what she called the "movement approach".

> There was a guy from _____. And that did impress me about the no lines. I didn't get that in school anywhere. But the no lines and just the movement approach where all children had a piece of equipment and kept moving, that was one big thing. Another thing that helps me is just catching the enthusiasm from the workshops.

She added that she had also brought back from workshops specific games to use and had gotten help in dance.

Pat did not enter college with the idea that she was going to one day teach physical education. She had, in fact, never had any physical education prior to college and decided while there that it was something children should experience.

> I got to college and I had never had any physical education. And we were required to take a course right off, you know, and I just got real fascinated with it. And I thought how awful for children not to have that. But then I grew up in the country, and I spent all of my time outside...swinging from vines, jumping over creeks, and that kind of thing...a lot of things that children do not get an opportunity to do or do not do. We had very few toys. I had a bicycle and skates and we would ride to another town.

Although Pat's certification was at the secondary level, she preferred teaching in the elementary school because she found the children to be more enthusiastic and appreciative and easier to motivate.

Pat described her physical education program in terms of its content.

> The main thing I can say is that I just get in as much activity as I can in only 30 minutes a week. And I have a hard time balancing between physical fitness, movement, and actual skills that will be needed in junior high school.

Pat indicated that she saw the three areas just mentioned as distinctly different aspects of the curriculum and that she was trying to establish a balance of them in her program. She found it difficult to comment on the similarities and differences that might exist between her program and others in the system except to say, "I think we teach a lot of the same things."

Pat further described the content of her program as units of instruction, some of which were for specific grades only, and additional activities that were sometimes inserted between the units. The units were (a) locomotion, including also personal and general space, body parts, colors, numbers, shapes and directions (K-2); (b) soccer (3-5, except that K-2 spend one day in it); (c) rhythms (K-5); (d) tinikling (K-5); (e) basketball (K-1 learning ball handling; 2-3 working on skills with some games; 4-5 progressing to Sideline Basketball); (f) dance, primarily creative and folk (K-5); (g) volleyball and Newcomb (K-2 working on catching and throwing type games and the other grades on volleyball skills and possibly Newcomb; 4-5 may try volleyball): (h) gymnastics, including tumbling and work on parallel bars, whittle equipment, and the cargo net (K-5); (i) track and field (K-5); and (j) frisbee golf (K-5). If time permitted,

deck tennis was also taught. The length of each unit depended upon on how quickly the students progressed. Other activities inserted into the schedule but not taught as units were (a) parachute activities, (b) Ga-Ga Ball, and (c) centers.

Pat mentioned other teachers as her biggest resource but said she also used an elementary school physical education book by Bryant and Oliver (1974). She believed the school system's curriculum guides were largely for classroom teachers and did not use them.

A Typical Class

Prior to the beginning of class, Pat placed equipment either out on the floor where it would be used or off to one side. Younger children entered the gym and sat in one straight line. Older children entered the gym and stood in squad lines. Pat then went down the line or rows, going over the names of the children. If there was a child whose name she did not know, she asked. At one of the two schools, she took a minute or two to teach the children the name of a bone or muscle. In the older grades, designated squad leaders sometimes assisted with the distribution of equipment.

Pat typically demonstrated and explained when a skill was taught. She generally followed a pattern of having the children (a) watch while she demonstrated, (b) try it with her, and (c) practice on their own. She then circulated to

individual children or groups. At times, especially when the children worked in centers, Pat observed but interacted little with the children. When she did interact, most of her verbal feedback was in the form of simple praise, although she frequently provided visual information or feedback. She sometimes told them that the skill or activity was difficult.

If the children were working in dance or rhythmic activities, Pat cued them throughout much of their practice. When games were played, she explained the procedures and rules and identified any safety precautions about which the children should be aware. If her directions were ever unclear, she apologized to the children.

At the end of the lesson, Pat had the children help put the equipment away. They then lined up and walked single file from the gymnasium.

## Pat's Beliefs About Purposes and the Means for Achieving Them

Pat identified three purposes for her teaching of elementary school physical education. She wanted the children (a) to learn things they could go home and play in their neighborhoods; (b) to learn good sportsmanship, helping one another, and cooperation; and (c) to feel good about themselves. She responded originally by naming only the first two purposes listed and, in fact, identified the third after the interview had ended. Having the children learn

things they could play at home was identified as the most important purpose, with the other two purposes being about equal in importance.

Learn Things to Play at Home

Pat wanted the physical education experience to reach outside the school and into the neighborhoods where children played. She hoped her program would give children the knowledge of games and the accompanying skill and interest to increase their level of activity. She talked about how she saw this happening with two of the activities she taught.

> Like when I first started that Tinikling, there was a lot of opposition, and the next thing I know they're jumping poles all over...all over in their little neighborhoods. And it became acceptable. And I hope they do that with a lot of things. I know they do it with something like Newcomb because when my son was in third grade at another school and didn't...he went to a birthday party and they played Newcomb. And he came home telling me about this wonderful new game he learned. And the children at that party were mostly at this school and had learned it from me. But my son wasn't getting it. And they adapted it to how many people they had and rope was the net.

As she talked further about the purpose, Pat explained the reason for its importance and the influence her teaching experiences had in affirming that importance.

> I want them to have the interest so that they will learn skills and that they will go home and practice enough on the game to help with their skills at home and then back in school again. I'm not...I don't mean to be talking in circles. I'm trying....I think that anything they can take home, no matter what it is, if it's skills or if it's a game that gets through that they will do when they get home after school, in the summer, I think that's important...to keep them active To keep them from sitting down in front of the TV all

> day every day....I think a lot of it [belief in this purpose] came from my experiences along the way, my teaching experiences. I think I've come from children knowing how to play street games like four square, hopscotch, jumping rope, to children that can do none of that.

Pat also concluded that skills and knowing how to play games were important because they both contributed to keeping the children active. Learning skills would enable children to use them in games and "non-games" in their neighborhoods.

Pat identified four practices she thought helped the children learn games and activites they could play in their neighborhoods.

1. Try to make it fun (as skills get better, it is more fun)
2. Try to generate enthusiasm
3. Allow cheering and interaction
4. Tell the children to have fun
5. Tell the children to practice at home in order to get better

Pat initially named only trying to make it fun but was able to expand the answer. "As they get better at skills" she added, "things are more fun." She also thought it was important to generate enthusiasm. She thought children had to be so quiet at other times during the day and should be able to cheer and interact with one another during physical education as long as it was not while directions were being given. Pat gave an example to illustrate the final practice named, telling the children to practice at home.

> I tell them, if they want to get better at it, they can practice at home. And I tell them how they can go about it. With the lummi sticks, they can use pencils. Some of them do roll up newspapers or magazines and use them. And like in tinikling, I tell them they don't need the poles, just to practice the steps.

Learn Good Sportsmanship, Helping One Another, and Cooperation

Pat directly linked sportsmanship, helping one another, and cooperation from the very beginning of her discussion of this purpose.

> Good sportsmanship's a biggee with me, too. But that's not my primary goal, I guess. And that's a hard one these days with the children watching what they see on television in sports...the crowds and the players.... And I try to teach helping each other. Maybe that's part of good sportsmanship. Especially...the stronger ones helping the weaker ones...a sense of cooperation among the group.

The practices identifed by Pat for meeting this purpose were sometimes very general and sometimes very specific:

1. Tell the children to throw so their partner can catch it

2. Have the stronger children help the weaker ones

3. Have the children choose their own groups

4. Tell the children to have fun

5. Tell the children that they will all learn together; they are not expected to know how already

6. Tell the children they all have something to contribute; everybody should do his best

7. Foster an attitude that makes them feel part of a group

Pat explained that when she let the children choose their own groups in units like volleyball and soccer, the more skilled players typically sought one another out, as did the less skilled players. The more skilled children were allowed to develop more on their own, while she worked with the less skilled children. Telling the children to have fun, that they were not in the Olympics, was done to shift the emphasis from competing to cooperating. Pat believed all children should know that they have something to contribute and the expectation is that they try to do their best. She gave as an example her teaching in basketball, where she emphasized that passing and positioning were just as important as shooting and that each person had something he or she could be good at.

Make Each Child Feel Good About Himself

As has been stated, Pat added this purpose almost as an afterthought following the conclusion of the post-observation interview. She at that time also identified two practices for achieving the purpose but later expanded the list to include the following seven practices.

1. Tell the children how well they are doing
2. Give children who are discouraged extra help or encouragement
3. Keep telling the children they can do it
4. Move around to interact with individual children
5. Listen to what the children say at the beginning of

the lesson

6. Call the children by name

7. Tell children a skill or activity is hard

Pat expanded little on these practices. She felt that listening to the children at the beginning of class (#5) helped to develop a closeness with the children that was difficult to achieve in one 30-minute lesson per week. She felt the children would know by this that they were important to her. Calling the children by name (#6) also made them feel important. Pat believed that telling the children a skill or activity was "hard" (#7) made them try harder and created a sense of pride when they were able to accomplish it.

## Relationship Between Beliefs and Teaching Practices

This portion of the paper examines Pat's intended and actual teaching practices and discusses them in relation to each of the purposes she identified for her program. Findings are presented with regard to (a) practices related to learning things to play at home; (b) practices related to learning sportsmanship, helpfulness, and cooperation; and (c) practices related to helping the children feel good about themselves. As practices related to the purposes are discussed, consistencies and inconsistencies with the purpose are identified.

Practices Related to Learning Things to Play at Home

Pat identified five means for helping the children learn games and activities they could play at home or in their neighborhoods. Of these, she practiced two frequently enough to be considered consistent with the purpose; she was inconsistent in carrying out the remaining three practices.

Practices consistent with beliefs. The two practices found to be consistent with Pat's belief that children should learn games and activities they could play at home were as follows:

1. Allow cheering and interaction

2. Tell the children to practice at home in order to get better

Pat believed that developing the proper attitude and an interest in games and activities were an important part of this purpose. For that reason, several practices related to the atmosphere of the class were identified. As Pat had indicated, the children in her classes often cheered, shouted to team members, and interacted with one another during the lesson (#1). It was evident that this was permissible, as Pat insisted on quiet when she explained tasks and gave directions. Notes from a kindergarten class engaged in activities with a parachute indicate that the children were permitted to be a bit loud except when she talked.

> The teacher gets out the parachute and spreads it out. The children are clearly excited. She shows them how

> to hold the parachute.
> "I'll know you're ready when you're quiet." She explains what they will do.
> The children lift the parachute. They make a mushroom. There is lots of giggling....
> The teacher takes that parachute away.
> The children cheer when she gets out the bright-colored parachute.
> They lift it, lie down, and put their heads under. They are very noisy doing this. There is lots of excitement. (Day 4)

Notes from a fifth grade class in the same activity indicate similar behavior.

