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THE TEACHING OF SKILLS FOR THE OBSERVATION OF
MOVEMENT: INQUIRY INTO A MODEL

by

Ann Harrell Craft

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of the Requirements for the Degree
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Approved by

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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.

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The purpose of this study was to inquire into a feasible model for teaching undergraduate physical education majors to observe movement using the Body, Space, Effort, and Relationships framework. A workshop was conducted as the setting for the inquiry into the model.

The model was composed of three interrelated elements: the observer, the movement framework, and the environment. The element of the model which focused on the observer included three concepts. The first concept was that of the observer developing awareness. The second concept was concerned with the observer's ability to concentrate and to hold his/her focus while observing. The third concept was recognition of personal biases, on the part of the observer, during observation. The second element of the model, the movement framework, was adapted from Laban's work. The movement framework consisted of four components: Body awareness, Space awareness, Effort, and Relationships. The third element of the model focused on the environment. This element had two phases; one was concerned with the types of experiences used and the second was concerned with the structuring of the experiences. The two types of experiences used were simulated observation and actual movement experiences. The structuring of the experiences was based on four concepts

of learning to observe movement. The concepts were: reduced complexities, additive process, unity, and practice.

The inquiry into the model was conducted in a workshop environment. The workshop was composed of ten sessions of one and one-half hours each during a period of four weeks. The ten participants were undergraduate physical education majors who volunteered for this study. In the workshop, the movement framework was introduced to the participants and they were taught to apply it to their observations of simulated and actual movement experiences.

Data were collected using five techniques: participants' logs, instructor's log, audio tapes, application tapes, and an outside evaluator. The data collected were subjectively analyzed by the investigator. Based on this analysis, the following insights were gained. The model was found to be a functional means for building observational skills. The concepts and practices within the model could be introduced into teacher preparation curricula; however, alterations and modifications of the model may make the introduction more successful. The data indicated that the model had some impact on the participants' attitudes toward observation in the teaching of physical education. The difficulties encountered in teaching undergraduate physical education majors to observe movement, using the BSER framework, are related to helping the participants to: recognize their personal biases, understand the importance of observing

movement as a skill in teaching, and recognize the difference between observing movement and analyzing specific sport skills. Another difficulty was knowing what the participants were seeing as they were learning to observe. The use of a variety of recording techniques could help to alleviate this problem.

ACKNOWLEDGMENTS

Far away there in the sunshine
are my highest aspirations. I may
not reach them, but I can look up
and see their beauty, believe in them,
and try to follow where they lead.

Louisa May Alcott

With the assistance of many people, the completion of this study was realized. I gratefully acknowledge my adviser, Dr. Kate Barrett, for her probing questions and continuous support from the conception of the idea to the completion of the study. A special thanks to Dr. David Purpel, whose encouragement and suggestions were instrumental in the development of the idea for this research. I extend my appreciation to the remaining members of my committee, Dr. Hugh Hagaman, Dr. Gail Hennis, and Dr. Rosemary McGee, for allowing me to try something a little different.

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CHAPTER I

INTRODUCTION AND BACKGROUND

INTRODUCTION

The use of direct observation has contributed to discoveries ranging from micro-organisms to galaxies. Observation has been recognized and used as an important aspect of numerous professions. Artists learn to observe the subtleties of color and shape. Doctors are trained to observe various symptoms in order to diagnose diseases. Writers and actors use their observational abilities in developing their characters and roles.

Observation has also been recognized as important in education. The importance of the teacher's ability to observe is supported in the literature. Several authorities believe the ability to observe cues given by students to be an important step toward becoming an effective teacher. When used in education, observation basically serves two purposes. The most common use of observation is for the purpose of studying about teaching. There is much research which relates to the use of observation in studying teacher behavior. Learning about teaching, by observing teacher behavior, seems to be an area of emphasis in many teacher preparation programs. The second use of observation

in education is for the purpose of seeing the responses of learners during the teaching/learning process. This purpose has not been the focus of research as often as the first purpose discussed. The teacher's ability to observe the learner is not emphasized in most teacher preparation programs.

Physical educators have talked and written about the importance of observation in teaching. As in education, the emphasis on observation in physical education has been on observing teacher behavior. Observation, as a skill used by the teacher to see the learner's responses, has not been explored in physical education (Nixon and Locke, 1973). Most often, observation in physical education tends to connote analysis of skill, that is the ability to separate the component parts in order to determine their relationships. Teacher preparation programs in physical education devote part of their curricula to teaching pre-service teachers to analyze and teach specific sport skills. This is not intended to minimize the importance of a physical education teacher's ability to analyze skill, but I believe this to be different than observing the movement responses of the learner. To observe the learner's responses, in physical education, the teacher must be able to see the movements as they actually occur. Before the teacher can analyze a skill executed by a learner and use

the information to help that learner, the teacher must be able to see the movements the learner is making. Learning to observe movement, as discussed here, is seldom a part of the physical education curriculum. We seem to assume that the pre-service teachers automatically acquire the ability to observe, actually see, what the mover is doing. I believe this to be a fallacy in our teacher preparation programs and one that should be corrected.

It is my belief that teacher preparation programs in physical education could better prepare their majors by teaching them to observe, to see through carefully directed attention, the totality of movement. This belief fostered the idea for this study which is concerned with the task of teaching undergraduate physical education majors how to observe the totality of movement. The purpose of the study is to inquire into a feasible model for teaching physical education majors to observe the totality of movement and to conduct a workshop as part of the inquiry.

The model used in this study consists of three interrelated elements: the observer, the movement framework, and the environment. Each of these three elements is interrelated to form a building process. The result of the building process is the development of the observer's ability to observe movement.

As an inquiry into the teaching of observation, new questions and concerns raised through the implementation of the model are considered as important to this study as specific answers. Also of importance, is the possibility that this research will help to emphasize the importance of teaching prospective teachers of physical education to observe movement. Acceptance of the importance of observation of movement may lead to the inclusion of the teaching of observation in more professional preparation curricula.

SELECTED USES OF OBSERVATION IN RESEARCH

Some sciences such as astronomy, earth sciences, natural history, disciplines in biology, anthropology, and sociology have used direct observation as a primary method of research. The results may have not been revolutionary, but over the long run they have made substantial contributions to progress in science. Observational methods have helped in the identification of new problems, the anticipation of needs for theories, and in testing theories when experimental arrangements were difficult or impossible (Wright, 1960).

In education, observation has been utilized in several ways. Four uses of direct observation, as suggested by Boyer, Simon, and Karafin (1973, v.1:20), are for teacher training, the evaluation of programs or

practices, experimental research, and descriptive research. Boyer, Simon, and Karafin (1970, v.1:20) described the use of observation in teacher training, as feedback to enable a person to view his/her own behaviors objectively. This feedback provides an opportunity for behavior change. As a means of evaluating programs and practices, they see observation as a way to collect data against specified criterion measures. Boyer, Simon, and Karafin (1970, v.1:20) described experimental research as research with standardized and specific conditions and with the categories reflecting the specific variables under observation. The same authors view descriptive research as having few prescribed conditions and the observer records what occurs during a particular time period. The four suggested uses of direct observation are represented in the research areas of child behavior and student/teacher behavior. Examples of the four uses in these areas of research are included in the anthologies by Boyer, Simon, and Karafin (1973), and Simon and Boyer (1970).

Child Behavior

Wright (1960:71) said:

The simplest way to study child behavior is to get within seeing and hearing range, observe, record, score, classify, summarize, freely interpret, and do something with the recorded information.

His belief is supported by the fact that since 1809

ninety-four percent of the studies of preschoolers (children under six) have used direct observation as a research method. As the child gets older, direct observation has been used less; eleven percent of the studies of children ages six to twelve years and only three percent of studies involving children thirteen to nineteen years have used direct observation (Wright, 1960:75). This form of observation has been a popular method for child study because it lends itself to a spontaneous and ongoing study of child behavior in a setting of everyday life. The method is considered direct because there is no planned arrangement between observer and subject(s) and recording follows closely to the observation (Wright, 1960:71).

Wright (1960:78) described four aims of research in observational child study: ecological, normative, systematic, and idiographic. In studies with an ecological purpose, observations of the child's behavior are examined in relation to conditions anchored in natural habitats. In normative studies, observations are recorded and analyzed in terms of age and central behavior tendencies. Normative studies are prominent in observational child studies. Studies with a systematic aim are concerned with relationships between universal behavior variables. They are generalized and not limited by reference to specified habitats or classes of children. The idiographic aim is in

observational studies of particular children seen as individual persons.

There have been many systems and methods developed to be used in direct observation. They all differ to some degree, but each codes some aspect of behavior. Boyer, Simon, and Karafin (1973:4) described some of the behaviors that have been emphasized. Eighteen of the early childhood measures developed in the late 1920's and early 1930's reflected the psychometric movement. They were geared towards quantifying everything and establishing developmental norms of child behavior. In the late 1940's and early 1950's, the focus of these instruments shifted toward measuring behaviors related to abstract social education of children. There were not many observation studies conducted during this decade because the social sciences were focused on war more than on children. The tools used for child research in the 1960's and 1970's tend to examine the home and school variables which influence the child's cognitive growth. This interest in intellectual development seems to be a result of the launching of the Sputnik. As a result of the political and social influences of this decade, observational systems are and will probably continue to reflect a demand for looking at emotional, social, and interpersonal, maybe even moral growth of children (Boyer, Simon, and Karafin, 1973:4).

In their anthology of early childhood observation instruments, Boyer, Simon, and Karafin (1973) described seventy-three systems for observing children and those who interact with them. There appears to be two types of systems; one has few categories, is easy to learn but allows for only gross information. The other type has many categories, requires long training periods, and yields much information. The included systems have been used for experimental research, when the conditions are standardized and specified, and the categories reflect the specific variables under observation. Some are used for descriptive research in which few conditions are prescribed with the observer recording whatever occurs during a particular time and making no attempt to manipulate variables. Other systems are used in the evaluation of programs and practices. In these systems the data collected are usually compared with specified criterion measures. A few of the systems are used for teacher training. The data collected serve as feedback to enable a person to view his own behaviors objectively, thus providing an opportunity for behavior change based on what was observed (Boyer, Simon, and Karafin, 1973:20).

The anthology includes systems to be used by trained observers, teachers, and parents. They have been used to observe interaction between parent and child, child and child, child and teacher or therapist, child's interaction

with his environment, the environment of the child and the behavior of the parents. Most of the systems use specific predetermined categories as units which are to be coded. Many consider a time unit and some account for a change in speaker, topic, or audience. The services of only one person are required for most systems, a few require a team of two observers. The majority use live collection methods, with no special equipment. Some, however, require special equipment or video and/or audio equipment. The systems have been used in settings such as: nursery schools, kindergartens, primary schools, home and community environments, and laboratories.

With the systems that have been developed during the past few decades, it is now possible to record many kinds of behaviors as they happen and to suggest prescriptions for effective modification of behaviors. Boyer, Simon, and Karafin (1973, v.1:IX) described four major classes of categories within these systems. They are: individual behaviors, observing one child's behavior in a variety of situations; social contacts, observing a child interacting with others; physical environment, observing a child interacting with his environment. The fourth class is the developmental level, which looks at six areas of growth: affective, cognitive, interpersonal, neurological, physiological, and social.

Wright (1960) identified three phases of observation as being: recording behavior, analyzing the obtained record, and planning for sampling the universe. Wright (1960) also identified six methods of recording data, and although most were introduced in the early 1900's, they are still appropriate for observational child study. At the time when Wright (1960:73) reviewed the methods, those found to be most prevalent in the literature were: diary description, specimen description, time sampling, event sampling, field unit analysis, and trait rating.

Diary description. As described by Wright (1960), diary description is one of the oldest methods used in child development. It is a well known method and can easily be used by a lay person. One of its special features is the close and continuous contact between the subject and the observer, who have figuratively lived together as child and parent. This method traces the developmental changes as they occur at biographically sampled intervals. The observer makes daily sequential notations of new behavioral events in the behavior continuum of one subject. The diary description has two breadths of focus. One is the comprehensive diary, which includes as much of everything as it can. The other type is the topical diary, which includes only the phenomena in a few developmental channels. The aim of the diary method is a normative one of discovering behavioral

traits of children at different ages and stages of development. This method has the advantage of breadth, richness, subtlety, and permanency of the written word. It offers a multidimensional picture of simultaneous and successive factors in the behavior of one child over a long period of time. The works by Simon and Boyer (1970) and Boyer, Simon, and Karafin (1973) indicated that even with its advantages, the diary description method does not appear to be very popular. The reason for this method's lack of popularity is probably because it is often criticized as having biased selection, unreliable recording, and unwarranted interpretation.

Specimen description. The specimen description method of observation (Wright, 1960) covers intensively and continuously the behavior and situation of the child during an extended behavior sequence. The observer chooses a child to observe, a time, and a place in which to observe according to the purpose of the observation. The observer attempts to record everything in the child's behavior and the situation as it happens. With this method, a description of the situation is as important as a description of the child's behavior. Specimen records present for analysis finely woven strands of successive units and conditions of behavior. This method has often been adapted to the systematic aim of research and it has also been used to serve the aim of the normative research. The method is well suited

for studies with the ecological aim but has not been used as often in this vein. The specimen description method offers the advantage of being allowed to register almost everything observers can see of behavior, and in lay language, which may be surpassed only by a sound-movie camera as a means for recording (Wright, 1960:122).

Time sampling. Time sampling, as described by Wright (1960), is a method for recording selected aspects of behaviors, if and as they happen, within precisely limited time spans. The length, spacing, and number of intervals are intended to secure representative samples of the selected behaviors. Usually descriptive categories are coded in advance for quick and precise judgments in the field and later for efficient scoring. The range of time spans for the method is from five seconds to twenty minutes during one observational unit. The observer usually rotates from child to child during the scheduled intervals of time. The primary aim of this method is normative; when not normative, the aim is usually systematic.

This method of observation has disadvantages and advantages. Wright (1960) believes the method to be limited in that coded observational guides, although they provide a cue, restrict the observer to memorized symbols, check lists, and other recording devices. Its results show that certain behaviors occur with certain absolute or relative frequency under specified conditions. These results show little of

the actions and situations of children, of how they change or of how the actions and situation components are related. This method is also applicable when studying behaviors that occur often. Some of the advantages of the time sampling method, as discussed by Wright (1960), are: it is economical of the researcher's time and effort, its coding minimizes equivocal judgments, and it permits systematic control by selection of behavior and temporal lengths of observation. Although not the method most often used, time sampling appears to be a popular method in the systems discussed by Simon and Boyer (1970) and Boyer, Simon, and Karafin (1973).

Event sampling. Event sampling, as described by Wright (1960), is a method which looks at integral behavioral events of a specific class. The class of events is determined before the observation occurs. Examples of classes are anger outbursts, arguments, and games. The observer waits for the event to occur and then describes it as it happens. Each event is a sample of a specific class of behavior, of classified children in a selected life setting. According to Wright (1960), this method as a classic natural history method has been used in research biology for some time. Child psychologists are using the method more and more. Event samples have been similar to time samples in that check lists, category sets, and other coded techniques of recording are used. Some observers

have used the event sampling method by describing the event in everyday words and others have combined the narration with coded observation guides. The most evident aim of event sampling is systematic. That is, the studies contribute toward empirical generalizations that relate behavior to its universal determinants. The method, however, does lend itself to the ecological aim as well.

Event sampling has limitations as well as advantages. The greatest limitation of event sampling is that it breaks up the larger continuity of behavior. Yet it does have a continuity of its own that could be described if such a recording technique as specimen narration were used. A most distinctive good point of this method is that it structures the field of observation into natural units of behaviors and situations. It can also be adapted to study naturally occurring behavioral phenomena that happen only once in a fairly long time. This provides for recording key spontaneous behavioral phenomena. It is economical if lay adults who live on the scene are used as observers.

Field unit analysis. Wright (1960) indicated that the research method of field unit analysis in child study is comparatively new and has two phases. The first divides a behavior sequence into consecutive units in the field on the basis of explicit rules. That is to say, the episodes have some criteria base, but are not restricted to

particular kinds of behavior. In the second phase, descriptive categories are applied to the phenomena of each unit. An example of field unit analysis was used in a 1957 study conducted by Wright (1960:109). In this study, the record was time notations and phrases to identify the episode of behavior. After each observation period, the observer supplied categories to describe the behavior and situation in the episode. This method has a special advantage in that there is close contact through the stage of analysis with behavior in progress. There are several examples of procedures which have been tried in research and fall under the heading of field unit analysis. Two of these procedures are on-the-spot episoding, as described in the above example, and association units, both used by Wright (1960). The aims of this method vary according to the particular procedures used.

Trait rating. The trait rating method (Wright, 1960) selects dimensions of behavior and bases judgments about them on observations during extended sequences of behavior. First, the observer memorizes scales of various dimensions of behavior. Then, after observing the child for a given period he/she checks the scales to sum up what has been observed. Each rating becomes a statement that summarizes cumulative direct observation. Actually the

observer records more of a personality assessment than a description of behavior or conditions. Behavior rating scales are sometimes called personality inventories.

There are many observation systems which have been developed and used in child study. The six methods identified by Wright (1960) are found within these systems. Although the question of reliability and validity is still important, some researchers who are interested in child behavior have leaned towards Wright's (1960) suggestion that the time has come for significant observation first and reliable observation second. The implication is that the researchers are interested in recording behavior they think significant at a given time. They may become concerned with the reliability of the observation after the behavior has been observed and recorded.

Student/Teacher Behavior

In addition to using observation to study child behavior, observation has been used to record the spontaneous acts as they occur between teacher and student in actual classroom interaction. There have been numerous observational systems developed for this purpose. The fact that there is some disagreement as to the method(s) that should be used for recording the observations is reflected in the variety of methods included among the systems themselves. It appears that at one point the descriptive anecdote was

being emphasized as the "best" method for studying behavior. The American Council on Education (1945) suggested that specific descriptive statements be used more often in the observation of students in the classroom. This same method of recording was supported by Prescott (1957) as he discussed characteristics of a good anecdote. Biddle (1967), who reviewed methods and concepts in classroom research, believes that narratives are biased and incomplete. In his opinion, the only serious analytic study of classroom processes requires audiovisual recordings. The fact that approximately thirty percent of the systems included in Mirrors for Behavior (Simon and Boyer, 1970) require the use of visual and/or audio equipment tends to illustrate that others believe as Biddle (1967) does. Cohen (1971:38) cautioned us to recognize personal biases when using direct observation as a research method. This point was again emphasized by Almy (1959:47) who included as one of three aspects of observation, the fact that the observer can not rule out how he/she feels about the subject's behavior. Rowen (1973:9) believes that the observer must not only recognize his/her subjective judgment but must use it in the interpretation of what is seen. She believes that the observer's own experiences will help him/her gain insight into the observed behavior. Rowen (1973:12) stated: "Knowledge and understanding of human behavior must begin with self-awareness and self-acceptance." There are still

numerous systems being used, however, which depend only on pencil and paper and/or code sheets.

Classification of systems. Rosenshine and Furst (1973:147) classified the systems described in Mirrors for Behavior (Simon and Boyer, 1970) into four classifications, according to the purposes as stated by the developers of the systems. The classifications are: describing current classroom practices, training teachers, monitoring instructional systems, and investigating relationships between classroom activities and student growth.

Classroom practices. Rosenshine and Furst (1973:147-150) stated that most of the category systems used in observation of classroom practices are descriptive. They said that descriptive research was intended to provide a set of concepts and baseline data on teaching in natural settings and ultimately lead to correlational and experimental studies, but thus far has not. What has happened instead, they concluded, is that descriptive studies have led to more descriptive studies. These studies have attempted to "analyze" teaching by recording whether certain intuitively selected activities were present. Developers of systems for the purpose of looking at classroom practices include: Flanders, Bellack, Ballagher, Hough, Jones, Brown, Clements, and MacDonald and Zaret (Renshine and Furst, 1973).

Teacher training. In teacher training situations, Rosenshine and Furst (1973:150) listed three uses of observational category systems: 1) to provide a teacher with feedback on his/her behavior, 2) to give a teacher a set of procedures by which to categorize instructional activities, and 3) to provide a teacher with behaviors and activities which he/she can model during instruction. Some of the systems developed for teacher training were developed by: Flanders, Amidon, Hunter, Joyce, Moscovitz, and Puckett (Rosenshine and Furst, 1973: 150).

While there are many systems already designed and more evolving, Rosenshine and Furst (1973) question the value of teachers studying their own behavior. They believe that research for teacher training will not be productive until transfer outcomes, such as reading comprehension, creativity, problem-solving skills, and students' attitudes toward learning, are included in more research designs.

Monitoring instruction. Monitoring is one of the most important uses of category systems, according to Rosenshine and Furst (1973:152). Some of these systems have been used to monitor specific programs, such as those using individualized instruction, or those in a specific subject area. Examples of systems used to record transactions between teacher and student in programs of individualized instruction were developed by: Lindval et al., Honigman and Stephens, and Spaulding (Simon and Boyer, 1970). The system

developed by Lindval et al. (Simon and Boyer, 1970:#12, p.12.1-4) focused on Individually Prescribed Instruction. This system was designed to describe behaviors of students working without direct teacher supervision. Honigman and Stephens' system is used for recording data in three areas: material, interaction, and passivity (Simon and Boyer, 1970: #48, p.48.1-3). The systems developed by Spaulding (Simon and Boyer, 1970:#21-#22, p.21.1-3, 22.1-3) focus on affective and psychomotor dimensions. Spaulding's first system focuses on student behavior and his second system focuses on teacher behavior. Examples of systems used to monitor specific subject areas are those developed by Altman, for observing programs in science education, Wright, for monitoring special programs in mathematics, and Taba, for observing specific social studies programs (Simon and Boyer, 1970:#28, p. 28.1-3; #25, p.25.1-9; #23, p.23.1-8).

A category system was developed by Ribble and Schultz (Simon and Boyer, 1970:65, p.65.1-8) for the purpose of recording data on the congruence between the teacher's stated objectives and the classroom behaviors the teacher chose to implement the objectives. Other observational instruments have been developed for the observation of specific practices, methods, and materials packages (Rosenshine and Furst, 1973:152). Systems have also been developed for the purpose of determining whether the program developer's intentions are being implemented.

Rosenshine and Furst (1973:153) identified two ways in which monitoring systems can be useful in instructional research. One way is concerned with the relationship between the variables of implementation and measures of student growth. The second use is to identify "significant differences in student growth between programs which are well implemented and comparison studies." A major advantage of these monitoring systems is that they can yield information which can be used to revise the program (Rosenshine and Furst, 1973:154). These systems can be used to provide information concerning the extent to which a specific program has been implemented according to the developer's intentions. This information can be used to modify the teacher's training and/or the program.

Investigating relationships. The observational systems that Rosenshine and Furst (1973) classify in their fourth group were developed for the purpose of studying the relationship between classroom activities and measures of student growth. One example of how a system in this classification was used is a study conducted by Denny et al. (Simon and Boyer, 1970: #41, p. 41.1-4). Denny's system was used to collect information concerning teacher-pupil behaviors which relate to pupil creative growth. Other systems were developed to obtain information concerning relationships between instructional activities and student growth. Developers of such

systems are: Flanders, Perkins, and Wallen et al. (Simon and Boyer, 1970:#5, p.5.1-3; #63, p.63.1-3; #64, p. 64.1-3; #77, p.77.1-6). As indicated by Rosenshine and Furst (1973:155), only a few authors have developed a descriptive system and attempted to validate the variables by conducting a correlational or experimental study. Of the observational systems described by Simon and Boyer (1970), there are only seven clear cases in which the developer conducted such studies. Rosenshine and Furst (1973:155) expressed concern that there have been so few reviews of the results of correlational studies involving observational systems and measures of human growth. They believe descriptive-correlational-experimental research to be a must if research in educational processes is to be meaningful.

