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A CASE STUDY OF TEACHER SOCIALIZATION IN PHYSICAL EDUCATION
DURING EARLY TRAINING EXPERIENCES: A QUALITATIVE ANALYSIS
A CASE STUDY OF TEACHER SOCIALIZATION IN
PHYSICAL EDUCATION DURING EARLY TRAINING
EXPERIENCES: A QUALITATIVE ANALYSIS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of the Ohio State University

By

Thomas B. Steen, M.S.

* * * * *

The Ohio State University
1985

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FOR MY FATHER
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CHAPTER ONE

INTRODUCTION

Background

The existence of teacher education rests on the assumption that, in order to certify effective teachers, it is necessary to provide a program of formal teacher training that changes raw recruits into teachers who possess both the commitment and capability to bring about student achievement. Teacher training, like training for other professions, functions so as to attract suitable recruits, share with them the technical culture and professional ideology of teaching, and provide them with a new identity as a member of the teaching profession (Lawson, 1983a). Yet there is much evidence to suggest that teacher education has little impact on its recruits (Locke, 1983).

It may be that the impact is weak and short-lived so that teacher education graduates "forget" their training when they begin teaching and they adopt the practices that exist in the school system in which they are employed (Earls, 1981). It may be that teacher education programs do not change recruits at all; the influence of training may not be strong enough to offset the influences of personal qualities, previous experiences, and the "apprenticeship-by-observation" gained during 12-14 years of schooling (Lortie, 1975). It is also possible that teachers-to-be simply reject what they are taught in teacher education programs because it does not fit or suit them (Locke, 1983). In any case, it is clear that during the process of formal teacher training teachers are not socialized into teaching the way teacher
educators believe they should be -- somewhere along the way from the
university to the first years on the job the effects of teacher
education seem to "wash out." Unlike members of other established
professionals, (e.g., medicine, law), "Teachers do not, apparently,
acquire new standards to correct and reverse impressions, ideals, and
orientations" (Lortie, 1975, p. 81). Teacher education seems to be, at
best, a weak intervention (Siedentop, 1982) and, at worst, a
comfortable form of self-delusion (Burlingame, 1972).

Another possible explanation for the low impact of teacher
education is that teacher educators do not know how to train effective
teachers. But this does not seem to hold true in light of a number of
important prescriptions, espoused by highly regarded experts, for
improving teacher education (Conant, 1963; Howsam, Corrigan, Denemark &
Nash, 1976; Silberman, 1970; Smith, 1969, 1980). Furthermore, over the
past 10 or 15 years, research on teaching effectiveness has produced a
strong, growing body of knowledge that gives great promise of serving
as the foundation for a "shared technical culture" (Lortie, 1975) that,
until recently, has not been available to teachers and teacher
educators (Smith, 1980; Siedentop, 1985). But even before the growth
of the teacher effectiveness literature, knowledge about how to teach
certainly existed; although it was not "good" enough to be of much
practical use to the teaching profession, the lack of codified,
empirical, practice-oriented teaching knowledge does not explain why
teachers do not seem to teach the way they were taught.

The problem may be a deeper one, requiring an understanding of the
teacher education process itself and of the people who enter into it.
The teacher education process has gone largely unstudied, perhaps because teacher educators and researchers have expended most of their time and energy making changes and repairs in training programs. Locke (1983) likened this penchant for technological fixes to "shifting deck chairs on a sinking vessel. It is all very tidy, but rather irrelevant to a more fundamental problem" (p. 40). The problem may well be that we don't know what goes on during teacher education. Burlingame (1972) argued along similar lines:

By all too frequently fixing upon what ought to be going on in the training of teachers, educators have ignored what really is or isn't going on in people seeking to become teachers. It is not that educators have failed or succeeded -- too frequently educators have not even been in the field of play for which such terms are meaningful. . . much of the typical literature in education indicates that educators have not studied -- worse, have not even thought intelligently about -- teaching teachers (p. 55).

In spite of Burlingame's (1972) powerful call to study the teacher education process, the territory remains understudied. In their review of research on teacher education for physical education (RTE/PE), Locke and Dodds (1981) found that "only a handful of studies exist to provide systematic descriptions of what actually happens, how people behave, or how the experience is perceived by student teachers, supervisors, cooperating teachers and pupils" (p. 17). Of that handful, they reported that at least a third of those studies investigated student teaching, which is only one part of teacher training. In addition, the few studies that did investigate the earlier states of teacher education in physical education used survey and questionnaire data collection strategies. As a result, the short slice-of-time data gathered provides a useful but narrowly limited picture of a process
that is dynamic and supposed to bring about change.

Socialization theory provides a useful framework for an indepth, holistic look at the complex process of teacher education. It focuses "upon the interaction between the individual and the socializing agents of the training institution and the world of work" (Burlingame, 1972, p. 41). Professional socialization -- the process whereby recruits adopt the ideology and technical culture of the profession they choose to enter -- is a rich territory for investigators, not only because it is relatively unstudied, but also because it is exactly at this point, where the recruit and the training process come together that research on professional socialization can help to provide an accurate understanding of a process is now characterized by assumption and guesswork.

If professional socialization is viewed as a three-stage model -- recruitment, professional training, and work entry (Lortie, 1975; Pooley, 1975; Lawson, 1983a) -- then student teaching is the connector between formal training and the world of work. That teachers give high marks on student teaching for its value in aiding their move from formal training to the real world of teaching has been well documented (Lortie, 1975). However, little work has been done at the intersection of the recruitment stage and the training stage. It is at this point, at the beginning of the training process, where research is needed to provide a deeper understanding of the complex social phenomenon of teacher education.

There are three main elements of professional socialization that interact during the formal training stage: 1) the biography and
actions of the trainees; 2) the biography and actions of teacher educators; and 3) the organizational and immediate environments of the socialization setting. The success of the induction of recruits into the teaching profession depends on the interaction of these elements. "The concept of successful induction is one in which a recruit's inaccurate subjective warrant is replaced by a new self-image forged out of new ideological commitments and newly-acquired knowledge and skill" (Lawson, 1983a, p. 13). In teacher education, members of the faculty are the agents for professional socialization and the teacher education institution is the primary setting in which it occurs.

In RTE/PE, the element that has received the most attention is the biography and previous experiences of teacher candidates. It has been shown that trainees judge themselves to be suitable candidates for physical education teaching on the basis of their personal qualities, their past experiences in sport, the apprenticeship-of-observation with former teachers and coaches, and their desire to help others (Templin, Woodford & Mulling, 1982; Earls, 1981; Woodford, 1977). This self-judgment is what Lortie (1975) called the "subjective warrant" and seems sufficiently powerful in most cases to block attempts by teacher education programs to cause recruits to adopt the ideology and technical culture promoted by teacher educators (Earls, 1981; Lawson, 1983a).

The subjective warrant of future physical educators is based, in part, on past experiences in school sports (Templin, et. al., 1982; Dewar & Lawson, 1984). In many cases these experiences are strong enough to create what Earls (1981) called the "athletic syndrome" which
orients many recruits toward a professional role in coaching rather than toward teaching. Since there is evidence to suggest that the two roles of teaching and coaching are separate and often conflicting (Locke & Massengale, 1978; Massengale, 1981; Segrave, 1981), Lawson (1983a) hypothesized that a recruit's orientation toward teaching or coaching will affect the impact of teacher training, which is itself presumably oriented toward teaching rather than coaching (Chu, 1984).

As the primary agents of professional socialization in the formal training program, teacher educators are a key element in the interaction between recruits and teacher education. Yet as Lawson (1983a) reported, little is known about who they are. It seems likely that factors such as their orientation toward teaching and coaching, the degree of consensus about program goals and priorities, their beliefs and attitudes about physical education and athletics in schools, and their actions in the conduct of their professional duties may all influence the impact of the training process on recruits.

Just as classroom ecology influences student learning (Doyle, 1979), teacher education programs provide an ecological context in which teacher training takes place. Becker, Geer & Hughes (1968) identified the organizational environment and the immediate environment as contextual elements in their study of college academic life. Both the organizational environment, represented by the requirements, facilities, schedules of the program, and the immediate environment, provided by specific courses and other training events, are factors that might reasonably be expected to affect professional socialization in physical education.
These elements -- the recruits, the teacher educators, and the program context(s) -- initially interact during the first experiences of the teacher education program. First experiences can establish the pattern of the professional socialization process. As mentioned previously, notions about what goes on during this process have been mainly speculative; what is needed are careful, accurate descriptions about what really occurs, what changes are made, how recruits perceive the experiences of formal teacher training, and how they act during those experiences. This study is an attempt to answer that need.

The Problem

This study was designed to respond to the need for a more accurate understanding of the complex process of the professional socialization of physical education teacher candidates during their first experiences in formal teacher education. Its purpose was to provide a rich, systematic description of how physical education teacher recruits begin to learn the professional culture and skills that are taught during a teacher training program.

The study had two interrelated goals. The first goal was to investigate the characteristics and orientations of the recruits, and to describe personal qualities and past experiences that influenced their decision to enter physical education teacher training. The second goal was to investigate the experiences of the recruits in their first formal coursework in physical education teacher education, and to describe their behavior during the training experiences and their perceptions of the impact of those experiences on their expected professional roles as physical educators. These two goals can be
summarized in the form of questions: 1) who are these students; and 2) what went on during these training experiences.

Although the focus of the study is the process of formal training, the literature in professional socialization indicates that the effect of the training program is clearly linked to the biography and pre-career experiences of physical education teacher recruits. It is obvious that there is interaction between professional training and the students who have chosen to undertake it; what is less obvious, and in need of investigation, is what happens when such an interaction takes place.

The following questions, distilled from the two interrelated goals discussed previously, were used to guide the research. They served as a framework for the collection and analysis of the data generated in the study.

1. What are the biographies of these students?
2. Have they decided to pursue training to become a physical education teacher?
3. To what extent do these students believe that experiences encountered and qualities developed prior to formal professional training warrant their decision to pursue professional training in physical education?
4. What are the features and activities of the program and the coursework in which this training takes place?
5. What do students do and attend to during these training experiences? How do they respond to demands placed on them in these experiences?
6. What experiences do students see as valuable for their professional training and what experiences do they see as counterproductive or unproductive to their professional goals?

7. Do students share or reject the orientations and actions promoted by their teacher educators?

Overview of the Study

A descriptive study of a complex social phenomenon such as professional socialization is best served by data collected in the natural setting of physical education teacher education and in such way as to preserve the complexity, rather than to fragment or reduce it and thereby distort the phenomenon. The methods of qualitative research (Bogdan & Biklen, 1982; Guba & Lincoln, 1981; Patton, 1980), particularly participant observation and in-depth interviewing, were applied to the problem. Rigor and credibility were maintained through the use of the standard techniques of naturalistic inquiry.

The investigator, operating as a participant observer, made regular observations in two courses in the pre-admission year of the physical education major concentration during the 1984 winter term at a large midwestern university. Both are first year courses and they are required for students who plan to be certified to teach physical education. Since the courses are among the first experiences in the training program for physical education teacher prospects, they fit the problem in that they provide a socialization context for an early formal interaction between recruits, agents, and the program itself. In addition, the courses were quite different from each other -- one was an orientation to physical education and met in a classroom; the
other was a volleyball activity class and met in a gymnasium -- which promotes the collection of trustworthy data across a broader context than would have been available with a single course.

After an initial, brief announcement of the general intent of the study, the investigator established himself as a participant observer in both classes. Field notes, an activity log, a reflexive journal were kept for each observation. Eight students, six of whom were enrolled in both classes, were selected on the basis of sex, composite ACT score, and sport experience for formal and informal interviews. Audiotapes and written transcripts were made from formal interviews. These eight students were used as key contacts, as a source of more in-depth data that could be gathered from observation alone.

Data was analyzed using a progressive reduction of the information obtained into categories and was classified according to the research questions. Thick descriptions of the data were made, often using the participant's own words, to enhance the potential of the application of results to other situations by readers. In order to promote the confirmability and dependability of the study, an audit of the process and the product of the research was conducted according to procedures outlined by Lincoln & Guba (1982) and tested by Steen (in Tinning, 1983).

Significance of the Study

Improvements in teacher education are not likely to be forthcoming without an accurate understanding of how the process works. Locke & Dodds (1981) point out that "In most cases one needs to understand a complex phenomenon before it can be manipulated with much success" (p.
It is clear from the literature on professional socialization in physical education that an empirically based understanding of this type is not available at this time.

The call to researchers to produce an understanding of what goes on in teacher education and how it works (Burlingame, 1972; Locke & Dodds, 1981; Lawson, 1983a) is very much like the request by Dunkin and Biddle (1974) to teaching researchers and by Locke (1975) to physical education researchers when they called for investigations into the "Black Box" of real teaching. After researchers heeded those calls and moved into real schools to observe real teachers teaching, the result was a still-growing body of teaching knowledge that, after 50 years of wrong turns and dead ends in educational research, is finally able to provide some reliable answers to the enduring question: what is effective teaching. Research on teacher education has lagged behind; not much is know about teacher education largely because we know so little about the process itself, particularly in physical education. The hope here is that once we know more about the teacher education process, we can begin to answer another enduring question: what is effective teacher education. This study proposed to go into the black box of teacher education and to observe first-hand the experiences of real recruits during a part of their formal professional preparation.

The need for studies of this kind is significant for:

Until educators study the changes in students with care and precision, until some empirical base is available which indicates what changes can and actually do occur in people, educators have little ground for speculation about what ought to occur (Burlingame, 1972, p. 55).
Assumptions

This is a list of assumptions which were accepted as true for the purpose of conducting the research. Because they were accepted as given, they were not investigated.

1. The professional socialization of physical education teachers is a lifelong, continuous process. Nevertheless, it is possible to separate a part of the socialization process from the whole in order to investigate it.

2. The process of socialization is interactive and reciprocal. Several socialization factors, such as recruits, agents, and training experiences, interact with each other to produce a socialization effect. Each of the factors influences the other factors and each of the factors is influenced by the others.

3. It is not possible to make value-free judgments about the effects or the effectiveness of socialization because such judgments are "inherently ideological" (Lawson, 1983a, p. 5). It is possible to explain much, but probably not all, of the set of values on which such judgments are based.

Limitations

The scope of the study was limited in the following ways:

1. The training experiences of the students in this investigation may or may not be similar to those of other students in teacher training programs. The findings of this study are limited to this particular case. Nevertheless, since generalizability is one of the canons of good research, a
strong effort has been made here to present thick descriptions of the data in order to assist the reader who wants to apply the results of this study to other situations. Readers who are so inclined are cautioned to carefully examine the degree of fit between the situation reported here and the situation to which they plan to generalize.

2. The investigation was conducted by a single researcher. The possibility of investigator bias and the presentation of a single interpretation is acknowledged. However, the research audit was used as a means to address this limitation.

3. Most of the observations were made during the training experiences; the interviews were conducted near the time and place of the class sessions. Although there is good reason to believe that student experiences outside of academic life substantially influence their socialization (Becker et al., 1968), this investigation was limited, by available resources, to the settings in which these two courses took place and to student reports of their outside activities.

**Definition of Terms**

Anticipatory socialization: "the taking over by the individual of the beliefs, values, norms of a higher or lower status group in which he seeks members but does not yet belong" (Wheeler, 1966 in Pooley, 1972, p. 59).
Apprenticeship-of-observation: the process of socialization in which students become acquainted with the tasks of teaching through face-to-face and consequential interactions with established teachers during primary and secondary schooling (Lortie, 1975).

Avoidance strategy: a social strategy employed by students in which an individual tries to avoid or get out of complying with the expectations of the instructor or the program.

Biography: the set of intellectual, physical, and psychosocial qualities and past experiences that characterize a recruit or teacher educator.

Compliance: a form of student behavior in which an individual or group of individuals act in each a way as to meet the demands of a particular situation.

Facilitators of socialization: "social mechanisms which help move people into a given occupation" (Lortie, 1975, p. 26).

Perspective: "a coordinated set of ideas and actions [that] a person uses in dealing with some problematic situation . . . a person's ordinary way of thinking and feeling about acting in such a situation" (Becker, Geer, Hughes & Strauss, 1961).

Profession: the practice of applying knowledge and skill in performing services for other men, for organizations, or for society at large and when these services are accepted on trust (Becker et al., 1961)

Professional ideology: the system of dominant meanings held by recruits or teacher educators concerning work as physical educators.
Role orientation: the ultimate professional role, e.g., teacher, coach, researcher, etc., to which a recruit aspires.

Socialization: "the process by which people selectively acquire the values and attitudes, the interests, skills and knowledge -- in short, the culture -- current in groups to which they are, or seek to become, a member" (Merton, 1957).

Social strategy: "a social strategy involves the act or . . . the selection of ideas and actions and working out their complex interrelationships (action-idea systems) in a given situation" (Lacey, 1977, pp. 67-68).

Socialization agents: "the persons who, acting on behalf of the organization, are expected to train, educate, modify, mold, or in other ways change the individuals who enter it" (Wheeler, 1966, p. 55).

Socialization settings: the place where socialization events occur, and where agents and recruits interact (Wheeler, 1966).

Subjective warrant: the judgment or self-assessment by individuals about their suitability to enter a given occupation on the basis of personal interests and in relation to entrance criteria of the occupation (Templin, et al., 1982).

Unsanctioned adjustment: a social strategy used by students in which they comply or try to comply with course demands by adapting to a particular situation in a way that does not match the instructor's (or the Program's) expectations.
CHAPTER TWO

REVIEW OF LITERATURE

This study was designed to provide a view of the process of teacher education within the framework of socialization theory. The goal of the investigation was to enter a training program for students who want to become certified as physical education teachers and to obtain in-depth answers to questions: who are these students and what happens during their early training experiences. Because of constraints on available resources, a portion of the teacher training program was selected; two early training experiences were chosen because they represent the bridge from recruitment to the beginning of formal professional socialization. It is hoped that answers to these questions will help teacher educators better understand the people who want to become certified physical education teachers and the nature of their professional socialization during their early training experiences.

Research in teacher education for physical education (RTE/PE) is neither extensive nor evenly distributed across topics. After an extensive review of RTE/PE (Locke and Dodds, 1981; Locke, 1983, 1984), Locke and Dodds concluded that "the literature is thin, unreliable, and often uninformative" (1984, p. 5). Locke further remarked that people in teacher education have been "non-introspective about themselves, their programs, and their students" (1983, p. 292). About one third of RTE/PE is on the topic of student teaching; there have been only a handful of studies on the process of teacher education in physical
education prior to student teaching. Most of those used psychometric techniques which limit the usefulness of the results for decision-making by teacher educators.

In spite of a very limited research base, this study did rely on a small number of studies from physical education and from the broader arena of profession socialization. Some of the literature is empirical, some conceptual; in both cases, the work presented here served as a starting point for this investigation.

An important starting point for this study was Martin Burlingame's (1972) excellent article on teacher education research. Burlingame, a generic teacher educator acquainted with physical education teacher education, pointed out that teacher educators were essentially asking the wrong question in their programs and their research. He argued that teacher educators typically try to improve or fix their programs by implementing changes that, however well intentioned, are instituted without an adequate understanding of current processes in teacher education. In that sense, change in teacher education is like prescribing cures without accurate diagnoses. Burlingame (1972) made a forceful call for careful, accurate studies of the teaching of teachers in order to generate an empirical base that is able to inform decisions about the conduct of teacher education.