> The children don't understand about lying down to stick their heads under, so it doesn't work. The teacher apologizes to them for not being clear. They try it again, and it works. They love it and cheer and laugh. (Day 4)

Pat said that telling the children to practice at home and how to go about doing that (#2) helped them to learn games and activities. In the lessons observed Pat did not say this as a regular part of her teaching, but she did tell some classes in tinikling that they could practice at home without sticks by just going through the steps. It would seem that if children are reminded periodically in different activities that practicing at home is helpful, the message would soon become clear to them.

Pat did not name as a practice explaining the rules and procedures of games, perhaps because she thought it too obvious. This was, however, a definite part of her teaching whenever games were played, i.e., Pat explained the rules and procedures of soccer lead-up games and Halloween games and relays.

Practices inconsistent with beliefs. Three practices were found to be inconsistent with Pat's belief that the children should learn games and activities to play at home:

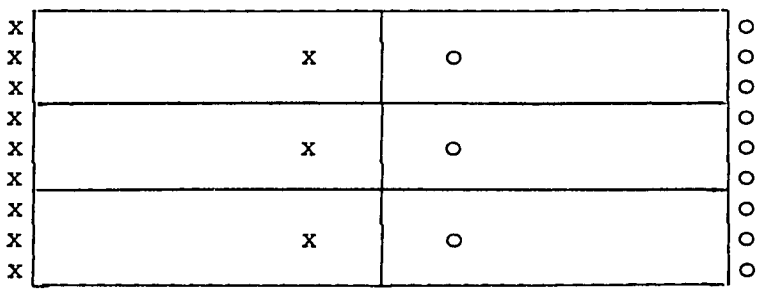
1. Try to make it fun (as skills get better, it is more fun)

2. Try to generate enthusiasm

3. Tell the children to have fun

In the first practice named, Pat conveyed the idea that skill improvement made an activity more fun. There was, however, an inconsistent emphasis on skill in Pat's teaching. Field notes from a fourth grade game of Lane Soccer indicate that her focus was on game procedures and rules, with little attention given to skill development.

> Those with pinnies are sent to one end of the floor. Those without them go to the other end.
> "The first three people rotate in." Three people from each team walk up the sideline and across the court near the center line, ending facing one another.




> "If the ball goes out on the side, the ones on the end go get it."
>
> The O team gets the ball first and quickly scores.
> "Stop. I do not mind if you clap and cheer. Do not squeal."
> They rotate positions (three from a team come on from one side of the court as the three who just had a turn forward walk off the other side and continue to the

> end line).
> A point is scored by the X team after several trips up and down the court. The teacher, who follows play up and down the court, calls "change".
> Play starts quickly. The O's score right away. "Change."
> The X's get the ball again....
> Pat referees the game the entire time.
> X gets to kick in from the end line. X scores. The children change positions again...
> The teacher gets those defending the goals to spread out.
> She blows the whistle on a throw-in. The boy throwing the ball in had picked up his back foot. The other team gets to throw the ball in.
> (The children mostly kick the ball down the floor and chase it. There is some dribbling but more kicking. I have not heard the teacher say anything about which to use.)
> The children rotate positions often.
> Pat blows the whistle to stop play for a lane violation.
>
> (Day 1)

Reflection notes from two other days indicate that verbal behaviors and the selection of content did not suggest that skill learning was being emphasized.

> During the station work today, Pat spent a lot of time just watching. All classes did the same thing with only minor variations....Most of the teacher's interactions with the children today seemed unrelated to skill and pertained more often to procedures and behavior or non-physical education matters.
>
> (Day 2)

> I have difficulty being able to identify the primary purposes of Pat's teaching. She clearly does some things for the sake of skill learning (demonstrating, having the more skilled teach or model for the less skilled, etc.) and generally gets quickly into the skill work, but her choice of content, at least what I have seen, does not show a strong skill orientation (Halloween games and parachute activities today).
>
> (Day 5)

The day Pat taught Tinikling, there was a very strong skill emphasis and the skills showed definite improvement.

Pat broke the steps down, explained, demonstrated, cued, moved more skilled children to the front of lines where they could be observed by the less skilled, and seemed to appropriately pace the lesson so that skill learning could take place. When the children played Halloween games and did relays, they typically got one or two turns to be active and there were no real skills involved except running. Additionally, Pat gave little feedback related to skill, averaging 13.2 incidents per lesson, with only 4.2 of those containing information about what was done correctly or what needed to be changed. Given the importance of information feedback to skill learning (Bilodeau, 1969; Magill, 1980; Schmidt, 1982; Singer, 1980) and Pat's very limited amounts, this represents a major inconsistency. Pat's purpose, however, was not primarily to develop skills, but to use skill development as a vehicle for making the learning of games fun so that the children would want to play them again at home.

Also related to fun, Pat named trying to generate enthusiasm (#2) and telling the children to have fun (#3). As Pat's personality was rather reserved, enthusiasm was not an apparent quality of her teaching. Her attitude was somewhat business-like, although a caring attitude was also conveyed. She was not observed telling the children to have fun, although she sometimes participated actively in the lesson and seemed to enjoy doing so.

Pat did not suggest that the curriculum was chosen because of its carry-over potential into the children's home and community life. It would seem that the curriculum itself might be the single most important factor contributing to the children's learning of games and activities to be played at home. Pat's program, however, seemed no more designed for this purpose than did any of the other programs.

Because the curriculum did not seem to support the purpose and because few of the practices identified by Pat were substantiated by her teaching, an inconsistency seems to exist between her belief in this purpose and her actual teaching practices. It should be noted, however, that Pat was able to report several instances in which the children were doing the games and activities she taught them at home and that the best evidence for Pat's success or lack of success in this area occurred outside of school and was thus not observable by the investigator.

Practices Related to Sportsmanship, Helpfulness, and Cooperation

Pat's second purpose was to have the children learn good sportsmanship, helpfulness, and cooperation. Of the seven practices identified for achieving this purpose, one was found to be a definite part of Pat's teaching and consistent with the purpose, five were found to be inconsistent with the purpose, and one practice was identified as

questionable in its contribution to promoting sportsmanship, helpfulness, and cooperation.

Practices consistent with beliefs. Only one practice, having the stronger or more skilled children help the weaker ones, was practiced frequently. This was done consistently with all age groups throughout the teaching of tinikling, either by directly asking those children with better skills to help someone or by placing the better skilled students in front of those who were having difficulty. Also, students who knew well the sequence of the Grand March were placed at the front of the lines for the others to follow. The practice was not observed in the teaching of parachute activities, Halloween games and relays, lummi stick routines, or soccer games, but most of those areas did not include the teaching of specific skills. Notes of a fifth grade class in Tinikling illustrate the use of more skilled students to help the less skilled ones.

> The teacher goes through "singles" and has the children do it with her. The cue is different this time: "Hop out...step in...hop out...step in."
> "Now you work by yourself."..."Stop."
> The teacher changes some children in their lines. She puts some children who were getting the step at the front of the sticks so the others could see them.
> They begin working again. The teacher tells them they can rest whenever they need to.
> She moves another girl to the front of a line.
> (Day 5)

Practices inconsistent with beliefs. Five practices were found to be inconsistent with Pat's belief that the children should learn sportsmanship, helpfulness, and

cooperation

1. Tell the children to throw so their partner can catch it

2. Have the children choose their own groups

3. Tell the children to have fun

4. Tell the children that they will all learn together; they are not expected to know how already

5. Tell the children they all have something to contribute; everybody should do his best

Pat had suggested that when children chose their own groups (#2), the better skilled children grouped together and helped one another. Most often, however, the children did not choose their own groups. In fact, they did so only in the older grades for learning Tinikling or working in centers. The teacher always grouped the younger children, and she put the older ones in groups or teams for Lane Soccer and relays. When told of this observation, Pat commented that she did allow the children to choose their own groups when they practiced skills prior to game play, for example in soccer. This was not observed by the investigator.

Four other practices were not observed to occur at all in Pat's teaching: (a) telling the children they're not playing in the Olympics and to have fun (#3); (b) telling the children that they are not expected to know how (to do the skill) already and will all learn together (#4); (c)

telling the children they all have something to contribute and should all do their best (#5); and (d) telling the children to throw so that their partners could catch (#1). Catching was not a focus in any of the lessons except when catching bean bags with scoops was done in one of the centers. In that instance, the younger children worked individually and the older ones had the option of individual or partner work. They were not instructed to throw so that their partners could catch.

Practices identified as questionable. One practice was identified as questionable in its contribution to teaching the children sportsmanship, helpfulness, and cooperation: foster an attitude to make the children feel a part of the group. She was unable to specify any ways in which she did this but suggested that it was an attitude she had toward the children. Attitudes are difficult to observe, especially in individuals who are reserved and less verbal. It was clear that Pat cared about the children because, in spite of the fact that she saw them only one day a week, she knew a great deal about them. Reflection notes from the fifth day reveal her familiarity with individual children.

> Pat came over to me several times during two classes today to tell me about specific children in the class. There were five with learning disabilities, one from an orphanage, two from the corrections center, one whose mother died from Aids, and one girl who was always getting into trouble and influencing others to do the same. Pat had told me before about the many children in this school who speak little English. She seems to be pretty aware of their individual problems. She also said she had talked with a group of the students

> who had been influenced by the girl I just mentioned and that a couple of them had done complete turn arounds. She volunteered this information after I commented to her that one little boy seemed to work so hard and be so well behaved throughout the class. He was one of the boys she had talked with.

It may be that allowing the children to interact and cheer also fostered an attitude of belonging to a group. The children typically did not tease one another, but when this did occur, Pat corrected the behavior. Still, the atmosphere of the classes was not one perceived as loving and warm. Pat was at times caring and generally positive, but could also be quite business-like and firm and even stern. She did not instruct children in game play to encourage one another, provide other positive examples of good sportsmanship, or use any system to reward desirable behaviors, interventions supported by the literature for promoting sportsmanship (Austin & Brown, 1978; Giebink & McKenzie, 1985). Thus, while there are several factors which support the notion the Pat fostered a sense of being a part of a group, observations do not totally support that idea.

The majority of the practices identified were not found to be characteristic of Pat's teaching. It was thus concluded that there was a lack of consistency between Pat's teaching practices and her belief that the children in her program should learn good sportsmanship, helpfulness, and cooperation.

Practices Related to Helping Children Feel Good About Themselves

The third purpose Pat identified for her elementary school physical education program was making each child feel good about himself. Six of the seven practices she identified for achieving this practice were found to be characteristic of her teaching; one practice was used too infrequently to contribute greatly to achieving the purpose.