Research models. The model for classroom focused research favored by Rosenshine and Furst (1973) is the descriptive-correlational-experimental model. This model is a loop in which the results of the correlational and experimental studies are used to modify further descriptive-correlational-experimental studies. The Canterbury (New Zealand) Teaching Research Project was cited by Rosenshine and Furst (1973) as one of the clearest explications of classroom research using the descriptive-correlational-experimental model. Nuthall (Rosenhine and Furst, 1973:123) described the four stage cycle used in the Canterbury

Project. In the first stage, the investigators developed ways to categorize classroom interaction. In the second stage, correlational studies were conducted to determine which kinds of behaviors were worth pursuing further and which were probably irrelevant for student growth. Stage three was the testing of correlational results in experimental studies to determine the effects specific manipulation of variables had on both subsequent classroom interactions and student growth. In the final stage, explanatory theory was developed which accounts for the relationships uncovered in experimental studies. Gage (Rosenshine and Furst, 1973:125) has used the descriptive-correlational-experimental loop when the experimental study focused on the training of teachers. He suggested that the focus of such studies be on specific aspects of the teacher's task instead of all parts of teaching at once. Gage and his students have completed eight correlational studies based on three independent sets of data.

Research in the area of curriculum-materials packages has also followed the descriptive-correlational-experimental loop. Rosenshine and Furst (1973:127) suggested five steps for a research loop to be used with curriculum-materials packages. The steps are: (1) train teachers to use the package, (2) observe and describe instructional activities that are important to the specific program and general education, (3) study the relationship between

instruction and human growth, (4) alter training procedures and/or materials on the basis of these studies, and (5) conduct new studies to determine the effects of the modifications. Rosenshine and Furst (1973:127) stated that the advantage of these packages is that they represent potential experimental treatments and provide teachers with means to accomplish more than they could without the packages. There are many curriculum-materials packages available. Some examples are: the Biological Sciences Curriculum Study (BSCS) Program, the Bank Street Program, and the Montessori Program (Rosenhine and Furst, 1973). Rosenshine and Furst (1973:127) posed three research questions related to curriculum-materials packages: are the materials and instructions suitable, are they used properly, and are the outcomes as expected? It is their belief that more research toward answering these questions is needed before more packages are developed and used.

Examples of systems which use direct observation.

There have been numerous systems designed for each of the four classifications identified by Rosenshine and Furst (1973). Some of the systems overlap in purpose and thus have been used in different studies for different reasons. I have chosen two systems as examples of those used. One, developed by Flanders (1965), is probably the most widely used and/or adapted system for studying classroom interaction.

The other, developed by Goodlad, Klein and associates (1974), is probably the most comprehensive system for studying interaction to date. This system is comprehensive in that it allows for observation of classroom interaction and interaction within the total school.

The Flanders' system. Flanders' system has been used more in correlational-experimental studies than any other classroom observation instrument to date (Rosenshine and Furst, 1973:155). Although Flanders' system is of the descriptive-correlational-experimental type, he did not use it as a loop to modify further studies (Rosenshine and Furst, 1973:125). Others have used Flanders' system for modification of further studies. Flanders (1965), who was particularly concerned with the influence pattern of the teacher, designed a system of interaction analysis dealing primarily with verbal behavior. It is his belief that verbal behavior can be observed with higher reliability than most non-verbal behavior.

Flanders (1965:18) said:

Interaction analysis is an observation procedure designed for a systematic record of spontaneous acts and to scrutinize the process of instruction by looking at each small bit.

He believed that the use of interaction analysis research on teacher effectiveness gives insight into why one group learned better than the other, rather than just measures the difference between pupil performance (Flanders, 1970:11). Flanders (1970:7) has said:

The major contribution of interaction analysis may well be that the inferences reached are based on events which can be said to have occurred with a greater degree of certainty than is usually true of classroom observation.

Another advantage, as seen by Flanders (1970), is that the data is organized into useful concepts before there is an attempt to make interpretations.

The Flanders' (1965) system has ten categories: seven deal with teacher talk, two with student talk, and one covers pauses, short periods of silence, and talk that is confusing or noisy. The teacher talk categories represent indirect influence, which encourages student participation and freedom of action. The direct influence deals with active control by the teacher. The student talk categories serve as a check on teacher influence. The procedures for using this system are: (1) the observer positions him/herself where he/she can see and hear, and (2) in three second intervals he/she uses a prescribed set of numbered categories to best record the communication of the period. The observer records the events as they occur and tries to make from twenty to twenty-five observations per minute. A major change in class formation, talk pattern, or subject matter is noted by double lines and the time the change occurred. At the end of the total observation, the observer writes a general description of each separate activity period including the nature of the activity, class formation, and position of the teacher. The recorded data are tabulated

in special matrices for analysis; patterns of behavior are identified and inferences regarding teacher influence are made. For additional insight into teacher influence, Flanders (1965) correlated measures of academic achievement and student attitudes with the verbal patterns observed in the classroom.

Flanders developed his system primarily as a research instrument. That is, he was interested in showing relationships between teachers and pupils and trying to gain insight into why, rather than just measuring differences between pupils (Flanders, 1970). Flanders (1970) believes that teacher education programs could and should use interaction analysis to help change teacher behavior. When used as a device for teacher feedback, Peck and Tucker (1973:948) described the intent of Flanders' system as getting the teacher to become more indirect in his/her behavior. A 1968 survey of teacher education programs showed that about two percent use Flanders' system (Flanders, 1970). Considering that this is the most widely used system, it is easy to agree with Flanders' (1970) idea that most teachers employed today have little or no opportunity to study teacher behavior systematically. Flanders (1970) suggested that using combinations of such techniques as micro-teaching, interaction analysis, simulated practice, T-groups, intense observation, and field work could lead to a coherent and potent curriculum in teacher education. As he sees it, this would be a

curriculum that would help the teacher develop, through personal experiences, commitments and convictions about his/her own behavior. These commitments and convictions would be based on preferred patterns of classroom interactions and desired educational outcomes.

The Goodlad system. One of the most comprehensive systems for observing interaction was developed by Goodlad, Klein and associates (1974). This system has two parts, one for studying the school and another for studying the classroom. After a trial run, the developers altered their categories to make them more realistic and changed their method of recording from a standard check list to anecdotal records. They found the check list to be too restrictive in that it neither reflected the dynamics of the classroom nor their own impressions of it. The group developed categories which included nearly every aspect of school life. They ended up with a framework of twelve categories which focused on: looking at the classroom as a home for children, instructional activities, subject matter, materials and equipment, involvement between teacher and student, interaction, inquiry, independence, curriculum balance, curriculum adaptation, ceilings and floors of expectancy, and staff utilization. The framework served as a means of standardizing record keeping. Data were collected from interviews with teachers and principals and via observations of classroom

activities. The developers found that their observers varied in their interviewing and writing skills; thus, the anecdotal records varied in their comprehensiveness and to the degree that data were separated from evaluations without data. After the data were collected and written up by the observers, it was analyzed by three judges. The three made independent judgments of the records, subsequent checks, and discussed the material until a high level of interpretative agreement and common vocabulary was reached.

This more comprehensive system could be the beginning of a trend in observational systems. It could mean that researchers are trying to find relationships by looking at the school as a total unit instead of dividing it into parts. The use of such a grandiose system might prove to be too comprehensive in structure. By trying to observe and record in so many areas, a lot could be lost. We will not know how much is gained or lost, however, until systems such as the one developed by Goodlad, Klein and associates (1974) have been used more in interaction research and the results examined.

Summary

Thus far I have discussed the use of direct observation as a skill used in research. The research has been in child study and teacher behavior, which looked at classroom interaction and the school as a total unit. This use of observation may be referred to as observation from "without."

That is, the observations were made by someone other than the teacher. The next portion of this chapter will examine the use of direct observation as a skill for teachers, to be used during the teaching-learning process. Observation used in this manner may be referred to as observation from "within."

OBSERVATION AS A SKILL IN TEACHING

The importance of the teacher's ability to observe is supported in the reviewed literature related to the training of teachers, child development, and physical education. Several authorities, Cohen (1971), Mosher and Purpel (1972), Knapp and Jewett (1957), and Mosston (1966), believe the ability to observe cues given by students to be an important step toward becoming an effective teacher. Hudgins (1971) supports this belief when he points out that an important difference between a skillful teacher and an unskilled one lies in what each perceives about pupils. When we look at observation as a skill in teaching, we are looking at observation as a skill for the teacher to use during the teaching/learning process. Information from this type of observation becomes the base for the teacher's diagnoses. This use of observation, sometimes referred to as observation from "within", is also used in the measurement and evaluation process.

Observation as a Means for Diagnosis

The alert and dedicated teacher, the effective teacher, wants to know today how to approach students tomorrow. One way of obtaining the necessary information for this knowledge is through observation and diagnosis. I believe that diagnosis via observation is the type of process Lee (1967:73) referred to when she said: "A system of evaluation so related to the teaching process that the necessary kinds of feedback flow to learner and teacher right out of the teaching-learning situation...." If we accept Lee's concept, it is obvious that observation is an important part of the diagnosing required of teachers. I believe that observation for the purpose of diagnosing was the type Cohen (1971:35) referred to when she said: "The keener the observer the better the teacher." Mosher and Purpel (1972: 41) imply the same concept with the phrase, "cognitive flexibility", meaning the ability to alter one's actions based on what is observed. Each of these educators supported what Rowen (1973) described as the need for the teacher to have the insight and sensitivity to respond accurately in terms of the student's abilities, interest, motivation, skills, and concepts. These characteristics, discussed by Rowen (1973), are based on two very important skills for teaching. These skills are observation and diagnosis.

To be effective with the technique of diagnosing, the teachers must be trained observers. They have to be

taught how to see the students as they actually are in the teaching-learning situation. Much of the traditional teacher's training is emphasized as seeing the students as "we" wish them to be. Observing for the purpose of diagnosis makes it imperative that the student be seen as an individual. For teachers to be able to observe the student as he/she is, requires guidance as to what and how to observe and much practice.

Observation, as a skill in teaching, also necessitates a close relationship between the diagnostic findings and their translation into a pragmatic school program (Smith and Neisworth, 1969:9). This concept is supported by Cartwright and Cartwright's (1974:3) definition of observation: "Observation is a process of systematically looking at and recording behavior for the purpose of making instructional decisions." The teacher must be educated in ways to process the information from his/her observations and in how to use the information to make changes and/or corrections.

Two words often used in connection with education are measurement and evaluation. These same words could be used in describing the process of observing and diagnosing. Measurement and evaluation, when based on observation and used as part of the teaching-learning process, usually refer to measurement and evaluation of individual students. Measurement and evaluation can be used in a broader educational sense and in reference to a particular lesson and/or entire

program. Observation may also be the base of this type of measurement and evaluation.

Measurement and Evaluation

Bradfield and Moredock (1957:51) defined measurement as: "...characterizing the status of phenomena" and evaluation as "judging the value of the phenomena." Observation is widely used as a method of evaluation in education because some behavioral phenomena cannot be assessed by any other procedure. Some of the academic areas that are most likely to use observation as an essential procedure of measurement are: art, music, home economics, physical education, speech, and drama (Bradfield and Moredock, 1957). Adams and Torger-son (1956) supported the use of informal, subjective techniques of evaluation by teachers. They maintained that teacher evaluation is very important in the diagnosis of instructional progress toward the stated goals. Adams (1966) viewed this progress as levels of diagnosis with each level getting more specific. She believed that the satisfactory level is reached when the teacher gains enough insight into the student's problem to enable him/her to plan appropriate corrective instruction. Adams (1966:463) suggested steps for educational diagnosis. These steps are: identify the students having problems, locate areas of learning difficulties, and discover the causal factors. She also suggested the use of some standardized tests as aids in following

these three steps. She did not suggest that standardized tests replace the informal technique of observation. The tests would serve as a cross-check of reliability and validity of the observations. They may also supply additional insight into some aspects of the student's behavior. Lee (1967) tended to sum up the importance of observation, as a means of measurement and evaluation in teaching, when she referred to the heart of the evaluation process as being the teacher's ability to perceive and assess skill and lack of it as teaching-learning occurs.

Although observation is one of man's oldest procedures of measurement and is readily accepted in two professions, medicine and psychology, it is not without its critics when used in education. Most of the criticism seems to come from those who are more scientifically oriented and hinges on the apparent lack of reliability and validity of such an informal procedure. No one denies that measurements and evaluations based on observation are subjective and that standard analysis and representative samples are important. Nevertheless, one purpose of observation in teaching is to provide teachers with information that helps them better understand students and give cues as to how to better guide and motivate students. The teacher is interested in the significant behavior as it occurs (Adams, 1966:270). For this reason, the teacher need not be as restricted in his/her observations as the researcher. Measurement by observation,

as described by Bradfield and Moredock (1957:50), is usually descriptive, classificatory, or rank, instead of scale number. This tends to create difficulty in establishing reliability and validity. Should we allow this difficulty to convince us that observation, as a means of measurement and evaluation, has no place in the educational process? This may be like "throwing the baby out with the bath."

We can accept observation as an important skill in teaching and continue to use it in the process of measurement and evaluation, and at the same time, take steps toward increasing the reliability and validity of such a process. Smith (1969:213) offered some suggestions which might help increase reliability and validity. He suggested the use of more than one method of data collection and a continuous cross-check of collected data as a means of increasing reliability. Smith believes that validity might be enhanced if teachers will carefully identify the specific variables for which the observation is made.

Perhaps the first step toward increasing the reliability and validity of measurement and evaluation, is better training in discriminating use of informal techniques for our pre-service and in-service teachers. Accepting this as a viable means of increasing the reliability and validity should have a direct influence on our teacher education programs. These programs will have to begin to provide the needed training and practice for developing skill in

observation and for making inferences based on observation. They will need to stop sending students out to observe without first teaching them how to observe, what to observe, and how to use the information obtained from their observations. Teacher education programs need to make students aware of the fine opportunities they will have for observing a wide range of student behavior.

Several methods have been developed which can aid the teacher in following Smith's(1969) suggestions. Many of these methods are part of the systems of observation that were previously discussed. Examples of tools within these methods are: check lists, anecdotal records, rating scales, participation charts, and behavior tallying. Many educators believe the use of some tool to be important because the tool will help standardize the observation and insure representative samples. Although these are important reasons for using a developed tool, we are reminded by Rowen (1973:4) that: "Unique qualities of individuals cannot be classified and categorized." To Rowen, some of the methods mentioned would be more acceptable than others because they include tools that lend themselves to describing behavior as it occurs rather than checking a predetermined category.

Regardless of the method used, after the observations are made and the data collected, the information should be systematically organized to offer some rational statement about the student's performance (Smith, 1969:215). The

evaluation should be based on several observations. If we think of evaluation as a continuous process instead of a terminal act, maybe we should also think of the results as hypotheses that are subject to change (Adams, 1966). Following this line of thinking, we can realize the importance of observation as a method of measurement and evaluation. Once learned, the skill of observation will always be with the teacher and can thus be used in any situation at any time. Teaching-learning and evaluation will be done simultaneously.

The advantages of subjective methods of measurement and evaluation depend on the teacher's training, experience, skill, and freedom from personal prejudices. These methods permit the teacher to study, measure, and evaluate the whole child in a variety of natural situations. Most appraisals made from observations are intra-individual. The child serves as his/her own point of reference, he/she is not evaluated against an established norm. I believe that Adams (1966:461) supported this concept when she stated: "Measurement, evaluation, and individual instruction are inter-related components of effective teaching."

From what has been said, it seems logical to assume that those who support the value of observational skills for teachers also have some common philosophical beliefs. That is, they believe in the individual worth of each student and that in some ways each student is unique. That each has his/her "best" way of learning and progressing through the

educational process. They also tend to believe that one of the best ways to help students is to be able to see actually what each is doing and plan accordingly. These same people would agree that to develop skill in observation is one of the most important singular skills a teacher needs. As Smith (1969:217) said: "Not to develop skill in education diagnosis is to suggest that either individual variation does not exist in class or that if it is present it is irrelevant to the instructional program." I think most teachers would agree with Smith's statement in theory; but what happens between the theory and practice, between the theory and training for practice?

In this section, I have discussed the importance of observation as a skill in teaching and some ways in which observation is used in the teaching process. The next section of this chapter, is concerned with the teaching of observation as it now exists in teacher preparation programs.

EXISTING STATUS OF THE TEACHING OF OBSERVATION

Trying to locate teacher education programs that emphasize and focus on the goal of sharpening the powers of observation in prospective teachers, is rather like the proverbial "needle in the haystack." The programs in which observational skills are considered important, seem to emphasize them for the purposes of observing teacher behavior. Professional preparation programs do not seem to be focusing

on observation as a way of sensitizing prospective teachers to cues given by students during the teaching/learning process. Instead of emphasizing observation as a skill to be used during the teacher/learning process, these programs use observation as a means for a pre-service teacher to study his/her own behavior.

There have been several articles written that explain ways in which teacher education programs have incorporated the use of video tape and observation in the training of their pre-service teachers (Darst, 1975; Fulton, 1962; Painter, 1962). These articles indicate that the observation emphasized is that of teacher behavior, not the behavior of the pupils. The pre-service teachers watch themselves on tape, analyze their behavior, and then try to change the behavior they do not like. I believe this use of observation to be the same as "process observation" that Simon and Boyer (1970: 27) believe to be indispensable in many teacher education programs. Additional evidence of observation being used in this manner is that out of sixty-seven systems for observation in the field of education, forty-seven were for the purpose of training teachers through feedback of their own observable behavior (Simon and Boyer, 1970).

Prospective teachers are being taught to observe themselves on video tape for the purpose of changing their own behavior. This training does make the prospective teachers more aware of their teaching behavior. I would like to

see such training expanded in a way that will help sensitize the prospective teacher to the student's behavior. There is not yet an emphasis on this aspect of teacher behavior, which is the teacher's ability to observe (see), what their students are actually doing during the teaching/learning process. This is the type of observational skill I believe to be so important to teaching and the type I chose to pursue. There is one area in teacher preparation that appears to be the exception to this lack of emphasis. The area is professional programs for prospective teachers of young children.

Kindergarten and Elementary School

Professional preparation programs for the prospective teacher of kindergarten and elementary school children tend to be the exception rather than the rule. Examination of the literature has shown some evidence, which indicates that educators in these areas not only believe in the importance of observation, they train their prospective teachers to observe children as well. This is supported by Rowen (1973: 5) who stated: "The attempt to develop insight and responsiveness in teachers and prospective teachers is a main focus of an observational approach to child study." Marie Montessori (1967) based a system of teaching on her belief that observation is the fundamental guide to the teaching method. From Wright's (1960) study, which showed that the overwhelming majority of studies involving observation were

done with pre-schoolers and young children, ages six to twelve, we might conclude that some training in observation is taking place. Of what is this group of educators aware, that the rest of us are not? Maybe they are supportive of observation because it is hard to measure and evaluate children through other means. Perhaps the reason for such wide use of observation is in Cohen's (1971:44) statement: "Their bodily selves are their real selves and if we learn to read body language we will be reading children." This implies that the primary interest of those working with young children is on the child and knowing and understanding him/her better. Prescott (1957:212) offered other reasons for observing children in his list of needs for continuing guided observations:

1. They supply facts which may change hypotheses.
2. They are a practical way of testing validity of all hypotheses.
3. They are a means of evaluating the effectiveness of corrective steps.
4. They provide a record of changes which demonstrate individual growth.

It seems to me that all of these reasons are applicable to the need for teachers at all grade levels to develop their observational skills. It appears, however, that the higher the grade level, the less important the teacher's ability to observe becomes. This statement is based on the lack of

emphasis on the teaching of observation, as a skill for teachers, found in the literature concerned with secondary education.

Secondary Education

The importance of observation, as discussed in the literature related to secondary education, is usually related to observation made by someone other than the teacher. This is indicated in the works by Simon and Boyer (1970), Biddle (1967), and Travers (1973). Although emphasis has been placed on observing the teacher's behavior, Smith (1969), Kleine (1970), Hudgins (1971), Howe (1973), and Combs (1974) did discuss the need for the teacher to observe the student in the process of learning. These authors discussed the importance of observations made during the teaching-learning process, but they do not offer suggestions as to how to develop the skill. The lack of emphasis on this type of observation makes the situation appear to be one in which observational skills are treated as concomitant learnings and that they will develop with the undergraduate who chooses teaching as his/her profession. Smith (1969) indicated this when he said that most teacher education programs send their students out to observe, but rarely is there a systematic attempt to teach the students how and what to observe. Since the indications are that teacher education programs are not teaching observation as a skill to be used during the

teaching-learning process, it is relatively safe to assume that they are not teaching pre-service teachers to process and use information that could be gathered via observation. These two steps, interpretation and action based on interpretation, are abilities that when integrated with the skill of observing could become a useful teaching strategy.

The need for physical education, as one of the professional preparation programs for teachers, to emphasize observation as a skill to be used during the teaching-learning process is supported in the literature. The nature of physical education being one of action, movement, I wonder what the teacher who can not observe movement uses as a basis for instruction?

Physical Education

The existing status of teaching observation to undergraduate physical education majors is much like that of secondary education majors. While there is agreement on the importance of this skill, little action is being taken towards the teaching of observational skills. This is supported by Nixon and Locke's (1973:1222) statement: "... the entire matter of the teacher's role as a systematic observer is unexplored."

The literature in the area of teacher preparation in physical education included two areas of focus for observation as it presently exists. One focus of observation

is usually described as being skill analysis, safety, affective reactions of pupils, and environmental conditions (Knapp, and Jewett, 1957; Bucher, Koenig, and Barnhard, 1974; and Daughtry, 1967). The other most emphasized area of observation is of an organizational nature, namely: uniforms, room or playing field environment, and formations. To illustrate this point, Bucher, Koenig, and Barnhard (1974:237) listed aspects to be observed by the teacher. Their list included: physical needs, heat and light; emotional needs, acceptance and security; social needs, cooperation and competition; safety; and constructive analysis of performance. As tools for the undergraduate physical education major, they listed: presenting skills within the ability of the student, appropriate teaching technique, lesson planning, and recognizing their own shortcomings. The need for ability to observe is implied by the fact that the "tools" listed are results of diagnoses made from observations. There is neither an emphasis nor mention of the teaching of the skill of observation as a base for the development of the listed "tools." Daughtry (1967) discussed the importance of the teacher's ability to analyze skill and to be observant of safety precautions, but did not emphasize observation as a skill to be used during the teaching-learning process.

The lack of emphasis on observation, as a skill for teachers, is further illustrated by Cowell et al. (1973). They listed problems of beginning teachers as seen by critic

teachers in Ohio. The greatest problem was seen as the inability to analyze errors of sport skills. This problem may appear to be the same as what I have been referring to as lack of emphasis on the skill to observe movement. I believe, however, that the focus when analyzing sport skill is different than the focus when observing the totality of movement in general. One difference can be extracted from Cowell's et al. (1973) diagnosis of the inability to analyze errors of sport skills. This diagnosis implies that the focus of this observation should be on errors made when executing sport skills. This type of analysis demands a predetermined standard of what the movement should look like. The skill of observation, as I refer to it, means observing movement as it occurs, being able to see whatever movement takes place during the teaching/learning process. Of course, being able to see movement is necessary in both skill analysis and observation of the totality of movement. The observation of the totality of movement lends itself to the idea of the teacher observing how the student moves and using the information as a basis for integrating the individual's movement with the skill to be learned. Gates (1968:127) supported this type of observation with the statement:

Awareness of natural movement relationships and emphasis on the rhythmic character of patterns and sequences are essential to development of facility in inventing one's own combinations and patterns.