Equally important for this study, Burlingame (1972) suggested the use of socialization theory as a framework for studying the teacher education process. Because socialization "centers on processes which mediate the individual's personality and the role expectations of the institution" (p. 41), he suggested that socialization research could
help provide an understanding of the conflict between the recruit and the training institution as the latter tries to change the former. Burlingame (1972) used socialization research from training for other fields to develop a schema of socialization process; he also provided examples of research on the professional socialization of trainees in school boards, principalship, college academic life, and nursing, examples which provide clues for the explication of the socialization of teachers. A major contribution of Burlingame's article (1972) is the attention he drew to the potential of socialization theory to illuminate researchable questions in teacher education, questions whose answers are able to provide reliable information which can help inform decisions in the real world of teacher education.

This investigation also made extensive use of two reviews as guides to the available literature. The first review, by Locke and Dodds (1981, 1984; Locke, 1983) is really a three-part series on research in teacher education for physical education. The entire series is now located in one place (Locke, 1984) for better accessibility. Besides serving as a guide to pertinent literature, the Locke and Dodds reviews also helped to locate this investigation in the larger framework of RTE/PE. By adapting the research models of Dunkin and Biddle (1974) for research and teaching and Hall (1979) for research on teacher education, they developed a classification system for their review of RTE/PE (See Figure 1). Although Locke's (1984) classification system was originally intended to organize the RTE/PE reviews, it is also useful as a means to locate this research in the larger framework of RTE/PE.
TOPIC CATEGORIES

Presage Variables
(trainee characteristics)

Context Variables
(program characteristics)

Content Variables
(what is learned)

Process Variables
(learning activities)

Product Variables
(trainee/teacher behaviors)

Research
(methods and management of the knowledge base)

Change
(in program elements)

Induction
(the early years)

Inservice
(the later years)

Figure 1. Categories for Research on Teacher Education (adapted from Locke, 1984, p. 17)
This study was concerned with several topical areas of Locke's classification schema, but it best fits the category of process variables because it is chiefly concerned with the interaction between a selected group of trainees and the settings and agents that they came into contact with during the teacher training experience in this particular case. Although the primary focus of the investigation was on the teacher education process, it also dealt with presage variables (biographies of physical education recruits), context variables (the nature of the two courses and the Program), and content variables (the activities and purpose of the training experiences). Still, the major concern of this study was how these variables — presage, context, content — interacted together and influenced the training process itself; the goal was to "go inside," to meet and get to know the students, and to share these training experiences with them, in order to "see" one part of teacher education from their perspective. Thus, using Locke's (1984) classification for RTE/PE, the investigation is best characterized as research into the process of teacher education for physical education.

In addition to the Locke and Dodds (1986, 1984; Locke, 1983, 1984) series of reviews on RTE/PE, this study also made use of Hal Lawson's (1983a, 1983b) seminal work on the socialization of physical education teachers. Lawson synthesized the available teacher socialization research findings from recruitment through entry into schools and into the later years on the job. In addition to providing an excellent overview to the literature and suggesting leads to research that might inform this investigation, Lawson's (1983b) synthesis suggested that
the effect of teacher socialization was cyclical; physical education teachers and their programs recruit prospective physical educators who in turn influence their teacher education programs and later, on the job in schools, influence their own students and programs, thus starting the cycle over again. The purpose of this investigation was to examine a part of the cycle, the part where new recruits start their formal training at the University in preparation for future roles in school physical education.

With these two reviews as guides, the literature pertinent to this study was examined. The search covered three areas, suggested by the research goals: 1) the biography and recruitment of physical education students; 2) training experiences for physical education; and 3) selected support literature from outside physical education.

The Biography and Recruitment of Physical Education Students

Since Burlingame's (1972) argument was both powerful and well-reasoned, one might well have expected that it would have spawned at least a small flurry of research activity using socialization theory to examine teacher education in physical education. However, that was not the case, for there have only been a few studies that answered Burlingame's (1972) call.

The first research on the socialization of physical education teacher trainees was done by John Pooley (1970). Pooley used a questionnaire and structured interviews to collect data from 240 freshman physical education majors in England and the United States. The study focused on the students' professional socialization prior to the beginning of their physical education college coursework. Pooley
(1970) used the literature of occupational socialization, particularly socialization into professional work, to hypothesize that physical education majors from different countries would experience different socialization processes. His investigation confirmed his two hypotheses; he found that there were differences in the professional socialization of his subjects by nation and by sex. More importantly for subsequent PETE studies, research presented a picture incomplete but important, of the anticipating socialization of U.S. physical education students. Anticipatory socialization, one phase of the socialization process (Burlingame, 1972), refers to the process in which a recruit, wishing to join a particular group, adopts that group's values and norms even before the recruit achieves membership status (Wheeler, 1966).

Pooley (1970) found that, on the average, his subjects decided to go into physical education careers before they entered college; the average age at the time of their decisions was 15-18 for males and 11-14 for females. Their decisions were most often influenced by their belief that the profession is useful to society, their own athletic skill, and their love of movement and activity. Males reported that the factor of highest influence in their decision was athletic skill; the importance of movement and activity was the factor of greatest influence reported by female subjects. In addition, males and females both reported that significant others or role models influenced their decision for physical education careers. The greatest influences for males were coaches (58%), physical education teachers (approximately 12%), and fathers (10%). Females reported they were most often
influenced by a physical education teacher (43%), a coach (23%), and their mother (about 12%). Pooley found rather extensive involvement in sports — the average amount of time spent in sports outside of physical education class was 25 hours per week. Subjects reported 1.92 experiences as team captains in secondary school and 2.29 hours per week spent attending sports events. Males read more sports than females; females had more experience in teacher-like activities before entering the University.

Pooley's (1970) subjects aspired to a variety physical education roles, and there was a great deal difference between the reported career aspirations of males and females. The main roles of interest for male freshmen majors were teaching and coaching combinations (35%) and full-time secondary-school coach (20%). By far the role of greatest interest for female freshman majors was physical education teacher at the secondary school level (81.7%); no women reported that they aspired to become a coach. Furthermore, only a few majors reported they were interested in a role in elementary school — 5% of the women said they wanted to work in elementary school — no men aspired to an elementary school position. It should be noted that Pooley's data was collected at a time when opportunities interschool sport for girls were extremely limited, and women's coaching positions were virtually nonexistent; this probably explains the lack of female subjects who aspired to become coaches. It is possible that a similar lack of opportunities for physical educators in elementary schools explain low percentage of subjects planning careers at that level.
Pooley presented a model of the anticipatory socialization of physical educators. The model proposes that the degree of professional socialization during pre-training is a function of three independent variables -- "recruits" personal characteristics, characteristics of the socialization settings experience, and the influence of socialization agents -- and two interviewing variables -- primary and secondary role enactments. Recruits enact a primary role when they participate in teaching-like experiences, and assist a teacher or a coach, officiate a game, or actually teach. Pooley (1972) considered both active and vicarious participations in sports activities as secondary roles. The central thrust of the model was that young recruits to physical education are influenced by their native abilities and past experiences, by their contact with institutions (such as family, school, community), and by people who are important to them (such as family members, peers, teachers, coaches, and the like). Pooley (1972) proposed that when these influences are combined with their teaching-like and participatory experiences in sport and fitness, the result is the degree to which recruits adopt the skills, knowledge and ideologies of physical education professionals.

Besides being the first investigation into the socialization of physical education teachers, Pooley's (1970) work served as a partial model for Woodford's (1977) study of the socialization of freshman physical education majors into orientations toward various professional roles in physical education. Woodford (1977) used Pooley's (1970) work to develop a detailed questionnaire to 223 men and women freshman majors at several state universities in the Southwest United States.
The questionnaire was designed to collect data that would help "understand the role orientations held by physical education majors as they entered a formal training program and to account for their acquisition" (p. 198). The questionnaire, which was administered one time, contained best-choice checklist and Likert scale items which asked for personal data and information about subjects' decisions to enter physical education, their socialization settings (including school physical education), significant others, and participation in sports and teaching-like activities.

The results confirmed Woodford's (1977) hypothesis that there would be significant differences in the socialization of the subjects in the investigation. Woodford found that the average age of his subjects at the time they decided to enter physical education was 16.3 years for men and 16.9 years for women. He reported that the overwhelming majority responded that the main reasons for their decisions were that the profession is useful to society, it provides them an opportunity to help others, and that they love movement and activity. Furthermore, the majority of these freshmen selected secondary school teacher/coach as the role they were most interested in. Students with different role orientations differed on the basis of ethnicity, importance of skill in athletics, and religious affiliations. Athletic skill was considered a more important factor in the decision for a physical education career by students oriented toward coaching than by students oriented toward non-coaching roles. Woodford (1977) found no apparent difference between male and female subjects on role orientations (except that more women chose the
elementary teaching role), and he found that there was no single significant other who influenced these students in their decision for physical education.

Woodford's (1977) work added to the picture of the early socialization of physical educators that Pooley (1970, 1972, 1975) presented. In many ways, Woodford's (1977) picture matched Pooley's (1970), particularly in the reasons given for entering physical education desire to help others and be of service to society plus love of movement and activity. There were also some ways in which the subjects in Woodford's (1977) study differed from those of Pooley (1970), most notably on the effect of gender, the influence of a single significant other, and role orientation. The differences may have been due, as Woodford (1977) suggests, to changing times in school sport and physical education, with a stronger emphasis on elementary school physical education and the growth of opportunities in athletics for girls.

In an even earlier study of psychosocial and cultural characteristics of prospective physical education teachers, Kenyon (1965) used for attitude inventories to survey 140 college students in physical education, education, and in the liberal arts curriculum. He found that prospective male physical education teachers, when compared to other teacher prospects, were somewhat traditionalistic in educational philosophy, came from slightly lower social class background, and more dogmatic in their thinking. Male physical education prospects were also more traditionalistic, dogmatic and authoritarian, and lower in social class than female trainees for
physical education teaching. He also found that in male physical education students as a professional subgroup do not show many of the characteristics of other prospective teachers; in fact, in many aspects the male physical education student is more like the student not preparing to teach (p. 111). Although he continued about drawing conclusions on the heterogeneity of subject matter subgroups, Kenyon (1965) concluded that his data suggested that "prospective physical educators may have more in common with the student no planning to teach than with one who is" (p. 111).

Segrave (1981) surveyed 267 undergraduate physical education majors at five different institutions to assess the occupational role preferences of prospective physical educators. He modified Chu's (1978) Teacher/Coach Role Preference Questionnaire which used a forced-choice item to determine role preference; it also collected data on the subjects' reasons for role selection. He found that "in general, coaching (preferred by 62% of his sample) appears to be a more attractive choice of occupation than teaching (38%)") (p. 55) and that role preference appeared to "be a function of socioeconomic status, background, varsity team membership [in college], and age" (p. 58). In addition, male subjects were significantly more consistent in preferring coaching over teaching; subjects who showed the greatest preference for teaching were upper and lower class women, who were over 21 years of age and had not been involved in intercollegiate athletics. His data on the reasons for role preferences selected suggested that females and higher class students were attracted to physical education work because of intrinsic reasons, such as "the opportunity to develop
relationships with students;" varsity athletics demonstrated a greater preference for an extrinsic, performance orientation. Segrave (1981) concluded that "the dominant preference for coaching among the present sample, especially males, could well be interpreted as negative for the future teaching mission of the physical educator" (p. 60).

Additional work using role theory (Bain, 1983; Bain & Wendt, 1983) sheds further light on the perceptions of physical education recruits concerning teacher/coach roles, and thereby adds to the picture of prospective physical educators. Bain and Wendt (1983) surveyed 80 undergraduate physical education students with a questionnaire designed to assess their perceptions of teacher/coach roles. Unexpectedly, they found that their subjects perceived teaching and coaching "as requiring rather similar characteristics or abilities" (p. 115). One three-way forced choice item on role preference (teach only, coach only, teach and coach), half (50%) of the subjects indicated they preferred a teaching and coaching role, as compared to about one-fifth (19%) for teaching only and almost a third (31%) for coaching only. They concluded that their data suggest that role conflict is perceived by recruits may be less important than once thought or that role conflict for teacher/coaches may develop other employment.

Sport sociologist George Sage (1980) reviewed the sociology of physical educator/coaches and concluded that

the literature is inconclusive as to whether there are unique and consistent personal attributes among the members of this professional occupation or whether the anticipatory socialization, occupational socialization, role expectancies, and the specific situation condition physical educator/coaches to believe and act as they do in fulfilling their occupational role (p. 119).
Sage, who has used socialization theory to study coaches beliefs and behaviors (1975) described the personal attributes of physical educator/coaches as a curiously neglected research area, given that the sociology of work and occupations is a well established area in generally sociology and that coaching is a high visibility, high prestige occupation in American education. He suggested that the complexity of the topic and the inability of trait theory assessment techniques to formulate "theoretical principles that can either make predictions or account for the findings about the personal attributes of physical educator/coaches" (p. 118) were the main reasons for the neglect and lack of conclusive results in this research area. He also suggested that the methodology of "interactionism," which takes into account both the individual and his social context in which he lives and works, might be a more useful means for studying coaching behavior.

Templin et al. (1982) reviewed the limited physical education literature on occupational choice and anticipatory socialization and used Lortie's (1975) model of recruitment resources to examine the influences affecting recruits' decisions to enter physical education. They concluded that physical education recruits were attracted by the opportunity for service and by the opportunity to exercise their perceived ability for teaching and coaching. Decisions to enter the field were facilitated by individuals' interest and ability in athletics, the influence of parents, and the absence of career alternatives. "In essence, through protracted exposure to significant thus (e.g., teachers, coaches, parents) and involvement in sport-related experiences, individuals may be socialized toward the
role of teacher/coach and a professional training program in physical education" (p. 128).

Placek's (1983) qualitative study of the conceptions of teaching success of upperclass physical education majors provided additional information about prospective physical educators. She used a critical incident technique to examine the bases of trainees' judgments of success and nonsuccess in teaching. Placek (1983) found that her subjects (N=47, juniors and seniors with some prior teaching experience) viewed success in terms of their students' enjoyment, participation, and learning; factor was discipline problems. For 83% of her subjects, students were "the measuring stick for success" (p. 52); less than 20% tied their success to their own actions.

Preservice Training Experiences for Physical Education

Research on training experiences for physical education is not extensive (Locke, 1984). After a thorough review of RTE/PE from 1960 to 1981, Locke (1984) concluded that "teacher educators have, on balance, been remarkably non-introspective about themselves, their programs, and their students. Heavy reliance on the psychometric tools of a social science tradition have served to keep the reality of how teachers learn their craft at a safe and often uninformative distance" (pp. 36-37). The bulk of the research that had been done focused primarily on the areas of student teaching and training methods for specific skills; among the areas in which little or no research had been conducted were socialization into the teaching role and the experience and perspectives of participants in teacher training programs. Locke (1984) suggested several reasons for "the discontinuous and
qualitatively uneven status of RTE/PE" (p. 37), such as the lack of identified teacher education specialists, the lack of career scholars or publication outlets, but he suggested that a more fundamental reason was that teacher educators apparently are not committed to using research to inform their practices in their programs.

After updating his review of RTE/PE to include research through 1984, Locke (1984) found that, in spite of some important changes (notably the increased involvement of teacher educators in reported RTE/PE, research on inservice teacher education, and greater use of strong theoretical constructs such as role conflict and dialectical social strategies), "there is much that remains unaltered and the most severe limitations of RTE/PE remain as yet untouched by the winds of change" (p. 41). Student teaching remained a dominant focus for RTE/PE, but at least a few of those studies examined aspects of the socialization of student teachers into roles and the world of teaching. Since the goal of this study was to examine the effects of formal training on the socialization of prospective physical education teachers, those studies (Marrs & Templin, 1983; Schempp, 1983; Templin, 1978, 1981; Tinning, 1983) were of interest. Unfortunately, no studies were reported by Locke (1984) nor found by this investigator on "what goes on" in physical education preservice teacher education other than the kinds of studies previously mentioned. In Lawson's (1983a) synthesis of research on physical education teacher socialization during teacher education programs, he cited only five pieces of research (not reviews) conducted in physical education. Of these five, only one (Templin et al., 1982) was research conducted during actual
teacher training, and even that piece (previously reported in this chapter) had more to do with past experiences prior to entering college than with the training experiences themselves.

Locke (1984) also championed qualitative methodology as a means for descriptive analysis of the actual behaviors of teacher educators and preservice trainees and of the contents in which these behaviors occur. Similar to Sage's (1980) call for interactionistic techniques which are capable of assessing the important linkage between person and situation and, in so doing, moving beyond the more simplistic trait theory, Locke (1984) suggested that use of qualitative methodology is the key to a clearer, deeper understanding of teacher education.

The only studies to use socialization theory to investigate the earlier parts of teacher education (before student teaching) for physical education were Pooley (1970, 1972, 1975) and Woodford (1977). Because they used psychometric techniques, their findings were limited to student characteristics and biography; their findings added a great deal to the picture of physical education recruits but their methods precluded an examination of the socialization of their subjects in the training program. Templin (1978) was the first investigator to apply qualitative methods to RTE/PE. (Tindall, 1975, was probably the first to use qualitative research in physical education; Kollen, 1983, Tousignant, 1982, and Wang, 1978 also made notable contributions to RTE/PE with qualitative techniques.) Templin (1978) used mixed methods to assess student teachers' pupil control ideology and behavior and to identify selected socialization factors. He combined use of ethnographic interviews and observations with Pupil Control Inventory
to study 10 physical education student teachers; an additional 21 subjects were given the inventories only. He found that the student teachers became less humanistic and more custodial, as measured by the Pupil Control Inventories, as their student teaching experiences progressed, and that as they became more custodial they more closely matched the orientations of their cooperating teachers. Templin (1978) concluded that "although socialization process appears to exist, the shift does not indicate simple accommodation by the student teacher to the ideologies of their cooperating teachers" (p. 81).

In 1981, Templin again used similar methods -- the PCI and in-depth interviews -- to investigate the influence of pupils on student teachers' Pupil Control Ideology. As in the previous study, he found that the student teachers became more custodial by the end of the experience; interview data indicated a greater custodial orientation toward student discipline over the course of the study. He concluded that physical education pupils, especially those who misbehave, serve as socializing agents and are influential in socializing student teachers toward a custodial control orientation.

Marrs and Templin (1983) conducted another student teaching study in which they focused on the student teacher as agents of their own socialization. They used in-depth interviews and organized the investigation around Lacey's (1977) dialectical model of social strategies. They found that their subjects used several different strategies to either comply with or change a variety of student teaching situations. "In the cases studied, self-directed behavior was both congruent and contrary to the norms and role expectations of the
socialization setting and its agents" (p. 125). When taken with the previous work by Templin (1978, 1981), this work demonstrates that socialization of physical education student teachers is both complex and interactive, and involves cooperating teachers, pupils, and the student teachers themselves as active socializing agents.