Practices consistent with beliefs. Six practices identified by Pat were found to occur frequently enough to contribute to an improved self-concept in the children:

1. Tell the children how well they are doing
2. Give children who are discouraged extra help or encouragement
3. Keep telling the children they can do it
4. Listen to what the children say at the beginning of the lesson
5. Call the children by name
6. Tell children a skill or activity is hard

Feltz and Weiss (1982) suggested that effective forms of communication for improving self-confidence include verbal praise and encouragement and indicate that they are especially important when correcting performance. Providing encouragement (#2) and telling the children how well they were doing (#1) were examined in Pat's teaching by looking at the nature of verbal feedback. Pat gave an average of

only 13.2 incidents of total skill-related feedback per lesson. Two factors explain this. One is that Pat was simply not very verbal in her teaching. The second factor is that several of the activities taught by Pat contained little skill. If there was little skill in the lesson, feedback about skill could be expected to be low. According to lesson transcripts, there were 6 incidents of skill-related feedback in one second grade lesson and only 2 incidents of such feedback in a fifth-grade lesson when the children played Halloween games, compared to 33 and 19 incidents respectively in first and fourth-grade classes in Tinikling, an activity requiring more skill. Pat gave an average of 9.7 incidents of skill-related feedback that were positive, i.e., simple praise or praise plus information about what was good. While that number is low, it represents 73.4% of the feedback given. In other words, Pat may not have given a great deal of feedback, but what she did say was overwhelmingly positive. This seems consistent with Pat's practice of telling the children how well they were doing (#1).

The following excerpt from a lesson transcript illustrates Pat's telling a child that the skill was difficult to learn (#6). She also gave him extra help and encouragement (#2) and told him he could do it (#3).

> Pat: Charles, I want you to try to jump that rope. Good. Uh huh. Try again. Bring it in front of you; then jump over it. It's hard....

Child: I'm not very good at jumping rope.

Pat: It's hard to learn. You just keep working at it, though. When you stand in the middle of the jump rope, you need to turn it down, so it comes to right here on you.

Child: Okay.

Pat: Make it littler.

Child: I can't make it littler.

Pat: Why not?

Child: (unintelligible)

Pat: Just turn it like this. You can do it. Try that. Uh huh.

Pat called the children by name (#5) an average of 23.7 times per lesson. Although this was less than for two other teachers in the study, it must be remembered that Pat spoke to children less frequently than many teachers might. When she spoke to them, however, she typically called them by name. Additionally, she made an obvious effort to learn names. She also took time at the beginning of many of the lessons to listen if the children had something they wanted to say (#4). This time was not lengthy and took little time from the rest of the class but may have made the children feel more important.

Practices inconsistent with beliefs. One practice, moving around to interact with individual children, was found to occur too infrequently in Pat's teaching to contribute to making the children feel good about themselves. Pat did circulate around the room to individual

children or groups, but she often did not interact. Following is a portion of the field notes from a second grade class working on various skills and activities in centers. Pat's movement throughout the room and the absence of interaction are notable.

> "Now you may start."
> The teacher helps those with ropes first. She tells a boy with a ball to stay in his area. She moves to the group working with the scoops. The teacher comes to me and points out two boys, one who repeated the first grade because he was so immature and will now "teach the class if you don't watch out" and another boy on Ritalin.
>
> Whistle. The teacher reminds them what the whistle means. They rotate. One group goes the wrong way. The teacher watches the children use the hula hoops. She then watches the balloon and ball groups from the hoop station. She moves toward the scoops...interacts with no one. She looks at the whole group. Someone from the balloon group comes to her.
>
> Whistle. "Change." The children were better this time about putting up the equipment and getting quiet. Pat just stood quietly and waited. It took only about 15 seconds from the whistle until they rotated. They work again and the teacher watches at different stations.
>
> Whistle. "Shh...Change." The teacher watches. Sometimes the children come up to show what they can do, or Pat moves closer to one group and observes.
>
> (Day 2)

Hellison (1973) has stated that self-esteem can be enhanced in the physical education setting only when three conditions are met: (a) a nonthreatening environment, (b) treatment of each student as a unique and special individual, and (c) opportunities for success. While Pat was sometimes stern, the environment was never perceived as a threatening one for the children. Children were seen by

the teacher as unique. Whether there were sufficient opportunities for success is questionable. The children sometimes learned new skills and were successful, but often they played games which required little or no skill or, as in soccer, they ignored the development of skills. It is unclear whether or not the children would have viewed these as successful experiences. Although they did not appear to be developing skills, the children apparently enjoyed many of the games and activities. The competitive relays and elimination-type games played on Halloween created a competitive atmosphere, however, and identified some children as winners and others as losers.

It seems clear that Pat was consistent in carrying out a majority of the practices she identified for helping the children feel better about themselves. It remains unclear, however, in light of Hellison's criteria, that this was enough. If Pat were more verbal, more outgoing, more openly enthusiastic, if she touched the children more and interacted with them more frequently, it might be concluded that the atmoshpere of the class and attitude of the teacher were so positive the children would have to feel good about themselves regardless of the nature of some of the content. This was not the case, however. Pat's classes were positive, but not strongly so. She was encouraging, but not to the extent that it was a central feature of her teaching. It thus cannot be concluded that Pat's teaching practices were

consistent with her belief that the children in her program should be made to feel good about themselves. Rather, the consistency of Pat's teaching practices with regard to the development of self-concept is described as questionable.

Summary

Pat had been trained as a secondary school physical education teacher but enjoyed teaching elementary school children. She identified three purposes for her program, the most important of which was having children learn games and activities they could play at home and in their neighborhoods. This purpose is most closely allied with two purposes identified by the authors of 43 elementary school physical education textbooks studied: (a) rules, how to play games and sports, which appeared 12th on the list of the 17 most frequently named purposes; and (b) recreational skills, which appeared 4th on the list. The development of social attributes, which includes Pat's purpose of learning sportsmanship, helpfulness to others and cooperation, was the second most frequently named purpose in the textbooks. Her third purpose, making the children feel good about themselves, was the fifth most frequently named purpose.

Pat was able to identify five practices related to the learning of games, seven for promoting sportsmanship, helpfulness, and cooperation, and seven practices for making the children feel good about themselves. The majority of these practices were not found to appear consistently enough in

Pat's teaching to support the learning of games and activities to play at home or the learning of sportsmanship, helfulness to others and cooperation. While Pat consistently demonstrated a majority of the practices named for making the children feel good about themselves, her teaching did not meet the criteria identified by Hellison (1973) for enhancing self-esteem in physical education. The consistency between her belief in this purpose and her teaching practices was thus identified as questionable.

Three factors seem to be largely responsible for the overall inconsistency between purposes and practice. One is Pat's reserved personality which hindered the generation of enthusiasm and fun that she felt was necessary to creating an interest in games and activities. The second was the inconsistency of her emphasis on skill, which would have contributed both to the learning of games and activities and to feelings of accomplishment. The third factor was a curriculum which contributed too little to the development of skills, carry-over into play in the neighborhoods, or cooperation among children.

# CHAPTER IX

# FINDINGS ACROSS TEACHERS

The model of teacher thought and action developed by Clark and Peterson (1986) has provided the theoretical framework for this study. In it, the authors have linked what teachers think, i.e., their theories and beliefs, planning, and interactive thoughts and decisions, to their observable actions and the effects of those actions. This study has looked specifically at what teachers of elementary school physical education believe to be the primary purposes of their teaching and the relationship of those purposes to teaching behaviors. Findings across the five teachers are discussed under three headings: (a) teachers' purposes for elementary school physical education programs, (b) the means for achieving purposes, and (c) teaching practices.

## Teachers' Purposes for Elementary School Physical Education Programs

### Uniqueness and Diversity of Purposes

It is difficult to talk about findings across the five teachers precisely because it was the uniqueness of the teachers that so clearly emerged from this study. As can be seen from the summary of purposes in Table 7, the teachers identified some common purposes, yet much diversity exists.

Table 7

Summary of Purposes Identified by Teachers

| Robin | Martha | Adele | Carol | Pat |
|---|---|---|---|---|
| Skill | Enjoyment | Skill | Skill | Learn games to play at home |
| Self-concept | Knowledge of skills | Social interaction | Enjoyment | Sportsmanship/ cooperation |
| Fitness knowledge | Carry-over | | Direction following/ cooperation | Self-concept |
| Love | | | | |

Note. The purposes for each teacher are listed in the order in which they were named.

No two teachers had more than one purpose on which they agreed as a primary purpose for their programs. Several purposes--(a) knowledge and awareness of physical fitness, (b) knowledge of the way to do skills, (c) helping the children feel loved, (d) having what children learn in physical education carry over into other areas of their lives, (e) social interaction, and (f) learning games and activities to play at home--were named by only one of the five teachers.

Lortie's (1975) report of the Five Towns Study, in which teachers were asked to explain what they tried most to achieve, revealed that, while the modal response (77%) was a description of curricular responsibilities, teachers also

had special, personal concerns. This seemed to be the case with at least some of the subjects in the current study. Robin, for example, wanted the children to feel loved and emphasized that it was important to her to reach the whole child. She wanted to teach the child physical skills but without neglecting emotional, mental, and spiritual needs. Martha wanted what was learned in physical education, whether it was related to behavior or fitness practices, to be carried over into the children's lives outside of school. She spoke of "wanting to inspire them" and creating self-discipline.

In light of the fact that all 43 of the elementary school physical education textbooks studied by the investigator reported skill development as a primary purpose, it is interesting that only three of the five teachers in this study did so. Martha did not because she did not believe skill development was possible in the limited amount of time she had with the children. She believed that, if the children learned what they needed to know about skills in her class and then applied that knowledge in practice outside of class, skill development might be possible. Pat saw skill development as one part of teaching the children games and activities they could do at home, yet the development of skills was not emphasized in much of her teaching.

The development of various social attributes was the second most frequently named purpose in the 43 textbooks

studied and was also named by three of the teachers in this study. The teachers, however, seemed to value different aspects of social development or at least expressed their purposes differently. Adele wanted them to "learn how to interact with other boys and girls." Carol thought children should learn to follow directions and cooperate; Pat wanted them to learn to be good sports, to help one another, and to cooperate.

None of the teachers identified physical fitness development, named third by the textbook authors, as a primary purpose. Four of them did, however, discuss their belief in the importance of fitness, and two teachers named purposes in some way linked to fitness. Those who discussed the omission of fitness as a purpose of their programs had logically concluded that fitness development was not a realistic outcome of a one-day-a-week program.

In light of other research on teachers' beliefs, the diversity of purposes valued should not be surprising. In the Ashton et al. (1975) study of primary teachers in England, teachers held different views about the aims of the primary school program, some identifying moral development as their highest aim, some naming intellectual development, and others valuing still different outcomes. Other studies (Bennett, 1976; Taylor & Holley, 1975) as well as this one reported both different and overlapping findings, i.e., teachers had some beliefs about purpose which were unique

and some which they held in common with others.

The Articulation of Beliefs

Only one of the teachers, Robin, was immediately able to articulate her beliefs and spoke with enough conviction to indicate that the purpose of her program was something to which she had given a great deal of thought. This may be characteristic of Robin or it may be because she had recently been interviewed (unrelated to this or any other research study) about her teaching. The other teachers had difficulty talking about the purposes of their programs and sometimes indicated that they had not given much thought to them.