The analysis of skill almost forces the teacher to make the student change his/her movement to fit the predetermined concept of what the particular skill should look like.

These same critic teachers, from Ohio, suggested that curricula in teacher preparation be changed to include more observation in the schools. They did not include a suggestion that training and guidelines become the base for the observation; thus I ask, why observe? If teacher preparation programs continue to send undergraduates out to observe without needed skills and knowledge, what purpose is served? It may be true that the best way to learn to observe is by observing, but I believe that some guidelines and knowledge are required for a beginner to learn how to observe. Cowell et al. (1973:35) stated that many teachers look without seeing; however, they did not offer suggestions as to how to help them see.

Davis and Wallis (1961) listed expectations of teachers in physical education as seen by "outstanding superintendents." The ability to observe, as a skill for teaching, was not included in the list. These two examples make it apparent that those who are in in-service positions in education want teachers who can act as a result of observation, but they do not stress the importance for teacher preparation programs to teach observation. Again, I think we are jumping to the end of a process, observing, measuring, and evaluating, without the needed emphasis on the first step of the process, the observation.

In most of the literature, the skill of observation was treated as a concomitant learning; however, a few authors in physical education emphasized its importance to teaching. Those writers who advocated observation, as a skill to be used during the teaching-learning process, included guidelines for observing. The guidelines are concerned with: how the development of observational skill can be woven into the curriculum, how to plan the observational experiences, how to implement the observational experiences, and more specifically, how to observe movement responses.

One of the few methods books that emphasizes observation as part of the teaching process was written by Davis and Wallis (1961). These authors seem to look at observational skills in the same way as I have defined them for this study. This is evidenced by their statement: "The teacher must actually see the significant movements performed, their timing, the place they were performed, their relationship to other movements..." (Davis and Wallis, 1961:316). They also included a list of suggestions for the undergraduate to use as guides to observation. In addition, they listed twelve principles of observation and placed observation first when discussing operations of teaching. The thing that makes this reference different from most of the others, is the authors' emphasis on being able to see the movements performed, with skill analysis becoming a secondary part. That is, they see the skill analysis as a result of accurate observation.

Morison (1969:158) stressed the importance of the teacher having the ability to observe well. She believes that all of one's faculties and senses should be alerted during observation and that they should be ready to respond to what is seen, heard, or felt. Morison (1969:161) offered some aspects of movement that the teacher needs to observe. She also included some guidelines for the teaching of observation. Another source which stressed the importance of the teacher's ability to observe is Movement-Physical Education in the Primary Years (Department of Education and Science, 1972:15). This reference listed cognitive terms to guide observations. It suggested that the observer think in terms of bodily concepts; qualitative aspects, weight, time, space, and flow; spatial aspects, personal, general, levels, directions, pathways, and shapes; and relationships. The importance of the teacher's ability to observe was also emphasized by North's (1973:149) statement: "Meaningful teaching requires a constant picking up of responses, and the making of new responses by the teachers." She continued her emphasis of observational skills by including some guides as to what the teacher should look for. North (1973:167), like Morison (1969), believes that teachers can be taught to observe by being made aware of different movement aspects and guided practice.

In an article written by Fox (1962:40), there is a list of guidelines for making observations. These guidelines

are set up for teacher preparation programs to follow as they teach undergraduates to observe. Fox believes that observation should be an integral part of all courses, academic and professional, and that observations should begin as early as possible in the student's program. He also suggested that observational experiences continue over a period of time with the same group of children, that quality preparation and guidance must be given prior to the experience of observing, that a variety of experiences should be provided, and the progress of the students should be checked.

Possibly the most specific information on the importance of the teaching of observational skills is offered by Barrett (in preparation). She went beyond the discussion of its importance and even beyond suggestions for teaching prospective teachers to observe. Barrett (in preparation) discussed the implementation of the suggested guidelines. She outlined steps in designing experiences in observation and pointed out errors common to beginning observers. Her guidelines include: preparation, orientation, implementation, evaluation, and interpretation. A discussion of the use of still photos and films in learning to observe adds to her treatment of the teaching of observation. This work by Barrett (in preparation) helps in the teaching of the skills others have implied concerning the use of observation by the teacher of physical education. The unique aspect of this work is the fact that she does go beyond just offering

guidelines and suggestions for the teaching of observation and helps the professional in teacher preparation make better use of the suggestions.

A condensed list of guidelines from those who advocated observation as a skill for teachers includes suggestions from Barrett (in preparation), Davis and Wallis (1961), Gates (1968), Morison (1969), and North (1973). They suggest that the observer should:

1. guard against seeing what he/she hopes to find.
2. guard against projecting motives into the child's behavior.
3. be comprehensive with the observation.
4. know the activity and the performer.
5. look at the whole of what is happening.
6. look at aspects of the native ability of the mover.
7. look at the dynamics of the movement.
8. not base his/her interpretation on one observation.
9. look for the mover's ability to adjust to the situation.
10. look for relationships between movement sequences.

Others emphasized the importance of observation as a skill for the teacher, but did not offer suggestions as to how to teach the skill. Ludwig (1961), for example, referred to a keen sensitivity to student behavior as the basis

for rapid changes in methodology. This reference implies the need for teachers to be able to observe during the teaching/learning process and from the observation, be able to make corrections that will help the student change his/her behavior. Ludwig (1961) did emphasize the importance of the ability to observe while teaching but she did not offer suggestions as to how to observe.

Most of the teacher preparation programs in physical education devote part of their curricula to teaching pre-service teachers to teach and analyze specific sport skills. Systems of analysis are usually taught in isolated courses such as mechanical analysis, kinesiology, or motor learning. In some programs the prospective teacher learns to analyze as he/she learns methods for teaching skills. In any case, when utilizing direct observation as a means of analyzing, the focus is on a specific skill of a specific sport. These courses meet the minimum requirement expressed in the literature, that is, for teachers to be able to analyze skill. Since each of the skills is made up of various movements, it seems to me that teacher preparation programs could use time more wisely if they were to teach observation of movement as a totality. If prospective physical educators are taught to observe movement, they could learn to apply their observational abilities to any movement within any skill. This concept was supported by Barrett (in preparation) and Broer (1966) when they wrote of the common elements in all forms

of movement, regardless of the purpose. If pre-service physical educators are taught how to see these elements in the totality of the movements, they would have a starting point for analyzing skill and a base for later instruction. I agree with Lisa Ullmann's idea, as found in Redfern (1965: 8), that the teachers of the various branches of physical education (gymnastics, games, swimming, athletics, and dance) need to realize that we are all from the same tree, namely that of movement experiences.

OBSERVATION OF MOVEMENT IN PHYSICAL EDUCATION

Existing Ways of Looking at Movement

This portion of the chapter examines approaches to analyzing movement. They range from viewing movement specifically to conceptually. When analyzing movement specifically, the approach usually focuses on analysis of specific skills, i.e. sport skills, dance skills, and gymnastics skills. Analyzing movement conceptually implies that the analysis and ultimate observation could be applied to all movement situations regardless of the purpose.

There are several schemes for analyzing movement as specific skills. Broer (1971) supported one method which is based on mechanical principles or laws. These principles are concerned with gravity and buoyancy, equilibrium, motion, leverage, force, angle of rebound and spin, and projectile. Bunn (1965) also advocated analysis with a mechanical base.

Godfrey and Kephart (1969) divided skill analysis into two basic categories, locomotor and manipulative, and then looked for general considerations in all movement. Robb (1972) advocated a framework which involves analyzing the task (skill), then analyzing the components or subroutines of the task, both sequentially and temporally. Robb (1972:118-121) also discussed frameworks developed by Stetson and McDill, who analyzed in terms of speed and duration of movement and Smith and Smith, who looked for postural, transportive, and manipulative movement.

Beginning in the mid 1960's, a number of schemes for analyzing and observing movement were developed based upon the work of Rudolph Laban (Allenbaugh, 1967; Knight, 1974; Logsdon and Barrett, 1969; Morison, 1969; Russell, 1965; Stanley, 1969). Laban (1971) developed a system for observing human movement regardless of the purpose of the movement. His system has been used in industry, theater, dance, and education. Laban's system is sometimes referred to as an analysis or classification of movement. Preston-Dunlop (1967), however, described Laban's work as a new approach to looking at movement. She viewed Laban as a synthesist, one who looked for relationships among the components of movement. The four major components which make up Laban's system are: Body (what the body can do), Space (where the body can move), Effort (how the body can move), and Relationships (with whom or what the body moves). This system is discussed more fully in Chapter II.

Gates (1968:142) suggested that we in physical education need to recognize human movement and what we know about it as the core of all the activities with which we as teachers are concerned. Laban has provided us with a way of looking at movement as a totality, a way to observe the core of all activities. When professionals in the field accept the importance of human movement as the content of physical education, we may then be able to realize the importance of learning to observe movement as a totality, as well as dividing it into specific skills.

Case for Observation of Total Movement

Physical education teachers are expected to be able to teach a variety of activities: sports, games, dance, gymnastics, and aquatics. During their undergraduate study, some of their course work includes learning a variety of specific skills and most likely learning to analyze each specific skill. In learning to analyze, the emphasis is usually on what the performer is not doing but "should" be doing in order to perform the skill correctly. The analysis is made against some predetermined standard of what the expert performer looks like. The existence of this situation is recognized by Broer (1966:6), who criticized physical education texts for analyzing skill by describing in minute detail, how the performance of the expert looks. Broer (1966:6) reminded us that no two individuals have the same tool

for movement, namely the body; therefore, implying that we should not expect everyone's performance of a skill to look the same. I think that Broer (1966) has pinpointed the key weakness in our teacher preparation programs, as far as observation is concerned. We are teaching our prospective teachers to analyze specific skills according to predetermined standards instead of teaching them to observe movement as it actually occurs.

Barrett (in preparation) said: "All forms of movement have common elements no matter the purpose." This idea of commonalities within various movements is supported by Bunn (1955), Broer (1966), Robb (1972), and North (1973). Several others who have contributed to the physical education literature, Bilbrough and Jones (1970), Mauldon and Redfern (1969), Russell (1965), and Mauldon and Layson (1965) concur with this concept. Accepting the idea of commonalities within various movements, has made me question why we in physical education teach our prospective teachers to look at movement in terms of specific skills with specific parts? Why aren't the teacher preparation programs teaching undergraduates to observe movement as a totality? The idea of observing the totality is supported by Gates (1968:24), who believes that once one learns to look at movement for itself, one can then look at any part of movement and see its relationship to the total. She suggested that when we are initially learning to look at movement, we should disregard the

result of the movement, the person, as well as the purpose. The Department of Education and Science (1972:16) also supports observation of the totality of movement in their statement: "... although it is often convenient in the study and observation of movement to refer to separate identifiable components, bodily action utilizes them all in a continuous flux and rhythm." They continued by emphasizing that the total concept is of greatest relevance to teachers.

In a critique of the traditional model of teaching, Hoffman (1971:53) indicated that the ability to analyze movement has been considered important in teaching methods but not as important as the teacher's ability to design, administer, and oversee organized group practice experiences. He continued his critique by saying: "... the traditionalists have not given priority to the process of movement analysis." Perhaps teaching methods in physical education should emphasize observation for analysis and direct the focus of the observation to movement, as it occurs, instead of specific skills. This is not to imply that observation for the purpose of safety and organization is not important. It too, is a necessary part of teaching. Nevertheless, I believe that these aspects can be integrated into the teaching of the observation of movement responses. I concur with Hoffman (1971:52), that physical educators have focused on organizational processes to the exclusion of more relevant teaching behaviors.

Movement is the unique aspect of physical education, therefore we should focus on that aspect. If physical education professional preparation programs are to prepare teachers who are more effective, they need to help pre-service teachers develop skills they can use during the teaching/learning process. It is my belief that observation of movement as it occurs is one very important skill needed for teaching physical education. This belief was the driving force of this study, which is an inquiry into one possible way of teaching observation of movement responses to undergraduate physical education majors.

CHAPTER II

THE DEVELOPMENT OF A MODEL FOR TEACHING
OBSERVATION OF MOVEMENT

To many people, physical education is sports, games, dance, aquatics, and gymnastics. In whatever way it is viewed, physical education usually includes these activities. One element each of these activities has in common is movement. Their very existence depends on the movements of those who participate in the activities. Although it takes many forms, one might say that the core of physical education involves human movement. I believe that it is this movement aspect that gives physical education its uniqueness in education. Physical education is one of the branches of education that emphasizes the development of movement responses. These movement responses are usually developed as the specific skills that make up sports, games, dance, gymnastics, and aquatics. A specific skill, as I am defining it, refers to a predetermined combination of components to fit a particular purpose. Skill analysis is the breaking down of these combinations into the individual components.

It appears that in many instances, physical education and specific skill development have become synonymous. This being the case, it is easy to understand why teacher preparation programs in physical education usually emphasize

skill analysis in the education of their pre-service teachers. The movements of a skill can be analyzed mechanically, the easiest way of performing them determined, and this easiest way taught to a learner (Metheny, 1952:6). Teachers of physical education have been following this general procedure for years. They usually analyze the skill to be performed, teach each part of the skill to the learner, and watch the learner, to see that each part is performed as taught. If the skill is not performed correctly, it is usually taught again. This method implies that all learners are expected to perform the skill in exactly the way it was taught. Broer (1966:6) criticized this concept by saying that physical education texts which promote this type of analysis, do not account for the fact that no two individuals are the same in body build or psychological and emotional makeup. As the name itself implies, the focus of skill analysis is on the components of the skill, not the movements inherent in the execution of the components. Broer (1966:20) stated:

Performers and teachers need to recognize that many somewhat different movements may be efficient and correct for any given purpose, depending upon the individual doing the performing.

Metheny (1952:5) supported this concept with her belief that the important aspect in all activities is the understanding of two basic principles. The principles are:

... how to conserve energy by proper use of the body and its parts, and how to expend energy intelligently and efficiently to accomplish a given purpose.

The inferred point of Broer's (1966) quote is that it is important for the teacher to see the movement responses as they occur if he/she is trying to help the individual mover. By not heeding the words of Metheny and Broer and continuing to focus on specific skill analysis, we tend to force the physical educator to try to change the learner's style of movement to fit the predetermined standards of the specific skill. In my opinion this procedure constitutes a weakness in our physical education programs. The procedure is limited in that skill analysis, as it exists, has caused us to become very specialized and specific in our approach to teaching physical education. We have stylized skills and teach the components of these skills in very specific ways. The focus is so much on the performed skill that we do not see the movements involved as movements. No doubt, skill analysis has a place in physical education. My question is, have we bypassed a very important element in all skills teaching, that of movement? With the specific components of a skill as the major emphasis, we tend to forget that there are many situations in work and play that cannot be anticipated in detail (Metheny, 1952). Teaching specific skills and observing movement for the purpose of analyzing a specific skill does not help us to prepare students to cope with the situations that cannot be anticipated.

Instead of teaching the mover to fit the skill, I support altering the skill to fit the mover.

I believe that physical education, as a profession, needs to focus more on the actual movements inherent in a skill and work toward developing the individual's movement potential. If movement becomes the focus and development of movement potential becomes a goal, my premise is that the mover will better be able to integrate the specific skill with his/her personal movement style.

To accomplish the task of developing the individual's movement potential, teachers of physical education will have to be taught to observe movement as it actually occurs. They must be able to see the "what," "where," "how," and relationships in movement. The "what" is the body as the instrument of action. The "where" is the space into which the action is projected. The "how" is the quality of movement. Relationships is that association which the mover has with objects and/or persons in the environment (Stanley, 1969). It is important that each of these movement components can be observed separately and in combination, thus the observer sees the totality of the movement. It is the totality of the movement response that is important and this totality seems to be a missing link in skill analysis. Observing movement as a totality, creates the need for a frame of reference that is constructed to emphasize the unity of movement.

This study is concerned with the development of a model for teaching observation of movement as a totality. The model consists of three interrelated elements: the observer, the movement framework, and the environment.

OBSERVER

One element of the model focuses on the observer and includes three concepts believed to be important when learning to observe. The first concept is that of the observer developing awareness. The second concept is concerned with the observer's ability to concentrate and to hold his/her focus while observing. The third concept is recognition of personal biases, on the part of the observer, during observations. All three are integrated with the other elements and remain key concepts throughout the model.

Awareness

The development of the observer's awareness was approached in two ways. One focused on the observer becoming personally aware of his/her ability to observe and the other focused on awareness of the framework. Both approaches were considered important throughout the model. Each approach was emphasized at different times during the implementation of the model

Personal observational powers. Awareness of personal observational powers was an initial focus in implementing

the model. Gates (1968) suggested that when learning to observe, we first must know what we usually see and how we look at it. Then we can become aware of what we can see. Gate's idea was important to this model. Before trying to teach the participants a different way of looking at movement, it was important that they consciously examine how they already viewed movement. Without this personal realization on the part of the participants, they would probably not recognize the difference between what I was asking them to do and what they thought they had been doing. By helping them realize what they usually saw and the frame of reference they used for seeing it, I had a base on which to build and expand their powers of observation.

Rowen (1973) and Gates (1968) suggested the use of "observational games" as aids in increasing one's observational powers. To help raise the participants' level of awareness toward observation and their ability to observe, I modified and used some experiments with observation which had been suggested by Gates (1968). An example of one of the classroom experiments follows.

Example: The participants were asked to look around the room. After two minutes, they were asked to list five objects they had seen. They then looked for one minute and were asked to add a descriptive statement about each of the five objects. The participants were then asked to walk about in the room and after one minute, to list three new items and to describe something about each. At the conclusion of the experiments, there was an open discussion of the different items seen and described.

The participants were asked to try similar experiences outside of the classroom. These experiences were: 1) to look at objects from different distances, noting the details observed at each distance, and 2) to observe various habits and mannerisms of people they contacted during their daily routine. These experiments were used to help the participants become aware of the many things that could be seen and to get them to see things around them.

In addition to the experiments with observation, there were group discussions on the importance of observation to teaching, especially to the teaching of physical education. The purpose of these discussions was to help the participants become aware of and to understand the differences between observation and analysis as it is traditionally used.

Movement framework. The second part of the awareness concept was to help the participants become cognizant of the way of observing movement selected for this model. As was stated by Gates (1968), Rowen (1973), and Fox (1962), it is important for the observer to be aware of the possibilities of what could be seen. North (1973:167) stated that in the training of observers, it is necessary to draw attention to different aspects and to clarify what has been seen intuitively. To aid in this, the participants were taught a particular way of viewing movement. They were given a handout to acquaint them with the components of this approach. The

handout was used in the following manner.

Example: Using the handout as a reference, the participants were asked to focus on the Body component of the framework and its subdivisions. The parts of the body: head, neck, arms, legs, etc. were recognized as being able to do something. Once the participants were aware of the parts of the body, the focus became the actions these parts are capable of performing: bend, curl, stretch, and twist. The next concept of awareness for the Body component was that a body part can lead an action and they can come together and separate. Following awareness of these uses of body parts, the awareness concept was extended to body parts used in weight bearing: support and transference. The awareness focus of the Body component then became body actions: locomotion, elevations, turns, gestures, and stillness.

A similar procedure was followed when applying the concept of awareness to the components of Space, Effort, and Relationships. These procedures were an aid in drawing attention to the different movement aspects and in helping to clarify what was being observed.

Concentration

The second concept, in the element which focused on the observer, was concerned with developing the participants' ability to concentrate and focus during their observations. The ability to concentrate and focus is important in any learning situation. The need for the observer to concentrate was emphasized by Morison (1969), Grieve (1971), Rowen (1973), and Barrett (in preparation). My goal involving the concept of concentration was twofold. First, to help the participants learn to concentrate on the component of the movement framework emphasized during each session. Secondly,

to help the participants concentrate on the component(s) as they observed movement.

To help the participants concentrate on the components, each component was introduced separately. The following is an example of how the component and its major subdivisions were each discussed as parts before attempting to unite them.

Example: The Body component would be the focus of a session and the only component introduced during that session. The subdivisions were introduced and discussed one at a time. Each subdivision remained the focus until I believed the participants understood its place in the component. To aid with this concentration, I asked the participants to experiment with using the component's subdivisions in movement. When the focus was on body parts, they would experiment with movement of different body parts, concentrating on the part being used at the given time. They were asked to experiment with the actions of each part: bend, curl, stretch, and twist and also with the body actions: locomotor, elevations, turns, and stillness. They then experimented with movement in which one part was stressed or led the action. They worked with various parts bearing their weight and with weight transference.

These movement experiences were designed to help the participants develop a kinesthetic sense for the type of movements they would be asked to observe. The premise for the movement experiences was that by developing a "feel" for the movements they were asked to observe, the participants awareness of the movement would be increased and they would better be able to hold their concentration on the movement and not the mover. As they were learning to see movement, it was most important that they concentrated on the components

which make up the movement and not concern themselves with objectives and results of the movement. That could come later.

The participants were asked to think in terms of the movement component(s) regardless of what the mover was doing. To help with this aspect of concentration, I used segments of video tape that had been made specifically for this purpose. The segments included the minimum number of movers needed to illustrate the emphasized component. The movers stressed the emphasized component and there was no functional purpose for their movement. Thus the participants had only to focus on the movements. An example of how a segment of tape would be used follows.

Example: If the emphasized component was Body, the segment of tape used was that which emphasized the subdivisions of the Body component. The focus of the tape would be one mover performing non-locomotor activities with different body parts. The participants would be asked to identify the body part being stressed. They would observe the segment of tape and then discuss the parts that were stressed. Sometimes the discussion would take place after they watched the tape, sometimes the discussion was simultaneous with the viewing of the movement. The taped segment would be repeated as often as necessary for each participant to be able to focus on that particular subdivision. Each subdivision was treated in a similar manner until all subdivisions of one component had been emphasized.

After two components and their subdivisions had been emphasized for concentration, as discussed in the previous example, the ability to concentrate was extended to include concentration on the unity of the two components. This

concentration was also aided by using taped segments in a way similar to that previously discussed.

Example: If the unity were to be between the component of Body awareness and Space awareness, the focus of the segment of tape used would be on the subdivisions of the two components. The participants were asked to identify the body part(s) emphasized, to describe the subdivisions as observed, and to describe "where" (Space) the actions were taking place.

This procedure was designed to lead to the development of the participants' ability to concentrate on the four components as the totality of movement, by adding other components as the participants were able to use them in their observations.

Personal Biases

The third concept of that part of the model which focused on the observer was the development of the ability to recognize personal biases. Cohen (1968), Almy (1959), Davis and Wallis (1961), and Barrett (in preparation) remind us that we must differentiate between what is actually observed and our own preferences. It was important to the success of this model that the participants recognized their own biases and those of others toward movement activities associated with physical education and toward using a particular framework as a base for observation of movement. So that they could concentrate on looking at movement the way I was purporting, the participants had to be cognizant of how they were viewing movement prior to the introduction of the movement framework used in my plan.

As the participants began to use the movement framework, it was important that they realized when their observations were judgmental and based on personal prejudices rather than on what they were observing. If they allowed their prejudices to enter in, the observation could be blocked and they would no longer be able to concentrate on the movement as it was happening.

Example: When observing a beginning tennis player, via video tape, the participants' comments were "...his footwork was poor..." and "...too much wrist action and incorrect follow through."