Schempp (1983) has also studied physical education student teachers, using a critical incident technique to examine students' perceptions of role satisfaction and role competence during their student teaching experiences. Schempp's (1983) inductive analysis of his data led to the interpretation that his subjects saw that the primary factor in their job satisfaction and sense of competence was their students' appropriate engagement in scheduled activities. Similar to Placek's (1983) findings with both physical education teachers and upperclass teacher prospects, Schempp (1983) found that the student teachers in his study appeared to be more tuned in to the compliance behavior of their pupils than to their achievement of sport skill and health fitness: "student teachers appeared to derive satisfaction from their teaching role when students were working, enjoying and asking questions about an activity the teacher felt was appropriate" (p. 113) and "telling students exactly what to do, when to do it and for how long, and having students do as they are told, seem to be the hallmarks of role competence according to these student teachers" (p. 114). This is almost a perfect, albeit extraordinarily troublesome, match with teachers' and preservice students' conception of physical education success as "busy, happy, and good" students (Placek, 1983) and the real task of secondary school physical education
students as being "a member in good standing" (Tousignant & Siedentop, 1983).

One final student teaching study provided insight into the nature of physical education teacher socialization during training experiences. Tinning (1983) developed a task theory of student teaching based on the work of Doyle (1979) and Tousignant (1982), and tested the theory in a naturalistic field study using the qualitative research procedure of analytic induction (Bogdan & Biklen, 1982). He found that changes in the student teacher's behavior could be directly linked to monitoring by the university supervisor; in the absence of such monitoring, the student teacher's behavior was primarily a function of the gymnasium ecology. This additional support for the substantial evidence that student teachers can and do learn new teaching behaviors under carefully controlled conditions (Siedentop, 1981), but it also demonstrates the influence of the ecology of physical education settings as an agent of socialization.

In addition to these student teaching investigations, Earls (1980, 1981) and Chu (1981) interviewed practicing physical education teachers and, among other questions, asked them to look back at their formal teacher training experiences. Earls (1980, 1981) found that his subjects -- teachers judged to be "distinctive" by teacher educators -- were powerfully presocialized by pre-college experiences in school and sports, and that this influenced them to repel the socializing forces of their teacher education. Both Earls (1980, 1981) and Chu (1981) found a disjunction between teacher education and the real world of teaching, with the teachers inadequately prepared for the roles their employers judged significant.
Selected Literature from Outside Physical Education

Although it is thought that physical education as a subject matter area is different enough from other subject areas to present its own particular set of problems and situations, the practice of physical education and physical education teacher education can profit from research which is not specific to physical education. Indeed, a good case can be made that research in physical education teaching did not generate much in the way of useful results until it paid attention to teaching research outside of physical education and followed the lead of classroom researchers in the search for effective ways to teach (Siedentop, 1983). Similarly, it is likely that research on teacher education for physical education can profit a great deal from work in teacher education outside the particular area of physical education (Locke, 1984).

Rather than conduct an extensive survey of the literature related to teacher education and teacher socialization, it was decided to use a smaller number of "classic" works, ones which were frequently cited in the physical education literature. The primary sources for leads to this body of selected outside literature were Burlingame (1972), the Locke and Dodds (1982, 1984; Locke, 1983, 1984) series of reviews in physical education teacher education, and Lawson's (1983a, 1983b) synthesis of physical education teacher socialization. Consequently, this investigation made extensive use of Becker's well known work on medical education (1961) and undergraduate academic life (1968) and Lortie's (1975) superb sociological study of school teachers. In addition, other works on adult socialization (Brim & Wheeler, 1966),
professional socialization (Anderson & Western, 1967; Western &
Anderson, 1968), organizational socialization (Van Manen & Schein,
1979), and teacher socialization (Lacey, 1977; Zeichner, 1979; Zeichner
& Tabachnick, 1981) were reviewed.

Becker's (1961, 1968) studies were interesting for a variety of
reasons. Both were loosely designed and used "unstructured techniques"
(1961, p. 18), both were rooted in symbolic interactionism, and both
focused on the collective, rather than individual, character of the
students they studied. The purposes were similar as well; in Boys in
White, the goal of the research was to "discover what medical school
did to medical students" (1961, p. 17), and in Making the Grade the
goal was to discover "what is it like to be a college student?" (1968,
p.), with particular emphasis on academic life. Of special interest
is Becker's notion of perspective. As Becker and his associates (1961,
1968) use the term, perspectives are "coordinated views and plans of
action people follow in problematic situations" (1961, p. 33). What is
unusual in their use of perspective is that it is not limited to
perceptions:

"A perspective contains, in addition to the cognitive
elements. . .a set of actions. The group's members consider
the actions appropriate and expedient -- appropriate in that
they are thought likely to achieve the goal and expedient in
being adapted to the situation in which the goal must be
sought" (1968, p. 92).

In both studies, the perspective of the student groups became the
primary analytic device for assessing how students responded to their
education. In Boys in White, Becker et al. (1961) found that the
dominant perspective of the medical students in their study was the
short-range, pragmatic perspective of the need to succeed as a student and become credentialed as a doctor. In Making the Grade, they found that the driving perspective of the college students studied was the "grade point perspective" which "specifies the grade point average to undertake those actions that will earn 'good' grades" (1968, p. 34). In both cases, Becker's (1961, 1968) teams of researchers conducted impressive work on student culture, and both still stand as classic pieces of qualitative research.

Lortie's (1975) School Teacher is equally impressive and remains as one of the very best works on the teaching profession. As a basis for the book, Lortie (1975) used data from two research projects. In the Five Towns study, 96 teachers randomly selected from an intentional sample of New England schools representing a variety of socioeconomic settings and grade levels were interviewed by a team of interviewers. In the Dade Country (Florida) study, all of the professional staff of the school system were surveyed with a questionnaire which contained several items designed to check out the Five Towns data. Lortie (1975) used the resulting data to examine the nature and "ethos" of teaching including, among other topics, teacher preparation. Based on his research, Lortie (1975) theorized that teachers' conservative backgrounds and lengthy "apprenticeships-by-observation" from their own schooling are not offset by their formal training in teacher education and lead to an individualistic, biographical orientation to their work as teachers.

Lacey (1977) studied English student teachers in their probationary postgraduate year in an examination of teacher
socialization. His work is based on the premise that socialization is a complex, partial and incomplete process in which the interaction between individuals involved and the specific situation is both ongoing and creative. This is in contrast to what Lacey (1977) calls the functionalist model of socialization in which individuals are largely passive, social institutions are unchanging, and the process of socialization is finite and deterministic.

Of special interest is Lacey's (1977) use of social strategies as a primary unit of analysis of behavior. From his student teacher case studies, he developed a model of socialization as "the adoption or creation of appropriate social strategies" (p. 96), which involve "the act or . . . the selection of ideas and actions and working out their complex interrelationships (action-idea systems) in a given situation" (pp. 67-68). Thus the adoption or internalizing of social (in this case, professional) norms is ever-changing as the individual chooses how to respond to particular situations. Lacey (1977) found three kinds of social strategies: 1) internalized adjustment, in which the individual fully adopts the values and ways of behaving of the social organization he is attempting to join; 2) strategic compliance, in which the individual tries to "get by" by temporarily complying with the demands of the situation; or 3) strategic redefinition, in which the individual struggles with the constraints of the situation and tries to change it in his favor. Lacey (1977) labeled his orientation to socialization as the "sociology of the possible" because, in his view, individuals have power to affect social forces, such as organizations and institutions, just as social forces can influence individuals.
Zeichner's (1979) notion of teacher socialization as dialectical or bidirectional is largely based on Lacey's (1977) work. Also in the same vein is Doyle's (1979) concept of reciprocal causality which he applied to the study of classroom teaching.

The question at hand is how are these theories of socialization played out in teacher education. Zeichner and Tabachnick (1981) reviewed a variety of studies of education students and teachers in the United Kingdom and in the United States and suggested three scenarios concerning the relative impact of teacher education and the schools on teacher socialization. The "commonly accepted scenario" of the education community is that teacher education socializes prospective teacher into progressive/liberal attitudes during their training and that they shift to more traditional perspectives during student teaching and inservice experiences, thereby "washing out" the effects of teacher education. An alternative scenario, which is essentially Lortie's (1975) view, is that teacher trainees' biography presocializes them before they begin teacher education and the effect of the training program is not great enough to offset the effects of background and school experience. Another alternative scenario, and perhaps the most frightening one for teacher educators, is that the schools and universities are partners in the development of traditional teaching perspectives. Unlike Lortie's (1975) theory, this view holds that teacher education has considerable impact, but it is an impact that is almost directly opposite of the intended impact as generally stated by the teacher education community. Which of these scenarios is "correct" remains to be seen; Zeichner and Tabachnick (1981) suggest that
research is needed to study the role and influence of teacher education on the socialization of teachers.

Summary

Do teacher education programs "work"? Are their effects washed out or simply not strong enough? These are crucial questions. Just what goes on in teacher education needs to be known, for if such knowledge is not available, innovations in teacher preparation will continue to be based on hunches and guesswork.

Socialization theory and qualitative research methods show promise as tools for developing a better, more accurate understanding of the teacher education process. Unfortunately, both have been little used in research on teacher education for physical education, although a small body of recent research has demonstrated that the promise is warranted. Furthermore, the research on preservice training for physical education, especially prior to student teaching, is extremely limited. Given what is known about the backgrounds of physical education students and about the quality of physical education teaching in the schools, research on what happens when trainees interact with training programs would be of great use to those who conduct such programs. This investigation was proposed to meet that need.
CHAPTER THREE
RESEARCH METHODS AND PROCEDURES

In this chapter the methodology used to conduct the research is described. Attention is given to the selection of methodology, selection of subjects, the collection of data, and data analysis.

This study attempted to enter the world of teacher education in physical education in an effort to understand the trainees themselves and what they do during the training process. The investigation was essentially a microethnography of two first-year university courses in the professional education sequence for students who plan to become certified physical education teachers. A total of thirty-nine class sessions were observed and eleven formal interviews were conducted during the winter term of the 1983-84 academic year. In addition, a simple questionnaire was prepared and used to collect information about subjects' backgrounds and their desired professional positions; pertinent documents were collected and analyzed. All observations were recorded in the form of fieldnotes, and the formal interviews were audiotaped and transcribed.

Selection of Methodology

The best reason for choosing a particular set of research methods is that the methods fit the problem. In other words, the correct choice about which methods to use is driven by the need to find accurate, reliable answers to the research questions. The purpose of a research technology is to generate good data that are able to shed light on the problem at hand (Siedentop, 1982b). Too often,
methodological decisions, are made for other reasons and the result is tantamount to trying to fit round pegs into square holes (Locke, 1977). The data that result are likely to be invalid and unreliable, and they will not be of use in answering the intended question. It was the goal of this investigation to collect and analyze data with methods that were appropriate to the study of the professional socialization process of students who are planning to become certified for physical education teaching.

This study had two main questions: 1) who are the students in this case, and 2) what do they do during this part of the teacher training program. The purpose was to provide a rich, systematic description of how this group of physical education recruits came to begin physical education teacher training and what happened during their initial training experiences. The decision was made that the methods of qualitative research (Bogdan & Biklen, 1982; Cuba & Lincoln, 1982; Patton, 1980) were appropriate for this investigation.

Qualitative methods were chosen because they are amenable to obtaining the participant's perspective of teacher education, they minimize interference to the natural setting, they can be applied over time, and they yield descriptive results (Bogdan & Biklen, 1982). Burlingame (1972) pointed out that a great number of policy decisions in teacher education are well intentioned "better ways of doing business" instituted to solve perceived problem in the program. Unfortunately for everybody concerned, these innovations often fail because they are based on commitments, assumptions and hunches which too often stem from an inadequate understanding of how the process of
teacher education actually works. He called for studies that would provide such an understanding and help teacher educators enter "the field of play" of teacher education. Yet to date, there has been little work that provides the kind of research that Burlingame (1972) called for.

Qualitative research is essentially descriptive. A descriptive base of the process of education is needed before meaningful and effective changes can be implemented and tested. In addition, qualitative methods are very effective for learning the insider's (student's) perspective of teacher education; they allow the investigator to enter the research setting and study it up close while maintaining relatively unobtrusive status in the setting.

Equally important for this study is that the phenomenon in question - professional socialization - is by definition a phenomenon of change. As they are socialized into a profession, people are supposed to change from raw recruits to trainees to practicing professionals. Investigation of a change process requires methodology that allows continuous study over time, a requirement for which qualitative methods are aptly suited. Even if, as some observers have suggested, there is little or no change (Zeichner & Tabachnick, 1981), only methods that can be put to continuous use over the expected period of change can discover that the intended change, trainee to professional, did not occur.

Finally, in an area such as teacher education for physical education, where the research is sparse, it is an advantage to apply methods that are open-ended and not narrowly focused. Methods which
bring a sharp focus to bear on the problem are useful when the research area is better known and when the search is for a fairly specific answer. In this case, the area is not well known and the search is for questions as well as for answers. Qualitative methods, which are flexible and inductive, seemed to be an appropriate choice on this score as well.

On Confidentiality

In order to increase the likelihood of credible information from the students in this investigation, they were promised that their identities would not be revealed. Likewise, notification was given to the course instructors that they would not be identified in the report. Confidentiality was assumed to be particularly important for the students in that certain of their candid comments, if revealed and associated with the individual who made them, could have potentially damaging consequences in terms of their standing in the courses or in the program. In keeping with agreements made concerning confidentiality, pseudonyms for the students and the course instructors were used in this report. In addition, the University itself was not identified and course numbers and titles have been changed. University and course documents are cited but complete citation information is not given to protect identities as promised.

The Research Settings

Two university courses were the primary settings in this investigation. Both courses are part of the professional education sequence in physical education and they are required for students who
plan to become certified to teach physical education. In addition, both are first-year courses which means they are intended for students in their pre-admission year of the physical education teacher certification program.

"Introduction to Physical Education" (PE 200) was an academic course with the goal of introducing students to common professional issues in physical education and to the program. The course is described in the syllabus:

A main purpose of PE 200 is to introduce students to the demands of [the] program and to orientate students to the values and perspectives of the program. A continuing theme throughout the program is "what does one have to know and be able to do in order to teach and coach effectively in today's schools?"

It was also stated in the opening meeting that student performance in the course would be used to make the program selection decisions. PE 200 carries two hours of academic credit; it met in a classroom twice a week over the 10-week term.

The other setting used in this study was a volleyball activity course (PE 220) which is one of a series of "skill courses" which are required of all physical education majors. The focus of all the skill series courses is learning how to play or perform the sport activities which commonly appear in school physical education programs. Volleyball is one of approximately 18 different activities required, which are taken during the first and second years in the program. The entire skill series carries 15 credit hours; PE 220, which met twice a week for 60 minutes is worth 1 hours of credit. Class sessions for PE 220 were held in one of the gymnasiums in the University's recreation/physical education building.
The selection of two research settings was made in order to maximize the variance or diversity in the total socialization setting, that is, the physical education teacher education program. It was assumed that the collection of data in two quite different training experiences would enhance the trustworthiness of the inquiry by using a broader research context than would be the case if only one of these courses was used. This was judged to be particularly important for study of professional socialization in which the total impact of several training experiences taken together may be of greater influence in trainees than the impact of experiences taken individually (Lawson, 1983a, 1983b).

In addition to the two courses, data were collected in informal student gathering places in the recreation/physical education building. Several informal interviews took place in the student lounge where, it was discovered, some physical education students went between classes to talk, snack, study, watch television and eat lunch. Several contacts with subjects occurred in the hallways outside of class and the lounge. Although there are strong indications that professional socialization is significantly influenced by students' non-academic experience (Becker, et al., 1968), it was decided for reasons of expediency (one researcher working in a limited time frame) that the research settings be limited to PE 200 and PE 220 and to informal gathering areas located close to those two courses by place and time.

The Students

One of the two main questions in this investigation had to do with
discovering the biographies of these students. That question is not addressed here (see chapter four for findings about the students); however it is appropriate to address here the methodological decisions made with respect to the selection of these particular students and with respect to the selection of students for formal interviews.

The reasons for selection of the two courses as the research settings were given in the preceding section. All students in these courses were considered subjects for the research. The students who were in enrolled in both classes were of particular interest since they might be able to provide a broader perspective of the socialization process that they experienced during the period covered by investigation. There were nine students who were enrolled in both classes; there was a total of 26 students in PE 200 and 22 students in PE 220. Two other sections of PE 220 were offered during the winter term of 1984; four students enrolled in PE 208 were also enrolled in these other sections, but data were collected only in one section of PE 220 so these four students were not observed in both settings.

Eight students were selected for formal interviewing in order to gather more in-depth data than was possible from observation and informal interviews in the regular class sessions. To ensure maximum variation between students and to save time by identifying interviewees early in the study, these eight students were chosen via the strategy of purposeful sampling (Patton, 1980). Previous research (Pooley, 1970; Woodford, 1977; Templin et al., 1982; Lawson 1983a) has indicated the existence of several student background variables that seem to influence the professional socialization process. Of these, gender,
American College Testing composite score, and teacher/coach orientation were selected as the variables to be used for purposeful sampling. In addition to promoting variation, these variables were chosen because of their potential to yield results that could be useful for policy makers in the University program. They were also expected to be relatively simple variables to identify, which would aid a speedy selection process for interviewees.

The ACT composite score was used because it was easy to obtain and is a commonly used proxy for academic ability. Teacher/coach orientation — a student's disposition toward physical education teaching or coaching as the paramount professional role — was used because teacher/coach role conflict is a persistent and especially troublesome problem in the practice of school physical education. Results that might shed light on the influence of socialization into physical educator roles would be very valuable for teacher educators.

Gender was listed on the class rosters. ACT scores were obtained, with permission, from student records under the supervision of the Registrar's Office. Students were identified as high ACT or low ACT by ranking the composite tests cores, then assigning the highest third as "high" and the lowest third as "low". A questionnaire was developed to gather data on student's backgrounds and their professional role orientations. It was discovered during the study that teacher/coach orientation was not easily judged so school sport experience was substituted for teacher/coach orientation as the third variable. (Findings about role orientation and the difficulty in identifying students' orientation are included in Chapter Four).
Lawson (1983a) hypothesized that sport experience is linked to role orientation in physical education. School sport experience (identified as the number of seasons played and the number of different sports participated in during secondary school) was used as a reasonable and more reliable substitute variable.

The eventual selection of eight students to be formally interviewed was made using the following process. All students enrolled in both PE 200 and PE 220 were identified on each of the three variables: female or male, high or low ACT composite scores, and high or low school sport experience. In addition, students who had been in previous courses in the physical education major sequence were identified; they were considered lower priority than "new" students because they were likely to be beyond the intended focal point of the study (i.e., early training experience). The attempt was made to identify one student for each of the eight possible combinations of these variables, for example, female -- high ACT score -- high sports experience.

It was found that, of the nine students who were enrolled in PE 200 and PE 220, there were only three new students who exhibited all three variables. These students were selected for formal interviews. It was decided to select the other five students from best remaining prospects, some of whom were "old" students and some did not have an ACT score on record. In keeping with the sampling goal of maximizing variation, the researcher chose two students because they seemed to be critical cases (Patton, 1980). One was a member of an influential subgroup in the volleyball class, and the other was the most skilled
male volleyball player. In addition, another student who was enrolled only in PE 200, was selected because he fit one of the variable combinations and because he was a member of a university athletic team, which was thought to be a potential influence in the socialization process (Lawson, 1983a). By the end of the third week of the term, eight students were targeted for formal interviewing. The interviews were spread out throughout the rest of the term. All of the eight consented to interviews and gave permission for their comments to be used for research purposes and possible publication. (The interview guide contains the permission requests; see Appendix C).