To say that teachers had difficulty in identifying beliefs about purposes is not to say that they had no firm beliefs. The teachers may not have consciously asked themselves, however, what they most wanted their children to learn and how to best accomplish those purposes. Some of their teaching was, however, very consistent with purposes that had been difficult to articulate. Carol, for example, identified as a purpose having the children learn the importance of specific direction-following and cooperation but then talked very little about cooperation and identified no practices related to it. Yet from the first day and throughout her teaching, an emphasis on cooperation was evident. These findings are in concert with those of Ashton et al. (1975), who concluded that their study of the aims of

primary teachers in England "would seem to lend strong support to the idea that, while teachers may have difficulty in stating aims, they undoubtedly have them" (p. 3).

Much has been written in recent years to suggest that reflective thinking is a valuable process for teachers. As early as 1933, Dewey identified the relationship between reflection and beliefs.

> Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends constitutes reflective thought.... Once begun, it includes a conscious and voluntary effort to establish belief upon a firm basis of evidence and rationality. (p. 9)

It would seem that the "active, persistent, and careful consideration of beliefs" to which Dewey refers would also lead to beliefs which could be more easily articulated. Reflection, then, may have benefitted the teachers in this study by making them more able to articulate beliefs about the purposes of their programs and by giving the intended outcomes greater prominence in their thinking as planning and interactive teaching took place.

In summary, the teachers' beliefs about the purposes of elementary school physical education reflected some common thinking yet remained highly individualized. The two most frequently named purposes by the authors of elementary school physical education textbooks, skill development and social development, were also those most frequently named by the teachers in the study. Two teachers, however, did not

identify skill development as a purpose, although it was listed as such by all of the elementary school physical education textbooks reviewed. Several of the purposes were identified by only one teacher, reflecting the idiosyncratic nature of their beliefs in spite of their professional preparation in the same field of study. The teachers' difficulty in articulating their beliefs about purposes may be related to a lack of meaningful reflection on their teaching.

## The Means for Achieving Purposes

As a group, the elementary school physical education teachers had difficulty identifying the practices they employed to achieve the purposes of their programs. This may, again, be related to limited amounts of reflection on teaching. Although it was originally intended that the practices would be identified in the post-observation interview, difficulty in doing so made it necessary to give teachers an opportunity to expand their lists in the follow-up interview. Teachers were also asked at that time to further identify practices related to their purposes by selecting them from the investigator's list of behaviors typical of their teaching. Through these additonal opportunities, the teachers' lists of practices grew considerably.

The teachers seemed most able to identify practices related to skill development, perhaps because the research in that area is more specific and is given greater emphasis in the physical education literature and in undergraduate

and graduate professional preparation programs than are other purposes named by the subjects. This does not mean that teachers were immediately able to identify such research-based practices as their means for bringing about skill development. Robin, for example, was able to name seven practices in the first interview, but not until the second interview did she name practices associated with skill-related feedback, demonstration, and increased practice time, considered among the most significant factors in skill learning (Rink, 1985; Siedentop, 1983). She did not link skill description with the purpose of skill development until she saw it on the list of her characteristic teaching behaviors. Similarly, Carol omitted from her original list but later named as a means for helping children learn "as many skills as they can", providing opportunities for the practice of skills. Thus, while the teachers had difficulty in identifying a number of their practices, they eventually either recalled or recognized many of them as behaviors which contribute to skill development, i.e., they named them in a later interview or identified them from a list of their own teaching behaviors.

Adele had the greatest difficulty in naming practices to develop skills, originally identifying only "practice alone with varied tasks" and "work in groups of two or three and eventually in a game that uses the skill." In order to stimulate additional responses, the investigator asked for

what reason the teacher demonstrated skills, a practice she frequently used. Adele responded that this would help them know how to do the skill and added that she sometimes had children demonstrate as well. At the time, she could think of nothing else. In a later interview she added four additional practices, including skill explanation and skill-related feedback. She did not mention practice time. All three teachers suggested that it was helpful to vary tasks or vary the equipment used in doing tasks. Only Robin introduced the idea of progression. Again, this does not suggest that the teachers were unaware of the importance of the previously mentioned means for developing skill, only that they were not readily able to identify them.

Greater difficulty existed in identifying practices for purposes other than skill development, and there were fewer common practices listed by teachers who had the same purposes. Martha and Carol, for example, both wanted their students to enjoy physical activity, yet the only practice identified by both teachers was giving praise or positive reinforcement. Martha spoke additionally of not allowing complaints, telling the children why they were doing things, selecting content the children would enjoy, and giving children an opportunity to answer questions. Carol emphasized the personal behaviors of smiling, using humor, using body language, getting excited during games, and being active, as well as giving children choices. Pat and Robin

wanted to improve the self-concept or self-confidence of the children and named four practices in common: (a) positive reinforcement, (b) calling the children by name, (c) listening to children, and (d) moving around to interact with individual children, although three of the four practices were not identified by either teacher until seen on the list of behaviors characteristic of their teaching. The teachers were doing things to promote self-concept, although they were initially unable to identify what they were doing. Robin gave greater emphasis in her practices to the types of learning experiences the children had and named (a) learning experiences where children feel successful, (b) providing good social experiences, and (c) experiences where children make decisions and try them out. Pat named none of these, focusing instead on her interactions with the children.

The probable reasons teachers had difficulty in identifying practices are varied. They may have included some combination of the following: (a) lack of familiarity with the literature and research findings, (b) nervousness during the interviewing process, (c) little reflection on purposes and teaching practices, and (d) an inability to articulate what they knew. The demands of teaching as many as nine classes a day, sometimes with different content and equipment and at different grade levels, did not encourage reflective thinking (Dewey, 1933). The teachers sometimes

had no time between classes and rotating responsibilities on lunch duty. Hours after school and in the evenings were often devoted to graduate course work, family responsibilities, and coaching.

Some practices which supported particular purposes were carried out even though the teachers had been unable to identify them. This may suggest that, while the teachers may have failed to reflect on their purposes and the specific means for achieving them, the value was strong enough that the teachers behaved in concert with that value, perhaps acting on knowledge they did not know they possessed. In other words, the belief, for example in self-concept development, was so much a part of who a teacher was that she treated the children with respect, called them by name, gave praise, and made opportunities to interact with them, even though she was unable to list these as practices for improving the children's self-concept. As Clark and Peterson (1986) have indicated, the individual may be planning and deciding based on "a mixture of only partially articulated theories, beliefs, and values about his or her role and about the dynamics of teaching and learning" (p. 287). Shulman (1987) supported this view when he summarized some of his research findings.

> We have concluded from our research with teachers at all levels of experience that the potentially codifiable knowledge that can be gleaned from the wisdom of practice is extensive. Practitioners simply know a great deal that they have never even tried to articulate. (p. 12)

The ability to act in concert with purposes and practices which have not been fully articulated may be especially likely to occur when the purposes are associated with personal values the teacher holds which extend beyond the realm of physical education teaching and which have grown out of personal experiences and family and church values, e.g., Robin's belief in loving children and improving their self-concepts and the importance of listening to children as one means of achieving these.

## Teaching Practices

While few real patterns emerged across teachers regarding the consistency with which their teaching practices supported the purposes they had identified, those that did can best be seen in Table 8, which indicates whether the teaching practices of each teacher were consistent or inconsistent with the purposes she identified.

Of the 15 purposes identified by the teachers, 7 were found to be supported by the practices of the teachers who named them, 5 were not supported by teaching practices, and 3, for reasons already discussed, were placed in a questionable category. In a similar study, Duffy (1977) found comparable results. Of eight reading teachers with strong belief patterns, four consistently employed practices which reflected their beliefs. Three other teachers who did not evidence clear and categorical conceptions of reading were also observed; two demonstrated practices which reflected

Table 8

Consistency of Teaching Practices for Each Purpose of the Five Teachers

| | Consistent | Questionable | Inconsistent |
|---|---|---|---|
| ROBIN | Fitness knowledge<br>Self-confidence<br>Feeling loved | | Skill development |
| MARTHA | Enjoyment<br>Knowledge of Skills | Carry-over | |
| ADELE | | | Skill development<br>Social interaction |
| CAROL | Enjoyment<br>Direction-following/ cooperation | Skill development | |
| PAT | | Self-concept | Learn games to play at home<br>Sportsmanship/ cooperation |

a structured view. In the present study, no attempt was made to measure the strength of beliefs. Had the study included only physical educators who held strong beliefs about the purposes of their teaching, perhaps the consistency between purposes and practices would be higher. If Duffy's study is any indication of what could be expected, however, there would still be teachers whose practices did not support their purposes.

Kinzer (1988) found that (a) preservice teachers tended to be more consistent in their beliefs concerning reading processes and development than were inservice teachers, and

(b) both preservice and inservice teachers with reader-based, holistic explanations for how reading takes place and develops tended to choose vocabulary and comprehension lessons reflecting their beliefs. Preservice and inservice teachers with other theoretical orientations did not choose lessons consistent with their beliefs. The investigator speculated that inservice teachers were influenced by practical issues which preservice teachers had not yet encountered and that preservice teachers were more strongly influenced by the theoretical orientations taught through their university. No explanation was given to account for the greater consistency of those holding reader-based, holistic orientations. The five teachers in the present study were all experienced teachers and would thus have had a number of years over which to have been influenced by practical experiences and, for those teachers with limited graduate coursework, to have distanced themselves from the theoretical orientations and belief systems which may have been present in their undergraduate programs. As previously stated, some belief systems or theoretical orientations may have been stronger than others, helping to explain why some purposes were more likely to be reflected in teaching practices than were others.

Accomplishing Skill Development

It is readily apparent from Table 8 that no teacher who sought to develop the skills of the children consistently practiced behaviors that would bring this about. Because

skill development has been clearly identified as an important purpose of the profession in both the research literature (Goc-Karp, Kim, & Skinner, 1985; Laflin & Johnson, 1987) and in the review of elementary school physical education textbooks by the investigator, and because there is a great deal of research and other literature identifying practices related to skill development, this finding is problematic.

Adele, whose children had very little movement time and received only 4.7 incidents of skill-related feedback per lesson, was not consistent in carrying out practices to achieve this purpose. Robin admittedly sacrificed some time in skill development so that she and the children could have more time to talk. Corrective feedback was limited so that the children could practice without interference and because Robin wanted the children to receive large amounts of positive reinforcement and little that was negative. All these reasons seem consistent with beliefs Robin held but which, in practice, conflicted with her belief that children should learn skills. Unlike Robin and Adele, who used games in which children waited for turns, Carol provided greater opportunities for skill development by having the children play one-on-one or two-on-two. Carol's teaching was consistent with most of the practices she identified for developing skills, but she was inconsistent in providing information about the skills and in giving skill-related feedback. While the amount of feedback may have been adequate, Carol

sometimes gave information and feedback about only one element of the skill, ignoring other critical features. The giving of skill-related feedback was an area in which all three teachers were found to support the purpose of skill development inadequately.