If during a group discussion participants made remarks that were judgmental, other members of the group and I would try to help them become aware of the judgments they had made. Once aware that the observation was judgmental, the discussion would be on the biases that led to the evaluation of the performance, thus increasing the participants' awareness and understanding of their prejudices.

FRAMEWORK

The second element of the model is the movement framework. A framework that was constructed to emphasize the unity of movement was the type preferred for this model. The most widely used framework for observing the totality of movement came out of the work done by Rudolph Laban. Laban and his associates devoted years to a longitudinal study of the movements of men and women and the inner functions which

initiated those movements (Thornton, 1971). Laban observed movements of people during work and play, as well as those movements of highly skilled artists of the theater. His observations led to a framework for observing movement as a totality. The framework can be applied to all movement, regardless of its purpose. Laban's framework has been adapted in various ways, but the basic categories are ever present. The categories are Body, Space, Effort, and Relationships.

The framework, for observing movement, used in this study is Stanley's adaptation of Laban's work. The four framework components and their subdivisions are shown in Figure 1 (Stanley, 1969:39).

Body Awareness

As a framework of levers controlled by muscular forces and operating under the influence of gravity (Department of Education and Science, 1972:14) "... the body is the tool of human movement" (Stanley, 1969:49). The component of Body awareness asks the question, "what" is the body doing? "What" the body is doing includes: basic functions, body parts, weightbearing, body actions, body shapes, and symmetrical and asymmetrical uses of the body. Transitions between the three basic functions are in all movements (Stanley, 1969:40). The body parts which are actively involved in movement can be observed, as can the parts concerned with weightbearing. The actions being performed and the shapes being made can also

Body Awareness	Space Awareness
<ol style="list-style-type: none"> 1. Basic functions: bend or curl, stretch, twist 2. Body parts <ol style="list-style-type: none"> A. Recognition (i) Of the part used (ii) Of the part stressed B. Body parts can bend, curl or stretch, twist C. Body parts can lead an action D. Body parts can meet and part E. Body parts can be used symmetrically or asymmetrically 3. Weightbearing <ol style="list-style-type: none"> A. Support--parts taking the weight B. Transference of weight C. Balance 4. Body actions <ol style="list-style-type: none"> A. Identification (i) Locomotion (ii) Elevations (iii) Turns B. Gestures C. Holding or carrying actions which establish stillness 5. Body shapes: pin, wall, ball, screw 6. Symmetrical and asymmetrical uses of the body 	<ol style="list-style-type: none"> 1. Recognition of and adaptation to space: General and personal <ol style="list-style-type: none"> A. Recognition B. Adaptation to general space 2. Orientation to personal space <ol style="list-style-type: none"> A. The three-dimensional cross B. Diagonals C. Planes 3. Levels: low, medium, high 4. Pathways in space: floor patterns: air patterns 5. Extensions in space: large, small, near, far
Effort	Relationships
<ol style="list-style-type: none"> 1. Effort qualities of movement <ol style="list-style-type: none"> A. Weight: firm (strong), fine touch (light), heavy B. Time: sudden (fast), sustained (slow) C. Space: direct (straight), flexible (wavy) D. Flow: bound ("stoppable"), free (ongoing) 2. Emphasizing one element 3. Emphasizing two elements simultaneously 4. Basic effort actions 	<ol style="list-style-type: none"> 1. With objects: <ol style="list-style-type: none"> A. The manipulative relationship B. The non-manipulative relationship <ol style="list-style-type: none"> (i) An obstacle (ii) An extension (iii) A target 2. With people: <ol style="list-style-type: none"> A. Alone B. Alone in a mass C. Partners: cooperative, competitive D. Groups E. Intergroup relationships

Figure 1
The Components of the Movement Framework

be observed. Whether both sides of the body move similarly or one side is emphasized can be seen (Russell, 1965:20). The body as the instrument of movement can be observed and should be observed with each of this component's subdivisions seen in relation to each other.

Space Awareness

Space awareness is one component in which the focus is on the environment instead of the mover. This component asks the questions, "where" does the body move and in what directions and levels do the different parts of the body move? The Space component is subdivided into: general and personal space, orientation to personal space, levels, pathways, and extensions. The space available necessitates many adjustments in the movements performed. Movements can be in different directions and at different levels. They can make pathways both in the air and on the floor. The size of the movement can be observed in degrees of large or small. Although varied, all movement takes place in space.

Effort

The Effort component is concerned with the attitude of the mover and the quality of the movement. Effort asks the question, "how" does the body move? The subdivisions of the Effort component are: qualities of movement, number of elements emphasized, and the basic effort actions or combinations of elements. The motion factors of weight, time, space,

and flow can be blended to effect the qualities of human movement. The four motion factors are in all movement, but at times one, two, or combinations of their elements may be emphasized. The effort component is the inner force that is the difference between mechanical and living movement.

Relationships

Basic to the study of this component, is the movers' ability to modify their movements, in relation to the changing environment (Stanley, 1969:67). The relationship component asks the question, with whom or what does the body move? The answer lies in the observation of relationships with objects, both manipulative and nonmanipulative and with people, alone, as partners, and/or in groups. Most activities in physical education involve the mover moving with someone, opposing someone, overcoming obstacles, and/or using implements of some type; these situations set up relationships.

Application of the Movement Framework

To help the participants become aware of how the framework could actually be applied to movement, video taped movement sequences were used. After each component had been discussed, a video tape emphasizing that component was viewed.

Example: Part of the video tape emphasizing the Body component was shown to the participants and they were asked to identify the parts of the body being used and the type of body action being performed. The segment of tape was repeated and the participants were asked to identify the body part being stressed. This procedure was continued until each subdivision

of the Body component had been the focus of the observation. The specific segment of tape used was not always the same, but was from the section made specifically to emphasize the Body component.

This general procedure was followed for each component of the framework, with each building on the preceding one. This building process helped to develop the participants' understanding of how the components fit together for the observation of the totality of movement.

When applying this framework to the observation of movement, the focus is on the components and their interrelationship with each other. Human movement utilizes all of the components and it is their continuous flow and rhythm that forms the total concept (Department of Education and Science, 1972:6). The total concept is the important aspect in the initial stage of learning to observe movement.

ENVIRONMENT

The third element of the model focuses on the environment. This element has two phases, one is concerned with the types of experiences used and the second is the structuring of the experiences. The two phases are interrelated and together help create a learning environment which was considered desirable for this study.

Types of Experiences Used

The model for teaching the observation of movement included experiences of two types. One type was simulated

and the other was actual movement experiences. The simulated experiences were designed as the primary aid to learning to observe movement. The movement experiences were designed to aid the participants in their use of the framework and to strengthen their understanding of the movements they were asked to observe.

Simulated experiences. Studies conducted by Mitchell (1972), Stoller, Lesser, and Freedman (1964), Fulton and Rupiper (1962), and Costello (1975) were influential in the decision to use simulated experiences. These studies compared direct observational experiences with simulated observational experiences. Although the studies were conducted for various reasons, the results were similar. They all indicated that there was no significant difference between direct and simulated observation when used as an aid for observing selected actions. There are, however, some external advantages that simulated experiences have over direct observation. As discussed by Mitchell (1972), external advantages of simulated experiences are that they:

1. are more cost effective.
2. reduce the time needed by university personnel to achieve similar results.
3. can be focused to the precise purpose of the observation.
4. can be repeated exactly.

It is my belief, that all of these advantages would be valuable when teaching observation of movement as part of the teacher preparation curricula in physical education. Reducing the cost and personnel time required for direct observation would make it easier to add the teaching of observation of movement to already existing curricula. Being able to control the focus of the observation and to repeat the exact movements, should provide opportunity for the pre-service teachers to concentrate and practice as they learn to observe. It is possible that simulated observation experiences could reduce the time needed for pre-service teachers to learn to observe movement. I believe that these advantages are significant enough to warrant study of the use of simulated observation in the teaching of observation of movement.

Simulations for this study were developed using video taped activities. After the initial taping, the tapes were edited by selecting and combining segments I thought best for the purpose of this study. The product of this editing process was a master tape consisting of two divisions, training and application. The training tapes were of sequences of movement which emphasized the four components of the movement framework and their subdivisions. The purpose of these tapes was to allow the participants to see the components in actual movement as they were learning to use them. These movement sequences were considered to represent the components of the movement framework in their purest form. For

example, a segment of training tape made to emphasize the Effort component would include one mover illustrating the extremes of the motion factors: weight, time, space, and flow. Each factor would be illustrated separately and then in combinations with other factors. These training tapes were made at the University of North Carolina at Greensboro. Graduate and undergraduate students were the movers in all of the training tapes. The tapes made to introduce each component focused on one mover at a time. Tapes made for later use focused on both small and large groups of movers. Segments including both small and large groups were in the areas of games, dance, and gymnastics.

The application tapes illustrated activities that are usually included in the physical education curriculum. Most of the application tapes were filmed during actual physical education classes. The tapes were made in elementary, junior high, senior high, and university classes. The purposes for filming during an actual class were twofold. First, to record movement activity that actually existed as part of the physical education curriculum. The second reason was that I believed that to film a class in progress was as close to the live class situation as a simulated experience could be. The activities filmed for these tapes were: games, dance, and gymnastics at the elementary level; dance and gymnastics at the junior level; and tennis, fencing, gymnastics, dance, volleyball, and basketball at the university level.

Actual movement experiences. The movement experiences were designed as supportive activities for learning to observe movement. They had a direct influence on understanding the framework for observation of movement used in the model. The relationship of developing a kinesthetic sense to the ability to observe movement was discussed by Gates (1968), Morison (1969), Bartenieff (1965), and North (1972). They all believe that having experienced the movements helps in the understanding of the movement responses to be observed.

In my model for teaching observation of movement, the movement experiences were designed around the components of the movement framework. They were to parallel the simulated experiences of each component, the premise being that to experience the components, in movement, would aid in the participants' understanding of them. Thus, for this purpose, the framework became content for the movement experiences. An example of how the movement framework was used as content follows.

Example: The emphasized component was Body. The participants experimented with movements that different parts of the body can do: bend, curl, stretch, and twist. They used different parts to lead various movements and to meet and part. The participants supported their weight on different body parts and different numbers of parts. They were asked to experiment with three types of weight transference: (1) step like actions, (2) roll like actions, and (3) spring like actions. The participants also explored the body actions of locomotion, elevations, turns, gestures, and stillness. After experiencing movements from each of the subdivisions

of the Body component, the participants were asked to concentrate and explore with combinations of movements from this component. For example: combine what the parts can do (bend) with the types of weight transference and body actions.

Similar experiences were designed around each of the four components. After each component had been individually experienced in movement, they were combined as content for movement experiences. These combinations also paralleled the simulated experiences.

The second phase of the environmental element is concerned with the structuring of the experiences. This phase includes four organizational concepts for learning to observe movement.

Structure of Experiences

Structuring the experiences involved the application of four concepts used in learning to observe movement. The concepts were interrelated and had a direct influence on the stimulated and actual movement experiences previously discussed. The concepts are: reduced complexities, additive process, unity, and practice.

Reduced complexities. The first concept to be applied in the structuring of experiences was that of reducing complexities. Kirchner (1970) and Barrett (in preparation) suggested that the novice observer focus on only one person at first. Their suggestion was adopted for my model and by reducing the complexities of the situation, the concept was

applied in another sense. That is to say that the initial observational experience was designed so the observers were responsible only for observing. They had no responsibility toward the mover(s). Conditions were established in which the participants were not hindered by the complexities of the teaching/learning situation. The simulated observation experiences were important in creating the condition of reduced complexities. They allowed me initially to have only one focus of concentration for the participants and to remove all of the aspects of teaching that are found in a live classroom situation. The example that follows illustrates one way that the complexities of a situation were reduced.

Example: The simulated experiences initially consisted of segments which focused on one component of the framework. In this way, the participants were encouraged to concentrate on only one component without concern for the other aspects of movement. The complexities of learning each component were further reduced because each subdivision of a component was emphasized individually within the taped segment. Thus, the participants had only one subdivision to think about at a given time. The taped segments, illustrating the components of the framework, paralleled the participants' progress in learning to use the framework.

The experiences in observing were gradually made more complex, but at the same time were simpler than conditions that exist in the actual teaching/learning situation. This increase in complexity was done through the concept of additive process.

Additive process. The additive process entails beginning with one idea and combining it with other ideas when the observer becomes familiar with the preceding one. All

of the experiences in this plan were organized on the concept of the additive process. The following is an example of how this concept was applied in this model.

Example: The framework was introduced one component at a time. Each component was reduced to its individual subdivisions, which were introduced one at a time. As the participants became familiar with a subdivision, the next one was introduced until each subdivision had been added. When one component was completed, the subdivisions of the next component were individually introduced. Once the second component was familiar, it was combined with the first and the participants were asked to apply both in their observations. This procedure was followed until the participants were familiar with each component of the framework and could apply them in their observations.

A similar procedure was followed in increasing the number of movers the participants were asked to observe.

Example: With the first component, the participants observed a taped segment with one mover, who emphasized a subdivision of that component. For each of the components, only one mover was observed initially. As the participants became more familiar with the framework, more movers were involved in the simulated observational experiences. The additive process began with the participants' observation of one mover, progressed to observing small groups, and finally large groups, representative of an average size class in a school physical education program. In the group situations, the participants were asked to observe the group as a whole and also as many individuals as they felt comfortable observing.

As is implied by the term additive process, application of the concept led to the combining of the components. This unity was an important concept in this model.

Concept of unity. North (1973), Department of Education and Sciences (1972), Laban (1974), Preston-Dunlop

(1967), and Russell (1965) emphasized the importance of observing the unity of movement. The primary purpose of my model for the teaching of observation was to help the participants develop the skill of observing the unity of movement. The application of the concept of the additive process led directly to observing movement responses as a totality. As each subdivision and/or complete component was added, an attempt was made to help the participants become aware of the relationship between each component. The concept of this principle is the observation of movement as: "what" the body does, "where" the body moves, "how" the body moves, and the relationships that exist between the mover, objects, and other movers. The examples given for the additive process also apply to the principle of unity. All of the experiences were designed to help the participants develop the ability to use each of the components as they related to each other, thus observing the totality of movement.

The concept of practice. North (1973), Laban (1971), and Gates (1968) believe that the best way to learn to observe movement is to practice observing movement. The concept of practice was certainly important in my model. Practice helped to establish the interdependence that existed between all the elements of the model for teaching observation of movement. Important to my model was the opportunity for the participants to apply the knowledge they were learning.

The practice was designed always to have a definite focus. Video tapes were often used for the expressed purpose of practice. The tapes usually illustrated activities from an actual physical education class. An example of how a tape might be used follows:

Example: A segment of tape made during a junior high gymnastics class was shown. The participants were asked to focus on one student and to describe that student's movements, applying as much of the movement framework as they could at that point. The length of time the participants observed and the number of students they were asked to watch varied with each segment of practice tape.

In addition to practice via simulated experiences, the participants also practiced applying the framework as they observed actual movers. An example of this type of practice follows.

Example: Once the participants were comfortable with experiencing the movements themselves, they were asked to observe each other and to apply the framework to their observations. At times, these observations were made in pairs with one participant observing his/her partner and vice versa. At other times, half of the participants were asked to observe the other half as they moved. In all cases, the observations were followed by a discussion of what had been observed.

The discussions previously mentioned played an important part in the practice concept. They were the primary source of feedback for the participants concerning their progress. Feedback was an integral part of each practice. Without feedback, the value of the practice would have been minimized. The feedback created the opportunity for the participants to know if they were applying the movement framework in the manner that was intended in the model.

How the experiences were structured was crucial to the plan for teaching the observation of movement. The concepts of structure were so interwoven with the simulated and actual experiences that the influence the two phases had on each other was constantly flowing both ways.

The relationship of the environment, the movement framework, and the observer was one of interdependence. The three elements have a reciprocal action to each other. They were woven together to create a model for teaching the observation of movement. The model is illustrated in Figure 2.

INTERRELATIONSHIP OF THE ELEMENTS

The model depicts a process that is structured to create change within the observer. The first element of the model which focuses on the observer contains three key concepts that are threads connecting the element of the framework and the element of the environment. Each of the loops represents a component or combination of components of the framework. The line forming the loops represents the environment, which are the experiences structured as visual and movement. The line connecting the loops represents the concepts of awareness (A), biases (B), and concentration (C) within the observer. These lines symbolize evaluation, at a point in time, emphasizing the three key concepts. The observer at the exit end of the model, is symbolized by a divided rectangle. The amount of space in each area represents

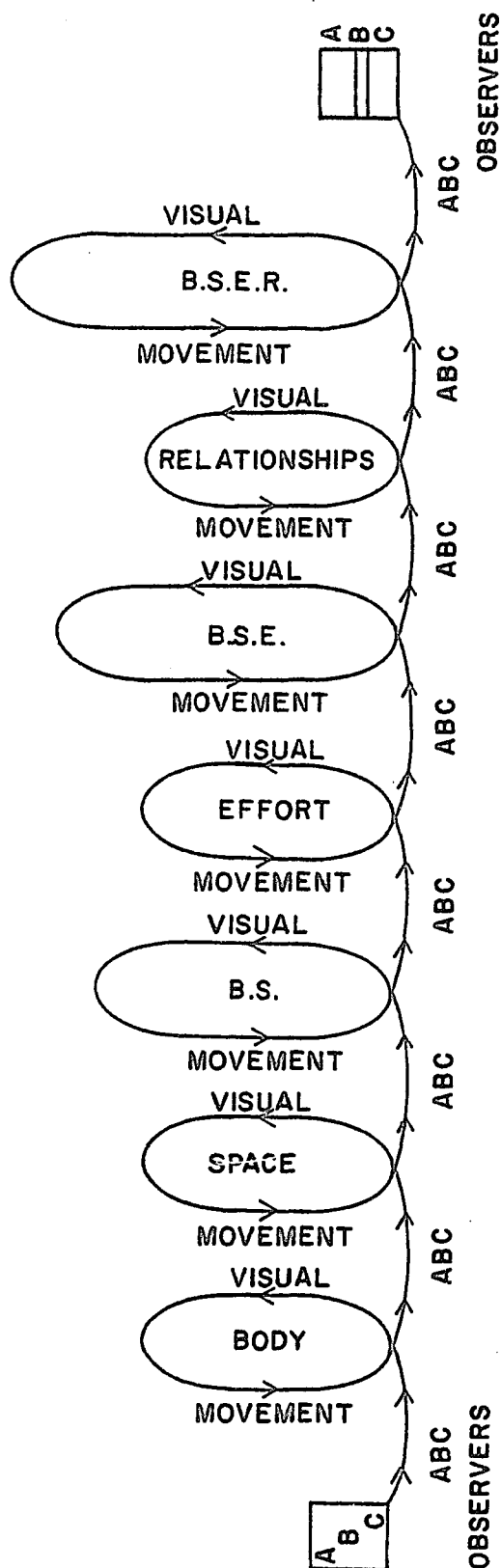


FIGURE 2
THE MODEL FOR TEACHING OBSERVATION OF MOVEMENT

the portion of awareness (A), personal bias (B), and ability to concentrate (C) that is expected as a result of the process.

Each of the three elements are interrelated in a way that is a building process. The observers undergo changes in their ability to observe, as they apply the movement framework through the experiences provided. It is expected that the changes will increase the observers' awareness (A) and ability to concentrate (C) as they decrease the influence of their personal biases (B). The extent of influence of these three concepts within the observers as the process begins is an unknown. It is important in the beginning that each observer become aware of his/her observational powers, the framework, personal biases, and the need to concentrate while observing. Each of these concepts plays an active part throughout the process and is checked at regular intervals.

The components and their subdivisions of the second element, the movement framework, are introduced separately. The environment has been structured to include visual and actual movement experiences which focus on the first component (Body) to be introduced. The component is introduced to the observers, and to help in increasing their awareness, they practice via the visual and movement experiences. As the observers practice, an awareness of their personal biases is emphasized. Once the observer is aware of the component and how it can be applied to observation of movement, which

involves concentration, the second component (Space) is introduced. The observers then become involved in visual and movement experiences which focus on the Space component. As the observer becomes aware of the component and how it is applied, the need for the ability to concentrate is reinforced. During the practice of applying the Space component, attention is drawn to personal biases as they enter into the observations. As the observers increase their knowledge of Space and their ability to use the component, they are asked to use both Body and Space as they describe the movement responses. An awareness of the two components and how they go together becomes the focus for concentration. As the observers practice using both components, recognition of personal biases becomes important and is aided through feedback from all involved, instructor and participants. Having practiced using the Body and Space components together, the third component of the framework is introduced. This is the Effort component. The same procedure is followed using the visual and movement experiences. The observers practice using the Effort component by concentrating on the subdivisions, then Effort as a whole. The practice then becomes broader to include Body, Space, and Effort as the components used in the observation of movement. Again after the initial awareness, the emphasis is on concentration and recognition of personal biases. As the observers become comfortable using the three components as a unit

during their observations, the fourth component (Relationships) is introduced. The observers concentrate on the aspects of this component until such time that they can apply the component in describing their observations. At this point, practice in using the four components: Body, Space, Effort, and Relationships together is begun. The observers are asked to concentrate on what they see the movers do and to describe the movement in terms related to the four components. An awareness of observing movement as a totality becomes very important. Recognition of personal biases is also emphasized as the observers develop their ability to see movement as a totality, based on what the body does, where the body moves, how the body moves, and with whom or what the body moves.

When the observers exit the process, they should have developed an ability to apply the framework to the observation of movement. The observers' personal biases (B) should be much smaller, thus decreasing the influence they have on the observation. The observers' awareness (A) should be at a very high level, as they are aware of the movement framework, the unity it allows for in observing movement, and how it can be applied to observation of movement responses. The observers' ability to concentrate (C) should have improved in that they are more able to focus on a given movement and/or combination of movements long enough to see and describe what occurs, without being distracted by personal biases.

There is no set time limit for this process. The time needed will depend on the individuals involved. In this study, the process was a total of fifteen hours. The time was divided into ten sessions of one and one-half hours each.

CHAPTER III

INQUIRY INTO THE MODEL

The workshop atmosphere was selected as the environment in which the model, discussed in Chapter II, would be implemented. The purpose of the workshop was to allow for inquiry into the implementation of the model designed for the teaching of observation of movement. The following questions were guides for the inquiry:

1. Is the model a functional means for building observational skills?
2. Can the concepts and practices, implicit and explicit, in the model be successfully introduced into teacher preparation curricula?
3. What impact did the model have on the participants' attitudes toward observation in the teaching of physical education?
4. What are the difficulties in teaching undergraduate physical education majors to observe movement?

The workshop format was selected because it allowed for the establishment of an informal environment, one in which a give and take interaction between all participants and myself could exist. The intent in using the workshop format was to help the participants feel comfortable enough to express their opinions, ask questions, and try to apply

the new material being presented in a non-threatening environment.

ORGANIZATION OF THE WORKSHOP

Structure of the Workshop

The structure of the workshop involved making decisions about the number and length of each session. In addition to these decisions, both the location and the recruitment of participants had to be considered.

Sessions. The decision concerning the number of sessions was based on studies by Fulton (1962), Stoller, Lesser, and Freedman (1964), and Mitchell (1972). These studies used simulated observation in periods of from nine to twelve meetings per study. With this knowledge and the knowledge of the amount of material I hoped the participants would learn to use, I decided on ten sessions of one and one-half hours each. The length of each session was based on the belief that after thirty minutes the participants could no longer hold the focus needed for the simulated experiences. Realizing that my plan would not only include simulated experiences, but would also include movement experiences and discussions, I decided that a session of one and one-half hours would allow adequate time for all the experiences I planned. It was my belief that this time period would not be too long and that the participants would be able to maintain their

ability to concentrate. With the decisions to conduct a workshop, the number of sessions, and length of time per session made, the next step was to locate a site for the workshop.