The Elite Interviewees

Dexter (1970) uses the term "elite interview" to distinguish from the more commonly used term "informant". An elite interview "is an interview with any [italics his] interviewee. . .who in terms of current purposes of the interviewer is given special, nonstandardized treatment" (Dexter, 1970, p. 5). By contrast, an informant is someone who participates, usually at the researcher's request, as a "subprofessional colleague or co-worker" (Dexter, 1970, p. 8). Since the students selected here for formal interviews were not considered co-workers, but were singled out for special treatment (interviews outside of class), they were considered elite interviewees. Because their selection was a methodological decision, brief biographies of the interviewees are presented here. Further findings about them and their own comments and actions will appear in greater detail in the research results (Chapter 4).

Meg -- A 19-year old in her first year in college, Meg scored 19
on her ACT composite (the upper third of the class scored 19 and up; the lower third scored 13 and lower). She had a record of extensive involvement in both school and non-school sports. Her skill level in volleyball was low.

Dan -- With an ACT composite score of 21 and secondary school sport experience in four different sports over 10 seasons, Dan was Meg's male counterpart: high ACT and high sport experience. In addition, some of his early class comments seemed to the investigator to be unusually thoughtful and reflective so he was considered a good prospect for interviewing.

Donna -- Although Donna was in her second year of physical education major classes and, thus, considered an "old" student, she was the only female in the class with a low ACT composite score and high in school sport experience. Since she was also friendly and easy to talk to, she was selected as an elite interviewee. Donna was admitted to the teacher education program in physical education partway through the term during which this inquiry took place. She was the only interviewee admitted into the program before June, 1984.

Art -- Selected for extensive school sport experience and a low ACT score, Art was 18 years old and in his first college year at the time of the investigation. He was also a member of one of the University's athletic teams and on an athletic scholarship, which required a great deal of extracurricular time and effort. Art was also one of four minority students in PE 200 and PE 220. Although he was not enrolled in the volleyball class, he was selected on account of his combination of the three variables -- male with high sport experience
and low ACT — and his athletic team and minority membership.

**Carl** — Carl was one of the few males with limited school sport experience. He also differed from most of the other students in that he was 27 years old, married, and a parent. After working for several years, he had taken time away from his job to go to the University, where he was in his second year. He had no ACT scores on record; for purposes of the study he was assumed to be high ACT on the strength of his good academic record.

**Skip** — Skip, a 19 year old freshman male, reported no school sport involvement after tenth grade. His ACT composite score was the lowest on record for the students enrolled in PE 200.

**Jane** — A freshman in her second year in college, Jane was selected because of her extensive volleyball experience. From the earliest sessions in PE 220, it was apparent that a group of 6-8 women stood out from the rest of the students by their obvious experience and skill in volleyball. There were no "volleyball girls" in the regular pool of students enrolled in both PE 200 and PE 220 so Jane was selected. She was judged a good prospect for interviewing because she appeared to be friendly and gregarious. Along with Meg, she had a high ACT score and high sport experience.

**Gary** — Gary, like Dan, was high ACT score and high sport experience. He was selected because he was known to the researcher as a student. Early in the study, when the researcher was unsure about access to the students' perspectives, the decision was made to use Gary for the first formal interview. It was thought that previous contact with Gary might ease entry into the student role. In addition, contact
with Gary provided an opportunity to test the possible effects of prior knowledge of the investigator as a staff member on the student-researcher relationship. At the time of the study, Gary was 20 years old and in his third year at the university. He planned to apply for admission to the program in spring, 1984 along with the first-year students.

In summary, a purposeful sampling strategy was used to select eight students for elite interviews. They were chosen on the basis of three preselected variables and, in some cases, because they appeared to stand apart from the other students in ways that might be significant in the process of professional socialization. Of the eight possible combinations of the three preselected variables -- gender, ACT composite score, and school sports experience -- six combinations were represented among the interviewees. No representatives were found for either of the female-low sports combinations. Table 1 identifies the eight interviewees with the variable combinations they represent.
TABLE 1
Selection of Students for Elite Interviews

<table>
<thead>
<tr>
<th>Females</th>
<th>ACT Composite Score</th>
<th>Lo</th>
<th>Hi</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Meg and Jane</td>
<td></td>
</tr>
<tr>
<td>Hi</td>
<td>none</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lo</td>
<td>none</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Donna</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

School Sports Experience

<table>
<thead>
<tr>
<th>Males</th>
<th>ACT Composite Score</th>
<th>Lo</th>
<th>Hi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hi</td>
<td>Carl* and Gary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lo</td>
<td>Skip</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

School Sports Experience

* ACT score assumed

The Instructors

From the standpoint of socialization theory, the two instructors were the main agents of the professional socialization process during the training experiences in this investigation. They are briefly profiled in this section.

Dr. Stone, the instructor for "Introduction to Physical Education" has been a full-time faculty member at the university for more than 10 years. He said that the term "pedagogical specialist might, in fact, be the most accurate description of how I've spent most of my time. . .for the last 10 years. . .if you look at the titles of things I write
and the kinds of things I contribute and the kind of research we do" (T 15, 6-11). In his time at the University his chief involvement has been in the program of teacher education for physical education. His responsibilities included teaching undergraduate courses, policy making, advising and teaching at the graduate level, and conducting research on teaching and teacher education. This was the first time that Dr. Stone had taught PE 200, and also the first time that PE 200 was required for physical education students. (For a further description of changes in the program, see the following section on "The Program").

The volleyball class (PE 220) was taught by Sara Walker, a doctoral student employed by the physical education department as a graduate assistant. At the time of the study, Ms. Walker was part way through her first year at the university after having spent several years teaching and coaching at a midwestern liberal arts college. She also had experience teaching physical education and health and coaching in public and private schools. A large part of her coaching experience was in volleyball, on the high school and college levels. In her doctoral work at the university, Sarah was specializing in teacher education for physical education. She reported that she "used to characterize myself as a teacher" but now that she has become more involved in professional preparation "the more I find myself as a teacher educator" (T 50, 1-3).

The University and The Program

The University is a large land grant institution and is located in the central United States. Undergraduate and graduate students are
enrolled in a wide variety of programs. One of the programs for which the University has received recognition is the education program at the undergraduate and the graduate levels.

The department of physical education is part of the education unit. Although housed in a separate facility, the head of the department reports to the education dean. Within the department are several divisions including the program for teacher education (hereafter referred to as the Program). The Program is responsible for training students for teaching physical education in public and private schools. Through its work with graduate students, the Program also engages in research on teaching and teacher education. The Program has historically enjoyed a favored place in the department, and the work of both the Program and the department as a whole is respected across the university. The department head is fond of describing the department as a "professional program," which implies a practical, service-oriented approach to its work in teaching and research.

The Program is served by six full-time faculty and by 6-12 graduate assistants who carry half-time work loads.

The 1983-84 academic year marked some major changes in the Program for undergraduate majors. In order to better control the quality of its graduates, the "new" program instituted an admissions policy which was designed to be more selective. The main features of the new policy were an admission limit of 50 students per year, once-a-year selection decisions, and emphasis on admissions applications at the end of the freshman year. Formerly, as many as 100 students entered the Program each year; they were able to apply at the end of any term and enter
when it was convenient for them. The students in PE 200 and PE 220 were
the first group to come under the new policy. Students who had taken
previous coursework in the Program, but who were still not admitted,
were strongly encouraged to apply before the end of winter term, 1984
or drop out of the Program. Since 1983-84 was a transition year
between the old and new policies, the first group of "new" students
also included a few old students as well.

The Investigator

In qualitative research, the investigator functions as the
research instrument (Guba and Lincoln, 1981). Therefore the background
and training of the investigator is an important influence on studies
of this kind. As a methodological concern, a brief biographical sketch
of the researcher is included here. Additional information about the
investigator particularly his attitudes and sensitivities toward
teaching, teacher education, and the field of physical education, which
undoubtedly colored his interpretations of the data, is included in
Chapter 5.

As the son of a physical educator, the researcher grew up in close
association with the field of physical education. From reading
professional books and journal and from watching a college physical
education teacher and coach in action, the researcher gained a deep
familiarity with physical education work. Long experience as a
participant in several sports and later professional experience as a
physical education teacher and coach were also fundamental to the
investigator's own socialization into physical education.

The researcher is an experienced teacher educator in physical
education, having spent nine years in three different institutions as a college teacher of prospective physical educators. Besides teaching professional preparation courses for students in physical education, he has also been a program director with responsibility for the planning and supervision of a college-level training program for physical education and recreation. In addition, he has over ten years experience in the development and administration of training programs for summer camp leadership.

The investigator's research training is varied, and includes graduate coursework at two first-rate universities in statistical group comparison research, single case experimentation, and naturalistic inquiry. Training for naturalistic inquiry was a three-course graduate-level series in qualitative research with particular application to educational contexts. In addition, the investigator conducted a research audit (Lincoln and Guba, 1982) for a qualitative study of student teaching in physical education (Tinning, 1983).

During the period covered by the investigation, the researcher was employed by the Program as an instructor. Although this role helped ease the entry into the Program in many ways and provided access to other staff members, it also meant that a great deal of effort and thought was required to adopt the role of a student, especially early in the study.

Gaining Entry

In some cases, gaining entry to the research site can be a difficult task for qualitative researchers. Since qualitative research requires a lengthy stay in the natural setting and usually includes a
great deal of observing and question asking by someone relatively unfamiliar to the subjects, researchers must often face a series of difficult roadblocks before they can enter the research setting and begin to collect data. This, however, was not the case in this investigation. Gaining entry to the settings and access to the students themselves proved to be a relatively simple process.

As a member of the teaching staff responsible for the physical education curriculum in teacher education, the researcher was already part of the Program. In addition, Dr. Stone, who was the current faculty member designated to serve as head of the Program (a rotating position), was able to grant permission to conduct the investigation as well as provide access to his own class, PE 200. Sarah Walker agreed to allow the investigator participate in PE 220 and to conduct research during the course. Both instructors consented to be interviewed, and they were promised that their true identity would not be revealed.

During the first class session of PE 200 and PE 220, as prearranged between the investigator and instructors, the researcher was introduced to the students as someone who would be conducting research on "what it's like from the students' point of view" and who would be participating in most or all of the class activities. Additionally, each of the students selected for elite interviews granted permission to the researcher to record interviews and to use the data for research purposes and probable publication. In return, the researcher promised that they would not be identified in the report and that any information that they provided would not be used in such a way as to affect their grade in either course nor their admission to
the Program.

The investigation was conducted in keeping with established criteria for the protection of human subjects. The research was conducted in an established educational setting involving normal educational practices. The identity of the subjects was not revealed. The observations and interviews did not deal with sensitive aspects of their behavior and did not involve any deception. No attempts were made to change or influence either student or instructor behavior. Observations were designed to be as unobtrusive as possible, and the course instructors and the students were fully briefed.

Gathering the Data

The data for this study were gathered by means of participant observation, in-depth interviews, and document analysis. Most of the data are in the form of words: field notes of observation, transcripts of interviews, and written materials from the two courses. Multiple data collection strategies, a form of triangulation (Guba and Lincoln, 1982), were used to establish credibility of the findings. Combined with use of multiple settings, use of three sources of data provided opportunity to check, confirm and compare data and emerging hypotheses.

Participant Observation

The dominant data collection technique used in this investigation was participant observation. Compared to the other two data collection strategies used, more time was spent and more data were collected by going to classes, observing what took place and documenting the observations in the form of fieldnotes. Over the course of the study,
38 class sessions were observed and a total of 393 pages of fieldnotes taken. By comparison, there were 11 formal interviews which generally took 20-30 minutes with students and 50-60 minutes with the instructors; the interview transcripts resulted in 103 typewritten pages.

It was decided that participant observation was the best way to collect data which would answer the research questions. As mentioned previously, socialization is a dynamic phenomenon. In order to understand the socialization process it was assumed that it was as important to see the actions of the subjects in the natural settings as it was to hear them talk about their experiences under interview conditions. It was also decided, given the time available, that a practical choice favoring participant observation should be made. Nevertheless, the major consideration was trustworthy data and it was felt that multiple data sources would best serve that end.

The role of a participant observer can range from full participation to complete onlooker (Bogdan & Biklen, 1982). In this investigation, the researcher adopted a role about in the center of the participant-onlooker continuum, although there were some differences in the role adopted for the "Introduction" course as compared to the volleyball course. In both PE 200 and PE 220 the researcher participated in class sessions as a student but with the goal of observing what the students did. In order to adopt the student role, the researcher sat with students and took notes during PE 200 sessions and participated in all drills and games in PE 220. He completed reading assignments in both classes, but took tests and received grades
in the volleyball class only. In PE 200, it was possible to take notes of observations during tests and lecture/discussion and still behave like a student; however, in order to maintain a student-like role in PE 220, full participation was necessary. Early in the study, the investigator took great care to be as unobtrusive as possible, to avoid reactivity. Later, at one point after the researcher had established himself in the settings, he began to doubt the effectiveness of full participation in the volleyball class. A shift to a more passive form of observation was considered, but preliminary analysis suggested that insights gained as an active participant were very valuable and could not have been gained by a less active form of observation. For example, it was found that, as a participant, the researcher experienced first-hand the frustration and embarrassment of performing poorly in front of other students. It was then possible to follow-up on such experiences in interviews with students, some of whom reported similar feelings under the same circumstances.

Participant observers also adopt roles that are either overt or covert (Guba and Lincoln, 1982). Although it was likely that a covert role, in which the researcher's role as researchers deliberately hidden from the subjects, might be of some advantage in a study of professional socialization, the observer chose an overt role for practical and ethical reasons. The observer role the researcher attempted to model, with adaptation to this study, was Cusick's (1973) in his classic study of high school student life. No attempt was made to hide the researcher role from the subjects but, at the same time, the investigator sought to blend in with the students, to act and talk
like a student, so as to understand these training experiences from the students' own perspective.

During observations the investigator focused on the students, noting what they did, what they paid attention to, and how they responded to the demands of the courses and the Program. There was a repeated tendency, especially in the "Introduction" course, to focus on the instructor's actions. Nevertheless, the researcher was very aware of the need to focus on student actions. Mental and written notes were often made in order to ensure that observations focused on the students.

A written record of all observations was made in the form of fieldnotes. Descriptions of class events were recorded as completely and objectively as possible; a strong effort was made to make low inference descriptions. When the observer wanted to record personal observations, hunches, developing hypotheses, and the like, they were recorded separately as observer comments (in the extra-wide margin) in the fieldnotes. The fieldnotes were hand written in notebooks; pages and lines were numbered to facilitate analysis and organization of the data (A sample of fieldnotes made during the study is shown in Appendix E).

Fieldnotes were made as soon as possible after the conclusion of each class session. For PE 200, notes were taken during class sessions and then immediately after class the final, more complete version was prepared in the fieldnotebooks, which were the primary data source for analysis. As mentioned previously, in the volleyball class note taking and full participation were not compatible activities. The procedure
that evolved for making fieldnotes in PE 220 was for the investigator
to make a mental outline of class activities and the main actors as
each class proceeded. From time to time, the investigator checked this
activity outline after class with another student or the instructor.
Then a brief written outline of the class and key conversations or
events was made in a quiet place, usually in the locker room in the
recreation building. Following the preparation of the outline, the
final, complete version of the fieldnotes was entered into the
fieldnotebook. This was usually done in the university library.

The investigator's activity log shows that fieldnote preparation
took approximately 2 1/2 hours for each hour-long class session. The
activity log, a record of times, dates, and activities of the
researcher, was kept as part of the audit trail (Lincoln and Guba,
1982), which consists of a complete set of the investigation documents,
including data sources, i.e., fieldnotes, transcripts, course
documents. The audit trail also included records of the investigator's
research activity (activity log) and record of his decisions,
reflections, insights, problems, and the like (reflexive journal). The
reflexive journal was used as a check against investigator bias as the
study proceeded. The audit trail made it possible for an independent
research auditor "to examine the processes whereby data were collected
and analyzed and interpretations made" (Guba, 1981, p. 20).

Indepth Interviews

In addition to participant observation, data were collected by
means of interviews with students and the instructors. Both formal and
informal interviews were used. Informal interviews generally took the
form of conversations between one or two students and the investigator. They took place in class, in hallways, or in the lounge and usually lasted only a few minutes. Some were unplanned, others were planned, particularly when the investigator wanted to check out statements or actions of other students or a preliminary hypothesis. Data from informal conversations were documented in the fieldnotes; conversations were recorded verbatim (noted without quotation marks) or as close to verbatim (noted without quotation marks) as possible.

Formal interviews differed from informal interviews in several ways. First of all, formal interviews were specifically requested by the researcher and arranged for a particular time and place away from the primary research setting. Second, specific permission was requested and obtained to record and use the interview data for research purposes. Third, the interviews were tape recorded and transcribed. (Note that the first two student interviews were recorded with notes, under the assumption that a tape recorder might be too obtrusive. The decision to use a tape recorder was made when it was found that the students probably reacted more to an investigator asking questions and busily writing than to an interested listener with a tape recorder nearby.) Finally, the formal interviews were held with students selected via the purposeful sampling procedure described earlier. Many of the informal interviews also took place with the preselected elite interviewees but several other students were interviewed informally as well.

The format used for formal interviews followed Patton's (1980) "general interview guide approach" (pp. 197-198 and 200-202). An
interview guide, prepared primary from the literature and the research questions, was used for each interview (see Appendix C for the interview guide). The purpose of the interviews was to gather indepth information from individual students on their backgrounds, personal characteristics, decisions to enter physical education, and their reactions to these particular training experiences. The sequencing of questions was varied from interview to interview, depending on the investigator's judgment of which question the interviewee might be of greatest help in answering. However, each interviewee had an opportunity to address each of the guide topics. Every effort was made to keep interviews open-ended, to encourage students to speak on their own terms and in their own language, and to avoid leading questions. Although the main interview topics were covered in each interview, the use of particular questions was flexible; probes were used when appropriate and other leads were followed when they appeared fruitful.

The use of open-ended, flexible formal interviews was of particular importance because little is know about the socialization process of physical educators. It was felt that a too narrowly focused interview could miss pertinent information that might be generated from a more open, flexible approach. Sanders (no date) points out that

"We do not know how learners are perceiving, interpreting, making meaning of, or judging the practices, policies and activities we present. In these situations, interactive open methods are likely to help us discover useful, unexpected information for the purpose of improving our practice" (pp. 2-3).

In a sense, the search conducted in this study was as much to find more questions as it was to find answers about the professional socialization of these physical education students. In keeping with
that goal, the interviews were kept somewhat casual, more like a guided conversation (Sanders, no date) than a formal interview.

For each interview, the investigator asked for permission to "talk with you about your background in sports and school and about your views of these courses." A meeting time and place was arranged, usually just before or after a class session and somewhere in the recreation/physical education building. The interviews were held in small rooms or hallways where interference from other people was likely to be minimal. Before starting with interviews, each student was asked for permission to 1) use the tape recorder, 2) use the interview information for research and for possible publication. In addition, confidentiality was assured.

All interviews were transcribed, a few by the investigator and most by a professional transcriber. The investigator originally planned to make all transcriptions but when it was discovered that it was too time consuming to produce both fieldnotes and transcripts, the professional transcriber was hired. The interview tapes were reviewed several times before transcription to keep the interview data fresh in the researcher's mind. After transcription, the tapes were checked against the transcripts to ensure the accuracy of transcribed material.