Table 9 uses Cole's (1979) feedback categories to present the average number of incidents of skill-related feedback given by each teacher in a 30-minute lesson. It

Table 9

Incidents of Verbal Skill-Related Feedback Provided by Each Teacher Per 30-Minute Lesson

| Type of Feedback | Robin* | Martha | Adele* | Carol* | Pat |
|---|---|---|---|---|---|
| Approval | 6.7 | 16.2 | 2.3 | 21.2 | 8.7 |
| Supportive | 2.2 | 9.3 | 0 | 7.2 | 1.0 |
| Convergent Questioning | .8 | .8 | .5 | .2 | 0 |
| Corrective | 5.5 | 11.3 | 1.8 | 10.5 | 3.2 |
| Disapproval | 0 | 0 | 0 | 0 | .3 |
| Total | 15.2 | 37.7 | 4.7 | 39.0 | 13.2 |

Note. * denotes teachers who identified skill development as a purpose.

is clear that the teachers who identified skill development as a purpose gave no more skill-related feedback, as a group, than did teachers who did not identify skill develop-

ment as a purpose. Adele, in fact, gave the least skill-related feedback. The most supportive and corrective feedback, i.e., feedback which contains information about what is done well or what needs to be changed, was provided by Martha, who identified knowledge about skills but not skill development as a purpose. Martha also provided the highest percentage of supportive and corrective feedback (54.9%).

There may be a variety of explanations for the inconsistency between practices and the purpose of skill development. In Robin's case it must certainly be questioned whether the number of purposes was in itself at least partly responsible. When the means for achieving one purpose, e.g., listening to children so that they would feel loved, interfered with the means for achieving another, giving skill-related feedback, one of the purposes had to suffer as a result. Robin chose to listen to the children.

Martha indicated that she did not believe it was possible to develop skills in a one-day-a-week program, and this may have been a factor in the thinking of other teachers as well. They may have pursued skill development less diligently if, while believing it to be an appropriate purpose for physical education in general, they questioned whether it was a realistic outcome of their own programs.

Another possible explanation is that teachers valued skill development as a purpose but did not have the

knowledge to bring it about. Shulman (1987) has stated his belief that the knowledge base for teaching is extensive and elaborate and has emphasized the importance of pedagogical content knowledge, which he defined as follows:

> It represents the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction. Pedagogical content knowledge is the category most likely to distinguish the understanding of the content specialist from that of the pedagogue. (p. 8)

In physical education, pedagogical content knowledge would include, for example, the ability to analyze skills developmentally and the ability to organize tasks into an appropriate progression for learning. Without this knowlege, teachers would be less able to bring about the skill development they were seeking in their children. A teacher who did not possess knowledge about motor development might, for example, be satisfied with a much less mature skill pattern than would a teacher who possessed this knowledge.

Differences Between More Consistent and Less Consistent Teachers

It can also be seen from Table 8 that three teachers taught in ways that were more consistent with their beliefs about purposes than did the remaining two teachers. Robin was consistent with regard to three of her four purposes. Martha and Carol demonstrated practices that were consistent with two of their three purposes. Adele's teaching practices were inconsistent with both of her purposes, achieving skill

development and social interaction. Pat was inconsistent with regard to two of her three purposes.

The reasons some teachers were able to teach in ways that were more consistent with their beliefs are not clear, but specific differences can be identified between the two groups, i.e., between Robin, Martha, and Carol, who were largely consistent with their beliefs, and Adele and Pat, who were not, that may enlarge this understanding. The differences include the following:

1. Teachers whose practices were more consistent with their purposes were able to identify a greater number of means for achieving their purposes than were teachers who were less consistent, and they were more able to identify practices relevant to achieving their purposes. This could indicate greater familiarity with scholarly literature, research, curriculum materials and other sources of knowledge related to their purposes. In other words, they may have known more about what to do to accomplish desired outcomes. Shulman (1987) has stated that the knowledge base for teaching includes at a minimum: (a) content knowledge, (b) general pedagogical knowledge, (c) curriculum knowledge, (d) pedagogical content knowledge, (e) knowledge of learners and their characteristics, (f) knowledge of educational contexts, and (g) knowledge of educational ends, purposes, and values, and their philosophical and historical grounds. Some of these knowledges are growing and changing, making it

more difficult for the teacher to remain well-informed. His Model of Pedagogical Reasoning and Action begins with comprehension and includes an emphasis on the comprehension of purposes. Shulman stated:

> We engage in teaching to achieve educational purposes, to accomplish ends having to do with student literacy, student freedom to use and enjoy, student responsibility to care and care for, to believe and respect, to inquire and discover, to develop understandings, skills, and values needed to function in a free and just society....Saying that a teacher must first comprehend both content and purposes, however, does not particularly distinguish a teacher from non-teaching peers....The key to distinguishing the knowledge base of teaching lies at the intersection of content and pedagogy, in the capacity of a teacher to transform the content knowledge he or she possesses into forms that are pedagogically powerful and yet adaptive to the variations in ability and background presented by the students. (pp. 14-15)

Robin, Martha, and Carol may have either possessed greater pedagogical and content knowledge which related to their purposes or they were better able to express what they knew.

2. Both during the interviewing process and during instruction, more consistent teachers were more verbal than were the less consistent teachers. The six lesson transcripts of Robin, Carol, and Martha, whose teaching was more consistent with their beliefs, had average lengths of 10, 11, and 19 pages respectively, while Pat's and Adele's transcripts averaged only 6 and 7 pages. Teachers' verbal behaviors may play a significant part in achieving any number of purposes, e.g., the giving of praise to support self-concept development or corrective feedback to support skill development. In spite of differences in the quantity

of the information given as the participants responded to interview questions, it did not appear that the more consistent teachers, as a group, were any more certain of their purposes than were the less consistent teachers. It may be, nonetheless, that that there were differences in the strengths of their beliefs.

The results of Duffy's (1977) study on conceptions of reading suggest that constraints on the teacher's behavior, e.g., mandated curriculum materials, resources, time available, habits, and student abilities, might intervene between theory and action and account for the observed discrepancies between them. It might be true, however, that teachers with stronger beliefs about the purposes they sought to accomplish would be less easily influenced by these mitigating factors.

3. Teachers whose behaviors were more consistent with their purposes displayed greater interest in continued study than did the teachers whose behaviors were less consistent with their purposes. Carol had already completed her master's degree. Robin had taken a number of hours toward the completion of hers. She and Carol both spoke of ways they had been influenced by their graduate classes and frequently talked about the things they were learning. Adele and Pat, on the other hand, seemed to be relucant participants of the graduate class in which they were enrolled and communicated more worry than excitement about it. This may indicate a lack of confidence in their

academic abilities or a reluctance to continue with this type of professional growth. This would influence the depth and breadth of the knowledge base (Shulman, 1987) upon which they were working. Again, the teachers who were less consistent may not have had the knowledge base which would have made their practices more informed.

Pissanos (1989) found that the physical education specialists she interviewed believed that teachers had to want or need professsional growth and feel a real commitment to it before growth could take place. They also believed, however, that personal motivation and commitment were often not enough and that teachers sometimes needed someone to stimulate them into action. It is possible that continued graduate study, which was recommended by the school system's coordinator for physical education, might serve to change the attitudes of Adele and Pat in addition to increasing their knowledge base. Staff development research by Swann, Carnes, and Gilmer (1986) indicated that the longer a teacher was exposed to training, the more positive the attitude, as compared to teachers who had little or no training.

4. The need for class control and structure varied from teacher to teacher and may have played a significant role in determining how time was spent. Teachers whose practices were less consistent with their purposes tended to have a more formal class structure. Adele's classes were

highly structured and children lined up to get out and put away equipment. Doing this one person at a time took away from the amount of time that could have been spent learning skills. Related to class control, Adele rarely allowed the children to talk during class, although she identified social interaction as one of her purposes. Pat did not display quite the same need for control. She used squad lines, but the children in her classes had been taught to use these as a quick means of organizing into groups of various sizes, decreasing the time spent in management. Pat did, however, use group activities which had more structure and which used little or no equipment. Examples were relay races using locomotor skills, parachute activities, and circle and team games. These may have increased her feelings of control of the class. While Robin, Martha, and Carol may have used some of the same measures for providing structure and class control, their classes were on the whole less formal and more individualized. They not only had children working alone or with partners, they interacted more with individual children. Such behaviors have the potential to support the purposes of skill development (Magill, 1980; Placek & Locke, 1986; Schmidt, 1982), self-concept development (Feltz & Weiss, 1982; Pangrazi, 1982; Weiss & Bressan, 1985), and making the children feel loved.

The Demands of Teaching

Although not an observable difference from subject to subject, teachers may have been influenced to varying degrees by the demands of classroom teaching. Even though the teachers in the study were experienced, the physical education setting is dynamic and complex. Paying attention to the safety and behavior of each child, the pacing of the lesson, and various other demands of teaching may have prevented the teachers at times from focusing more directly on practices linked to their purposes. Carol, for example, said she liked using learning centers because she had more time to interact with individual children, yet she actually gave much less skill-related feedback when the children worked in centers. Instead, she spent a great deal of her time reminding children to write down their scores, helping them set up equipment, telling them where to stand, etc., yet she was completely unaware that this was happening. With so many things going on at once, she became absorbed with keeping the class running smoothly and devoted much less of her time to helping children develop the skills they were working on in each center. As Clark and Peterson (1986) have indicated, the teachers' beliefs, theories, and plans do not operate in a vacuum, but are influenced by what takes place in the classroom. What takes place in the classroom may be so powerful that it weakens or even prevents implementation of the teacher's belief system (Kinzer, 1988).

> There are factors that exert perhaps more influence on teacher decision making than theoretical orientation. The social, psychological, and environmental realities of the school and classroom are thought to be so salient as to mitigate or preclude implementation of belief systems in decision making, if such systems exist. (p. 359)

As stated earlier, Duffy (1977) has also identified several factors which may interpose between beliefs and practice. The effect in the present study of such mitigating factors would be to hinder the accomplishment of purposes.

Inconsistencies Within Teachers

While possible explanations have been offered to account for the consistency or lack of consistency between the teachers' beliefs about purpose and their teaching practices, these do not necessarily explain the reasons individual teachers were consistent with regard to some of their purposes but not with regard to others. While some reasons have already been given in the chapters on individual teachers, additional explanations are necessary. Four explanations are offered for consideration:

1. Some beliefs about what children should learn in elementary school physical education may have been stronger than others. For example, Robin's beliefs that children should learn about physical fitness, feel loved, and grow in self-confidence--values that grew out of her childhood, family and church experiences-- may have been stronger than her belief that they should learn physical skills. Although Robin stated that she viewed the four purposes as equal in

importance, no method for assessing their relative strengths was employed. While Duffy's (1977) study determined the strength of teachers' belief systems with regard to their conceptions of reading, it did not attempt to identify stronger and weaker beliefs within a teacher and relate these to practice. The examination of practices in light of the strength of belief systems seems an appropriate and needed area of research.