Location. The type of location desired was a college or university with undergraduate physical education majors who had no formal training in observation and who were not familiar with the framework selected for observing movement. The institution also had to have an academic calendar that would allow time for the workshop without disrupting regular classes. Averett College in Danville, Virginia met the criterion and accepted my workshop on their campus. The academic calendar at Averett, which was a 4-1-4, was perfect for my study. Their January Term was an ideal period for the workshop. The January Term was an independent term, consisting of four weeks, in which students usually took one concentrated course. Spacing the ten sessions, I decided to have three sessions the first week, two sessions the second and third weeks, and three sessions the fourth week.

Participants. Recruiting of participants for the workshop was done through the Physical Education Majors' Club at Averett. I asked for volunteers to participate in the ten workshop sessions. The participants did not receive a grade nor credit for their participation in the workshop.

Ten physical education majors agreed to participate for the ten sessions. The academic classification of the ten participants was: four seniors, one junior, three sophomores, and two freshmen. The group consisted of nine females and one male student.

Data Collection

The techniques of data collection were designed to aid in the evaluation of the model. The evaluation was structured to uncover new questions as well as to provide insight into the questions of inquiry. The techniques used for collecting data and evaluating the model were those which collected feedback from the participants, an outside evaluator, and the instructor of the workshop. As the study was an inquiry into the use of a model for teaching observation, it was my belief that the participants should provide the primary source of feedback as to the positive and negative effects of the model. Four data collecting techniques were used in conjunction with each session of the workshop. Descriptions of the four techniques follow.

Participants' logs. All of the participants were asked to keep logs in which they recorded their thoughts, feelings, and opinions about each session of the workshop. Their entries included their candid opinion of each session. They were encouraged to be open and honest in writing about their likes, dislikes, and reactions to the experiences of

each session. The participants were asked to use the following questions to guide their writing.

1. Why do you think the session was helpful or why was it not helpful?
2. Which aspects of the session were most beneficial to you and why?
3. Which aspects were most difficult to grasp and why?
4. Did the session alter your ideas concerning the importance of observation in teaching, if so, how?
5. Do you have any general comments and/or questions in reference to anything that happened during the session? If so, please include them in your log. Please feel free to include whatever comes to your mind.

I collected the logs for each session at the end of the following session. This gave the participants more time to reflect on the session and its effect on them. I read each participant's log and reacted to their comments either verbally or in writing at the beginning of the next workshop session. My verbal comments were directed to the group and were general; my written comments were more specific and directed to individuals.

Instructor's log. My reactions to each session were recorded after the session. The questions that guided my writings were:

1. Was the session successful, if so, why, if not, why?
2. Did the participants understand the material as presented, if so, why, if not, why?
3. Could the participants apply knowledge gained in previous sessions, if not, why?
4. Are there patterns in the participants' behavior which I can identify?
5. Are the patterns positive or negative to the teaching/learning process?

Audio tapes. Each session was audio taped. I listened to the tape after each session and analyzed the verbal behavior for additional insight into the model. The questions that guided my listening were:

1. Was the presentation of material clear?
2. Which parts were not clear?
3. Did the session become stymied at any time, if so, why?
4. Is there a pattern in the participants' progression evident in the discussion, what is the pattern?
5. Were the objectives of the session accomplished?

Application tapes. Video tapes of activities used in physical education curricula were made for the purpose of giving the participants an opportunity to utilize their newly acquired knowledge and skill. The participants were asked to

view a segment of tape during each session and to record their descriptions of the movement observed. The length of the tapes varied, depending on the components of the framework to be applied. I analyzed the participants' responses and evaluated their progress in learning to apply the framework as presented. The following questions were used to guide my analysis:

1. Are the participants using the framework when observing, if not, what are they using as a framework?
2. Are there patterns in the participants' ability to apply their knowledge; what are the patterns?
3. Are the participants progressing in their ability to use the framework? If they are not progressing, what are the reasons?

Outside evaluator. A fifth technique involved an outside evaluator who was asked to react to the model and its application. The evaluator was in no way connected with the study prior to the evaluation. The person selected had an in-depth understanding of and experience in using the Body, Space, Effort, and Relationships framework and in planning and implementing teacher preparation curricula in physical education.

The evaluator was asked to analyze and react to the logs covering sessions two and seven of three randomly selected participants. The evaluator also analyzed and reacted

to the instructor's log covering sessions two and seven, the responses of three randomly selected participants to the third and ninth segments of application tape, and the audio tapes of sessions three and ten. The sessions were selected, by me, for the purpose of supplying data collected in the initial stages of the workshop, as well as data from the last stages. Other collected materials were made available to the evaluator upon request.

After the evaluator had analyzed the information, we discussed the evaluation during a taped interview. The taped discussion provided me with an opportunity to listen to the tape after the interview and to ask for clarification of the evaluation and suggestions for improving the model during a second taped discussion with the evaluator. I did not establish guide questions for the evaluator's responses because it was assumed that the evaluator's expertise would guide the evaluation.

INDIVIDUAL SESSIONS

The workshop consisted of ten one and one-half hour sessions. Each session will be described in terms of its goals, experiences, and an evaluation.

Session One
January 5, 1976

Goals

1. To find out how the participants observe movement at the present time and to get a written example of their observations.
2. To introduce the purpose of the workshop and generally discuss what we will be doing during the ten sessions.
3. To help the participants become more aware of their personal powers of observation.
4. To introduce the Body component and its major subdivisions.

Experiences

1. The participants were asked to describe, in writing, how they looked at movement at that point in time.
2. The participants were asked to observe two segments of application tape and to describe, in writing, what they saw. Each segment was of a tennis player.
3. The purpose of the workshop was explained. There was a discussion on applying the Body, Space, Effort, and Relationships framework to the observation of movement.
4. The participants and I discussed the importance of observation in education and specifically in physical education.

5. The participants were given two minutes to look around the room and without further observation, to list items they had seen. They were then allowed to look around for two minutes and were asked to describe something about the items they had listed.

6. The Body awareness component was introduced.

a. Participants were asked to use curling and stretching actions with various body parts while seated.

b. They also experimented with leading actions while seated.

7. In the gymnasium, the participants were asked to experiment with body parts meeting and parting, with weight bearing and transference, and with body actions, i.e. locomotor, elevations, turns, and gestures.

Evaluation

The intent of the first session, as outlined by the goals for that session, was achieved. I believe that the session was successful in that the goals were met and the students, through their actions and logs, indicated signs of interest in the purpose of the workshop and observation of movement.

Session Two

January 7, 1976

Goals

1. To provide an opportunity for the participants to apply the Body component to their observations of movement.
2. To help the participants become comfortable using the Body component of the framework in their observations.
3. To help the participants develop an in-depth understanding of how the Body component was to be applied.
4. To introduce the Space component.
5. To provide an opportunity for the participants to apply both the Body and Space components while observing a movement.
6. To provide an opportunity for participants to observe a small group of movers.
7. To provide experiences through which I could obtain information for evaluation of the participants' use of the framework.

Experiences

1. There was a short explanation concerning the reason for the practical work.
2. The participants observed three segments of video tape and applied the Body component to their written descriptions of what they saw. Two segments were of one mover and were approximately 45 seconds in length. One segment was of three movers and it too was approximately 45 seconds in length.

3. The same three segments of tape were repeated and the participants discussed the movement in terms of the Body component.

4. The Space component was introduced through a verbal explanation.

5. The participants were asked to observe a 45 second segment of application tape and describe the movement, applying both the Body and Space components.

Evaluation

Each of the established goals was reached. It is my belief that the participants had an understanding of the Body component and they could apply it while observing movement via segments of video tape. I omitted the practical work dealing with the Space component because of the participants' negative reaction to the practical work concerned with Body awareness. In my opinion, they had not been provided as good a basis for the understanding of Space awareness as they had been for Body awareness. I believe that the omission of the practical work developed an awareness within the participants for the need to include practical work.

Session Three

January 8, 1976

Goals

1. To increase the participants' understanding of the Body and Space components as they are applied to

observations of movement.

2. To provide an opportunity for the participants to observe a group of movers.

3. To provide an opportunity for the participants to select one person, from a group, to observe.

4. To provide practical moving experiences using content from the Body and Space components.

5. To provide experiences through which I could obtain information for evaluation of the participants' use of the framework.

Experiences

1. The participants observed segments of video tape of one mover and discussed, as a group, what was being observed in terms of the Body and Space components.

2. The participants were involved in movement experiences combining content from the Body and Space components. The focus was on what the body did and where.

a. The participants explored moving in general space.

b. The participants explored moving in personal space, using extension (near and far), levels (high, low, and medium), and directions (front, back, and sides).

c. The participants explored moving in various directions, emphasizing level changes, floor, and air patterns.

3. The participants observed taped segments of approximately 20 movers and applying the Body and Space components

described, in writing, the movements they observed.

4. The participants observed the same group as in the previous experience, but selected one mover to include in their written descriptions applying the Body and Space components.

Evaluation

The session was successful in that its purposes were achieved. It offered a variety of opportunities, i.e. observation with discussion, observation with written description, and practical work. I gained insight into how well the participants could handle the material we had been covering. They were able to observe and apply the Body and Space components to their descriptions of the observed movement. Some participants did not participate in the verbal discussion of the movement, but those who did demonstrated an ability to use the framework as presented at that point.

Session Four

January 12, 1976

Goals

1. To develop the participants' ability to apply the Body and Space components while observing movement.
2. To introduce the Effort component.
3. To provide opportunities for the participants to apply the Effort component.

4. To provide opportunities for the participants to apply the Body, Space, and Effort components while observing movement.

5. To provide experiences through which I could obtain information for evaluation of the participants' use of the framework.

Experiences

1. The participants observed a 30-second taped segment of a fencer in action. Following the observation, they were asked to apply the Body and Space components by describing, in writing, what they had observed.

2. This experience was repeated with the viewing of another fencer.

3. The participants observed a 60-second segment of the application tape, this time of a junior high school gymnastics class. They were asked to observe a group of five people and in written form describe the movements, applying the Body and Space components.

4. The participants observed the same tape as they had in the previous experience and were asked to describe the movement, in written form, of one person applying the Body and Space components.

5. The Effort component was introduced and discussed.

6. The participants observed approximately 40 seconds of a segment of the training tape, showing one mover, and were asked to apply the time, weight, space, and flow

factors of the Effort component.

7. The participants observed a segment of the training tape approximately 45 seconds in length, showing one mover, and described the observed movements in terms of Body, Space, and Effort components.

Evaluation

The session was not successful. There was no practical work and the participants became bored with observing the six segments of application tape and writing their descriptions. I believe that I lost them in the beginning of the session with the application tapes. The introduction of Effort was very confusing, especially since the participants were not really concentrating on what was said. They became very general in their observations and when asked to apply Body, Space, and Effort, most of them used only the Body and Space components. They were more familiar with these two components. When applying the Body and Space components, the participants were not connecting the two and were general in that they would mention locomotor movements, but did not specify which locomotor movements. They treated most of the subdivisions of the Body and Space components in this same manner.

Session Five
January 14, 1976

Goals

1. To give feedback to the participants concerning their logs and written descriptions of their observations.
2. To re-introduce the Effort component.
3. To provide an opportunity for the participants to experience movements which emphasize the time, weight, and space subdivisions of Effort.
4. To develop the participants' ability to use the Effort factors as they observed movements.
5. To have the participants observe shorter segments of video tape.
6. To provide an opportunity for the participants to combine the Body, Space, and Effort components in their observations.
7. To provide experiences through which I could obtain information for evaluation of the participants' use of the framework.

Experiences

1. The Effort component was re-introduced and focus was on the factors of time, weight, and space. The flow factor was omitted.
2. During practical work, the participants explored movements using the extremes of time, weight, and space.

3. The participants were involved in practical work with combinations of the three motion factors they had studied.

4. The participants worked with a partner. One would use movements emphasizing a combination of time, weight, and space, as the other observed and verbally described what was observed in Effort terms.

5. The participants, working in pairs, were asked to add the components of Body and Space to the Effort component. One moved while the other verbally described what was observed.

6. The participants observed three 15-second segments of the training tape, of one mover, and wrote a description of what they observed.

a. The first segment was described in terms of time, weight, and space only.

b. The second and third segments were described in terms of Body, Space, and Effort.

Evaluation

The session was successful in that the participants increased their understanding of the Effort component and could apply it when observing movement. There was some confusion as to the difference between the weight elements of firm and fine as they tried to apply them to the tapes viewed. These elements were difficult to distinguish on

the tapes. The participants could add the Body component to the Effort component as they observed the tapes. They had more difficulty combining the Space with the Body and Effort components. They were still not describing the Body, Space, and Effort components as they related to each other.

Session Six

January 19, 1976

Goals

1. To improve the ability of the participants to apply their knowledge of the Body, Space, and Effort components as they relate to each other.

2. To "guide" an open discussion concerning the participants' thoughts and feelings about observation using the BSER framework as compared and contrasted to observation using skill analysis.

3. To provide experiences through which I could obtain information for evaluation of participants' use of the framework.

Experiences

1. The participants viewed approximately one minute of application tape, observing a tennis player and described what they saw, in written form, applying the Body, Space, and Effort components.

2. The participants viewed a segment of application tape of two serves used in a volleyball game. They described what they saw in the manner discussed in experience #1.

3. The participants viewed approximately 30 seconds of video tape of three volleyball players in a game situation. They were asked to describe what they saw and record their observations as previously discussed.

4. The participants observed a segment of the training tape, approximately 30 seconds in length, of one mover. They were asked to apply the Body, Space, and Effort components and record their observations in writing.

5. The participants viewed a segment of the training tape of one mover, approximately 15 seconds in length, and wrote a description of what they observed applying the Body, Space, and Effort components.

6. The participants observed one mover via a 15 second segment of the training tape, applied the Body, Space, and Effort components to their observation, and wrote a description of what they saw.

7. The participants viewed short segments of the training and the application tape. After each segment, they verbally discussed what they observed. When necessary, the taped segment was replayed.

Evaluation

I believe the session was very successful. Although it was composed primarily of viewing tapes and writing descriptions of what was seen, the participants stayed with the task and thus provided me with information upon which to evaluate their progress at this point in time. During the open discussion of what was being observed, participants who had not previously been verbal, contributed their views.

From what they wrote during their observations and what they said during the verbal discussion, I was pleased with the progress of most of the participants. One participant seemed a little confused on some of the subdivisions of the components and two were not combining the Body, Space, and Effort subdivisions. They described the components separately, but were observing the movements and applying the components. At this point in time, I believe that most of the participants had grasped the Body, Space, and Effort components. An understanding of the components, as they relate to observation, seems to have been accomplished by the majority of participants. In my opinion, however, they need practice in applying this understanding.

Session Seven

January 21, 1976

Goals

The goals of session seven were altered because the video tape deck and monitor were not available. I had originally planned to have the participants view two segments of the application tape, showing groups of elementary school children working in the areas of games and dance. The participants were to observe the total group for a short time, applying the Body, Space, and Effort components in their written descriptions. They were to watch one designated person within the group and record their observations. This same procedure was to be used during the second segment of the application tape. As this was not possible, the goals had to be redesigned. They became:

1. To review session six and discuss questions the participants might have concerning that session.
2. To introduce the flow factor of the Effort component, thus completing the subdivisions of that component.
3. To provide an opportunity for the participants to have practical experience using the elements of flow.
4. To provide opportunities for the participants to work with a partner, and to apply the Body, Space, and Effort components during a live observation.

5. To provide experiences through which I could obtain information for the evaluation of the participants' use of the framework.

Experiences

1. The participants were involved in a group discussion concerning the content of the previous lesson.

2. The flow factor of Effort was introduced and then discussed by the group.

3. The participants were involved in practical work experimenting with the extremes of flow (bound and free). The participants moved to the beat of a drum at first, then without the drum alternating bound and free movements.

4. Half of the participants observed the other half move and verbally described the elements of the flow factor. The groups changed and the other half described the movements.

5. The participants worked in pairs, alternating with one moving while the other described the movements, applying the Body, Space, and Effort components. This was concluded with both discussing the observation.

6. As a group, the participants observed one mover and verbally discussed the movements in Body, Space, and Effort terms. They discussed the movements with the mover, asked the mover to repeat moves, and/or hold specific positions that they might better see what was occurring.

Evaluation

The session was successful. The participants seemed to enjoy moving and observing alternately. They were applying the Body, Space, and Effort components and getting feedback from the mover as to his/her intent of the movement. They were connecting the three components better than they had done previously. All participants present were more verbal during discussions than they had been during discussions within the classroom. They liked being able to exercise a certain amount of control over the mover and discussing the movements with the mover. I believe that the participants can apply the portions of the framework, we have covered, to their observations and they are doing so with increasing ease.

Session Eight

January 26, 1976

Goals

1. To provide an opportunity for the participants to discuss or ask questions concerning any part of the framework and/or workshop.
2. To provide an opportunity for the participants to apply their knowledge of the framework while viewing video tape segments.
3. To introduce the component of Relationships.

4. To provide an opportunity for practical work in the area of Relationships.

5. To give each participant a written evaluation of his/her progress as I saw it through session number seven.

6. To provide experiences through which I could obtain information for evaluation of the participants' use of the framework.

Experiences

1. The participants viewed a 30-second segment of the training tape of one mover. They were asked to write descriptions of the movement they observed, applying the Body, Space, and Effort components of the framework.

2. The participants viewed a 15-second segment of the training tape, showing the same mover, and again wrote a description of what they saw, using the BSE components.

3. The participants watched a 30-second segment of the application tape of a group of elementary children working in the dance area. The participants were asked to observe the entire group and to write a general description of the movements they saw, applying the Body, Space, and Effort components.

4. The participants saw the same group of children involved in the same activity as in the previous experience. This time they were asked to observe one designated child for approximately one minute and to write a description of his movements in Body, Space, and Effort terms.

5. The participants viewed a segment of the application tape of a group of elementary children working in the games area. They were asked to observe one designated child and to write a description of his/her movements, applying the Body, Space, and Effort components. The participants were instructed to begin writing their descriptions whenever they felt they had observed enough to write.

6. I introduced the Relationships component, which completed the framework. The introduction was presented in a "lecture" style. The participants had the opportunity to ask questions and/or make comments.

7. The participants were given an opportunity to explore the Relationships component during practical work.

a. They first experimented with the relationship of their own body parts to each other.

b. The participants then explored the concept of relationships, while working with a partner.

c. The participants explored the concept of relationships while working in small groups of not more than four people.

d. The participants then worked with relationships in a larger group including all participants present.

8. After the practical work, there was an open discussion concerning Relationships.

Evaluation

Session eight was not as successful as previous sessions. The participants arrived in a less than receptive state and I did nothing to get them out of it. There was very little interaction during the open discussions. During the practical work, the participants were inhibited, much as they had been in the first session of the workshop. The discussion, following the practical work, was the best during that session. There were a few questions and some sharing of insights that had come from the practical work. Most of this discussion centered around Relationships as they exist in sport activities. I think that the participants understood the concept of the Relationships component.

Session Nine
January 28, 1976

Goals

1. To review the framework and its use when applied to the observation of movement.
2. To clear up any questions the participants might have concerning components of the framework and their use.
3. To provide opportunity for the participants to view various segments of the training and the application tapes and to describe verbally the movements as they were observed.
4. To provide experiences through which I could obtain information for evaluation of the participants' use of the framework.

Experiences

1. There was a review discussion concerning the application of the Body, Space, Effort, and Relationships components to the observation of movement.
2. The participants saw short segments of the training tape and verbally described the movements applying the Relationships component.
3. The participants viewed several segments of the training and the application tapes, some of one mover and some of groups of movers. They were asked to focus on only one person within the group. As the segments of tape were

seen, the participants verbally described the movements applying the Body, Space, Effort, and Relationships components as they related to each other.

Evaluation

This session was not totally successful in that the freshmen, sophomore, and junior participants were not actively involved in the discussions. They seemed bored and I think it was partially due to their lack of insight of how to apply the framework to observations while teaching. The seniors had an idea of how this could be done and thus appeared to be interested in the discussions and observations. There was some confusion in this session concerning the difference between observation of movement using the BSER framework and skill analysis. At this point in time, such confusion was a bit disappointing to me. I believe that the confusion was cleared up to some extent through the discussion.

In my opinion, those who verbalized their observation demonstrated an understanding of the BSER framework as it could be applied to the observation of movement. Those participants did apply the framework as they viewed the tapes. I believe that the underclassmen could apply the framework, but I am not sure that they have the depth of understanding the seniors seem to have.

Session Ten

January 29, 1976

Goals

1. To clear up any questions the participants have concerning the movement framework and its application when observing movement.

2. To get feedback on the changes, if any, in the way the participants described movement during their first observation of the workshop and observations of the same tennis player during the tenth session.

3. To provide an opportunity for the participants to apply the movement framework while observing a group.

4. To provide an opportunity for the participants to verbally discuss movement, as they watch a segment of video tape.

5. To establish a situation in which I could get verbal feedback, from the participants, concerning the workshop in its entirety.

Experiences

1. The participants viewed two segments of the application tape that they had viewed during the first session of the workshop. The segments showed the tennis players the participants had observed prior to the introduction of the BSER framework. Again the participants were asked to observe,

applying the BSER framework and describe in writing, the movements of each of the players.

2. The participants viewed a segment of the application tape of elementary school children in a gymnastics class. The participants were asked to apply the BSER framework to all observations.

a. They were asked to describe movements of the total group.

b. They were asked to choose one child they would help and explain why they chose that child.

3. The participants watched a segment of video tape of elementary school children working in the area of dance. They were to focus on a group working together, within the class, and to verbalize their observations of the movements.

4. The participants observed the first segment of the application tape used in this session again and verbally described the movements of the tennis player.

5. The participants and I verbally discussed the workshop in its entirety. They were encouraged to make any comments or express any feelings they might have concerning the workshop. Eight questions which I had designed were used to guide the discussion. They were:

a. What was (were) the most beneficial aspect(s) of the workshop? Why were they the most beneficial?

b. What was the most difficult aspect of the workshop to grasp? Why was it the most difficult?

- c. What constituted a successful session for them?
- d. Was the material presented clearly?
- e. Can they apply the knowledge they have in a situation outside of the workshop?
- f. Which aspect of the workshop would they like to see replaced and why?
- g. Would it be more beneficial to learn about the Body, Space, Effort, and Relationships framework and to learn simultaneously to apply the framework in teaching?
- h. What courses, if any, could possibly be of benefit to learning the framework if taken prior to the workshop?

Evaluation

The tenth session of the workshop was successful in that it provided a lot of feedback that could be used in evaluating the application of the model. The participants were candid with their comments concerning various aspects of the workshop and how they felt about it. As in other sessions, everyone was not verbal unless directly spoken to; however, they did offer nods and facial expressions which were some indication as to their reactions to certain aspects being discussed. All of the participants demonstrated an ability to apply the BSER framework to their observations of movement. There was a difference, among the participants,

in degrees of sophistication with which they could apply the framework. Some participants could not select one student out of the group as one they would help. I believe this was due to their lack of knowledge concerning the teaching process and the content being used.