The Student Questionnaire and Other Documents

In addition to participant observation and indepth interviews, some of the data in this investigation were collected by means of document analysis. The most important documentary data source was the questionnaire that was given by Dr. Stone to all students in the "Introduction" course during the first class meeting. The
questionnaire (see Appendix B) was designed to elicit information about student biographies and orientations toward professional roles in physical education. Biographical questions asked for information about experiences in physical education, school and non-school sport, current physical activity, and leadership and teaching-like activities. Students were also asked about their decisions to enter physical education and the roles, combinations of roles, and grade levels they found most attractive at that particular point in time.

Beyond collecting biographical and role preference data, the questionnaire was also intended as a means to generate data early in the study about student's orientations toward teaching or coaching. This orientation was to be one of the three variables in the purposeful sampling strategy for selecting elite interviewees. In spite of two questionnaire items designed to clarify orientations -- a forced choice item on the most attractive role combinations, e.g., a coaching assignment at the level and sport most desired combined with a teaching assignment in a non-preferred area or level, was designed to tease out more accurate evidence of role orientation's than might be possible with a simple role preference item -- early analysis indicated that student role orientations more complex than simple, and, consequently, more difficult to identify than anticipated. The decision was then made to substitute school sport experience for role orientation in the purposeful sampling strategy.

Several documents associated with the two courses were also used: syllabi, test results and final grades, and other handouts. In addition, students in PE 200 were asked to write a brief paragraph on
their conception of physical education as a school subject; the paragraphs were used as data. The university catalog and program handouts were other documents used.

Organizing the Data

The data were organized for analysis around the two main questions and the corresponding sub-questions. The general plan for analysis was taken from Sanders (1983) with the main goal of organizing data that could give answers to the research questions.

Data used to answer the first main question -- who are these students? -- were organized into categories derived from the sub-questions, the literature on recruits into physical education, and the data itself. Then all the data sources were combed for data that fit into the categories and that came from a referral to each of the students selected for elite interviews. A data file on each student was prepared, organized by category and containing copies of all data having to do with that individual. The data were then cross-referenced by category, and categories were compared and analyzed for emergent themes.

The biographical and role preference data from the questionnaire were analyzed with simple descriptive statistics: mean, range, and frequency. Calculations were made by hand and with a hand calculator.

Data used to answer the second main question -- what happened during these training experiences -- were analyzed inductively using the procedure described above. Sanders' (1984) explanation of "concept analysis" was the main source for the technique. After the categories were developed for each guiding question and emergent themes
discovered, the data were checked for negative examples and "null examples" (likely examples suggested by the literature or investigator hunches but not found in the data in this case).

For purpose of locating data for analysis, the various data sources were coded and paginated. The fieldnotes were assigned either "A" (for PE 200) or "P" (for PE 220), and interview transcripts were assigned "T". Each page of the fieldnotes and the transcripts was numbered and each line of every page was numbered from top to bottom along the left hand margin. Thus "A127, 10" represented line 10 on page 127 in the fieldnote book for the Introduction class (PE 200); "T54, 12-17" represented lines 12 through 17 on page 54 in the interview transcripts. In addition, the instructors' grade records (GR 200, GR 220) and the student questionnaires (QR) were also assigned analysis codes.

In reporting the findings in Chapter Four, the data location codes are used to indicate the source and location of the data presented. Schedules and formal interviews conducted and the class session observed appear in Appendices D and E.

Trustworthiness of the Inquiry

The quality of a piece of research is a function of the quality of the data generated. Siedentop (1982b) has pointed out that the essential question for researchers is a question of methodology: "How do you know?" Research results based on good data have the potential to be of use to practitioners in the real world; research results based on bad data are of no value, and may, in fact, be counter-productive to
the goals of research users.

Researchers operating out of the better known (at least in the academic community) rationalistic paradigm (Guba, 1981) agree that good data are accurate, reliable, generalizable, and objective. Naturalistic inquirers, whose work tends to be less well understood, likewise work rigorously to produce good data, data that Guba (1981) has characterized as trustworthy. Trustworthy data are credible, dependable, transferable, and confirmable, qualities which are comparable to the four qualities of good data in the rationalistic paradigm.

Guba (1981) suggests that good data from both paradigms share common characteristics. All good data are, fundamentally, true and consistent across cases. In addition, they are applicable to other situations, and they are neutral in the sense that they are directly linked to the subjects and the inquiry conditions, rather than to the inquirer's self interest.

Table 2 (Guba, 1981) shows the characteristics of good data and the comparable terminology from the rationalistic and naturalistic paradigms.
**TABLE 2**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Rationalistic Term</th>
<th>Naturalistic Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truth value</td>
<td>Internal validity</td>
<td>Credibility</td>
</tr>
<tr>
<td>Applicability</td>
<td>External validity/ Generalizability</td>
<td>Transferability</td>
</tr>
<tr>
<td>Consistency</td>
<td>Reliability</td>
<td>Dependability</td>
</tr>
<tr>
<td>Neutrality</td>
<td>Objectivity</td>
<td>Confirmability</td>
</tr>
</tbody>
</table>

(from Guba, 1981, p. 80.)

In this investigation, regular and systematic attention was given to methods and procedures that would promote trustworthiness. Prolonged engagement in the field and persistent, regular observation were used to foster credibility. Triangulation of data sources, regular peer debriefing (at a graduate seminar in qualitative research methods) and occasional member checks with students were additional strategies used to establish credibility.

A great deal of effort has been made to collect thick descriptive data and to use the participant's own words in order to aid readers who wish to transfer the research findings to other situations. Triangulation also helped to guard against researcher bias by providing opportunities to check out information obtained. A research audit was conducted by an independent peer of the investigator's to attest to the dependability and confirmability of the inquiry. The audit served as a
means to check the stability plus trackability of data, and it was also used to confirm that the results were free from investigator bias (see Lincoln and Guba, 1982 for a thorough discussion of the purpose and methods of the research audits). The audit report for this study appears in Appendix F.

Summary

This chapter described the methods and procedures used in this investigation. Qualitative research methods were used because they best fit the problem: a study of the professional socialization process of prospective physical education teachers. Participant observation, indepth interviews, and document review were the techniques used to collect the data; conceptual analysis of the data was conducted using a combination of preselected and emergent categories and themes. The strategies used were adopted to promote trustworthiness of the inquiry and were in keeping with recommended procedures for naturalistic inquiry.
CHAPTER FOUR
FINDINGS

The data in this investigation were collected from participant observations of class activities in two required courses for physical education students and from interviews with selected students outside of class sessions. The goal of the study was to describe the students, their decisions to enter physical education, and their experiences during a part of their early formal training for physical education teaching.

The data are presented here in two parts. The first part presents student biographical data and information about their decisions to enter physical education. The second part presents the features and activities of the two courses and actions of the students during these training experiences, which were designed to help them become effective physical educators.

Within the two parts, the findings are organized by the research subquestions which apply to that section. Additional findings which do not exactly fit particular subquestions are presented in the section that is most appropriate. The six guiding subquestions are listed as follows:

1. What are the biographies -- personal characteristics and past experiences -- of these students?

2. Have these students actually decided to pursue training for a physical education career? To what extent do these students believe that experiences encountered and qualities developed prior to formal training warrant their decisions to pursue professional training?
3. What are the features and activities of the Program and the two courses?

4. What do the students do and attend to during these training experiences? How do they respond to the demands placed on them?

5. What experiences do students see as valuable for their professional training? What experiences do they see as unproductive or counterproductive?

6. Do students share or reject the orientations and actions promoted by their teacher educators?

PART ONE

Student Biographical Data

Biographical data of the students in these courses were primarily collected through the student questionnaire and formal interviews. The questionnaire provided general information on the 23 students to whom it was administered. More in-depth information came from the formal interviews with the eight students selected for elite interviews. Some additional biographical data were collected in informal interviews with students in class and in nearby settings, such as the student lounge. ACT scores were obtained, with permission, from the office of student records.

The questionnaire data help to give a picture of the students in this case. Low inference data (such as year in college, number of seasons on school teams, estimates of hours spent in physical activity) from the questionnaire will be presented here in order to present a background for the more in-depth, higher inference data collected from interviews and observations.
The biographical data presented is used to answer the first of the two main research questions: who are these students? The first sub-question was used to guide the collection of biographical data: what are the biographies — personal characteristics and past experiences — of these students?

The results of questionnaire provide the following information about the students:

1. Age and year in college
2. School location
3. Amount of physical education
4. Participation in school sports
5. Participation in non-school sports
6. Teaching-like and leadership experiences
7. Current physical activity

Formal and informal interviews with some of the students corroborated their questionnaire data. In every case but one, the interviews data matched the questionnaire data. In the case that did not match, a student had omitted from the questionnaire a teaching-like experience; that information was added to the questionnaire data by the investigator after confirming the information with the student.

Findings from the Questionnaire Data on Student Biographies

The questionnaire was administered to all of the students in the Introduction to Physical Education class and to one student in the volleyball class (who was not enrolled in PE 200). The volleyball student was one of the elite interviewees, and the only one of the eight elite who was not enrolled in PE 200. Of the 26 students who
started and finished the course, 22 returned questionnaires. Announcements by Dr. Stone and personal requests by the investigator were successful in bringing in some of the not-returned questionnaires, but four were not able to be obtained. The 22 returned questionnaires represented a return rate of 85%.

The questionnaire yielded a general picture of the "average" PE 200 students: 19.9 years of age with 1.9 years of college and an ACT composite score of 15.7. Ages ranged from 18 to 27 with two students in the over-22 age bracket; 17 of the 23 students were in their first or second year in college. ACT composite scores ranged from 8 to 23; 4 of the 23 students scored 21 or above, which was the University's average score for incoming freshmen for the Fall term of 1983 (Registrar's Office at the University, January, 1984). By further comparison, the range of ACT scores for all incoming University freshmen was 3-34 (a score of 36 is the maximum possible for the ACT composite).

Under the category of school location, 19 of the students reported they received all of their prior schooling in the state in which the University is located, and 21 students attended junior and senior high school in the same state. There were two students who had attended school in foreign countries -- Taiwan and Korea -- for a portion of their pre-college education. No other student attended a school located outside of midwestern United States.

In order to understand something of the students' past experiences in physical education, they were asked about the amount of physical education they had in elementary, junior high/middle, and senior high
school. Since it was presumed that lessons taught by a physical education specialist teacher might indicate higher quality in elementary school, they were also asked if they were taught by a specialist rather than by a classroom teacher. Analysis of the questionnaires returned shows that 18 of the 23 respondents (78%) were taught by a specialist teacher in elementary physical education. Students reported that they had physical classes from once a month to three times per week in elementary school, with an average of 1.9 classes per week.

In junior high/middle school, the average number of classes per week was 3.26; frequency of classes ranged from once a week to daily physical education. The majority of respondents had physical education either three times per week (7 students) or five times per week (8 students). More than a third of the students (9) indicated that they had physical education every semester in junior high/middle school.

The average amount of high school physical education was 3.76 class sessions per week. Eleven students had daily physical education; six of those completed their classes in two semesters. Classes per week ranged from one (1 student) to five (11). Most students had 3.86 semesters of physical education in high school.

These students were also asked to provide information about their participation in school sports. Previous research (Pooley, 1970; Woodford, 1977; Templin et al., 1982) indicated that physical education majors were generally extensively involved in school sports in secondary school. Lawson (1983a) hypothesized that the amount of school sport involvement would affect the way recruits are socialized
into physical education teaching. It was thought that data concerning
the sport experiences of these students would help provide a better
understanding of them and their socialization into the physical
education profession.

Analysis of the questionnaire data shows that these students
reported that they played an average of 8.74 sport seasons during their
entire secondary school careers and an average of 4.43 seasons during
the last three high school grades (10-12). Participation ranged from
no participation in school sports (reported by two students) to 17
seasons of participation. The average participation for female
students was 9.0 seasons, ranging from 0 to 15; male students reported
an average of 8.55 seasons and a range of 0 to 17. In addition,
students reported that the average number of different school sports
played was 2.83 for all secondary grades; for grades 10 through 12, the
average was 2.09 different sports. Of the 23 respondents, 15 indicated
that they played 3 or more sports in secondary school; one student
played 5 different sports. When separated by sex, 6 women students and
9 men students played 3 or more sports during both junior and senior
high school; in senior high school alone (grades 10-12), 5 women and 4
men participated in 3 or more different sports.

Thirteen different sports were reported, including cheerleading.
The sports most often played were track (played by 12 students for a
total of 37 seasons), football (11 students, 35 seasons), and
basketball (10 students, 41 seasons). For the last three high school
years (grades 10-12), wrestling (4 students, 11 seasons), joined track
(8 students, 19 seasons), basketball (7 students, 17 seasons), and
football (6 students, 12 seasons) as the sports with 10 or more seasons of participation.

The data reported above were for interscholastic sports; for intramural sports, the students were asked about the intramural offerings at their high schools and about their participation in intramurals. Of the 23 respondents, 12 reported their schools did not have intramural programs. Students whose schools did have intramurals indicated that 10 students went to schools that offered between one and five intramural activities a year; one attended a school that offered more than six intramural activities per year. The average number of intramural activities participated in by the students whose schools had programs was 2.5 activities per year.

A students' sport experience is obviously not limited to school sponsored sports. The questionnaire asked for information about students' participation in non-school sports; students were also asked about their sport involvement in interviews. Analysis of the questionnaires shows that 21 of the 23 respondents participated in some form of non-school sports. These students reported that they played an average of 2.26 different sports (range: 0-4) for an average total seasons of 10.4 (range: 0-23). Male students participated in an average of 12.08 non-school sport seasons and female students participated in an average of 9.09 seasons. The highest total seasons played was reported by one male and one female student; 8 males and 5 females reported 10 or more seasons of participation. Two males and four females reported 3 or less seasons. The earliest age for participation in a non-school sport activity was 5 years old --
reported by a female student for "Little League Cheerleading". The average age for playing non-school sports was 14.6 years old; 8 students reported playing at age 8 or before, and 12 students played at age 18 or older.

Students listed 18 different non-school sport activities, which included most of the traditional youth sports as well as water skiing, racquetball, body building, cheerleading, and dance. The most popular activities were baseball (reported by 9 students for 62.5 seasons, an average of 6.9 seasons), softball (6 students, 37 seasons, average: 6.2 seasons), and basketball (7 students, 18.5 seasons, average: 2.6 seasons). Other sports played by 4 or more students were soccer (average seasons: 4.4), football (average seasons: 3.5), and volleyball (average seasons: 1.75). Of the 18 different activities reported, 11 were played by students as adults (age 18 or older). The most popular adult sports were softball, played by 5 students, and basketball, reported by 4 students.

The students were also asked about their current activity in sport and fitness. Analysis of the questionnaire data shows an average of 8.3 hours per week and an average of 2.0 different activities. Fourteen different activities were reported, the most popular of which were weight training (8 students), running or jogging (7), basketball (5), and swimming (4). Two of these students were members of University athletic teams and another student was trying to "walk on" the football team. In terms of their time spent in current physical activity, 8 students indicated they spent 10 or more hours per week; of these 8 students, 5 spent more than 15 hours per week in physical
activity, and one student spent over 20 hours per week. At the other end of current activity scale, four students indicated they engaged in no physical activity.

Analysis of informal and formal interviews plus the questionnaires provided further data on the current activity levels of these students. By matching data from the fieldnotes and transcripts, categorized under current activity, with questionnaire data under the same category, analysis shows that ten students were still playing the sports in which they lettered in high school. In addition, ten of the students were engaged in six hours per week or more in one activity. Using their reports of high school sport participation and six hours per week as an indicator of regular, serious current activity, the data show that five members of this group of physical education students were still regularly playing a sport they played either interscholastically or outside of school. The data show that four other students (other than the five indicated above) were regularly working out in fitness activities. One additional student reported that she spent ten hours a week as a basketball official. Of the ten students engaged in regular current activity, four were women and six were men. Two of these, as previously indicated, were varsity athletes at the University and a third was training for a tryout. After subtracting these three students, there were seven students who could be considered as engaging in regular, serious physical activity on their own.

The questionnaire also asked students to report teaching-like and leadership experiences. The items were open-ended in that students
were simply asked to list the activities plus the number of years or seasons they spent in these types of activities. Analysis of the data shows that 17 of these students reported an average of 1.94 different teaching-like experiences; 5 students reported no teaching-like experiences. The experiences ranged from assisting or aiding a physical education instructor or a sports coach to full responsibility as a youth sport coach or sport/fitness instructor at agencies such as a YMCA or Commercial health spa. Of the 17 students reporting some kind of teaching-like experience, 9 students held positions in which they had the major responsibility for their students. The average number of years for teaching-like experiences for the 17 students was 3.35 years (a "year" is assumed to be one year in which a particular experience occurred, not a full calendar year of experience).

In addition to teaching-like experiences, students were asked to list other kinds of leadership experiences that they had. Of the 23 students responding, 9 listed that they were team captains in high school. Two of the student captains served for two years, and two female students were captains for two different sports. The students with other leadership experiences reported such things as church group leader, band president, and founder (with a parent) of a youth soccer league. Five different students were "gym aides" in physical education classes. Analysis of all the data, including fieldnotes and transcripts, shows that five of these students had already been through the Early Field Experience (EFX) program offered by the Education Department for students interested in becoming teachers. The EFX program explores teaching as a career and provides each student with a
field experience assisting a school teacher in the students' area of interest, for example, physical education.

Findings from the Qualitative Data on Student Biographies

While data from the questionnaire tend to show how alike the students are, the data from fieldnotes and interview transcripts tend to highlight the differences between students. The simple descriptive data used to analyze the questionnaire -- mean, range, frequency -- tend to draw attention to comparisons and shared characteristics. On the other hand, the qualitative data draw attention to experiences and characteristics which are special to each individual. In order to make the best use of the qualitative data collected in this investigation and in order to provide further information about the biographies of these students, the remainder of this section will be devoted to profiles of the eight students selected for elite interviews.

The profiles were prepared from fieldnote and transcript data which were organized according to the following biographical categories:

1. Personal characteristics
2. Schooling in general
3. Physical education experiences
4. School sports
5. Non-school sports
6. Teaching-like experience
7. Leadership experience
8. Family & home life
9. Home town
The categories were derived from the research questions and from the data. All the data sources were carefully combed for information that would fit categories which was filed according to the individual to whom they pertained. The result of this analysis was a set of biographical data files for each of the elite interviewees. The student profiles that follow were written from these files. A central concern in the analysis and the writing was to present an accurate, detailed portrayal of eight students in such a way as to provide an answer to the first of the two main research questions: who are these students. The first subquestion -- what are the biographies of these students -- served as a guiding theme for the organization and preparation of the student profiles.

One additional note: Chapter Three also contains brief descriptions of each of the students profiled here. The information in Chapter Three is more brief and designed to show how the selection of the elite interviewees was made. The information provided here is in greater detail and is presented in answer to a specific research question. As such, it is included in the research findings.

Carl

At the time of the study, Carl was a 27 year-old sophomore, married, and had a two year-old daughter. He took a job after high school and helped his wife through college on her way to a degree in occupational therapy. He worked full-time until about two years prior to the study when he started attending the University on a part-time
basis. This year he changed to full-time but he continued to work on the side.