2. The particular means by which teachers chose to achieve their purposes might have created conflicts. Robin, for example, thought listening to the children helped them feel loved, and she created an atmosphere in which children felt free to talk with her. This was something they often did. Robin said later that the time she spent listening was the reason she did not give more feedback, a practice related to another of her purposes, skill development. Adele said she sometimes let the children play a social game like Duck, Duck, Goose, a practice which she thought would help their social interaction skills but which would do little for skill development. In both cases, the means for accomplishing one purpose served to hinder the achievement of another purpose.

3. Teachers may have had more knowledge about how to accomplish some purposes than they did others. As stated earlier, Shulman (1987) has described the knowledge base for teaching as extensive and identified seven categories of

knowledge he believes represent the minimum of what teachers must know. The areas of content and pedagogical content knowledge alone represent vast amounts of information and abilities. It is likely that teachers will know more about some aspects of teaching than they do others and that this might influence their ability to accomplish given purposes.

4. Teachers may have had purposes they wished to achieve but which were not among the primary purposes of their teaching. Trying to meet these secondary purposes may have inhibited the reaching of primary purposes. On Robin's list of teaching characteristics is that she encourages ethical and moral or character development. Robin sometimes sat the children down to talk about things that may have been unrelated to the lesson but which she thought would help them as people. Once she talked to them about a lady she knew in a nursing home who went around trying to cheer up other people. She conveyed this information because she saw character development as part of teaching the whole child, but she did not identify it as one of her purposes. She said, in fact, "I don't think I give myself enough credit to say that I do that [encourage character development]. I mean, I hope I would help." Yet this stood out in her teaching and certainly replaced time that might otherwise have been spent developing skills or conveying fitness knowledge.

Selection of Content

While the examination of teacher planning was not a focus of this study, discussions with the teachers revealed that the selection of content for their programs was based on the belief that a program should be balanced rather than on the contributions the content might make to the purposes of their programs. Robin indicated that she saw a relationship between content and purposes but could not say which decision came first, the selection of purposes or the selection of content. Studies of planning (Clark & Yinger, 1979; Morine-Dershimer, 1977; Peterson et al., 1978; Taylor, 1970; Zahorik, 1975) have shown that teachers do not begin their planning by specifying objectives as was suggested in the Tyler (1950) model. Macdonald's (1965) integrated ends-means model in which objectives arise from the activity may be closer to what Robin and the other teachers in the study actually practiced, as their planning books typically revealed only a listing of the skills, tasks, or activities to be practiced each day.

Carol indicated that she wanted the children to have a well-rounded program and hoped that all three of her purposes were being enhanced through the variety of activities her program offered. As mentioned earlier, when Carol was asked if selecting activities to enhance her purposes was a conscious process, she replied, "I don't think I think about it." Shulman (1987) has emphasized that teaching material

must be scrutinized in light of the teacher's understanding of the subject matter and purposes and that the teacher must ask whether it is "fit to be taught" (p. 16). If Carol and Robin did this, it would seem that it was not a conscious process.

Reflective Teaching

While the reasons for inconsistencies between the teachers' purposes and their teaching practices seem to be complex, "not thinking about it" may be the single most important factor the teachers, with the possible exception of Robin, had in common. Their difficulty in identifying both purposes and practices leads to this conclusion.

Schon (1983) has said that teachers may improve their teaching through reflection-in-action, i.e., thinking about what they are doing while they are doing it, and reflection-on-action, thinking and deliberating after teaching. Kilbourn (1988) has emphasized that, because most teachers work in relative isolation and thus without the input of others to stimulate their thinking, reflection-on-action is especially important and is the avenue for improving reflection-in-action. Teachers in physical education report feeling especially isolated (Pissanos, 1989) and may find reflection-on-action to be particularly beneficial. Thinking about what took place in their teaching may have helped the teachers in this study to select content and interactive behaviors that were more in keeping with the

purposes they were trying to achieve.

The impact of reflection on the behavior of teachers has implications for both the teacher education programs of colleges and universities and the school districts providing inservice training to teachers. Zeichner (1983) and Griffey and Podemski (1990) have pointed out that teacher education programs are based on particular orientations or paridigms which view and prepare their prospective teachers differently. Not all orientations view the teacher as a reflective practitioner (Griffey and Podemski's term) or inquiry-oriented teacher (Zeichner's term). While other orientations may emphasize the development of technical skills, theoretical and empirical knowledge, or other teaching competencies, programs that are inquiry-oriented seek to prepare teachers who think deliberately about their teaching. Shulman (1987) has described reflection in terms of its process and content.

> This is what a teacher does when he or she looks back at the teaching and learning that has occurred, and reconstructs, reenacts, and/or recaptures the events, the emotions, and the accomplishments. It is that set of processes through which a professional learns from experience....Central to this process will be a review of the teaching in comparison to the ends that were sought. (p. 19)

Several programs which attempt to prepare teachers to think in this way have been described in the literature, most notably with regard to the student teaching process (Bolin, 1988; Bolin, 1990; Mayer & Goldsberry, 1987; Zeichner & Liston, 1987). Zeichner and Liston have indicated that

reflective teaching is the central goal of the curriculum at the University of Wisconsin, Madison and have described an "inquiry environment" that "elicits and rewards initiative and critical thought at all levels" and which "provides students with opportunities for independent decisionmaking with regard to their education and teaching" (p. 28). As a result of their research on the beliefs-practice relationship in student teachers, Mayer and Goldsberry (1987) concluded that reflection was an important component of teacher education courses.

> Focusing on beliefs during their preservice experience might have contributed to the firmness with which they [student teachers] held onto their beliefs and used them to guide their practice. It might also explain why the two teachers did not become more custodial. There is support here for incorporating such reflection into teacher education courses....Beliefs seem to play an important role in the preservice teacher's development. This research suggests that greater care needs to be payed to the development of beliefs and beliefs/practice relationships throughout the teacher education process. (pp. 33-36)

Because of differences in the way teachers are prepared, practitioners may or may not have the orientation and skills which would lead them to reflect in meaningful ways on their beliefs and teaching practices. For this reason, inservice training may be an important means of developing knowledge and skill in reflection. Because inservice training is usually of shorter duration, however, it is less likely to have an impact on teachers.

Oberg (1986), who use construct theory as the framework for her case study research on teachers' professional

development, asserted that "one approach to the improvement of practice is for professionals to reflect critically on their own professional actions and beliefs" (p. 55). She concluded that "the teacher who once begins to view her practice critically is likely to persist in a search for ways of improving" (p. 64). One key to improved teaching thus seems to be guiding teachers to reflect on their beliefs and practices.

As the teachers in this study appeared to be both intelligent and hard-working, it would seem that having the time and developing the skill of reflection-on-action (Schon, 1983) would significantly impact on the beliefs-practice relationships of their teaching. Thinking reflectively about what they want children to learn and how they want them to learn it would lead teachers to examine behaviors that may not have been examined for some time, if at all. It might also lead them to weigh new information and make wise decisions about what to incorporate into their teaching, decisions which would be consistent with their purposes and beliefs.

While reflection is not identified by name in Clark and Peterson's (1986) model, teacher planning includes the two categories of preactive and postactive thoughts, which are described by the authors to include reflection.

> Teacher planning includes the thought processes that teachers engage in prior to classroom interaction but also includes the thought processes or reflections that they engage in after classroom interaction that then

> guide their thinking and projections for future classroom interaction. For example, teacher planning includes the reflection that the teacher has at 3:30 p.m. at the end of a given day that then cause the teacher to plan a certain activity for the class for 8:30 a.m. the next morning. Thus, because the teaching process is a cyclical one the distinction between preactive and postactive thoughts has become blurred. (p. 258)

Because teachers' theories and beliefs affect their planning and their interactive decisions and thoughts (Clark & Peterson, 1986), and because reflection serves to strengthen beliefs (Dewey, 1933), influences planning, and leads to examination of practices, the beliefs-practice relationship, including the relationship of beliefs about purpose to teaching practices, would seemingly be strengthened through the process of reflection.

# CHAPTER X

# SUMMARY AND REFLECTIONS

## Summary

### Purpose of the Study

The purpose of this inquiry was to discover how beliefs about the purposes of teaching were reflected in the actual practices of elementary school physical education specialists. Specifically, answers to the following questions were sought:

1. What do elementary school physical education specialists perceive to be the primary purposes of their teaching?

2. In what ways and to what extent are the perceived purposes of teaching physical education reflected in interactive teaching behaviors?

### Review of Literature

Three bodies of literature provided important background information for this study: (a) the purposes of physical education in general and elementary school physical education in particular in the United States during the period from 1880 to 1987; (b) the purposes of elementary school physical education from 1957 to 1987, as identified through a review of textbooks in the field; and (c) the literature linking teachers' thoughts and beliefs to

teaching practices.

Studies of the purposes of physical education in the United States revealed that the early emphasis on the health of the body developed into a more sophisticated and informed concept of physical fitness. The advent of the Progressive Era in education brought with it a focus on social-educational purposes and the belief that physical education could contribute to all of the major goals of education (Hess, 1959; Lynn, 1944; Umstead, 1985). As the content of physical education programs shifted from gymnastics and exercise to games and sports, skill development also became a major concern. Rosentsweig's 1969 study of college physical educators identified organic vigor and neuro-muscular skills as their first and second priorities. Studies in the 1980's have emphasized skill development, physical fitness, and self-concept development (Goc-Karp, Kim, & Skinner, 1985; Laflin & Johnson, 1987). The investigator's review of elementary school physical education textbooks identified as the top five purposes: (a) skill development, (b) social attributes, (c) physical fitness, (d) recreational skills, and (e) self-concept.

Research on teachers' thoughts and actions has been conceptualized through a model developed by Clark and Peterson (1986). Their model identifies reciprocal relationships existing between two domains of teaching: teachers' thought process and teachers' actions and

observable effects. Within each of these two domains of teaching, reciprocal relationships exist among their components, i.e., there are interacting effects among teachers' (a) theories and beliefs, (b) planning, and (c) interactive thoughts and decisions, and among (a) teachers' classroom behaviors, (b) students' classroom behaviors, and (c) student achievement. Few studies have attempted to examine the relationship between teachers' beliefs and their interactive teaching behaviors. One that did was Duffy's (1977) study of teachers' conceptions of reading. He found that, of eight teachers who evidenced strong belief patterns, only four consistently employed practices which directly reflected their beliefs.

Research Methods

Answering the questions posed in this study necessitated understanding teaching from the perspectives of the participants. Therefore, the interpretive research paragigm was selected as the framework for the research methodology (Bogdan & Biklen, 1982; Burgess, 1984; Lincoln & Guba, 1985; Patton, 1980). Participants of the study were elementary school physical education teachers, each of whom taught in one-day-a-week programs in the same school system. Sources of data used in the study were (a) field notes, (b) reflection papers, (c) transcripts of lessons, and (d) interviews. After teachers were observed for a period of five days, each was interviewed to determine the primary

purposes of her teaching and the means by which she sought to achieve those purposes. The teachers' actual practices were compared to their stated purposes and means and interpreted in light of relevant scholarly literature.