The participants seemed to welcome the opportunity to discuss the entire workshop and the use of the BSER framework as it applied to teaching. They were so involved in the discussion that the session went 30 minutes over the scheduled time.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter includes the presentation and analysis of data. All of the data are presented and analyzed simultaneously. Five techniques were used in collecting the data. They were: participants' logs, instructor's log, audio tapes, written descriptions of the application tape, and the reactions of an outside evaluator to the model and its application.

The data collected through the first four techniques have been compiled into one set. This portion of the data focuses on the observer, the framework, and the environment. These three parts are the same interrelated elements that are in the model designed for this study. Although all of the data, as are the elements of the model, are interrelated, they are discussed under the part where they had the most direct influence. The data analyzed under observer are related to the development of the observer's awareness, concentration, and recognition of personal biases. The data under framework are directly related to the four components: Body, Space, Effort, and Relationships. Environment includes those data which are related to the types of experiences and the structure of the experiences.

The data collected via the reactions of the outside evaluator are presented and analyzed in a separate part of this chapter. These data are discussed under the following subheadings: application of the model, activities observed through simulated experiences, and changes in the participants.

At the conclusion of the chapter, two case studies are presented. The cases represent the range in the participants as they began and finished the workshop. The case study data were extracted from the participants' logs and the written descriptions of their observation.

OBSERVER

The data presented in this section are related to the observers' awareness, concentration, and personal biases as they developed in the participants. These three areas will be discussed separately.

Awareness

After the second session of the workshop, some of the participants began to realize that observation, as it was referred to in the workshop, was different from the observation they thought they could do. The observation they felt they could do was based on skill analysis. This awareness came faster for some than for others. Those participants who had had more experience in the area of teaching were the first to come to this realization. During the sixth

session, all of the participants were aware of how much more involved observation of movement was than what they had originally thought. It was at this time that one senior participant became aware that she was beginning to see more movement by not analyzing what she saw in terms of specific skill. This awareness was reached after three of the four components of the framework had been introduced and applied to observation and after a discussion of the differences between skill analysis and observation of movement using the framework. The participants had also devoted a large portion of session six to applying the three components as they related to each other in the observed movements. Although the participants had expressed the belief that they were seeing more movement, in session nine, some of them still seemed confused as to the differences between skill analysis and movement observation using the framework. Those having trouble understanding the differences believed that both skill analysis and observation of movement using the BSER framework served the same purpose. Those who seemed to have a better understanding of the differences believed that the BSER framework made the observer look at the individual who was moving. One participant described the BSER framework as a means to an end and skill analysis as an end in itself. I believe that this confusion existed because we did not contrast and compare skill analysis and the BSER framework during each of

the workshop sessions. It is my belief that those who could not understand the differences between the two lacked an in-depth understanding of both skill analysis and the BSER framework.

By the tenth session, all of the participants had indicated that they were more aware of what was involved in the observation of movement. They also believed that they were seeing more movement than they had prior to the workshop. Since the development of an awareness of the BSER framework was one of the aims of the workshop, I am not surprised that the participants were more aware of the ramifications of using the framework for observation of movement. I believe they thought they were seeing more movement because they were in fact seeing more movement. During the first session of the workshop, their framework for observation, if any, had been skill analysis. With this framework they had focused on seeing the negative or incorrect movements and expressed a great deal of concern for the movements not performed. During the workshop, specific skills, i.e. forehand drive and lunge, were not discussed as such. The emphasis was always on the movements observed as they related to the BSER framework. In a sense, if the participants were going to have anything to describe in their written applications of the BSER framework, they were forced to observe the movement as it occurred.

Three out of the four senior participants demonstrated an awareness of the relationship between the observation of movement and the teaching of physical education. The realization of this connection was not a goal of the workshop, but was deduced by the three seniors and provided further insight into the teaching of observation. Those participants who made the connection had been previously exposed to some type of teaching/learning situation in which they had taken the role of teacher. In addition to this experience, these seniors were much closer to graduation and actual teaching than the underclassmen. I believe this had an effect on them and helped to motivate them toward making the mental transfer of what we were doing in the workshop to a teaching situation.

As early as session five, a sophomore expressed an awareness that the seniors were seeing more and were verbalizing their observations more than she felt capable of doing. Because the seniors seemed to be grasping the material faster, she assumed that they had had previous experience using the BSER framework. The fact was that they had not; however, as stated earlier, they were closer to actual teaching and had been exposed to that role to some extent. Even though the seniors seemed more motivated to learn how to observe, it was after the ninth session that one of them stated that she, for the first time, understood the purpose of the workshop. This participant had demonstrated more insight into using the

framework in observation of movement and into the teaching process than anyone else. Based upon this information, I have reservations as to whether some of the other participants were ever truly aware of the purpose. The purpose of the workshop and observation using the BSER framework had been explained in session one and discussed again in session five.

Concentration

The participants realized the importance of concentration and focus while observing. They learned that in order to describe the movement they were asked to observe, they had to focus and concentrate on what was happening. When they observed with a predetermined idea as to what should happen, their concentration seemed to be more toward what they knew rather than what they were seeing. As the workshop progressed, their ability to concentrate on the movement aspects they were asked to observe improved.

All of the participants found it distracting to observe a group of movers. When asked to observe a group, it was for the purpose of getting a general picture of what was happening in terms of movement. The participants could observe one designated mover within a group and hold their focus on that mover. If asked to select one mover from within a group to observe, they had more difficulty keeping their focus on the one mover. I believe that part of the problem with observing a group was that they had been observing one

mover and were specific in their descriptions as they related to the BSER framework. They had to concentrate so hard on the newly learned framework that they could not be less specific in their observation in order to get a general view of what the group was doing. It would have been impossible for them to have been as specific when observing the group as they were when observing individuals. A group of three movers was the maximum number the participants felt comfortable observing. The activity the group was engaged in also had an effect on the participants. When asked to observe a large group of college students working on ball handling ability, several of the participants were frustrated because they did not understand the purpose of the activity. This lack of understanding affected their ability to concentrate. They seemed to feel more comfortable observing a group involved in volleyball. They still did not see more than two or three people; however, they were able to concentrate on the movements of those people rather than the game itself.

There were also indications that their ability to describe movement observed during a sport activity was not directly related to their ability to concentrate. During session five, the participants were asked to observe one mover, out of a group, who was executing a forward roll. A few of the participants described, in BSER terms, a forward roll in the way one might expect it to be executed. The

movements they included, however, were not in the roll they were asked to observe. Instead of concentrating on the movements being executed, these few participants seemed to rely on their memory of a forward roll.

Personal Biases

The participants did learn to recognize their biases and to omit them from their observations. In their first observation, the participants were evaluative in their description of the tennis player's movements. Their descriptions of what they observed during this observation were not of the movements they saw, but of the movements not executed. This first observation seemed to be based on a predetermined standard that the participant had of how the movement should look. If the movement did not look as expected, it was evaluated by the observers as being poor. After practice in the use of the BSER as a framework for observing movement, the participants learned to describe what they saw and to omit their evaluations from the observation. Much of the movement they were asked to observe was movement that they had no predetermined standard for, thus perhaps making it easier to omit their evaluative remarks. The participants also learned to omit them when observing sport skills with which they were familiar.

Most of the participants had expressed that they were uncomfortable in the dance area and found it difficult to get

involved in movement that could be dance. The participants were more inhibited during the practical work of the fifth and eighth sessions than any session other than the first. The practical work of the fifth session was related to the Effort component with an emphasis on motion factors. The participants did not use equipment during this session. The practical work of the eighth session was in the area of Relationships. Again the participants did not work with equipment. I believe that they felt more inhibited than in other sessions because they associated their practical work with dance.

FRAMEWORK

The data presented and analyzed in this portion of the chapter are directly related to the BSER framework. Most of the data relates specifically to one of the four components and its subdivisions. The discussion focuses on how the components and subdivisions were learned and applied by the participants. The data are presented under the four components of the framework. Due to the interrelationship of the four in observing the totality of movement, there may be some overlap of the components as the data are presented.

Body Awareness

The Body component and its subdivisions was the first component to be introduced to the participants. In session two, the participants demonstrated an ability to apply

subdivisions of the Body component, primarily body actions. Often they would describe the activity and omit the body part being moved. For example, one participant wrote: "... transfer of weight, twisting, turning, alternating leading parts." This tendency to describe body action while omitting body parts used was more prevalent when the participants observed three or more movers. I believe this reaction is one that might be expected, since body actions seem to be more general in terms of discussion than the body parts used, or weight bearing, shapes, etc. The participants indicated that they felt rushed to write everything they saw. This was supported by the fact that as the number of movers observed increased, the participants' descriptions of their observations became more general. The participants demonstrated a higher degree of ability in applying other subdivisions of the Body component when they verbalized their observations instead of writing them. As the workshop progressed and the subdivisions of the Body component were stressed, the participants were better able to describe the actions in terms of the parts used and their relation to weight bearing. Other subdivisions of the Body component were not often used, for example: basic functions, shapes, and symmetrical/asymmetrical uses of the body.

Space Awareness

Space was the only component not emphasized in practical work. The participants were introduced to the Space component through lecture and observation of the training tape. The participants seemed to understand the Space component and its subdivisions, at least those of general and personal space, levels, and to a lesser extent, pathways. They could apply the component when observing and working with that component only. For example, one participant wrote: "She is moving forward mostly, backward, sideways and occasionally up and down. Her pathway is usually straight, sometimes zig-zagged and seldom curved." When asked to observe a group of three or more and to use both the Body and Space components, the participants seemed to focus more on the Body component than on the Space component. For example:

Each person was using a limited space. Their bodies were utilizing locomotor and non-locomotor movements in order to kick, strike, throw and catch objects. Their bodies were supported on feet, transfer of weight. Most of the people were leading with body limbs to give impetus to the object.

The focus on the Body component may have been due to the fact that they had been working with that component longer or possibly the fact that they had not themselves explored movement emphasizing the Space component. It was noted that in session four, when the participants were asked to use the Body, Space, and Effort components together in their observations, they

were not as specific with Body or Space as they had been prior to adding Effort. They used Space least of all.

Effort

All of the participants had some difficulty understanding the Effort component and its subdivisions. I believe that this difficulty was primarily due to the way the Effort component was first introduced to them. Effort was introduced through observation and lecture, with no practical work. All four factors, weight, time, space, and flow, were introduced during the same session. The participants became bored and lost their concentration. I believe that they were overloaded with observation and details. The second day we worked with Effort helped the participants to understand the component better. The greatest difficulty resulted in distinguishing between the firm and fine elements of the weight factor. This was possibly due to the fact that the differences between these two elements were not distinct enough on the video tapes. By the ninth session, most of the participants felt that they could see the Effort component quicker than any of the others. For example, one participant wrote:

At first used sudden, forceful and flexible moves with arms mainly. Then began using sustained, strong and flexible movements. Both arms were involved - emphasis mainly upon them - they moved in angular patterns and were extended at times.

Relationships

The participants had the most difficulty understanding the Relationships component. Some of them never applied it to their observations. One reason for this could be the fact that the Relationships component was not only introduced last, but less time was devoted to it. The component and its subdivisions were introduced during session eight and the participants did not have time to develop their ability to apply it.

The Framework as a Total

All of the participants did learn to use the terms of the framework. Most of the participants could apply the four components to their observations, but did so separately. For example: "...his movements are fast and heavy, his right arm bends and extends, he used his left knee some, his movements are very direct and mostly in personal space." They indicated that they found it very difficult to be specific in describing movement using all four components simultaneously. For example, they were not able to observe that the mover utilized personal space as he led with his right arm, bending and extending, in a fast, heavy, and direct manner.

In the beginning, the participants used an analysis sheet that had been given to them. They became very dependent on the analysis sheet and while using it could combine the components. When asked not to use the analysis sheet,

the participants tended to describe the components separately. By the seventh session, the participants all felt that the BSER framework was beginning to come together for them. This was evident in the fact that they were beginning to use it more as a total, rather than as four separate parts. One problem with this may have been a lack of stress, on my part, in connecting the components in the initial stages of the workshop. Although each component was introduced, discussed, and was intended to be used in an add-on process, the participants did not seem to be able to cope with this process. Or it may have been due to the fact that each preceding component was temporarily dropped as a new one was introduced.

It was also noted that when applying the framework to their observations of movement, no one described the movement in connection with the activity. For example, an observation of a tennis player was written as: "He operates at a medium level, his right arm occasionally high or low. He bends his arms, mostly his right. His movement is bound, direct, strong, and fast." The movement would be described as it related to the components of the BSER framework, but not as it related to the activity or movement patterns observed, i.e. volleyball, tennis, basketball. One could not necessarily identify the activity of tennis from the participants' descriptions of what they observed. I think that this might be expected, if not desired, in this phase of the

teaching of observation as it was designed for this particular study. One purpose was to get the participants to observe the movement in terms of the BSER framework and not in terms of the specific skills of the sport or game as such. Also, as was stated in an earlier chapter, the reason for selecting the BSER framework was because these components are in all movement regardless of the activity. There was no emphasis, in the workshop, on relating the observed movements to the activity. The emphasis was on describing the observed movements by applying the four components of the BSER framework.

ENVIRONMENT

The data in this section are related to the structured environment of the workshop. That environment consisted of the experiences designed to help the participants learn and use the BSER framework as it applies to observation of movement. The experiences were primarily simulated observation and actual movement. The simulated experiences involved the viewing of segments of video taped movement activities. The actual movement experiences involved practical work based on the BSER framework.

Some of the workshop sessions included an introduction and discussion of each of the four components of the framework. Other sessions involved practical work and

observation of tapes, providing opportunities for the participants to apply their knowledge of the components.

Simulated Experiences

The simulated experiences were observations via video tape. These experiences were described in Chapter II. In the fifth session of the workshop, the participants began to complain about the length of the segments of video tape when they were asked to observe and record their descriptions of the movement. All of the participants felt that they were seeing too much to record during a forty-five second segment of tape. They were more comfortable observing fifteen second segments of video tape.

During the third session, the participants were asked to observe a tape of a group of twenty people and to apply the components, of the BSER framework, they had learned. Most could not make even general comments about what the group was doing. Several participants even had difficulty selecting one person from the group whom they would observe. The third session of the workshop may have been too soon to go from observing a tape of three people to observing a taped group of twenty. Also, the activity of the group could have been a factor. The movers were college students, each working with a ball in the games area, with the emphasis on ball handling. The participants had never seen ball handling skills developed in such a way and they were unable to see

any order in it. They thought it looked like "mass confusion." I believe they were unable to see any organization because they did not understand the purpose of the observed activity. Throughout the workshop, the participants consistently had difficulty observing a tape of three people at one time. When they were asked to choose one person out of the three, they always chose the one who used slower movements and fewer locomotor movements. The participants indicated that the faster movers, who traveled more, did so much that they missed seeing much of the movement, or at least were unable to record all that they did observe from the tapes. On several occasions, the participants complained about being able to see more on the tape than they were writing on their papers. This was especially true when observing the longer segments of tape.

The participants indicated that it was easier to observe a tape of one person who was performing movements that were not directly related to games, dance, or gymnastics, than it was to observe a group of children when they were working in a games or gymnastics area. The participants were not told the purpose for the movements they observed in games and gymnastics and most of them felt that they had no purpose. The approach to games and gymnastics, as shown on the tapes, was new to the participants and represented work being developed by Barrett (in preparation), Mauldon and Redfern (1969), Morison (1969), and Williams (1974).

I think that one of their problems, when observing movers in either area, was indicated by their statements that what they saw looked like confusion and a waste of time. This concept of what they were observing seemed to distract from their ability to concentrate on the movement. The observation of movers performing movements not directly associated with games or gymnastics were not distracting in this way, because the participants did not look for a purpose for these movements.

Some of the freshmen and sophomore participants felt that it was easier to observe movers in a sport activity than in the other video taped situations. I think the fact that they were familiar with sport activity and knew the purpose of the movement was one reason for their belief. Another reason was that they knew the movements that were "supposed to be" performed in the sport activity. As was previously pointed out, however, they often described these movements, instead of the movements that were actually happening.

In the fourth session of the workshop, the participants predominately observed movement via the application tape and wrote their descriptions. The participants became bored and tired of writing. From this session through the end of the workshop, the participants consistently indicated that they were tired of describing their observation in written form. They believed that open discussions were more

beneficial than the written records. In their final critique of the workshop, all of the participants felt that having to record their observations in writing was the most difficult and tiring aspect of the workshop. I believe that the complaint of having to write too much is legitimate. The time pressures involved in trying to write down everything they thought they saw, created some frustration within the participants. I also agree that the open discussions of the observations were valuable. They provided immediate feedback as to how the participants were observing. The pressure of the participants having to remember to write everything was alleviated. This technique of recording their observations by writing, could also account for the fact that some of the participants, in the final critique, expressed a desire to do away with the viewing of video tapes. I think that it was the recording technique instead of the tapes that they were against.

Actual Movement Experiences

The participants were very inhibited during the practical work of the first session. They did not understand the purpose of experiencing the movements and indicated that they felt the experience was useless. Before the first session was completed, however, they did begin to relax a little and seemed less inhibited. By the third session of the workshop, the participants seemed comfortable during the actual movement

experiences. They had also begun to realize how the practical experience helped in their observations. They believed that by trying the components of the BSER framework in movement, they developed a better understanding which helped in their observations. I believe that the reaction of the participants to the practical work was to be expected. They were being asked to move in ways that were different to them and at that point, they had no basis for integrating those experiences in movement with observing movement. During the third session of the workshop, several participants indicated that the practical work was more valuable after they had viewed segments of tape and observed movements related to the same areas they experienced during the practical work. By the tenth session, all of the participants believed that the actual movement experiences constituted the most beneficial part of the workshop. They suggested that there should be more actual movement experiences and that the video tapes should be used as a means of practicing observation, but not as a means of introducing a component. Not only did the participants believe the practical work to be more beneficial, but they also enjoyed it more than the simulated observations. The participants were not asked to write in connection with the actual movement experiences. I believe that not having to write increased the appeal of these movement experiences even more.

On occasion, the participants did observe movement in a live situation. There was some expression that this experience of observing was more desirable than the video tapes. The reasons the observers felt that observation in a live situation was more desirable, were that they received immediate feedback, had control over the rate at which they had to describe what they saw, and could talk with the mover concerning what the mover thought was being done.

In discussing, with the participants, the environment of the workshop, they indicated that they thought all of the experiences were helpful. They would prefer more emphasis on actual movement experiences and less emphasis on the use of video tapes. They also indicated that the length of the workshop, in relation to the number of sessions and length of each session, was satisfactory. The consensus was that less time would not have been sufficient to accomplish as much as they felt they had accomplished. The length of the workshop could have been extended if learning to observe was directly related to the teaching process. Several of the participants, underclassmen primarily, felt lost because they could not make the connection between observation of movement and teaching physical education. This connection of observation with teaching was not part of the workshop; however, the need for it is recognized. To have proceeded with the workshop beyond the ten sessions, without getting into observation as it is used in the process of teaching,

would have been more detrimental than beneficial. I believe that all of the participants, except the seniors, would have become bored to the extent of dropping out of the workshop. The fact that the participants, in the last three sessions, began to ask questions related to observation as it would be used during the teaching process, supports this belief.

EVALUATOR

The outside evaluator was asked to read entries numbered two and seven from the logs of three participants and entries numbered two and seven from the instructor's log. She also read the reactions of three participants to application tapes from sessions three and nine. The evaluator listened to the audio tapes from sessions three and ten. After having time to assimilate the material, the evaluator discussed her reactions with me. The initial discussion was audio taped, as was a follow-up discussion in which I asked for clarification of statements made during the first discussion. The following information was extracted from the two audio taped discussions and is believed to represent the evaluator's reaction to the model.

Application of the Model

The evaluator indicated that she believed the model to be a viable means for building observational skills. She believed the model could be introduced into a teacher education curriculum, if the teachers were also using the BSER

framework as content in their activity classes. Using the BSER framework as content for movement experiences would help students transfer the use of the framework in their observations to the teaching process. The participants expressed the same idea when they discussed how the movement experiences helped them apply the BSER framework. The evaluator indicated that the model has potential to bring teaching into the learning of observation and that regardless of background or grade level, undergraduate physical education majors can learn to use the framework. She raised one caution when teaching the framework as a tool for observation of movement. The danger, as she saw it, was that students could combine any set of words, relative to the BSER framework, and assume it happened in the observed movement. I found this to be true during the workshop. Early in the workshop, some participants seemed to be combining terms they were learning more than describing the movement as they saw it. For example, one participant described a forward roll using BSER terms, but described the roll as she thought it should be executed rather than how it was actually executed. If this happens when using the framework, the observation tends to take on characteristics of observation as it now exists. We decide what is to be seen before we see it.

The evaluator indicated that for teachers to use the model, they must be skilled in conducting discussions. She remarked that several of the participants believed that the

discussion sessions were helpful. She saw an increase in participation during the discussions. The evaluator suggested that the group of participants could have been divided into two groups of five for discussion purposes. This smaller group situation could have helped the participants become more involved sooner. She indicated that the model might include using various size groups for discussion, each group using a set of guidelines for discussion, with the teacher floating from group to group. Regardless of the size of the group, the teacher must consistently answer the questions as they are asked and not get off the topic in the answering process.

It was obvious to the evaluator that the participants did not like writing down their observations as much as they were asked to do during the workshop. She believed that they were burdened by the amount of writing and this often led to frustration when viewing the tapes. The evaluator suggested that the sessions in which the participants would be asked to write descriptions of their observations be spaced throughout the workshop. She also felt that perhaps segments of the application tape should be no longer than fifteen seconds, which is the length with which the participants seemed most comfortable. The evaluator suggested, too, that the length of application tapes could be sequentially lengthened. Another possibility, as seen by the evaluator, was to show a short segment of tape and replay the same segment to allow

the participants to see if they described everything they saw. The tape could be shown until the participants were comfortable with it. The suggestion concerning the length of the tape was incorporated into the workshop as it was being conducted. Replaying the tapes was not done in the workshop, because it was believed that the participant would develop a dependency on being able to see the same movement over and over. In a teaching situation, they do not have this opportunity, thus the focus was on the information they could take in during a given time.

The evaluator suggested that more opportunities be designed for the participants to practice focusing their observations on individuals in a group situation. She felt that unless the participants were told to look at one or two individuals at different times, they tended to just take in the whole and not see individuals. When observing a group, the participants described their observations as if everyone was doing the same thing.

The evaluator thought that the use of audio tapes was a good idea and should remain in the model. She thought that the tapes were a good source of feedback, as they provided information related to the teacher's behavior and how the participants were able to handle the material. Because of the length of time required to listen to the tapes, she believed it would be more practical to use them periodically. The evaluator also believed that the activity sessions were

very important to the model, in that they gave an added value to using the framework in observing movement. She based this on her belief that it is easier to see something if you have experienced it. The evaluator suggested including more activity sessions to work with the framework and to find out what Body, Space, Effort, and Relationships awareness really means. To the evaluator, the logs were the key to the model. She saw the participants' logs as being very useful to the instructor and felt that they should not be changed. It was from these logs that the range of the participants' backgrounds and observational abilities became evident early in the workshop. The instructor's log has the potential for becoming the basis of the lesson plan, as it would build on the participants' logs.

Activities Observed Through Simulated Experiences

The movements which were used as the content of the training tape were not specifically related to dance, games, or gymnastics. The evaluator, however, associated those movements with dance and felt that the participants may have done the same thing. The point was made that it is important to be aware of things that interfere with learning, i.e. a mover wearing leotards or using movements that could connote activities with which the participants were not comfortable. The evaluator felt that the participants were more comfortable observing tennis than dance or dance like movements.