He appeared to be alert and in good condition. He was slight of build and was one of the shorter males in either of the two courses.

As a boy, Carl "took up sports as a past time, to occupy my time." His parents both worked so "they really didn't spend much time with me." He reported that he attended an inner city elementary school where his classroom teacher taught physical education once a week. Most of his participation in sports was in backyard and sandlot games until he went to high school. However, he did start bowling, in organized leagues, when he was 12, and he has continued to bowl at least three hours a week for all but two of the 15 years since he took up the sport.

He attended the public middle and high schools in the suburban community where he now lives. At the middle school, he had physical education five days a week for two of the four semesters he attended there. At the high school, he also had two semesters of physical education for 5 days per week, which is the minimum required in that state. The school did not have an intramural program.

Carl described his high school physical education experiences this way:

What you might call physical education and fitness -- we didn't have it. We had a physical education class that you went to. That was only your freshman and sophomore year in high school. Juniors and seniors it wasn't required and they recommended that you didn't take it because the classes were full. . . .

. . . mostly what we did was just play -- recreation. There was no physical fitness involved at all. . . .
That was as far as it went. I don't know why they had a phys
ed teacher in high school. He was just there to hand you a
ball and say go to it. (T27, 5-16)

In high school, Carl was involved in the athletic program. He
reported that he "didn't play on a lot of teams but I did participate.
I played on the football team and on the baseball team. I never did
make the basketball team. I tried out but I never did make it." He
played football in his freshman and junior years, he had a part-time
job his sophomore year. He described himself as a "finesse player" --
he was small in school: 120 pounds and under five feet tall, until his
junior year when he grew about six inches. After his junior year, he
"got tired of football" and did not go out for the team as a senior, in
spite of an invitation from the coach. He said he wanted to go out but
he felt "just burned out." He played on the baseball team as a senior
and, even though it was his first experience in organized baseball, he
earned a letter.

Carl says he "plays most sports." In the ten years since high
school, he has played "a lot of basketball and softball," especially in
the summer when he has been involved in recreation, church, and
industrial leagues. He continues to bowl once or twice a week and
considers bowling the sport "I do the most."

A few years ago, Carl and his wife served as youth counselors at
his church. He described that experiences as "a lot of fun...It was
mostly a recreational thing for the kids to get together and have fun."
The group went bowling, played basketball on the church's court, and
went on some overnight weekend trips. Carl did some instruction in
basketball, teaching "the kids how to shoot jump shots and stuff like
that." He and his wife received special training for leading discussions on sexuality, the topic of one of the weekend retreats. They gave up their youth counselor activities when their child was born.

Carl also had a short experience as a softball umpire in a girls' recreation league. He quit umpiring because it "was bad -- they complain all the time."

After high school, Carl took a job at a state liquor warehouse. He continued to work there part-time when he started at the University about two years ago. Even though he is now a full-time college student, he goes in to work on part-time basis. With a two year-old child, his wife's job and school activities (she takes a class one night a week and plays basketball another night), and his own work in school and at the warehouse, their family schedule is busy. He says he has a difficult time studying at home because the baby "climbs all over me any time I pull out a book." Nevertheless, he finds the schedule less difficult now: "it's easier going to school full-time than part-time. You can schedule your time easier."

At the time of this investigation, Carl had nearly completed the University's requirements for general education and had started the course sequences in education and in the physical education major. Beside these two courses, he also took a natural science course which is required for physical education.

Carl was selected for elite interviewing as a male with a record of low involvement in school sports. His ACT composite score was assumed because he did not have his ACT scores on record; because of
his good academic record, his ACT score was assumed to be high for the selection process.

Skip

Skip was 19 years old and a freshman at the time of this study. Like Carl, he was one of the shorter males in the volleyball class; he had a medium build. He came to the University from a town about 100 miles away with a population of approximately 20,000 people. He was a full-time student and lived in university-supplied housing.

All of Skip's schooling was in his hometown. He had physical education classes on a regular basis from elementary school, taught by a physical education specialist teacher, through high school, where he reported he had class five days a week each year. The high school, classified as "Triple-A" (the state classification for the largest high schools), was the only high school in his community.

He said, "I pretty much taught myself what I know today about sports because my mother and father were divorced when I was five . . . That's why I think I was naturally able to do sports because nobody really taught me or really pushed it on me" (T64, 21-25). He played on the basketball team for three seasons, in 7th, 8th, and 9th grades, and on the school teams in basketball and football for four seasons from 7th through 10th grades. He went out for basketball in 7th grade at the urging of the coach, "really a fair guy" (T64, 27), and even though he was "about the shortest guy on the team at the time," he surprised himself and made the team.

I thought, oh well, I'll go out there -- what the hell. I'll probably never even make the benchwarmer squad . . . I had never played competitive basketball before and once you get
to junior high you meet all these kids from all the elementary schools in the whole city . . . but I made the team so that was probably the highlight . . . it was just a great high for me.

In football, he became a starter at defensive back as a freshman after he "grew pretty much" (T66, 1) between his 8th and 9th grade years. He quit football when he "screwed up my ankle bad" (T61, 21) and didn't get into any games.

Skip told the investigator that he didn't play basketball in high school because he was "too short, I guess . . . I could have -- I have the talent" (P132, 15-16). But another time he said "I don't think I was good enough to make the high school team . . . I wanted some time off anyways" (T61, 14-16).

In third grade, Skip started playing organized sports on a Little League baseball team. He played five seasons of baseball plus two seasons of youth football and three seasons of youth basketball.

On the questionnaire, Skip did not report any experience in leadership or teaching-like activities. However, in an interview he said that he "helped coach my little brother's baseball team this [past] summer and I learned a lot from that. I taught my little brother pretty much how to field and bat and stuff like that" (T64, 4-6).

At the University, he plays intramural basketball. He said he was "really bummed" when his team lost a playoff game. "They brought in professional officials and they called a foul every two minutes . . . It was a crock" (T63, 5-15). He told the investigator that he would have rather had a basketball class than a volleyball class -- "if I played basketball in class it would have helped me, with the practice
and all -- our intramural team would really roll" (P132, 23-26).

About halfway through the study, Skip said that he was having some difficulty in his coursework. "Things about school are starting to get me down -- other classes -- like those required classes for this field . . . " (T59.1, 26-28). He reported that he was not doing well in a basic biology class and had, in fact, recently dropped the course. In his first term, he had a grade point average of 1.6, about which he was "really depressed" (T60, 25). Since he dropped the biology class, he found that "Everything is sort of boring now because I don't have a whole lot of challenging things . Everything is sort of easy" (T60, 25-28).

Skip was chosen for elite interviewing as a male with low school sports involvement and low ACT score. His ACT composite score was the lowest of all the students in PE 200.

Art

At age 18, Art was one of the youngest students in either of the two courses. At the time of the investigation, he was a freshman in his second term at the University. He was also one of the four minority students in the Introduction to Physical Education class.

Art was attending the University on an athletic scholarship; he was a member of the University track team. He was about six feet tall and fairly lean, except for surprisingly broad shoulders.

The community where Art grew up and went to school is located about a 45-minute drive from the University and has a population of approximately 40,000 people. He attended all levels of pre-college
schooling in this community.

Art had physical education classes twice a week at every level, from elementary to high school. His elementary school had a physical education specialist; his high school used student gym aides, a role for which Art was selected when he was in high school.

When asked about his experiences in sports, Art said: "When I was young, I played basketball, football and track. Then in the summer I played baseball. Then, as I became set on one sport . . . I just started playing basketball and track in my senior year in high school. And now I'm just running track" (T54, 32-37). He was a three-time letter winner in track in high school and was the team captain for two years. He ran track and played on school basketball teams from 7th through 12th grades. He also won one letter in basketball.

In talking about his high school experiences, Art said that when he was a junior "I was the kind of person who didn't care for anyone except myself, and then . . . I was gettin' in a lot of trouble . . . and, people, not just coaches at this point, but teachers and my athletic director and principals, they would, ah, call me down to their offices and have talks with me" (T56, 10-15). He said his high school grades "averaged a B" (T58, 38).

At the University, Art said his first term grade point average was 2.66, which was easily above the 1.7 GPA needed to be eligible for intercollegiate athletics. He thought that getting grades good enough to be eligible was "not really that hard". His coach wanted him to earn a GPA of 3.0 for the winter quarter but Art felt that a 3.0 was unrealistic for him. He said his goal was to "make the hometown people happy" (T59, 19).
On the questionnaire, Art reported that he spent an average of 17 hours per week on the track team. He played basketball for an additional 2-3 hours per week.

Art was selected for formal interviews as a male with high sports experience and a low ACT score.

Dan

Dan was in his second year in college at the time of the study. He lived at home in a nearby community of approximately 13,000 people. He was 19 years old.

He looked to be about six feet tall and was ruggedly built. When he came to classes for PE 200, he often wore an athletic jacket in the University colors with "University Rugby" printed on the back.

Dan was one of few students in the study who had gone to school out of state. In fact, Dan attended schools in five different states and even went to school in England for awhile. Dan's father, a businessman, was transferred often because of his job. Dan went to elementary schools in five different states, to middle school in an eastern state, and moved to his current community part way through senior high school.

In physical education in secondary schools, Dan reported that he had class two or three times a week for about half the semesters he was in those schools. His high school had an intramural program, and he participated in 1-2 activities a year.

Dan said, "I've been involved in sports since I was in third grade" (T93, 16-17). He played four different sports on school teams: baseball, football, soccer, and track. He won 4 letters in track and 3
in soccer. His high school, a parochial school, was one of the state powerhouses in soccer. In a move that he now considers a mistake, Dan played on the football team instead of the soccer team his senior year. Although he likes football and lettered in the sport, he felt he should have stayed in soccer, which was his first love and the sport his father wanted him to play.

Dan described his school sport experience: "I've never been extremely skilled in any one sport. I've always done a number of different sports. I guess you could say up to until recently, I've just been above a mediocre athlete -- just always participating, being involved. I've played in the varsity level for four years and two years of some sports. I had to work my way up" (T95, 15-19). "I never got picked as all-state. But I participated a lot and got experience in all of them . . ." (T96, 19-20).

As previously indicated, Dan's non-school sports activity started when he was in third grade, when he started to play soccer and football. He also played Little League baseball and community basketball. Altogether, he played 18 seasons in non-school sports.

Dan learned soccer from his father, who was born in England "and grew up with soccer. That was his sport" (T95, 25-26). When he was a high school freshman, Dan and his father started a community soccer program in the town where they lived then (northeastern United States). The program drew 500 children the first year. Dan also served as a referee and a coach, which he continued for 5 seasons.

In addition to soccer, Dan coached a community youth track team for a year, and he spent a season as YMCA counselor. He also worked as
a gym aide in his high school physical education program.

At the University, Dan started in agribusiness; he switched to education after his first quarter. "I hate math and you had to take a lot of math and statistics and all that stuff so that kind of shied me away from it [business]" (T93, 8-15). Since his program switch, he had taken another skills class for majors plus a health course. He had also done his EFX in the previous year; he was assigned to a local suburban middle school. He reported that he had "gotten in pretty good terms with them out there in the middle school" (T100, 6-8), and had continued to stay in contact by visiting occasionally.

When asked his plans in the Program, Dan said that he was going to wait a year before making application for admission. "I know [a department staff member] was saying it is important to get into it right away but I want to get a little bit more under my belt first to ensure a better shot at it" (T93, 23-24).

Dan was the only male student in PE 220 who appeared to have previous experience playing power volleyball. During a drill in one of the first class sessions, the investigator noted that Dan executed serves with mature form. When asked about previous volleyball experience, Dan replied that he had taken a University volleyball class the previous year. He had also played volleyball intramurals in middle school. "I always liked it but when you got in high school it was always a kind of girls' sport and so no one ever continued on with it. But I always enjoyed it" (T97, 9-13).

Once when Dan had missed PE 200 in the morning and had arrived for PE 220 late and disheveled, he told the investigator about his
part-time work. On this particular occasion, he had worked at his job at a pizza restaurant and then babysat until 4:00 in the morning. He said he worked at the restaurant under a flexible schedule that gave him 20-25 hours in the first part of the term, and then tapered gradually to 10-15 hours by the end of the term.

Dan was chosen for interviewing for his high sports experience and his high ACT score.

Gary

Gary, 22 years-old and in his third year of college, was one of the "old" students in this group. Old students were those who had taken required physical education courses the previous year but who had not yet been admitted to the program.

Gary lived in an apartment near the University, close enough to be able to walk to classes and back home for lunch. He came from the same town as Art did (population approximately 40,000). Although their high school was the only public high school in their town, Gary and Art did not know each other before coming to the University. The school's large size — Gary's graduating class numbered 400 students — was probably one of the reasons for that. Gary said his school had a large dropout rate; his class "lost" 300 students between 9th grade and graduation. The elementary and middle schools that Gary attended were located in the same town.

In elementary school, Gary had physical education once a week with a physical education specialist. From 6th grade on, he had twice-weekly classes every semester including his last years in high school. When asked about the physical education program that he
experienced, Gary said "It was good. We had class two times a week -- three would have been nicer. We had the President's physical fitness test twice a year . . . We had a unit in flag football -- we had set plays. We had gymnastics -- I learned some of the moves I'm learning now [in the second year gymnastics class he was also enrolled in]. had basketball and wrestling -- had a class tournament there." Most of the classes were 38 minutes long, not counting time for showers and changing clothes, and most of the units were three weeks long. Gary said that his physical education teachers "graded on how well you did, but if you couldn't quite do it and you tried real hard, they'd give you the grade anyway" (T3, 17-33 & T4, 1-6).

Gary played four different sports in secondary school. He was on the football team in 8th grade but he "got bored with it . . . and I moved into wrestling and baseball. I wasn't the greatest athlete but I got two letters in both wrestling and baseball" (T2, 27-31). He wrestled every year from 8th grade through 12th. He played baseball for his last three years in high school; "I started as a junior but got mono . . . I stuck with it. I played second base . . . I did what was asked of me . . . I wasn't the greatest but I got the job done . . . my batting was pretty low but I got my letter" (T2, 33 & T3, 1-4). In his senior year, he hurt his back wrestling which caused him to lose playing time in both wrestling and baseball "but I still played enough to get my letter" (T3, 5-10). He also played soccer for one year on the school's soccer club, and participated in two activities a year in the high school intramural program.

Gary started at the University in business. "That was mostly peer
pressure -- most of my friends were going into business. But I didn't do well and I didn't like it." As a result, he switched to physical education about six months prior to the period covered in the investigation.

Gary was a gym aide for one year in high school, and was a team captain for one season. For current physical activity, Gary reported his two required skills courses and three hours a week playing football with his roommates. He also spent a great deal of time with the University football team as a student manager.

At this point, Gary's grade point average was under the requirement for admission into the Education Department program for teacher training. "I've got to get my grade point up or I'll be taking classes and won't even be in the education program" (T5, 7-9). He said he planned to apply for admission to the physical education program in the spring with the "new" group of students.

For the selection process for elite interviewees, Gary was one of the two males (with Dan) categorized as high sports involvement and high ACT score. He was also selected because he was considered a good prospect for the first formal interview.

Meg

Meg, a tall, blonde student, was a 19 year-old freshman during the time of the investigation. She lived in University housing on campus.

Meg's hometown, about a three-hour drive from the University, has a population of approximately 20,000 people. Even though she described her community as small, she said the high school was not small, and yet "everybody knew everybody else" (P176, 16-18).
On the questionnaire, she reported that she had elementary school physical education with a specialist teacher three times a week. In secondary schools, she had physical education on a daily basis for all but one junior high semester and for one of her three high school years. Her high school had an intramural program and she indicated that she participated in several intramural activities.

In interschool sports, Meg participated in three activities: basketball, track and cheerleading. Her total number of seasons participated -- 15 -- was one of the highest in this group; only two other students had more seasons of participation. She started each of her three sports when she was in junior high and carried them through high school. She won letters in all three activities: three in basketball, four in track, and one in cheerleading. She was the team captain in both basketball and cheerleading.

Meg described herself as someone who had "always done a lot of different sports -- with my brothers and my friends" (P176, 10-11). In high school, her basketball coach wanted her to concentrate her energies on his sport. "He told me I could be good if I concentrated on one thing . . . [But] I wanted to do something else too . . . I didn't play as much then -- I think that was the reason that I became a cheerleader" (P176, 9-15).

In non-school sports, Meg listed four different activities on the questionnaire: Little league cheerleading (8 seasons), dance studio (9 years), gymnastics lessons (4 years), and body building (2 years). The first three activities she started as a young girl, the earliest was cheerleading at age five. Body building was an activity she started at
Meg had been involved in several teaching-like activities prior to the time of the investigation. She was an assistant gymnastics instructor for a year, a dance instructor for four years, and an instructor at a health spa for the past two years. She listed the volleyball class, running (3-4 hours per week), and officiating men's basketball intramurals at the University (10 hours a week) as her current physical activities.

Meg did not have very much experience playing volleyball before taking PE 220. She said that her cheerleading and participation in cross-country conflicted with trying out for volleyball. In spite of her lack of experience, she told the investigator "I've always liked volleyball" (T85, 61) but she never had the opportunity to get into the sport.

When asked about her family, Meg said "our whole family is athletic really" (T83, 7-8). Her older brother went to the University and played on the football team. He attended graduate school at the University and completed a Ph.D. in exercise physiology. Other family members also attended the University: "the University runs in the family. There are 14 members of my family that graduated here -- my Mom and Dad, two of my brothers and sisters and my brother [who] is in dental school right now here. Everybody has gone here" (T90, 6-10). Meg would have liked to have gone to a small college where she could have played basketball -- "I'm not good enough to play in a big school [like the University]" (T90, 5) -- but her family ties to the University were too strong to seriously consider another college.

When Meg was in junior high, she and her mother helped her brother
with his doctoral dissertation. "We went to schools . . . he had them doing all different kinds of skills like situps and pushups. And he wrote the results" (T89, 15-18).

Although she listed some current physical activity on the questionnaire, Meg reported that she no longer spends as much time in sports as she did in high school. "In high school, I went to school for sports -- I had to carry my books plus all my basketball stuff and then pom poms in the other hand. Now I just study all the time . . . study, study, study" (P177, 5-9).

Meg was selected for interviewing because of her high involvement in school sports and for her high ACT composite score.

Jane

Jane, who was 19 years-old and a first quarter sophomore, was part way through her second year at the University. She started as a business major but changed to physical education at the end of her first year. She was a full-time student and lived in a University dormitory.

Her polished volleyball skills along with volleyball shoes and kneepads were indicators that she had played a good deal of volleyball in the past. She was also one of the tallest women in PE 220 (Jane was not enrolled in PE 200 this quarter).

Jane grew up in a small town in a rural part of the state about 70 miles from the University. She took all of her elementary and secondary schooling there. During her last two high school years, she attended a nearby vocational school, but she still spent part of her time, including school team practices and games, at her regular high school. She "graduated twice", with 38 other seniors at the home
school and about 1,200 students at the vocational school.

In elementary school, Jane had physical education with a specialist teacher who met the class at the gym "a couple days a week." At her junior high school, which she described as "very small", she had physical education three days a week for each of the four semesters she attended there. In ninth and tenth grades, at her high school, she took two semesters of physical education, meeting every other day, in ninth grade and one semester, meeting every day in tenth grade.