Findings

The teachers' beliefs about the purposes of elementary school physical education reflected some common thinking yet remained highly individualized. The two most frequently named purposes by the authors of elementary school physical education textbooks--skill development and social development--were also those most frequently named by the teachers in the study. Two teachers, however, did not identify skill development as a purpose, although it was listed as such by all of the textbooks reviewed. Several of the purposes were identified by only one teacher, reflecting the idiosyncratic nature of their beliefs in spite of their professional preparation in the same field of study.

Teachers named from two to four primary purposes for their teaching but had difficulty in identifying both the purposes of their teaching and the means by which they sought to achieve those purposes. Only one teacher, Robin, seemed to have given enough thought to her teaching that she was immediately able to identify purposes.

The five teachers identified 15 purposes (8 different purposes) for their teaching. They were consistent in practicing 7 of these, inconsistent in practicing 5, and 3

were placed into a questionable category. Robin (who was consistent with 3 purposes and inconsistent with 1), Martha (consistent with 2 purposes and questionable on 1), and Carol (consistent with 2 purposes and questionable on 1) were found to be more consistent in carrying out practices which reflected their purposes. Adele (inconsistent in carrying out 2 purposes) and Pat (inconsistent in carrying out 2 purposes and questionable on 1) were found to be less consistent in matching their teaching behaviors to their purposes. Differences between more consistent and less consistent teachers were identified:

1. Teachers whose practices were more consistent with their purposes were able to identify a greater number of means and more relevant means for achieving their purposes than were teachers who were less consistent.

2. Teachers whose practices were more consistent with their purposes were more verbal both during the interviewing process and during instruction than were the less consistent teachers.

3. Teachers whose practices were more consistent with their purposes displayed greater interest in continued study that did teachers who were less consistent.

4. Teachers whose practices were more consistent with their teaching used less formal class structures than did teachers who were less consistent.

While any or all of the differences cited may help to explain why some teachers behaved in ways that were more consistent with their beliefs about the purposes of children's physical education, it must be noted that no teacher was able to carry out practices consistent with all of her purposes. This may be due to a lack of reflection on their teaching (Kilbourn, 1988; Schon, 1983). Thinking reflectively about what they wanted children to learn and how they wanted them to learn it may have helped teachers to select content and interactive behaviors which were more consistent with the purposes of their teaching.

## Reflections

One of the conclusions I reached as a result of talking with and observing the five elementary school physical education teachers, analyzing the beliefs-practice relationship that existed in their teaching, and studying the related literature is that reflection is a valuable and probably necessary teaching skill. Its absence may lead to the development of habitual teaching behaviors and content selection which offer little support to the purposes of one's program. Its presence may lead to the strengthening of beliefs and the examination of practices in light of intended outcomes. As a teacher educator, this will serve me well in my own teaching. As the investigator in this study, it has caused me to think very carefully about the research process, the plight of teachers in the schools, and

the professional preparation of teachers.

The Research Process

Doing interpretive research is a lengthy endeavor. The process of observation lasted nine weeks and was followed by initial interviewing, additional data analysis, and follow-up interviewing, in total nearly a four-month process. The results could be seen in approximately 1,000 pages of verbal data. Still the information does not seem complete. To understand well the five teachers' beliefs about the purposes of their teaching, how those beliefs were formed and why they were valued, to understand the meanings of the terms teachers used as they talked about purposes and practices and their perceptions of the relationships between their pratices and intended outcomes, and to understand additionally those factors that were mitigating factors in achieving purposes would have required much more extensive study. I gathered what seemed to me overwhelming amounts of data, only to find that there was so much more I still needed to know.

There are several ways this research study could be extended to provide additional information. Teachers could be administered an instrument to assess the strength of their beliefs, a factor seemingly worthy of pursuit. Most valuable, I believe, would be continued interviewing with two of the teachers, one who was fairly consistent in matching her teaching behaviors with the purposes she wished

to achieve and one who was less consistent. Sharing the complete results with the teachers and talking with them at great length about their conclusions as to the reasons for consistency and inconsistency would surely be beneficial. It is true that teachers had an opportunity to discuss this after a preliminary analysis of the data, but doing so at that time required that they address the issues without first giving them the opportunity to reflect on them, a practice I now know to be crucial.

The Plight of Teachers

One of the benefits of observing teaching over the nine-week period was being reminded of the great demands placed on teachers in elementary school physical education. I was surprised at the difficulty teachers had in identifying the purposes of their programs, especially the four teachers who seemed to be thinking about it as if for the first time. Upon reflection, I realize that I should have expected such difficulty. The teachers worked under conditions that were not at all conducive to reflection. They had virtually no one with whom to share their teaching experiences, as each taught alone, and they had little time in which to reflect. The teachers often taught eight or nine classes a day and sometimes had breakfast, lunch, or bus duty. Some teachers were in two different schools on given days. The schedule was often such that teachers had no time between classes, i.e., one class entered the gym as another left, or they had

five minutes between classes. Such teaching conditions are not conducive to what Schon (1983) calls reflection-on-action.

Reflective teaching is an emerging trend in professional preparation programs at this time. It is not likely to have been a part of the preparation of these teachers who had been out of school for a number of years. By the teachers' own admission, inservice meetings served to provide them with ideas for activities. The teachers in this study were thus probably without the skills and knowledge necessary for reflection and, again, had little time in which to practice it.

As a result of working with the teachers in this study, my respect for teachers in elementary school physical education, and in particular for the five teachers with whom I worked, has grown immensely. All were hard-working teachers who apparently cared a great deal about children and who persisted in their work in spite of the demands placed on them. Knowing this made it all the more difficult for me to accept that their purposes were often not being realized. They worked very hard doing things that were often unproductive in terms of accomplishing the purposes that were identified as most important in their teaching. The most apt description I can think of is that they were at times "going through the motions".

The Preparation of Teachers

As a teacher educator, it is becoming increasingly clear to me that preparing people to teach must include the examination of and reflection on what individuals believe and value. It must also include thoughtful discussion of the purposes of physical education teaching. One surprising finding in this study was that, while all 43 of the elementary school physical education textbooks identified skill development as a purpose, two of the five teachers did not. Also, as stated earlier, four of the five teachers had difficulty in identifying their purposes and communicated sometimes very directly that they had not given the subject a great deal of thought. Most had similar difficulty in clarifying what they meant once a purpose was identified.

Professional preparation programs, especially through methods classes and the student teaching process, can do much to equip the teacher to strengthen and better articulate beliefs and to examine the purposes of physical education. The program can provide direction in selecting important purposes as well as the knowledge and skills necessary to achieve those purposes. Finally, the program can emphasize the importance of examining one's teaching in light of beliefs and intended outcomes.

Valuable in the process of examining beliefs and learning to reflect are keeping a journal and writing reflection papers. Students can also be asked to write

about and discuss their beliefs about purposes, evaluation, discipline, and other critical concerns of teaching. They can be asked repeatedly in pre-student-teaching and student-teaching experiences to talk about their teaching practices in light of their beliefs and intended outcomes. This is done in concert with the development of technical skills necessary for teaching. Perhaps in this way teachers will develop the knowledge and skills necessary for achieving those outcomes they believe most important for children to learn.

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# Appendix A

## Letter to Coordinator

M E M O R A N D U M

TO: _____
Coordinator of Physical Education
_____ Schools

FROM: Ellen L. Roberts, Doctoral Candidate
Physical Education
University of North Carolina at Greensboro

RE: Request for Permission to Conduct a Study

DATE: May 19, 1986

Enclosed are materials relevant to a study I would like to conduct in the _____ Schools in the fall of 1986. You might want to give close attention to the letter to prospective participants in the study, as it discusses my procedures. I think you will find that my data can be collected with minimal interruption to the teaching process. I need only five subjects, elementary school physical education teachers, and would observe and take field notes on each for five days. I would like to audiotape the teacher in five to seven classes. The recorder is small and can be concealed fairly easily. Two, one-hour interviews would be conducted after school at the teachers' convenience.

Thank you for considering this request for permission to conduct my dissertation study in the _____ Schools. As I am employed out-of-state during the summer months, I would appreciate your notifying me of your decision at the following address: Saddle Rock Camp, P.O. Box 299, Mentone, AL, 35984. If you have any questions about the study, you may contact me there after June 1 at (205) 634-4608.

# Appendix B

## Letter to Teachers

Dear _____:

The purpose of this letter is to explain my study and to clarify your rights as a participant.

I am interested in observing, understanding and describing various aspects in the day-to-day life of an elementary school physical education teacher. I would like, therefore, to observe you for a five-day period as you teach your classes. I would observe three days on the same day of the week for three weeks and return for the remaining two days approximately two weeks later. I would like to audio-tape one lesson at each grade level. The tape recorder is small and could be slipped into your pocket or attached to a belt. The remote microphone would be clipped on at or near the collar. I will not interfere in any way with your teaching duties but would like to be able to ask occasional brief questions during non-teaching time in order to help me understand what you are doing and thinking.

Some of your activities are of greater interest to me than others. However, I feel that if you know specifically which aspects of your teaching I am most interested in, you might unconsciously alter your behavior. Thus, I am asking you to allow me to observe while you know just the general intent of my study, not the specific details. At the end of the five days of observation, I would like to interview you for approximately one hour. At that time the specific focus of the study will be made clear. A follow-up interview will be conducted after my data have undergone preliminary analysis, and we will have time to discuss my observations in some detail. With your permission, I will tape record both interviews.

Every attempt will be made to keep your responses confidential and to preserve complete anonymity at all stages of the research project. For example, tapes will be transcribed by me or by someone who does not know you. No actual names will be used in the transcripts; code numbers or pseudonyms known only to me will be used instead. You and your school will not be identified by name in any oral or written report. Upon completion of the entire study, I will be happy to provide you with a written summary of the results of the project.

It is my hope that through research of this type teacher educators will gain a better understanding of physical education teaching. If teachers at the college level can understand the "real world" of the teachers in public schools, they may be better able to provide prospective teachers with realistic training.

You have the right to withdraw your consent and discontinue participation in the study at any time. Thank you for agreeing to be a participant.

Sincerely,

Ellen L. Roberts
1835-C Merritt Drive
Greensboro, NC 27407
852-2340

# Appendix C

## Informed Consent Form

INFORMED CONSENT

THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
SCHOOL OF HEALTH, PHYSICAL EDUCATION & RECREATION

SCHOOL REVIEW COMMITTEE

INFORMED CONSENT FORM*

I understand that the purpose of this study/project is

to observe, understand, and describe various aspects of the day-to-day lives of elementary school physical education teachers

I confirm that my participation is entirely voluntary. No coercion of any kind has been used to obtain my cooperation.

I understand that I may withdraw my consent and terminate my participation at any time during the project.

I have been informed of the procedures that will be used in the project and understand what will be required of me as a subject.