She thought this had a direct relationship to the experiences the participants brought to the observations. Most of the participants were more familiar with tennis than dance. Although the participants may have felt more comfortable with familiar type movements, they also brought a bias to these movements. That is, they had a preconceived idea of the execution of a skill rather than observing what the mover actually did. It was for this reason that sport activities were not used in the early sessions of the workshop. The evaluator agreed that the omission of sport activity in the beginning was probably a good decision. Related to this decision is the fact that manipulative activities compound the problem because they give additional things to look for. She suggested that gymnastics might be a middle range between dance and games. The evaluator questioned whether or not Laban's framework was meant to be used for the specific purpose of looking at sport skills. She indicated that it is important for the participants to recognize tennis as tennis. She believes that students will be confused if we do not make the framework appropriate to specific sports. The situation needs to be included in the description, the description of a tennis player should sound like a tennis player. The evaluator's point is well taken; however, the reason Laban's framework was chosen was because it could be applied to any movement, regardless of its purpose. I certainly agree with the

evaluator's belief that when observation is used in the teaching process, it is important that the situation of the movement become part of the description. It is important that the teacher, as the observer, know the purpose of the movement. This aspect of observation in teaching would be the next step, if the workshop were extended into more sessions. The evaluator believes that the model should include the relationship of observation to teaching. She believes that the participants need a reason for using the terms of the BSER framework for describing movement. This would be a must for introducing this model into a teacher preparation curriculum.

Changes in the Participants

The evaluator indicated that the fact that the participants learned from the activity, video tapes, discussions, and logs is reason enough to keep these aspects in the model. They all contributed in various ways to the changes the participants underwent. She believes that the growth in each individual was apparent. Regardless of the very obvious differences between the participants and how they like to learn, growth did occur over the ten sessions. She believes that the participants did learn to do what they set out to do; that is, they learned to use the BSER framework in observation of movement in various forms. The model did seem to have an impact on the participants' attitudes toward observation. The participants had positive

feelings towards how well they could use the BSER framework. The evaluator believed that the participants were able to use the framework and could record much information about the way people moved. To accomplish this, the participants had to overcome their value judgments, which were so prevalent in their first observation. They learned to observe without constantly looking for what was wrong with the movement. The evaluator felt that she did not have enough information to determine whether the participants' attitudes toward observation were actually changed or not. She indicated that there was evidence that attitudes began to change. Several participants seemed very comfortable using the BSER framework and saw it as a better way to look at movement. For the potential of the model as an attitude changer to be fully realized, the evaluator believes that the participants would have to have the opportunity to apply what they learned to teaching. She did indicate that the participants were aware that more was happening in movement than they had ever considered before. They also realized that everyone is different and that this had implications for teaching. The evaluator did question how well the participants would be able to use what they had learned in the teaching process.

CASE STUDIES

Participant A

Introduction

Participant A is a female and a senior physical education major. She had completed her required course work with the exception of student teaching and was to student teach in the spring semester of 1976. Prior to the workshop, her only experience was in teaching swimming. She had no experience using the framework for observing movement that was used in this study. As the workshop began, I would describe this participant as being serious about her participation. She demonstrated an eagerness to learn and a genuine interest in the topic. She was very open to new and different ideas and was looking forward to teaching.

Ability to Apply the BSER Framework

Prior to being taught how to observe movement in terms of the Body, Space, Effort, and Relationships framework (BSER), the participants were asked to explain how they observed movement at that time. This written exercise provided information, for me, as to the ability of the participants to observe movement as they entered the workshop. Participant A wrote:

Generally speaking, I look for good form as the person executes a certain skill. This form includes proper use of body parts in relation to the given skill. Also, I look at the person's unnecessary

movements and try to find ways to aid him/her in eliminating them. For example, in teaching swimming strokes there are proper methods of execution which are efficient when performing and I look for these and try to guide the student toward using an efficient technique.

The major emphasis of the workshop was on the participants' ability to observe and describe movement in terms of the BSER framework. By design of the workshop, this ability was most often demonstrated through written descriptions of what they observed. The data included in this section are from Participant A's written explanations of what she observed from simulated experiences during the ten sessions. Data from each session are presented and followed by analytical comments.

Session one. Prior to the introduction of the BSER framework, all of the participants were asked to observe a taped segment of a man playing tennis and to describe his movements. This first experience at observing and describing was to be done in whatever way they could or would observe movement at that time. Participant A wrote:

The man was obviously a beginner at the game. He was rather "flitty," using his body very inefficiently. His footwork was poor and his racket positioning was awkward. He used very little follow through and seemed very unsure of himself.

Participant A described the man's weaknesses and generally evaluated his ability to play tennis.

The first session included a second simulated observation of a tennis player and Participant A again focused on

the weaknesses of his skill. She did not really describe the tennis player's movements. In each of the observations, she made judgments about the player's ability without justification. Her evaluations seemed to be based on very little movement information.

Session two. Participant A's first written observation applying the BSER framework was made during the second session of the workshop. The participants were shown a taped segment of one mover using locomotor activities and were asked to describe the movements using subdivisions of the Body component. Participant A's description was:

She used whole body movements, hopping, skipping, crossing over of feet. Running, which led to skipping, leaps and sliding.

Participant A named the locomotor body actions of the mover. The only body parts referred to were the feet and she did not mention the other subdivisions of the Body component. The introduction of this component, to the participants, emphasized locomotor actions, thus providing good reason for the participants to do the same.

In another observation, the participants were again asked to observe one mover, who had been taped to illustrate non-locomotor activities, and to describe the movements using the Body component. Participant A wrote:

Gesturing, bending arms; trunk, and legs.
Stretching, curling, and swinging of arms. Shapes with arms and upper body-transfers weight.

Participant A applied more of the subdivisions of the Body component by combining body functions with body parts. The use of non-locomotor activities by the mover may account for the participant being able to be more specific in her description of what she observed.

When asked to use the Body component to describe the movements of three people, via observing a segment of video tape, Participant A wrote:

The group used a considerable amount of locomotor movement and at the same time used much non-locomotor movement. Again many different shapes were made.

At this point in time, Participant A could not be at all specific when observing three movers. Her comments refer only to body actions and shapes in general terms. She could not be specific as to the actions and shapes, nor could she combine other subdivisions of the Body component.

Also during session two, the participants were asked to observe a segment of tape and to describe the movement of one of the three movers using the Space component. Participant A wrote:

Girl is using locomotor movements (skipping, hopping, running, sliding, etc.). She is moving forward mostly, backward, sideways, occasionally up and down. Her pathway is usually straight, sometimes zigzagged and seldom curved. Medium level.

Although the participants were only asked to describe the movement in terms of the Space component, Participant A included locomotor movements from the Body component. She described Space in terms of directions and pathways.

When using the Body component in her descriptions of what she observed, Participant A was able to apply the subdivisions of body actions and functions and in some instances described the body part involved. She was more general in her description of weight bearing and body shapes. When observing three movers, Participant A was very general in her use of the subdivisions. When applying the Space component, she used directions and pathways as well as locomotor movements from the Body component.

Session three. In the beginning of session three, the participants were asked to observe a segment of the application tape of a group of about twenty people. The people were working with a beanbag or ball on tossing, catching, and striking. The participants were asked to use both the Body and Space components to describe the movements they observed. Participant A's description follows:

Each person was using a limited space, moving forward, backward, and sideways trying to maneuver an object. Their bodies were utilizing locomotor and non-locomotor movements in order to kick, strike, throw and catch these objects. Their bodies were supported on their feet - one time saw transferring of weight to different body parts. Most of the people were leading with body limbs in order to give impetus to their beanbags, balls, etc.

Participant A described, in general terms, what the group was doing. Most of her description was of the group collectively, as if everyone were making the same moves. She did include some aspects of both the Body and Space components.

After observing and describing the group's movements, the participants were asked to select one person from the same group to observe and describe that person's movement. All of the people in the group were working either with a ball or a beanbag. Participant A chose a girl who was working with a beanbag. She wrote:

Arms leading - mostly right to toss the object. The leg was extended and went into a bended position. Her body was curled (twisted) at one point at the waist and the right arm was behind her to catch the object. She was throwing the object with both hands and used both feet on occasion to toss it. Her non-locomotor movements were all in relation to the object. She was usually in one specific area - using straight and curved pathways. She operated at all levels and moving in all directions. Limbs moved up and down. She mostly used personal body space and only used general when her beanbag got out of reach.

Participant A did use both the Body and Space components to describe the movement she observed in the groups. She linked the components together in some instances. As one might expect, Participant A's description was more specific when she observed only one mover. She applied more of the subdivisions and linked them together especially when using the Body component. This was illustrated in her reference to the right arm leading to toss the object and her body being curled at the waist with right arm behind to catch the object. She was not as specific in her application of the Space component. For example: "She operated at all levels and moving in all directions."

Session four. The participants were asked to observe a taped segment of approximately twenty-five junior high

students in a gymnastics class. They were asked to focus on one person and to describe the movements of that person, using the Body and Space components. Participant A described her observations as follows:

Weight transference from feet to hands and head. He was in tucked (curled) position. He rolled forward, transferring weight again from hands and head to back, hips and to knees.... He was operating at a low level except when his weight was supported on his feet. Used locomotor movements and non-locomotor movements.

In this observation, Participant A included subdivisions of each of the components. From the Body component, she described body functions, parts, weight bearing, and actions and from the Space component, she included directions and levels.

Also in this session, the participants had the opportunity to apply the Effort component in their observations. After a short practice time with the Effort component, the participants were asked to use the Body, Space, and Effort components together, to describe the movements of one person. Participant A did not complete the task, she separated each component and described the observed movement first in terms of Body, then Space, and finally Effort. She wrote:

What - body twisting, stretched into extended positions. Used non-locomotor movements with hands and arms. Locomotor movements with legs. Much gesturing with both hands and arms leading with feet and hands.

Where - she moved in every direction - usually her direction was led by her hands. Operated at all levels. Moved in curved pathways.

How - At first, she utilized slow, sustained movements, emphasizing arms and hands. Her movements were strong and exact - seemed explosive.

When asked to use the three components together, Participant A was not as specific in her use of subdivisions, nor did she link the three components together. She did include some aspects of the Body component when describing Where and How. When applying the subdivisions of the Effort component to the observation of the movements of one person, she was able to use time, weight, and space, but did not use the flow factor.

Session five. In session five, Participant A was able to tie the subdivisions of the Body, Space, and Effort components together better than she had in the previous session. I believe that part of her problem in the previous session was my fault, in that my explanation of the Effort component and its relationship to the Body and Space components was confusing. Because of the confusion with the Effort component, I temporarily dropped the flow factor, thus accounting for Participant A's omission of it from her description in this session. An example of her use of the three components while observing one person on a segment of tape was:

At first, used sudden, forceful and flexible moves with arms mainly. Then, began using sustained, strong, and flexible movements. Both arms were involved - emphasis mainly upon them - they moved in angular patterns and were extended at times. She operated at a medium level and mostly in personal space. Mostly non-locomotor movements with arms, hands, and trunk. Some locomotor movements with legs. Transferred weight from left to right, etc. Moved sideways, forward and backward.

Session six. This session was primarily a practice session for the participants. The participants used most of the time observing segments of the application tape and describing the movement they observed in Body, Space, and Effort terms. About half of the segments observed were of movement involved in sport activity, i.e. tennis, volleyball. The participants were sometimes asked to observe and describe the movements of one mover and sometimes to observe and describe the movements of the group. The rest of the segments were of one mover only and did not involve a sport activity, but rather one mover emphasizing aspects of the Body, Space, and Effort components. An example of Participant A's observation of one person serving a volleyball follows:

(Emphasis was on right arm). Body was in a slight tucked position at the waist. Left arm was bent at elbow holding the ball and right arm was extended. As she struck the ball the right leg extended and she had all weight on left foot. The right arm led in the serve. Her arm was extended on contact. The right arm was moving forward in direct space with fast time and strong force. The arm was operating at a medium level. She was utilizing personal space, non-locomotor and manipulative movements.

Participant A used subdivisions of each of the three components (BSE) and linked them with the activity in which the mover was involved. The flow factor had not been reintroduced to the participants, thus again accounting for its omission from her description. All of Participant A's descriptions for this session were very similar to the one previously included.

Session seven. The participants were not asked to write descriptions of their observations in the seventh session.

Session eight. During session eight, the participants were asked to apply the Body, Space, and Effort components in their observations of a taped segment of elementary children working in the area of dance. Although cursory, Participant A was able to describe time, weight, space, and flow of the Effort component, as they were used by most of the group. She also noted the body parts most often used and the air patterns they made as part of the Body and Space components. The participants were asked to observe one boy from the group of children and to describe his movements using subdivisions of the Body, Space, and Effort components. Participant A wrote:

Most of his movements were very sudden at the first part of the tape. He traveled in flexible space - usually turned to his right. His arms were forming air patterns - curved and extended. His movement was bound in that he had to maintain periods of stillness from time to time. He used general space and operated at high, medium and low levels. One time he maintained his balance by placing his right hand on the floor. He was bending at his waist and at a low level. His pathway was curved and most of his movements were light. He went through a period of very sustained movements - weight was heavy.

Participant A used most of the subdivisions of the Body, Space, and Effort components, however, she did not identify how and where the body part was moving.

Session nine. The participants were not asked to write observations during session nine. They observed segments of the application tape involving one mover, and used the BSER framework verbally to describe what they observed. During the discussion, as noted in the Instructor's Log, Participant A demonstrated the ability to describe movement using subdivisions from all four components. She could use the Body, Space, and Effort components separately and in relation to each other better than she had demonstrated in her last written application of the framework. Her use of the Relationships component was not as specific, as it was the newest of the four components; this did not surprise me.

Session ten. In the final session, the participants were asked to observe the same segment of the application tape that they had observed in session one. This tape was of a man playing tennis and the participants had observed and described his movement prior to being taught to use the BSER framework. In this description of the tennis player, Participant A did not evaluate the player's ability, as she had done in her first observation. She described, in BSER terms, what she saw the player do. She used aspects of all four components separately and in relation to each other. A comparison of the two observations indicates that Participant A saw, at least described, more movement during the latter

observation. Participant A's description of the tennis player, after learning to use the BSER framework was:

He operates at a medium level mostly - his right arm on occasion breaks into the high and low levels. He is bending both arms, mostly his right. His movement is bound and he's moving in a direct fashion. The weight quality is strong and time is fast as he swings the racket. His direction changes from forwards, to backwards, to sideways. Relationships is of individual to object and it is a dynamic one. His movements are fast and his legs are applying locomotor movements - walking, sliding, and running. His hands move across his body at times - mostly the right arm and is close to his middle from time to time. His use of space is general and both arms are gesturing - his right arm is bent and extended to contact the ball. Pathway is curved and zigzagged mostly. Emphasis is on the right arm.

Also in session ten, the participants were asked to observe a taped segment of children working in gymnastics.

Participant A wrote:

This group is involved in relationships between individuals and objects. Levels change drastically - high, medium and low. Movements are bound and free, pathways are varied. Transference of weight is prevalent. Much locomotor movement - walking, sliding, jumping, etc. Effort quality is heavy and light - most movements are fast and direct. Directions are mostly forward and sideways, occasionally backwards. General space was used.

Participant A was almost too general in her description to be of value. Comments such as "...pathways are varied," does not tell what the pathways were. She was more specific when using other subdivisions of the components. For example, she wrote "Directions are mostly forward and sideways....," however, she did not include the Body or Effort components in relation to the Space being used.

The participants were asked to select one child from the group that they would choose to help and to tell why they chose him/her. Participant A wrote:

I'd choose the tall student with the dark shirt on to help. He seemed to have problems with moving in any direction except forward. He always does a forward roll and doesn't explore any other way of moving. His effort is consistently the same, direction the same, everything seems the same. I feel he needs some facilitative help to encourage more exploration.

The purpose of this task was to see if the participants could select one person based on what they observed that person doing. Participant A handled the task rather well, considering that such ability had not been emphasized during the workshop.

Summary. I believe that Participant A had a better working knowledge of the Body, Space, Effort, and Relationships framework than any of the other participants at the end of the workshop. Her progress in using the BSER framework is illustrated in the previous excerpts from her written application of her observations. Near the end of the workshop, she demonstrated the ability to use subdivisions from all four components and to use them separately and in relation to each other when observing one mover. She could also apply the movement framework when observing a group, but was not able to include as many details. Participant A's two observations of the tennis player, one prior to being taught to use the BSER framework and the second after learning to

use the framework, illustrate her progress. She not only described her observations in BSER terms, but she was not judgmental. She observed and described what she saw, omitting her evaluation. Based upon her written descriptions, I think that Participant A had become aware of observation and the BSER framework, she had developed the ability to concentrate, and could recognize her personal biases in that she eliminated them from the descriptions of her observations. Her progress was characterized by her ability to use the BSER framework components separately and in relation to each other. She also demonstrated the ability to concentrate on movement.

Participant's Log

All of the participants were asked to keep a log and to make an entry after each session of the workshop. Their entries were to include answers to specific questions and expressions of their personal ideas and feelings concerning the sessions (see page 94).

Summaries of Participant A's entries and some direct quotes from her log will be included in this section. Both the summaries and quotes are in chronological order as they appeared in the entry for each session of the workshop. The number following the word "Entry" refers to the number of the session the entry covers.

Entry one. In her log entry after the first session, Participant A expressed an awareness of the need for being able to observe in physical education. She felt that the practical work was good and that it made her more aware of her body, especially of the parts that could be used for support. She also indicated that she realized most of the participants used movements they had previously experienced, such as those used in sports activities, instead of experimenting with new possibilities.

Entry two. In her entry for session two, Participant A was again supportive of the session. She felt that the session made her realize how much there is of which one should be aware. She liked viewing the tapes and verbally describing her observations more than having to write descriptions of her observations. She felt rushed and forced to generalize her descriptions when she had to write.

Entry three. Session three's entry indicated an appreciation for the Space aspect of movement. Participant A felt that she was beginning to put the Body and Space components together more effectively, yet could not use all the subdivisions as well as she would like. She expressed a desire to isolate different positions and to analyze each body part in a stationary situation. She felt that to stop the tape and hold the movement would allow her to see more. Participant A indicated that the most beneficial part of the

session was viewing the tape, and then participating in the movement experiences. She felt that the tape helped her to form a cognitive base to which she could relate while moving. In reference to the Space component, she wrote:

I can see that 'where' is just as imp't and much easier to detect because it's usually not as intricate as 'what' the body is doing.

Entry four. In her entry for session four, Participant A expressed the feeling that she could be more specific when she observed shorter taped segments. Prior to session four, the taped segments had been approximately thirty-five seconds in length. During session four, the time was reduced to approximately fifteen seconds for most of the segments. She felt that she had a better understanding of Effort, especially of the elements of space and time. She indicated that she still had problems with force (weight) and flow, as they did not seem as clear cut to her as the others.

Participant A seemed to mentally transfer what she was learning in the workshop to the teaching situation. An example of this transfer was when she realized the importance of word selection in teaching. She wrote:

This session made me stop and think about how important word selection is in teaching. For instance, have I relied upon terms which may only be meaningful to the motorically advantaged and in turn, completely omitted the majority of a class? Have I done the same thing when dealing with individuals? I feel guilty because I remember using concepts I understood and a few students in teaching swimming and later I had to talk in terms of what, where, how, etc. movement occurs. I realize now

that a more effective method would have been explaining what, where, how, etc. prior to using the terms. That way I would have made sense the first time and the students would have been given a fairer chance.

Entry five. Participant A's entry for session five indicated that she felt the session was one of the best and that she personally benefited a great deal. She wrote that she enjoyed and learned from:

- 1) going over the concepts
- 2) experiencing these concepts myself and watching another perform
- 3) viewing the tapes.

She also stated: " I feel good about what I'm beginning to bring together. Again, I'm seeing more and more about observation that pleases me."

Entry six. In her entry for session six, Participant A was writing her thoughts as to how equipment could limit movement. In the middle of this "rambling," she experienced what might be referred to as an "Ah Ha." She wrote:

Wait a second - I'll change my mind. I believe that the sport skill itself limits movement. (I have this set of preconceived notions about how certain things are to be done - "the proper way.") The equipment is there to create the movement in the skill, not to limit it. The skill itself puts the binding on. Who's to say that it's wrong for someone to use an unorthodox form in a particular skill? It may not be as the diagram on pg. 47 looks but as long as it achieves the objective within the boundaries of the rules, it seems that it is correct to me. This further supports my growing feeling that children should not be limited by sport activities. They should be free to explore possibilities, to find the most efficient way of doing something. If this were truly done in its

purest form, more and more styles, forms, etc. would emerge.... This workshop has made me realize the ultimate value of actually "seeing" movement instead of expecting that it was done therefore, it was.

Entry seven. Participant A expressed that she found session seven to be both helpful and unhelpful. The session was helpful in that it increased her understanding and use of the flow factor of Effort. She felt more comfortable observing movement and using the BSER framework. The session created frustration for her because at times the movement that she was observing was too fast and a bit ambiguous. Participant A wrote:

I gain more from watching a partner perform for I have a bit of control over what he/she does and can also discuss the movements with the performer to verify his/her intentions.

Participant A suggested that it might be helpful to be able to view oneself doing a series of movements. She said: "I'd know my intentions and if vagueness existed, I could do away with it by going through the same series again."

Entry eight. After the eighth session, Participant A offered insight as to where she was with her ideas and beliefs about teaching. She wrote:

Today, more so than ever before, I recognized my role in implementing this in a classroom situation. I feel it my duty as a teacher, either on the elementary or secondary level, to encourage each student to express their own ideas (in words and through movement) and also to present greater

challenges to them. I don't want them to mimic me, their friends, etc. I want them to be individuals - to progress and to question as individuals. This workshop has made me realize more so than ever before that my beliefs are quite tangible. Yes, I plan to use observation of movement simply because it fosters what I believe in and I feel that I can operate within its boundaries and satisfy my own philosophy at the same time. I look back at how creative I was as a child. Now I look at how staunch and ordinary my ideas and "creations" seem and it bothers me. I truly blame it on education, for the most part. I was cheated! I really was. If there were one single thing I wish someone had demanded of me when I was in grade school, it would definitely be creativity. Unfortunately, I didn't know how to demand it of myself.

Entry nine. Participant A indicated that she felt more knowledgeable and that the components of the BSER framework were beginning to come together into a neater package. She expressed the feeling that observing tapes, seeing the movement, and expressing it orally was more helpful than having to write her observations.

Entry ten. For the last session, number ten, the participants did not make an entry into their logs. Instead there was an open discussion, evaluating the entire workshop. During this discussion, Participant A made several comments which are summarized here. She said that the most beneficial part of the workshop, was to experience the movement, then see it in another person, live. She said she got into a rut when watching a lot of tapes and began to feel as if she were saying the same thing. She again expressed the desire to isolate the movement or slow the tape down when observing.

She expressed the opinion that they had reached the point, in the workshop, where they needed the opportunity to apply their observational ability to a teaching situation.

Summary

Participant A entered the workshop with a willingness to learn and to accept her part of the responsibility for the learning process. She worked hard during each session and also devoted "outside" time toward increasing her knowledge of the Body, Space, Effort, and Relationships framework. The workshop experiences had an effect on her attitude, beliefs, and knowledge toward observation in physical education. The experiences encouraged and supported her intuitive feelings toward teaching and the importance of and use of observation of movement in teaching physical education. I believe that Participant A benefited more from the workshop than any of the other participants. I also think that she could have easily gone beyond the intention of the workshop, which was to learn to use the BSER framework in describing observations of movement. She was connecting the concepts of the workshop with her philosophy of teaching and was ready to implement some of her ideas.