Jane was involved in the school sports program in junior and senior high.

"In junior high I played basketball two years, then I played varsity basketball for four years -- started as a freshman. Volleyballwise, I played reserve my first year [in high school], started varsity my second year, sat the bench my junior year, and started again my senior year. One of 'em coaches didn't like me so I sat the bench, it was really weird but (laughter). In track, I ran all four years. I didn't run -- I did field events: shot put, discus, high jump. I did that for four years in high school" (P74, 31-33 & P75, 1-9).

During her high school sports career, Jane earned four letters in both basketball and track; she earned three letters in volleyball. In addition, she was the team captain of her basketball and volleyball teams.

During her last two high school years, when she attended vocational school, she continued to play on her home school teams -- the vocational school did not have school teams. That meant she was usually late for practice sessions. The coaches at her home school "didn't like the fact that I was gone but I said it was my life, my education. I'm gonna do what I want. So they said OK ..." (T77, 24-26). The team coach either waited for Jane to arrive before
starting practice or began the session without her. "So it was kinda
good that I missed half of practice [laughs], you know, I wasn't as
tired as everybody else [laughing]. But in a way I kind of missed a
lot too" (T77, 33 & T78, 1-3).

Jane continued her sporting life at the University by
participating in intramurals and joining the women's volleyball club.
She played on intramural teams in basketball and volleyball. She also
played basketball "at home" in a Sunday night league and she took a
volleyball physical education class in the University's basic
instructional program "'Cuz I just wanted to play" (T69, 21). "And
this quarter starting, I joined the club so I've been playing a lot of
volleyball. Played basketball twice this quarter [laughs]. Other than
that, basically just volleyball now" (T75, 17-20). She said the
volleyball club practices twice a week and plays "a lot of tournaments,
usually on weekends . . . pretty much all year" (P69, 21-24).

Jane started at the University in the business program but she
switched to physical education at the end of her freshman year after
deciding she was not suited for a business career. At the time of this
investigation, Jane had completed the swimming class required of
physical education students and the required practicum in education,
"Early Field Experience in Teaching". In addition to volleyball (PE
220), she was also taking a physical education course in body movement.
"My biology and things -- I'm in the process of getting those done .
. . Almost all of my humanities and social sciences and my regular
studies like math and English -- they're all done" (T72, 15-25).
During the next quarter, she planned to take softball and "Introduction
to Physical Education" (PE 200); she said she would be in the pool of applicants for the spring admission into the physical education major program.

Jane was selected as an elite interviewee primarily because, with the other "volleyball girls," she stood out from the rest of the students in the volleyball class (PE 220). It was thought that one of the experienced volleyball players might have different thoughts and experiences during the course than the other students. Jane was categorized as high school sports involvement and high ACT score. She was not enrolled in PE 200 during the time of the investigation.

Donna

Donna was in her third year at the University during the time of the study. Since she had already taken several second year courses in the Program, she was an "old" student. Under the rules of the old program Donna was not required to take the "Introduction to Physical Education" course, which she did voluntarily. Along with several other old students, she had waited until this year to take the volleyball class, which was required of both old and new students.

Donna lived at home in the same nearby suburban community that Dan lived in. Her family's house was far enough off the main roads for them to get "snowed in" a couple of times during the investigation, which caused her to miss morning classes (including PE 200) those days.

Since Donna was one of the students who did not turn in a completed questionnaire, her biographical data was taken solely from the fieldnotes and the transcripts. She told the investigator that most of her sport experience was in gymnastics and cheerleading. She
started gymnastics at age three and then, later, added cheerleading. Her cheerleading background was extensive and included several summer cheerleading camp experiences. She also mentioned, during a class discussion in PE 200, that she played junior high soccer as well.

She was not an experienced volleyball player. At one point, she reported that she "hated volleyball, as a sport" (T11, 29-30) but she was confident of her ability to catch on. "Even though most of my experience is in gymnastics and cheerleading, I've always been able to do pretty much everything, as long as I try" (T11, 5-8).

When asked to be interviewed about sports and physical education, Donna said that she'd had "all kinds of experiences, more than most [physical education students]" (A68, 3-4). "I've probably done more things and been more places than most majors" (T9, 2-5). "I've always been an adventurous person . . . I've had 11 jobs and I've been to a lot of places, like Canada and Hawaii" (T9, 23-25). She had worked at a health spa and at cheerleading camp, where she became "staff head -- that's how I got to go to Hawaii -- and that gave me a chance to plan programs and get involved in the business end of things" (T10, 17-21).

When she was younger, she taught the neighborhood children gymnastics in her backyard. "I've always been the kind of person who preferred to being control . . . I just enjoy teaching" (T9, 31-33).

During the time of the investigation, she taught gymnastics at a private gymnastics school and she served as a cheerleading advisor at her high school, where she said she'd like to teach.

At the University, she had previously completed her Early Field Experience in teaching (EFX). She had worked with an elementary
classroom teacher because she changed from physical education to elementary education during her first year. She told the investigator that she had started out as a "PE major" but when she "got to her first P.E. class, everybody else looked 'masculine' and 'jocky' . . . I really felt out of it and different . . . I've always thought it was o.k. to wear make-up and good clothes . . . I was miserable -- everyday I came home told my mom I wanted to quit."

"That's when I changed to elementary education but that wasn't for me . . . I was in an elementary classroom in my EFX course, and it just wasn't what I wanted to do . . . I knew I wanted to be in physical education" (T10, 25-33 & T11, 1-3).

Donna reported that the program switch hurt her University grades. She said she had a 1.6 GPA the previous year, but now, after settling back into physical education, her GPA was 2.8. As an old student in the Program, Donna was eligible to apply for admission during the term in which this study was conducted. She did apply and was admitted to the Program toward the end of the term.

Donna was chosen for interviewing because she was one of the few women students enrolled in both PE 200 and PE 220 and who had an ACT score that could be categorized high or low -- hers was low. Her sport involvement was rated as high.

Section Summary

This concludes the presentation of the findings in answer to the first research subquestion: what are the biographies of these students? In summary, these findings are:

1. The students had extensive experience in school and non-school sports before starting at the University.
2. Most of the students had a great deal of previous experience in teaching-like and/or coaching-like activities.

3. After entering college, most of the students had, in effect, retired from the sports in which they had participated in high school. Although most students reported they were engaged in some kind of physical activity at the University, only about a third of them reported involvement that might be considered serious and of their own volition.

4. On the average, this group of students was significantly less able academically (based on ACT score) than their fellow University classmates.

5. Most were competent, but not outstanding, athletes.

6. Their age and year in school was fairly typical for students in the early years of college. All but one were in-state students.

The Decision and the Recruitment Process

In addition to student biographical information, data were collected and analyzed for information about student decisions to go into physical education careers and for information about the process whereby they were "recruited" into physical education. Recruitment, here, was taken to include the formal as well as the informal process by which students were influenced to enroll in these two courses, which were expressly designed as part of a training program for future physical educators. Whether or not students actually planned to become professional physical educators was one of the research questions, since it was not known if these students had, in fact, decided to become physical educators.

Furthermore, if they had decided to go into physical education, it was not known how their decisions were influenced by their previous experiences and previously developed personal qualities. Recent discussions (Templin, et al., 1982; Lawson, 1983a; Dewar & Lawson,
have alerted researchers to students' "subjective warrants," a construct first used by Lortie (1975). Although there is some disagreement about how broadly the construct should be applied, the subjective warrant essentially means the explicit or implicit self-assessment made by recruits concerning their suitability for work in the profession. Since the subjective warrant depends on such things as the influence of important persons (for example, family members, teachers, coaches), perceived job attractions, and perceived expectations for work as a physical educator, data was collected and analyzed that would help describe and explain how these students arrived at their decisions to go (or not to go) into physical education.

Most of the data in this section were collected by means of the questionnaire and the in-depth interviews. In a few cases, informal interviews provided data on student decisions and their recruitment to physical education.

The questions used to guide the research for this section were:

1. Have these students actually decided to pursue training for a physical education career?

2. To what extent do these students believe that experiences encountered and qualities developed prior to formal training warrant their decisions to pursue professional training?

Findings from the Questionnaire Data on Student's Decisions

On the questionnaire, students were asked if they had decided to pursue training as a physical educator. Because it was thought that student decisions might vary as to the strength of decision, they were asked to choose one response from the following: definitely yes,
probably yes, maybe, probably no, and definitely no.

Analysis of the questionnaire responses showed that most of the surveyed students had either definitely chosen to pursue formal training (16) or were strongly leaning in that direction (4). Two students were on the fence — they responded "maybe" — and one responded probably no. On the questionnaire, no students indicated that they were definitely not intending to enter physical education, but there was one PE 200 student who enrolled late (and in doing so, did not have an opportunity to fill out the questionnaire), who told the investigator that he was simply taking the class for an extra two hours of credit and that he might use the course to help coach a community youth sport team some day (A107-a, 15-18).

In addition to a direct question about student's decisions to pursue physical education training, the questionnaire asked students to indicate their preferences for various roles, grade levels, and school work situations (See Appendix B for the questionnaire).

Most of the 23 students (18 or 78%) selected senior high school as one of the levels that they preferred for their future work. Other preferred levels were college (7 responses or 30%), sports business (5 or 22%), elementary school (4 or 17%), and junior high/middle school (4 or 17%). There was one write-in response, which was for adapted physical education.

There were two forced choice items on the questionnaire which asked the students to indicate the physical educator roles and school role combinations that they found most attractive. One item asked for a ranking of common roles in physical education work, such as physical
education teacher, coach, athletic director, etc. The other item called for a first and second choice ranking of the most attractive combination of school roles, such as coach the sport(s) most preferred at the preferred grade level along with teach physical education in non-preferred activities and grade level.

On the first role item, coach was most often chosen as first choice (12 responses) and physical education teacher was the most selected second choice (12). Physical education teacher was selected by 7 students for their first choice; coach was picked by 6 students for second choice. The third choices most often chosen were athletic director (11) and sport business owner or employee (6). There were three write-in roles: pro-team manager (one first choice), sport psychologist (one first choice), and trainer (chosen twice).

Of the four role combinations on the questionnaire, students most often selected the preferred coaching situation plus the non-preferred physical education teaching assignment (selected by 9 students). The preferred teaching assignment with a non-preferred coaching assignment (7) and preferred teaching plus no coaching assignment (5) were the other combinations that received five or more first place choices. The most of the selected second choices were preferred teaching plus non-preferred coaching (10 second choices) and preferred coaching plus non-preferred teaching (7).

Findings from the Qualitative Data on Student's Decisions

Against the background provided by the questionnaire data, the qualitative data from interviews provides a more in-depth look at the students' decisions to go into physical education. The elite
interviewees were asked about the strength and timing of their decisions and about the physical educator roles that they were most attracted to. The transcripts and fieldnotes were analyzed for data concerning student decisions, role preferences, and recruitment influences.

Analysis produced three kinds of student decisions, categorized by the strength of the decision. Four of the elites -- Donna, Jane, Meg and Gary -- were judged to have made firm decisions because the data showed that they were firmly committed to going into physical education. Two students were categorized as having made fairly firm decisions by the time of the study; the data show that Carl and Art seemed to be committed to physical education jobs but they also seemed to be hedging; they both indicated "definitely yes" on the questionnaire item about the status of their decisions. The third decision category, for students who seemed to be "on the fence" about going into physical education, encompassed Dan and Skip, who were unsure about their commitment to become a physical educator.

When asked how set they were about going into physical education, all three of the women selected for elite interviews responded emphatically in favor of pursuing a physical education career. Donna, who was in the "old" program and in her third college year, replied that she was "Set! I even have my job picked out!" (T9, 15-16). She said she wanted to teach and be the cheerleading advisor on a part-time basis. Donna had come to the University with the intention of majoring in physical education, but had switched to elementary education after her first experiences in physical education professional courses where
she "felt out of it and different." She said that everyone else looked "masculine and jockey . . . I've always thought it was OK to wear make-up and good clothes . . . I was miserable" (T10, 26-29). She took her early field experience (EFX) in elementary education but found "that wasn't for me . . . it just wasn't what I wanted to do . . . I knew I wanted to be in physical education" (T10, 33 & T11, 1-3). After her EFX, she came back into the teacher training sequence in physical education; she applied for admission to the Program during the time of the investigation and was selected for admission.

As freshmen, both Jane and Meg were under the rules of the "new" Program. Although she had checked "maybe" on the questionnaire item about her intention to pursue professional preparation in physical education, Meg gave every other indication that she was firm about her decision to go into physical education. Toward the end of the term, she told the investigator she was "Real set!" (T88, 23) about her decision. Meg said that she saw a physical education degree as a way that might lead to a job as a manager of a professional sports team, "where you go round and take care of a team . . . of all their business -- I think it might be called sport management" (T88, 23-30). She said she also "kind of wanted to get into sports medicine," which her older brother, a Ph.D. in exercise physiology, was "really pushing" (T89, 4-8).

Jane, who, like Meg, was under the rules of the "new" program, was the third student who was judged to have made a firm decision to go into physical education. She had started at the University the previous year in the business administration but had switched to the
physical education sequence after not doing well in her business courses. She said she had "always wanted to be a teacher from way back" (T78, 26-27) and "I'd always wanted to go into phys ed but my father said there's no money in teaching so try something else. So, I tried and I failed, so I changed to what I wanted" (T72, 4-8). During an interview, she used a strong voice to state that she was now "very set" (T72, 33) about her decision for physical education. Both Jane and Meg indicated that they intended to apply for admission to the Program during the spring term, which was the earliest opportunity for admission for their group of students.

Of the five male elites, Gary was the only firm decision maker. Gary was in his third year at the University, having started in the business program due to "mostly peer pressure -- most of my friends were going in to business. But I didn't do well and I didn't like it." He said that he wanted to "work with people -- it's nice to make money, but it's more important for me to help people. I'd get bored without people" (T212-18).

Gary decided to change to physical education the previous spring, and he had already taken some of the required courses in the physical education major sequence. He said his goal was to "help people get fit ... to live longer" but also that what he really wanted to do is "coach big time" (T2, 1-3). Big time, to him, was a college coaching job in football. He said that a job teaching and coaching in a high school "seemed to be a good way to get in" to big time coaching (T6, 29-33). Gary was a student manager on the University football team; he said that several of the "assistants at the U started that way" (T7, 1).
As an "old" student, Gary was eligible to apply for admission to the Program during the term in which the investigation was conducted. But he decided to apply with the new students so he could "get my grade point up" (T5, 9). He figured he needed A's and A-'s to pull his GPA up to the 2.25 required.

A later section on recruitment into physical education will contain more data on the decisions of Donna, Jane, Meg and Gary. That their decisions for physical education are firm is evidenced by their interview statements plus their questionnaire responses and their intention to apply for admission to the Program. Perhaps this statement of Donna's is an even better indicator of these decisions: Teaching physical education "that's for me . . . PE is what's made me the happiest -- that's what I want to do!" (T12, 14-17).

Two of the elites -- Carl and Art -- responded "definitely yes" on the questionnaire item about the decisions but talks with them uncovered clues that suggested that their decisions were best characterized as somewhat less than strong so they were labeled "fairly firm". In formal interviews, both of them gave almost identical answers to the question: how set are you on going into physical education. Art, the freshman on athletic scholarship, said "I think I'm pretty set . . . I'm pretty well set on being a physical education major" (T53, 12-14). Carl, 27 years old and in his second year, replied "I think I'm pretty set" (T25, 2).

Carl, who had recently started college after working in a warehouse since high school, reported that he had been "going to school now part-time, trying to find out what I wanted." He was first
interested in business but he switched to physical education when "ethical problems . . . you can't be honest in business . . . kind of steered me away from that" (T25, 3-5). In physical education, Carl indicated a strong preference for a teaching role, at either the elementary or senior high level (he was the only student surveyed who indicated an interest in elementary school and in becoming a researcher, his third choice on the most attractive roles item). When asked if he would like to coach in addition to teaching, he replied "Yes and no. It's not one of my major things but I would like to coach some. Summers. Maybe football [which he played in high school] because it is in the summertime, and you're not working in the summertime" (T27, 30 & T28, 1-3). He also said he wasn't interested in a health club job.

Although his interest in physical education seemed very strong, as evidenced by his statements and his conscientious, hard work in both classes, he also indicated to the investigator some of his problems and concerns about the financial support of his family while pursuing a college degree. In addition, to making ends meet, his schedule of full-time college work and part-time work at the warehouse brought demands on his time that he wasn't sure he could continue to meet without jeopardizing his warehouse job and time with his family. So, in spite of giving indications of high interest and commitment for physical education, the problems of outside demands indicated a decision that was best labeled as pretty firm.

Art's decision for physical education -- "I think I'm set" -- was similar in strength to Carl's. Unlike Carl, however, Art began
thinking about a physical education career "when I first played sports which was mainly in the sixth grade" (T54, 3-4). At one point in the study, Art seemed to be favoring coaching over teaching as a professional role. He listed coach first on the questionnaire item on role preference, and, during an interview, he said he wanted to teach so he could coach. However, he ranked a preferred teaching assignment ahead of a preferred coaching assignment. Furthermore, analysis of the interview showed that the questions about role preference were somewhat leading. Later, when asked a different question, he said "I would like to be the best possible teacher and coach combined together. I would like to spend time with my people, not just the good athletes, but the, ah, bad athletes" (T56, 29-31).

The evidence for Art's decision as fairly firm instead of firm was more thin than for Carl's decisions. It was largely from an intuitive standpoint that the investigator felt that Art's decision might be wavering a bit. This was confirmed in an interview conducted shortly after the end of the winter term, when Art said that he was reconsidering his decision. He said he was giving more thought to trying to "make it" in track because "the money would be a lot better". He planned to wait out the spring application to the Program until the following year. However, he indicated he was still very interested in teaching and coaching; he said that if he was successful in track he thought the financial support from his running would make it economically possible for him to be a physical educator.

The two remaining elites -- Dan and Skip -- were judged to be "on the fence." They both seemed to be unsure about going into physical
education. Although Skip, a first-year student, checked "probably yes" on the questionnaire item about intention to go into physical education, he told the investigator that he had second thoughts about his decision. Around mid-term: "I don't know about phys ed though. Might have decided too early. There's too many things at this place" (P131, 26-33 & P132, 1-8). When asked about his alternatives he said "Photography, for one" (P132, 4-8). About a week later, Skip said that he was "taking it sort of slow . . . I don't see anything else that I'd really be interested in a whole lot" (T59.1, 2-6). He went on: "I've always taken [gym] classes in high school and everything else . . . and I've always been interested in sports and really my main objective is to become a coach some day" (T59.1, 6-8). Skip decided to forego applying for admission to the Program for a year since, as he put it, "there is some requirements I don't have yet. There is no way I'll be able to get it before next year to apply. I don't have the grade point average -- 2.5 or whatever. That's what you have to have to get in" (T60, 17-22).

On the questionnaire, which he completed before he made the above comments, Skip checked senior high school as the level he wanted to work with. He also ranked physical education teacher first, ahead of coach and athletic director, on the role preference item. On the role combination item, he ranked physical education teacher with no coaching assignment as his first choice.

The other "fence sitter" was Dan, a second-year student who had started at the University the previous year in agribusiness. He said that the math and statistics courses -- "I hate math" -- "kind of shied
me away" (T93, 13-15) from business. So he switched to physical education: "I wanted to be in phys ed and I wanted to be in education" (T93, 8-9), even though his parents thought that business was a "better field to get into for many reasons" (T93, 8-12). He said that he was also "still considering" school counseling as a career option.