I understand that all of my responses, written/oral/task, will remain completely anonymous.

I understand that a summary of the results of the project will be made available to me at the completion of the study if I so request.

I wish to give my voluntary cooperation as a participant.

_____
Signature

_____
Address

_____

_____
Date

*Adopted from L.F. Locke and W.W. Spirduso. Proposals that work. New York: Teachers College, Columbia University, 1976, p. 237.

Approved 3/78

# Appendix D

## Observation Form

# OBSERVATION FORM

Teacher:_____ Date:_____ Time:_____

Grade:_____ #Students:_____ Length of class:_____

Physical Setting:

_____

Lesson Content:

_____

Organization:

_____

Methods:

_____

Behavior Management:

_____

Personal qualities of teacher:

_____

Reflections:

# Appendix E

## Post-Observation Interview Schedule

# POST-OBSERVATION INTERVIEW SCHEDULE

1. Content of Program for the Year:

Do you think of what you teach in units?

Could you identify for me as many units as possible that you are teaching this year? Please let me know when some are for certain grades only.

How much does what you teach change from year to year? Is the program content you just descibed pretty much what you teach each year?

2. Resources

What books, if any, do you use as resource books?

How much do you use the system's curriculum guides--or would you say those are provided largely for classroom teachers?

3. Individualized Questions:

I am going to ask you some questions about things you did or did not do in your teaching. Please do not assume that I am challenging you. I am trying to under- your thinking. For example, if I asked: "Why did you have your children working with partners?" you might have several possible answers:

1 - Social development is important
2 - Skill can be practiced better with 2 people
3 - Only have 1 ball for every 2 people
4 - Moving them toward a game
5 - The children don't work well on their own

(Continue with questions specific to each teacher.)

*****

A large part of the purpose of this study and the interview is for me to understand as much as possible about your teaching from your perspective--how you teach and why you teach the way you do.

4. Undergraduate Program:

Can you look back and think of anything that was communicated to you in your undergraduate physical education program that strongly influenced the way you teach?

Were there any strong influences or beliefs communicated to you in your master's program that might influence the way you teach?

Have inservice programs by the school system influenced your teaching? If so, how?

Can you tell me why you wanted to teach physical education?

Did you especially want to teach at the elementary level? If so, why?

5. Program Description

How would you describe your program and teaching to another teacher, for instance from outside the state? What would you say about what you teach and how you teach to give that person a fairly accurate picture of your program?

How would you describe your program in relation to other programs in the area? How might it differ? In what ways might it be similar?

6. Primary Purposes

What do you most try to accomplish in your program? What do you most want your children to learn?

Can you explain a little more about what you mean by _____?

Can you tell me why _____ is so important to you? Do you know who or what influenced you to feel that way?

7. Practices

What specific things do you try to do in your teaching to accomplish _____? Are there things you choose to teach, things you say, or methods you use to help bring about _____?

Can you think of anything else you might do to achieve that purpose?

8. Additional Purposes and Practices

Are there other things you might be trying to accomplish that you would also say are very important for your children to learn?

Can you tell me why that is important? Do you know who or what influenced you to feel that way?

Are there specific things you do to try to accomplish _____?

(Make sure of priorities if several things are named.)

9. Goal Statements

Would the goal statements you turned in to your principal this year be the same of different from the things you have just named? Can you tell me how you stated those?

10. Additional Responses

Can you think of anything you might want to add that pertains to what you are trying to accomplish with your children and how you try to do that?

*****
Please use the self-addressed stamped envelope or telephone number provided if, in the next week, you think of anything to add to what has been said today.

*****
Please do not discuss this interview with the other subjects in this study. Some are still being observed.

# Appendix F

## Characteristic Teaching Behaviors

Characteristics of Robin's Teaching

--The teacher often speaks to children individually as they come into and/or leave the gym.

--The teacher frequently hugs children as they come into and/or leave the gym.

--The children sit in a circle at the start of class.

--The teacher reviews what was done in class last time, if it relates.

--The teacher tells the children what they will be doing that day.

--The teacher gives basic information on how to do a skill (when skills are done individually, with partners, or in centers).

--The teacher repeats basic information about the skill several times during the class (when skills are done individually or with partners).

--The teacher often praises good behavior.

--The teacher often calls the children by name.

--The teacher chooses children who sit quietly, listen, etc.

--The teacher sometimes provides fitness-related knowledge (often with warm-ups).

--The teacher frequently listens to and interacts with children.

--Children who misbehave are warned, have their names taken, or sit out.

--Children who sit out do so for a short period of time.

--The teacher talks with children who have to sit out.

--The teacher moves around the room to individuals or groups (when children work individually, in partners, or in centers).

--The teacher frequently says "please" and "thank you".

--The teacher encourages children to say "good try", encourage one another, and not laugh at others.

--The teacher encourages ethical and moral or character development.

--The teacher emphasizes that physical education is for work, not play.

--The teacher has the children line up to leave the gym.

--The teacher makes general comments at the end of class about class behavior or work and records or has children record checks, etc.

Characteristics of Martha's Teaching

--The children come into the gym and sit in two rows on the stage steps or gym floor.

--Equipment is spread out on one side of the room.

--The teacher identifies one bone or muscle for the children to learn.

--The teacher gives information about the bone or muscle.

--The children touch the bone or muscle and in unison say its name.

--The teacher touches (on herself or a skeleton) bones or muscles learned previously, and the children name them.

--The teacher tells or asks what was done in the previous lesson.

--The teacher tells the children what will be done that day.

--The teacher asks questions and presents information on concepts related to the content of the lesson.

--Questions frequently involve learning the movement vocabulary (Laban), identifying elements or qualities of movement, or solving movement problems.

--The children are sent by rows and sexes to find personal space and/or get equipment.

--The teacher gives a thorough explanation of the task.

--The teacher cues the children and makes suggestions as they move.

--The teacher often calls the children by name.

--Children who misbehave in class may have to apologize, stand and face the wall, or (for repeated offenses) write 25 sentences.

--The teacher circulates to individual children or groups.

--Skill movement time is very limited.

--When the children work on skills, the teacher gives a great deal of skill-related feedback.

--Children most often work individually but may also work in pairs or in small groups.

--The teacher frequently stops the class during practice on a task or takes time between tasks to ask questions or make comments to develop skill or to promote a cognitive understanding of the content.

--The teacher calls the children into a group at the end of the lesson and asks questions related to the content of the lesson.

--The children line up to leave the gym.

--The teacher often touches the children individually as they leave and has them name the bone or muscle of the week.

Characteristics of Adele's Teaching

--Equipment is placed beforehand on the edge of the stage or stage steps.

--Children stand on a line after they enter the gym.

--The teacher says "Good morning (or good afternoon), boys and girls."

--The teacher tells the children what they will do that day.

--The children turn and face counterclockwise.

--The teacher tells the children not to talk, push, or pass when they run.

--The children run 2 laps around the gym floor.

--The children do calisthenics, jump rope, or exercise to music.

--The teacher leads the exercises and counts while the children do them.

--The teacher demonstrates getting out and/or putting away equipment and finding personal space.

--A child demonstrates getting out and/or putting away equipment and finding personal space.

--When children work individually or in pairs, the teacher demonstrates and explains the skill several times during class.

--When children play games, the teacher explains the game and sometimes demonstrates what the children will do.

--When children work individually or in pairs, the teacher frequently has a child demonstrate a skill.

--Children choose partners by looking at someone who looks at them; they come and stand together without touching or talking.

--When children are off task or cause disciplinary problems, they repeat the task, are given a verbal reprimand, or sit out.

--Children who sit out do so for the rest of the class period.

--The teacher circulates to individual children or groups during the class.

--Children are assigned to teams.

--Direct teaching styles are used most often (command is used frequently).

--Children line up to get out and put away equipment.

--The teacher often praises good behavior.

--Children are referred to as "young ladies" and "young men".

--The teacher describes games, songs, and records as "fun".

--In modified or actual games, children give themselves points for or count successful attempts.

--In games, teams lose points for yelling, cheering.

--In games, children lose points for not following correct procedures (going through the wrong space, etc.) or rules.

--The teacher sometimes ends class with a song and simple exercise ("open and shut").

Characteristics of Carol's Teaching

--Equipment is out on the floor before the start of class.

--The teacher speaks to a few children individually and gives them a chance to say something at the beginning of class.

--The children start class sitting in line on a stage step.

--The teacher tells the children what they will be doing that day.

--The teacher and/or children demonstrate new skills or activities.

--The children choose their own partners.

--The teacher identifies one or two key elements of a skill.

--The teacher explains the rules and procedures of games/ activities.

--The teacher circulates to individual children or groups.

--The teacher interacts with many children individually during the class period.

--The teacher frequently touches a child when speaking to him/her individually.

--The teacher often praises behavior and/or performance.

--Children who misbehave are generally reprimanded verbally first and for repeated problems may have to sit out.

--Children who sit out generally do so for a part of the class period.

--The teacher reprimands children without harshness or an increase in the volume of her voice.

--The teacher most often has the children work individually, with partners, or in centers.

--Children practice skills individually or in pairs before using them in group or game play.

--The teacher sometimes plays with the children during class.

--The teacher frequently visually scans the class.

--The teacher frequently interjects a child's name when talking to the whole class.

--The teacher emphasizes cooperation/getting along in game play.

--The teacher frequently gives the children choices (Two-Square/Four Square; keep score or not keep score; let the ball bounce once or twice, etc.).

--The teacher comments at the end of class on the general behavior/cooperation of the class and gives points for cooperation and lining up.

--The teacher has children line up to leave the gym.

Characteristics of Pat's Teaching

--Before class, equipment is placed either out on the floor where it will be used or off to one side.

--Younger children generally enter the gym and sit in line.

--Older children generally enter the gym and stand in squad lines.

--The teacher often goes over the children's names.

--The teacher asks the name of a child when she does not know it.

--The teacher frequently calls the children by name during class.

--The teacher frequently listens to things the children have to say at the beginning of class.

--The teacher (at one school) has the children learn the name of one muscle or bone a week; she quickly teaches this and reviews.

--The teacher has designated squad leaders (older classes) who assist with things like distributing equipment.

--The teacher demonstrates and explains the skill.

--The teacher often follows a pattern of having the children (a) watch while she demonstrates, (b) try it with her, and (c) practice on their own.

--The teacher circulates to individual children or groups

--The teacher sometimes observes with little interaction (centers).

--Feedback by the teacher is usually in the form of simple praise; verbal feedback with information about the skill is limited.

--The teacher frequently provides visual information or feedback.

--The teacher cues the children through dance/rhythms work.

--The teacher explains the rules and procedures of games.

--The teacher identifies safety precautions in games/ activities.

--The teacher sometimes tells the children that the skill or activity is difficult.

--The teacher apologizes to the children when her directions are unclear.

--The teacher has the children help put away equipment.

--The teacher has the children line up to leave the gym.

--The teacher sometimes stamps the children's hands or gives the class a Happy Gram.