Participant B

Introduction

Participant B is a female and a sophomore physical education major. Prior to the workshop, she had no experience

teaching nor using the BSER framework for observing movement. As the workshop began, I would describe this participant as being interested in learning about movement. She was not as verbal as Participant A, but through her facial expressions made it obvious when she questioned what was being said. Participant B was a student who was ready to be motivated toward teaching.

Ability to Apply the BSER Framework

Prior to being taught how to observe movement in terms of the BSER framework, the participants were given a written exercise. They were asked to explain how they observed movement at that point in time. This information gave me an indication of the frame of reference used by the participants in observing movement as they began the workshop. Participant B began the exercise by creating a volleyball game situation in which she pretended to observe a volleying action. She wrote:

I look for body positioning before and the follow through, which includes proper contact with the ball by hands, smoothness in handling the body as well as the ball. By proper contact I am referring to the touch with fingertips instead of the smacking sound of palm contact.

The major emphasis of the workshop was on the participants' ability to observe and describe movement in terms of the BSER framework. By design of the workshop, this ability was most often demonstrated through written descriptions of what they observed. The data included in this

section are from Participant B's written explanations of what she observed from simulated experiences during the ten sessions of the workshop. Data from each session are presented and followed by analytical comments.

Session one. Prior to the introduction of the BSER framework, all of the participants were asked to observe a taped segment of a man playing tennis and to describe the movements of the man. This first experience at observing and describing was to be done in whatever way they could or would observe movement at that time. Participant B wrote:

(not familiar w/sport) only slightly
good follow through on strokes
body seemed quite flexible enough for proper move-
ment seemed to have good body positioning for
receiving and returning

Participant B's first comment leads me to believe that she felt it very important to know the activity in order to better observe movement in that activity. If the observation is for the purpose of teaching, I would agree with her, however, if the observation is to just describe the movements observed, I am not sure that one needs to know the activity except for possibly feeling more comfortable while observing. Participant B's description was very general, however, she did describe what she considered to be positive aspects of the man's movement.

For her second observation of session one, Participant B described the movements of a different tennis player.

She wrote:

improper follow through (to my understanding)
body off balance for receiving and returning (not
flexible)
seemed unfamiliar w/sport or maybe a weekend or
once in a while type player

In her second observation, Participant B was not at all positive, but was negative in her description of the player's movements. In both observations, she made general evaluations of the player's ability in tennis rather than concentrating on their movements.

Session two. During the second session, the participants made their first observation applying the BSER framework. They were shown a taped segment of one mover using locomotor activities and were asked to describe the movements using subdivisions of the Body component. Participant B wrote:

extension trunk - arms upward
hop - transfer of weight one leg to other
side step arms stretched
twisting of trunk arms help support
legs balance body weight
medium pace movement floor pattern circular...

From the Body component, Participant B used the body parts with their function and/or action and transfer of weight. She also mentioned one aspect of the Space component, floor pattern and one factor of Effort, time. She did use the divisions of the Body component in relation to each other.

In another observation, the participants were again asked to observe one mover, who had been taped to illustrate

non-locomotor activities, and to describe the movements using the Body component. Participant B wrote:

extension of arms upward
trunk bends, twists, body supported by one leg then
the other
body leads w/elbow, nose, foot, hand depending on
movement direction

Participant B applied some of the body parts with the functions they were doing at the time. She tended to describe the subdivisions as they relate to each other.

When asked to use the Body component to describe the movements of three people, via observing a segment of video tape, Participant B wrote:

all three did locomotor and non-locomotor movements transferred weight, extended arms and legs
upward bent, twisted

She became more general in her description. She referred to locomotor and non-locomotor, but was not specific as to which ones. Only once did she describe the body part in relation to the action. At this point in time, Participant B could not be as specific in her descriptions of the movements of three people as she had been with one mover.

During session two, the participants were also asked to observe a segment of tape and to describe the movements of one of the three movers and to apply the Space component. Participant B wrote:

general space - forward, backward, side, up,
down straight, circular paths, total body - high,
low levels legs, arms.

She included the total body in her description of the directions and pathways used and body parts with levels.

Participant B could use subdivisions of the Body component in relation to each other when observing one mover. When observing three movers, her descriptions were more general. Although asked to use only the Space component, she did include the Body component.

Session three. In the beginning of session three, the participants were asked to observe a segment of the application tape of a group of about twenty people. The people were working with beanbags or balls on tossing, catching, and striking. The participants were asked to use both the Body and Space components to describe the movements they observed. Participant B wrote:

confusing (unable to focus on number)
heads bounced balls, body supported by both feet

Participant B seemed overwhelmed by what she was asked to observe. I do not know if the confusion was created by the activity or by the number of people involved, maybe it was a combination of both. At any rate, she was not able to concentrate on the movement in this situation.

After observing the group, the participants were asked to select one person from the same group and to observe and describe that person's movements. Participant B chose a person who was working with a beanbag. She wrote:

Arms led in throwing beanbag up locomotor and non-locomotor movements walk, bent down to catch bag extended arms sometimes to catch personal space mainly - but did move to another space used bent left knee to catch caused body to be supported by one foot (right)

Although asked to use both the Body and Space components, Participant B used more aspects of the Body component than of the Space component. She used body parts in relation to their action, but her reference to Space was more general.

At this point in time, Participant B seemed better able to apply the subdivisions of the Body component in relation to each other than those of the Space component. She could not concentrate on the movement of a large group of people nor did she relate the Body and Space components to each other.

Session four. The participants were asked to observe a taped segment of approximately twenty-five junior high students in a gymnastics class. They were asked to focus on one person and to describe the movements of that person, using the Body and Space components. Participant B wrote:

Transfer of body weight from feet to hands to shoulder to back to backside extension of arms and legs far when body is at low level coming back up to standing position - direction down - leading with head then hands - non-locomotor - body curled - pathway was straight - body supported first by feet then hands and feet, then hands to head to shoulder, back, then back to feet. This caused transfer of weight to each of the parts mentioned, separately except feet and hands simultaneously.

Participant B was specific in her description. She used the subdivisions of body parts, functions, and weight bearing from the Body component and levels, extensions, and pathways from the Space component. She was able to relate the subdivisions of the two components to each other.

Also in session four, the participants had the opportunity to apply the Effort component in their observations. After a short practice time using only the Effort component, the participants were asked to use the Body, Space, and Effort components together, to describe the movements of one person. Participant B wrote:

She used locomotor and non-locomotor movements
Used non-locomotor with extensions of arms and
strong force
Body twisted, arms extended far - slow movement,
continuous flow then direct space
Zigzag patterns, high and medium levels
The legs kicked outward one at a time direct space -
strong force

Participant B's description tended to go from general, as indicated in the first two lines, to more specific as illustrated in the third, fourth, and fifth lines. In these latter lines, she used subdivisions from the Body, Space, and Effort components and related them to each other.

Session five. The participants were asked to observe a segment of tape with one mover, who was emphasizing the Effort component, and to describe her movements using the Body, Space, and Effort components. Participant B's description was:

Sudden and sustained, before sustained a stillness. Circular pattern extension upward with arms. Emphasizes (sic) more on legs. More locomotor movements. Weight was firm, direct space with legs. Arms used flexible space more. Body twisted, curled. Legs and arms extended away from body, and back in as well.

She applied at least one subdivision of each of the three components (BSE). Participant B was not able to use all three components in relation to each other. At times, she related two of the three to each other and one of these was always the Body component. She applied three factors from the Effort component, time, weight, and space. The flow factor had been temporarily dropped, by me, thus accounting for it being omitted by Participant B.

Session six. Participant B was not in attendance during this session. For a description of the activities for this session, refer to session six in the case study of Participant A.

Session seven. The participants were not asked to write descriptions of their observations in the seventh session.

Session eight. During session eight, the participants were asked to apply the Body, Space, and Effort components in their observations of a taped segment of elementary children in the area of dance. Participant B applied the weight and flow factors of the Effort component as she

saw them used by the group. She indicated that both personal and general space was used as well as both locomotor and non-locomotor movements at all levels. The participants were asked to observe one specific boy from the group of children and to describe his movements using subdivisions of the Body, Space, and Effort components. Participant B wrote:

Firm, bound movements at first, use of personal and general space. Body curled when extended at a low level, arms leading/gesturing more so than other parts. They went into sustained movement, use of personal space.

Participant B's description began in a general manner, as she wrote of firm, bound movements not specifying what type of movement, nor the Body part or Space used. She was more specific in describing the movement of the arms. Participant B did not seem to be able to use the components in relation to each other as well as she had done in previous sessions. During her next observation, within this session, she stopped after writing: "Lost - no use trying anymore."

Session nine. The participants were not asked to write observations during session nine. They observed segments of the application tape involving one mover, and used the BSER framework verbally to describe what they observed. As noted in the Instructor's Log, Participant B did not participate in the discussion. I have no way of knowing if she were able to apply the four components at that point in time.

Session ten. In the final session, the participants were asked to observe the same segment of the application tape that they had observed in session one. This tape was of a man playing tennis and the participants had observed and described his movement prior to being taught to use the BSER framework. Participant B's description of the tennis player, after learning to use the BSER framework was:

Locomotor movements - run, slide with feet - manipulative movement when striking ball with racket. Medium high and low levels mainly used. Extension of right arm to make contact with racket in hand to ball. Direction usually forward especially when meeting ball for hit. Movement seems direct (effort), bound because of preparing to contact ball w/racket heavy and light. Use of general space more so than personal. Relationship between body and ball.

She used aspects of each of the four components (BSER). Part of her description was in general terms and could apply to the tennis player's movements throughout the segment of tape. She did not use the components in relation to each other.

Also in session ten, the participants were asked to observe a taped segment of children working in gymnastics. Participant B wrote:

Direct moves - bound - transference of weight from feet to shoulders and hands to head to back to lower back to feet again. This is in the tumble on mat. Use of general space by all. Locomotor movements - run, hop, leap, then non-locomotor for curling body for tumble. Movements were forward and backward. Relationship of body to box and box to mat and body to mat. Meeting and parting. Sustained when tumbling but fast when running.

Part of Participant B's description seems to pertain more to one individual mover than to the group. The latter part of the description is more group oriented.

The participants were asked to select one child from the group that they would choose to help and to tell why they chose him/her. Participant B was unable to do this part of the task.

Summary. I believe that Participant B reached a plateau around session five. Up to session six, she seemed to be making progress. After that session, which she missed, her progress seemed to cease. In the beginning, she used the components as they related to each other. As the number of components increased, her ability to maintain this relationship seemed to decrease. Participant B's two observations of the tennis player, one prior to being taught to use the BSER framework and the second after learning to use the framework, illustrate a change in her ability to observe movement. Her lack of knowledge of tennis did not appear to be a problem in the second observation. She was able to focus on the movement, disregarding the specific activity.

Participant's Log

All of the participants were asked to keep a log and to make an entry after each session of the workshop. Their entries were to include answers to specific questions

and expressions of their personal ideas and feelings concerning the sessions (see page 94).

Summaries of Participant B's entries and some direct quotes from her log will be included in this section. Both the summaries and quotes are in chronological order as they appeared in the entry for each session of the workshop. The number following the word "Entry" refers to the number of the session the entry covers.

Entry one. Participant B expressed the belief that during the first session she had been made more aware of movement analysis. She viewed the workshop as an opportunity for her to learn more about the movement of the human body. Participant B found the practical work to be most difficult. She expressed a lack of ability and a dislike for "gymnastics" and believed that this caused her to have difficulty in understanding the movements. She questioned how one could observe what he/she disliked or was unable to accomplish. Participant B asked two questions in her first entry which are directly related to teaching. They were:

After all this observation, how is it applied?
What is accomplished or not accomplished?

She was asking for an explanation of the relationship of her "new knowledge" to the teaching of physical education.

Entry two. This session appeared to stimulate Participant B's desire to learn more about movement and observing

movement. She was challenged by being asked to observe more than one mover at a time. The session made her more aware of the importance of being able to observe the movements of people. Participant B raised the question of the possibility of analyzing someone moving, via the BSER framework, and being able to determine if that person were suited for a particular skill. This question, from Participant B, indicated some creative thinking, in that we had not even mentioned such a possibility during the session. Participant B indicated that she believed the video tapes, used in the sessions, to be of great help in learning to observe.

Entry three. In her entry for session three, Participant B said that she felt "freer" in the discussions and that she knew more than she did the first day. She did indicate that she had a "lost" feeling when trying to explain what she observed. She believed that other people, who had had some experience in the area of movement, were better able to explain what they saw. Participant B did indicate that perhaps she was not in a receptive mood during the session.

Entry four. Participant B felt that this session was helpful because she was learning to use the components as they related to each other. She thought it difficult to have to use all the learned components in verbal feedback, after only a few seconds of observation. She felt that the

session made her more aware of what she should be able to do when she began teaching.

Entry five. For reasons unknown to me, Participant B did not write a log entry for session five.

Entry six. Participant B did not attend this session of the workshop, thus there was no log entry.

Entry seven. For reasons unknown to me, Participant B did not write a log entry for session seven.

Entry eight. As her entry for this session, Participant B wrote:

The session was not very helpful because I was late and confused. It is partially my fault, (Lateness) and this caused me to misunderstand and become uninterested.

Entry nine. The first sentence of Participant B's entry for this session seemed to sum up how she felt. It read:

This session not helpful, too fast, feel lost anyway, but end of workshop.

She continued with her entry and indicated that it was very difficult to put everything together. Having to write a description of what she was observing seemed to compound this difficulty for her. She indicated that she believed that observation is very important in teaching, but feels that she just does not know how to do it correctly. Participant B felt that the workshop participants should have

been students with some background which would help them use what they learned in teaching. She believed that she had learned some things, but could have learned more if she had known more about teaching. Participant B stated that she really disliked and had a negative reaction to the "...singling out of students with 'good logs' against other students." This was the way she interpreted some positive feedback given to different students, by the instructor.

Entry ten. For the last session, number ten, the participants did not make an entry into their logs. Instead there was an open discussion, evaluating the entire workshop. Participant B had not been very verbal during any of the discussions we had had. This discussion was no exception for her. The comments she did make are summarized here. She believed the most difficult task, of the workshop, was having to relate the four components of the BSER framework to each other. She also indicated that the Body component had been over done, with too much time being devoted to it. Participant B felt that her ideas toward teaching had not changed because she had not had any ideas toward teaching prior to the workshop. She then asked me how I would use the BSER framework in teaching.

Summary

Participant B entered the workshop with an expressed desire to learn more about human movement. After the first

session, she became interested in observing movement and using the BSER framework to do so. During session three, she began to compare her ability to apply the framework to the ability of the other participants. She seemed bothered that some could state what they observed more clearly than she could. After missing session six, Participant B's attitude toward the workshop and all connected with it seemed to change. Prior to this time, she had been doing rather well with the tasks the participants were asked to do. After missing a session, she appeared to be confused, frustrated, and at times bored during the remaining sessions. Regardless of her mood changes during the workshop, Participant B seemed to hold on to the idea of using observation in teaching. At times, this probably contributed to her frustration because she could not understand the role of observation in the teaching process. Through her actions during the workshop and her log entries, it became apparent to me that Participant B's work was greatly affected by her mood and I was never sure what affected her mood. Possibly Participant B could have profited more had the use of the BSER framework been more closely connected with the teaching process.

CHAPTER V

SUMMARY, INSIGHTS, AND RECOMMENDATIONS

SUMMARY

The purpose of this study was to inquire into a feasible model for teaching observation of movement using the Body, Space, Effort, and Relationships framework. The model consisted of three interrelated elements: the observer, the movement framework, and the environment. The model was implemented in a workshop atmosphere which focused on the interrelationship of the three elements of the model.

The workshop consisted of ten, one and one-half hour sessions. The ten voluntary participants of the workshop were undergraduate physical education majors. They had had no formal training in observation and were not familiar with the BSER framework. The environment, as designed for the model and implemented in the workshop, consisted of simulated observational and actual movement experiences. The simulated observational experiences involved the viewing of segments of video taped movement activities. The actual movement experiences involved practical work based on the BSER framework.

Five techniques were used in the collection of data for the purpose of providing insight into the use of the

model. The techniques were: the participants' logs, the instructor's log, audio tapes, written descriptions of the application tape, and the reactions of an outside evaluator. The first four techniques were implemented as part of each workshop session. The fifth technique was used near the end of the workshop.

The data collected were subjectively analyzed by the investigator. Based on this analysis, insights derived from the data will be discussed as they relate to the following questions:

1. Is the model a functional means for building observational skills?
 2. Can the concepts and practices, implicit and explicit, in the model be successfully introduced into teacher preparation curricula?
 3. What impact did the model have on the participants' attitudes toward observation in the teaching of physical education?
 4. What are the difficulties in teaching undergraduate physical education majors to observe movement?
- Insights gained from this study provided a base for recommendations for further research.

INSIGHTS

Question One

Is the model a functional means for building observational skills? The data indicate that the model is a functional means for building observational skills. There is evidence that the workshop participants became more aware of observation and the use of the BSER framework. The participants also developed their ability to concentrate while observing. They learned to recognize their personal biases and to omit them from their observations. Heightened awareness, the ability to concentrate, and recognition of personal biases are all recognized skills of observation (Cohen, 1971). The model, as implemented in the workshop, provided for development in all three areas by the participants.

There is evidence to indicate that the BSER framework, as used in the model, can be taught to undergraduate physical education majors regardless of the range in their backgrounds. The environment, as designed in the model, was adequate in that opportunity was provided for the participants to learn to observe movement using the BSER framework. That is to say, the participants learned the terminology of the framework and learned how to apply the terms to their observations of movement. Once they felt comfortable with it, the participants, in this study, believed

that the Effort component was the easiest component to apply in their observations.

The participants who became aware of the relationship between the observation of movement and the teaching of physical education were seniors. The indication is that the model, as implemented, may be more relevant to the physical education major who has had some experience in the role of a teacher. Had the workshop been longer than the ten sessions, the emphasis could and should have been on observation in teaching.

Question Two

Can the concepts and practices, implicit and explicit, in the model be successfully introduced into teacher preparation curricula? The concepts and practices within the model could be introduced into teacher preparation curricula, however, alterations and modifications of the model may make the introduction more successful. The outside evaluator pointed out that the concepts and practices of the model could best be introduced into a teacher preparation program if the same concepts and practices were used by the teachers who were teaching movement activities to the majors. She also indicated, that for teachers of observation to use the model successfully, they should be skilled in conducting discussions. It is important that the teacher ask the "right" questions and that he/she be able to answer the

questions as they are asked by the students. Often times teachers' responses do not answer the questions asked.

The relationship of observation to teaching is implicit in the model. The data indicated that this concept should be explicit and a primary focus within the model. There was some evidence to indicate that the concept behind using unfamiliar movement activities in the training tapes needs to be reexamined. The purpose for which unfamiliar movement activities were used, that of excluding biases, is still valid. As was indicated in Chapter IV, biases alter one's observation, thus they must be recognized and omitted. The importance of the purpose of the movement in observation as related to teaching, however, adds another dimension which should be considered when selecting activities to be used in the training of physical education majors to observe movement. That is to say, the observer/teacher needs to know why the mover is moving and what the mover is trying to accomplish. Without this knowledge, regardless of how well the movement was observed, the observer/teacher cannot give the mover feedback needed to help improve the movement.

There is evidence to indicate that the concept and practice of using simulated and actual movement experiences is relevant and useful. There are also indications that, in this model, simulated experiences were overemphasized and that actual movement experiences were not emphasized enough. In connection with the simulated experiences, there

is evidence that the participants felt burdened by having to write descriptions of their observations. The burden of writing descriptions was directly related to the length of video tape viewed. Segments of tape of approximately fifteen seconds in length proved to be manageable to the participants in the study.

Although the concept that undergraduate physical education majors can learn to use the BSER as a framework for observing movement is supported by this study, it is important that safeguards are taken to insure that the observers do not learn to combine words relative to the framework and assume the actions occurred in the observed movement. The data indicated that the concept of learning to use one component, then adding the second to the first, applying both etc., until all four are being used simultaneously, requires more emphasis than was given in this model.

The practice of observing individuals in a group situation should be more explicit than it was in the model. The participants, when observing a group, tended not to see individuals; they saw the whole and described the movements as though everyone was doing the same thing. The participants, in this study, had difficulty seeing three people even when the three comprised the total group. The indications are that a progression for increasing the number to be observed should be built into the model. The progression

should include observing a selected number of movers (one, two, three etc.) in situations where the selected number comprise the total group, as well as in situations where the selected number is part of a larger group.

Question Three

What impact did the model have on the participants' attitudes toward observation in the teaching of physical education? The data indicate that the model had some impact on the participants' attitudes toward observation in the teaching of physical education. The outside evaluator believes that the model has the potential for changing attitudes toward observation and there is some evidence to indicate that the attitudes of the participants had begun to change. Most of the participants began to realize the importance of observation in teaching. Some of them believed that they were seeing more by using the BSER framework than when they did not use it. A few participants began to think that observing with the BSER as the framework was a better way to look at movement.

The potential for change in attitudes could be better realized when the participants begin to use what they observe in the teaching situation. This use of their observation would give some indication as to the extent of the change in attitude. That is, there would be an indication as to whether the change was enough to affect the teaching ability of the participants.

Question Four

What are the difficulties in teaching undergraduate physical education majors to observe movement? The difficulties encountered in teaching undergraduate physical education majors to observe movement, using the BSER framework, are similar to those encountered in teaching anything. The teacher must help the majors to learn to recognize their biases. He/she must motivate the student and illustrate how learning to observe movement is a useful skill for the teacher. If the BSER framework is not used in other major teacher preparation courses, i.e. the teaching of volleyball and basketball and in teaching practicums, it is difficult for the participants to understand the difference between observing movement and analyzing specific sport skills. Related to this difficulty, is the problem of helping the participants to overcome their personal biases as they relate to observation. For example, when the participants were first asked to observe a tennis player, most of them had a preconceived idea as to what that performance should look like, thus they judged accordingly. After learning to use the BSER framework, they omitted their biases and described the movement they saw without evaluating the performance.

It is difficult to know what the participants are seeing as they learn to observe. Having them write descriptions of the observed movement did not prove completely satisfactory in this study, as the participants

felt pressured by having to write as they observed. The implication is that a variety of recording techniques should be used. These techniques might utilize audio recorders, written codes, and the use of partners discussing what each is observing.

RECOMMENDATIONS

On the basis of the insights gained from this study, the following recommendations for teaching observation of movement and for further research should be considered.

Teaching Observation of Movement

1. The relationship between observation of movement and teaching physical education should be a key concept in the teaching of observation. It is this relationship that gives meaning to learning to observe movement to the physical education major.
2. A variety of methods of recording what the participants see while observing should be utilized as one teaches observation of movement. Written descriptions tend to require too much time of the observer.
3. The use of familiar movement activities should be strategically used while teaching participants to use the BSER framework in observation.
4. When teaching participants to use the BSER framework, opportunities should be provided for them to apply the framework to observations in a live situation.

Further Research

1. A similar study should compare alternate methods of recording what the participants are observing.
2. Further study should compare the use of familiar movement activity with the use of unfamiliar movement activity when teaching participants to observe movement using the BSER framework.
3. The relationship between the use of live situations as compared to simulated situations when teaching participants to observe movement should be investigated.
4. Further research is needed to investigate the order in which the components of the BSER framework should be introduced to those learning to observe.
5. A study should be conducted to evaluate the effectiveness of the model used in this study as compared to other methods of teaching observation of movement.

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