In talking about his decision, Dan said that he did not intend to apply to the Program for the spring admission because he had "changed over to education last year and I'm just starting from there . . . I'm not going to do it this year . . . I want to get a little bit more under my belt first to insure a better shot at it" (T93, 20-25). He expressed some concern over the new program policies, especially those that might apply toward admission, such as the number of students that might be accepted in a given year. He wanted to make sure that he would "get into the program without having to reapply and have my name thrown around a few times" (T94, 6-12). Another reason why he was "thinking about waiting [was] to push my grades back up there a little bit. Where grades won't have anything to do with whether you are accepted or not" (T94, 12-14). He said his grade point at the time was "just a 2.25 so it is not really anything I'm comfortable with" (T94, 16), and that he felt that his change from business to education "kind of unsettled me a little bit" (T94, 18-19).

When he talked about physical educator roles, he seemed to talk about teaching and coaching as the same role. On the questionnaire he indicated that he was most interested in senior high and college levels; he ranked physical education teacher as role he found most attractive, followed by coach and athletic director. He ranked a
preferred coaching assignment combined with teaching another subject as his first choice for role combinations; his second choice was a preferred physical education teaching assignment plus a non-preferred coaching role.

One additional finding concerning student decisions was the apparent discrepancy in several cases between different requests for information about the students' preferences for various physical educator roles. There were two questionnaire items that solicited role preferences. One item asked students to rank their top three choices from a list of common physical educator roles (e.g., physical education teacher, coach, athletic director); the item also allowed for "write in" choices. The other item asked students to rank their top two choices from among four different role combinations which are commonly found in school physical education and coaching (e.g., teach physical education in the subjects you prefer and at the grade levels you prefer and no coaching assignment). In addition to the questionnaire items, students were also asked about their preferred roles during interviews.

When the responses of the eight elite interviewees are compared, four of them indicated role preferences that seem to be consistent across different questions. However, the other four gave answers that seem to be very inconsistent.

The four who were consistent -- Carl, Meg, Gary and Donna -- responded to all the role preference questions, in interviews and on the questionnaire, with answers that fit together. For example, Carl told the investigator that his main interest was in physical education teaching and that he was interested in coaching if it didn't interfere
with his teaching duties. On the questionnaire, he ranked physical education teaching as his first choice role. His first choice among the role combinations was physical education teacher with no coaching assignment. Although they made different choices from Carl's, Meg and Gary also reported role preferences that were consistent across interviews and questionnaire responses. Donna, who did not turn in a completed questionnaire, gave indications of a very consistent role preference — teach physical education and work with cheerleaders — in formal and informal interviews.

The other four elites presented role preferences that did not seem to match across the different data sources. In an interview, Art said he was interested in becoming "the best teacher and coach combined together" (T56, 29-31) but he also sounded as though he might be leaning toward coaching as a favored role. On the questionnaire, he ranked coaching first and teaching second on the role item, but he selected a preferred physical education teaching assignment combined with a non-preferred coaching assignment as his first choice role combination (his second choice combination was the better fitting selection: preferred coaching and non-preferred teaching).

Similarly, Dan, Skip and Jane gave apparently inconsistent information about their role preferences. Generally, as was the case for Art, the interview data and the simple role preference item matched, but the role combination responses did not seem to fit. Dan selected physical education teaching for his first choice role and seemed to make only minor distinctions between teaching and coaching when he talked about professional role, but he chose coaching with
teaching another subject as his first choice role combination. Skip also chose coaching with teaching another subject as role combination, his was a second choice. Jane, who said she wanted to coach volleyball as well as teach, gave teaching with no coaching as her first choice role combination.

Findings on Student Recruitment into Physical Education

In addition to data about the decisions of these students to undertake professional preparation for physical education, data about their recruitment into physical education were also collected and analyzed. Recruitment — the process by which they were influenced to pursue a professional position as a physical educator — was thought to be an important aspect of the guiding question for this section: to what extent do these students believe that experiences encountered and qualities developed prior to formal professional training warrant their decision to pursue professional training in physical education? Answers to that question depend on information about the decisions themselves, perceived alternatives to physical education, anticipated professional roles, and the set of attractions and influences which fostered their decisions. The previous section contains the data concerning student decisions; this section contains data about the attractions and other influences on the decisions that the students had made. Taken together, all the data on student decisions and recruitment provide a look at the subjective warrants of these students; the following section will present data concerning their subjective warrants.

Lortie (1975), who originated the discussion of subjective
warrants, theorized that there are two kinds of recruitment resources, attractors and facilitators. Attractors are the "comparative benefits (and costs) proffered would-be entrants" (1975, p. 26). Examples of attractors identified by Lortie (1975) are opportunity for rendering important service, material benefits, and desire to work with young people. Facilitators are "social mechanisms which help people move into the work" (1975, p. 26). Highly accessible training and relatively easy admission standards were two of the mechanisms found by Lortie (1975) which facilitated the recruitment of the teachers in his study.

In this study, the data concerning recruitment into physical education was analyzed using Lortie's (1975) model. The fieldnotes and transcripts were searched for comments and statements which directly mentioned or indirectly suggested the things that attracted these students to physical education and facilitated their decisions to pursue professional training. The data were also analyzed for negative attractors, or "distractors", and for negative facilitators. Finally, drawing on previous research (Templin et al., 1982; Lawson, 1983a; Dewar & Lawson, 1984), the data were analyzed for known attractors and facilitators in physical education that did not seem to influence these students either positively or negatively (these were labeled "null" recruitment resources).

Before the presentation of the data on the recruitment of these students, the concept of recruitment should be briefly explained. As it is used here, recruitment means the process whereby the profession (in this case, physical education work) advertises or announces to
potential members the advantages or disadvantages of joining the professional community. The process is largely subtle, or, as Lortie (1975) suggests, silent, but nevertheless, it is very real. In addition, other lines of work also recruit so the process is a competitive one in which different occupations vie for the best recruits. "Occupations proffer different advantages and disadvantages to those making choices, and people vary in their dispositions and personal circumstances -- an occupation will attract some persons and repel others" (Lortie, 1975, p. 25).

Analysis of the data produced six different attractors which these particular students perceived to be the benefits of becoming a physical educator. Three of attractors appeared to be stronger than the others. They were the joy of sport and physical activity, job satisfaction, and the opportunity to help and work with people. The other three attractors, which were either cited less often or less strongly, were joy of teaching, desire to coach, and the possibility of leading to better work opportunities. In addition, for some of the students, other courses or programs were distractors; making money was a competing attractor, against which other attractors were measured.

When asked about their interest in becoming a physical educator, involvement in sports and physical activity was commonly mentioned. Dan: "I enjoyed physical activity. I enjoyed being active so that and phys ed kind of went together" (T93, 19-20). Skip: "I've always been interested in sports . . ." (T59.1, 7). Others mentioned they had always enjoyed their physical education classes and "all different sports" (Meg, T90, 13). In addition to direct statements about sports
and physical activity, all but one of elites talked at length about
their past experiences in sport; it was apparent that these experiences
were largely very positive and very important to the students. Even
when interviewees were not asked a direct question about what attracted
them to physical education, they made comments about their sports
experiences, asks if sports participation and being a physical educator
automatically went together. Carl expressed this theme this way:
"Sports -- I've always enjoyed it. I played when I was in high school.
I didn't play on a lot of teams but I did participate" (T25, 6-7).

The only elite interviewee who did not specifically mention or
strongly imply the joy of sports and physical activity as an attractor
to physical education was Donna. Donna's comments about her "past
experiences," of which she said she "had more than most," were about
her experiences as gymnastics teacher and cheerleading advisor. Her
focus was entirely on the teaching and leading part of those
experiences; in all of the data, she made no mention of her experiences
as a gymnast or a cheerleader.

Another common attractor to physical education was job
satisfaction. Jane said that it was important to her to do "something
I like, that I like what I do" (T73, 17-19). Gary thought that
physical education work would allow him to be "happy" (T6, 20) and
"comfortable . . . you can dress comfortably in p.e. . . . I'm a jeans
and T-shirt person" (T4, 24-27). He also said it was important that he
have a job that he would not be bored with. Carl, who had worked
several years at a warehouse, saw physical education as "something you
can do at 30 or 40 -- carrying boxes in a warehouse gets old even
though I might make better money than a teacher" (P83, 3-7).

Job satisfaction was often discussed in relationship to making money. "Most people say that bein' a physical education major, there's no money, but I don't look at the money aspect. You know, I think it's something I will enjoy. So that's why I'm goin' into it" (Art, T53, 31-34). Gary, Jane and Dan were all encouraged or advised by family members to go into business because the financial rewards were greater than in teaching. Gary's grandfather, a businessman, wanted him to "go into computers and put his company into computers . . . But I'd be bored, even though the money would be good . . ." (T6, 15-19). Jane, who had "always wanted to be a teacher from way back," said: "a good time and liking what you're doing . . . that is more important than the money ever was . . . My father thinks: what about money? How're you going to live?" (T78, 26-33). "I told him . . . it [business] just wasn't right for me, and this is. And money's not important, 'cause if it was I wouldn't be a teacher" (T79, 27-31).

The third major attractor that emerged from the data was the opportunity to help and work with people. Five of the elites specifically mentioned that such an opportunity was one of the attractions of physical education for them. The three who did not make specific mention of this attractor nevertheless implied its attraction when they talked about the satisfaction they felt when they had successfully helped the people they worked with during previous teaching and teaching-like experiences. Donna, for example, spoke quite proudly about her success in winning over her high school cheerleading squad: "now they respect me and they know what I want,
and we are much happier together" (T10, 4-16). Others were more direct: "I like working with kids" (Skip, T66, 22-23) and "I would like to spend time with my people . . . teach them right from wrong. And not teach them, not just teach them sports, but teach them about life" (Art, T56, 30-35). Gary, who wanted to "help people get fit" (T1, 33 & T2, 1), said "I'd get bored without people" (T2, 18); "I've got to be with people, and happy" (T6, 19-20).

Besides the three major attractors, there were three other attractors that were important in the recruitment of at least some of the elite interviewees. Some reported they were interested in physical education because they simply liked to teach; others were interested in the opportunity to coach. Two of the students who were attracted by the opportunity to coach also indicated they were interested in becoming a physical educator because it could lead to other sports-related positions.

Donna was one of the students who was attracted by the opportunity to teach: "Even when I was younger, I liked to teach. I taught gymnastics in the backyard with the neighborhood kids . . . I've always been the kind of person who preferred to be in control . . . I just enjoy teaching" (T9, 29-33). Similarly, Dan and Art both said they were drawn by the prospect of teaching others. Jane, in her EFX assignment, "got to teach a class . . . whenever I wanted and whatever wanted to teach, I taught." She found "it was fun" (T73, 5-8).

Jane also had an opportunity during her EFX assignment to coach the junior high volleyball team. About coaching, she said: "I like the role of the coach . . . I liked the idea of it" (T78, 23-26). When
Meg was asked about coaching, she replied, "I'd love to coach boys basketball" (T90, 4a); she later described basketball as probably her "favorite thing" (T90, 21). Another student who was interested in the opportunity to coach was Gary, who wanted to coach "big time football" (T2, 3). As a student manager for the University football team, he was "getting involved in plays, coaching philosophies. I've even started to draw my own plays and keep them so I'll be ready to coach when the time comes" (T2, 3-7).

Gary and Meg were the two recruits who reported that they were drawn to physical education because it could lead to other professional opportunities. For Gary, teaching and coaching was a "way to get in" to big time football coaching (T6, 31-33). Meg, who said she was interested in sports management or sports medicine, wanted to continue her education and go to graduate school. She said she thought she "could teach and maybe go to school part-time" (T89, 25).

Two attractors which were cited by Lortie (1975) from his sample of classroom teachers and also by Templin et al. (1982) for physical education students did not appear to be recruitment resources for the students in this study. The data collected here did not include the opportunity to serve society as an attractor to physical education. Nor was job security mentioned by the students as a benefit of physical education work. Both of these attractors were cited by Lortie (1975). Templin et al. (1982) found evidence for the service theme in their research and in previous physical education research. However, in this case, these two attractors were found to be "null" attractors.

In addition to recruitment attractors, the data were analyzed for
recruitment resources that facilitated or influenced the recruitment of these particular students. The data show that these students' decisions were facilitated by certain people (socializing agents) and certain experiences. The socializing agents mentioned were teachers and coaches, family members, community people, and other physical education students. The past experiences that served as facilitators were: teaching and coaching-like experiences, family living patterns, participation in sport and fitness, identification with underdogs, and classes in physical education.

The most important people-as-facilitators for these students were family members, teachers and coaches. These socializing agents were mentioned more often and were spoken of with more intensity than other kinds of agents. All but two of the elites specifically mentioned that members of their families influenced their interest in becoming a physical educator. Several students spoke about the influence of a family member as being very important in the process of deciding to pursue a job in physical education.

Dan's father, who was born in England, taught Dan how to play soccer, encouraged him to choose soccer over football in high school, and enlisted Dan to help him start a community youth soccer program. "My father and I organized and built a program . . . the people in the community were going outside the community to a neighboring community where soccer was very big. We just thought it was kind of wrong — that a community should have its own program -- so in '77 we started a recreational soccer program. The first year we had like 500 kids in it . . . I was only a freshman but with my father we kind of got things
going . . ." (T103, 10-17). Later in high school, Dan began to think about a physical education career: "There were thoughts going through my mind and then, when it was time to decide, it was going through Dad's mind what was going to happen, [with respect to his future occupation] . . . then when I got back into it [physical education, after trying business] myself it was my thoughts again" (T96, 29-30 & T97, 1). He said his parents wanted him to go into business, which is what he did when he started out in the University, before he switched into physical education.

Jane also started in the business program because of her father. "I'd always wanted to go into phys ed but my father said there's no money in teaching so try something else." She said she "tried and failed" and then she "changed to what I wanted" (T72, 4-7). Jane reported that her whole family was part of the reason she was interested in physical education. When asked why she decided to become a physical education major, she replied that her family was "physically oriented. My father plays softball, and . . . my mom and father both bowl. And everybody's in sports -- my sisters -- so it's kind of drilled in me, sports were" (T78, 15-21).

Their mothers influenced both Donna and Carl. Donna used her mother as her sounding board when she experienced difficulty fitting in with the rest of the physical education students -- they were "jockey" -- and temporarily switched to elementary education. When asked about people who were particularly influential in his going into physical education, Carl said: "my mom mostly" because she helped him calm down and get over his "very bad temper about losing. I hated to lose. I
just couldn't stand to lose and my mom would always say winning is fine and losing is fine, too" (T29, 18-21).

Older brothers and a brother-in-law were mentioned as influences by three elites. Meg's older brother had played football at the University and then had gone on to do graduate study in exercise physiology. Meg said that she and her mother helped her brother on his dissertation. When Gary was asked about influential people, he answered that his brother was a "real good football player. He was second team all-conference (at another large university) . . . He is five years older than me so I kind of followed him" (T3, 11-15). After some thought, Donna said her brother-in-law had been influential in her decision to go into physical education. "He's a p.e. teacher and a football and wrestling coach at my school . . . he's working on his master's degree and we talk often . . . he let's me read his notes . . . and he gets satisfaction from having me ask him questions" (T11, 18-23).

Only Art and Skip did not indicate that family members influenced them in their interest or decision to go into physical education. Skip did say that his parents' divorce was one of the reasons he first got involved in sports, but he did not list any specific family member as a facilitator. Art made no mention of his family at all.

Teachers and coaches were cited by several of the students as people who were influential in their decision to go into physical education. Skip's junior high basketball coach was "really a fair guy" (T64, 26) who gave Skip his first chance to be on a school team, which
"just a great high for me" (T65, 4-5). "The coach, he worked with each and everybody. He didn't just work with just the big guys on the team that were really big hot shots. He took individual time to help everybody... I learned not only how to play good basketball but team leadership and sportsmanship, stuff like that, for the first time, really. He was a really good coach" (T65, 7-11).

Skip also talked about his 8th grade basketball coach, a "new dude" who "didn't teach us nothing... a real loser I thought" (T65, 17-20), and about his high school football coach who was "sort of a bad-ass type of guy... a rough guy... nobody really liked him" (T5-6). Skip reported that even though he played on the football team he "just couldn't handle that guy too much." "He would hit people. My sophomore year he hit this guy and knocked two teeth out. You would go to practice scared shitless" (T66, 8-15).

Gary said he was influenced by the football coaches at the University. As a student manager, he had "gotten to know our coach quite well. I've gotten into coaching philosophies -- football is a science -- and that's really interesting for me" (T4, 29-33).

Art talked about the influence of all his coaches who helped him "as an athlete and as a person" (T55, 9). Along with teaching him about "the sport I was participating in at the moment... they taught me... how to care for people, and care for myself, and set goals, and to be the best person possible" (T55, 26-31). On one occasion in PE 200, during a discussion coaches and athletic experiences, Art said: "Most of my coaches are like a father to me... I go back and we act like father-son" (A105, 27-29). His coaches influenced his decision for a career when "they told me to do whatever I wanted to do, that I would like doing" (T55, 8-10).
Meg, when she discussed why she would like to teach physical education, said that the only teachers she "really liked were my physical education teachers . . . we got along real well together" (T89, 26-28). She reported that she also "got along well" with a "couple of my coaches", but that "basically just me and my physical education teachers got along real well. Maybe they influenced me" (T89, 29-30 & T90, 1-2). One of her physical education teachers "actually let me run the class" (T90, 28-29).

In addition to teachers, coaches, and family members, some of the elites reported the influence of other people. Meg said she first heard about job possibilities in sports management from another physical education major, with whom she had lunch, and that conversation triggered her interest in becoming the manager of a professional team. She also knew of a woman from her hometown who had that kind of job. Art spoke of all the people at his school, the principal, teachers, the athletic director, who "changed my life from bein' a person who wouldn't do things to a person who had to care for people" (T56, 13-17). He also talked about the influence of "a lot of people from my hometown . . . I really care for those people" (T56, 20-22). "I just wanna make the hometown people happy . . . That's all. Just the people that helped me; I want to make those guys happy" (T59, 19-22).

Two groups of facilitators emerged from the data that were collected in this investigation. In addition to people-as-facilitators, the students reported a variety of previous experiences which influenced their decisions to go into physical education.
Analysis of the data showed five different categories of experiences as facilitators and one category of experiences the students perceived as obstacles to their entry into physical education. The five kinds of experiences that facilitated students' decisions for physical education were: teaching-like and coaching-like experiences, participation in sport and fitness activities, family living patterns, identification with underdogs, and physical education classes. The experiences that blocked student decisions were subdivided into two groups: academic difficulties and threats from other physical education students.

When the elites talked about the experiences that had been important to them in terms of their decision to pursue physical education as a career, most of them brought up teaching-like and coaching-like experiences. Donna seemed confident and sure of herself when she said that she'd had more experiences "than most" (T9, 2-5). Before her current part-time position as freshman cheerleading advisor at her alma mater, she had held jobs as an instructor at a private gymnastics academy, health spa instructor and nutrition counselor, and staff member of a cheerleading camp. At cheerleading camp, she became staff head which gave her "a chance to plan programs and get involved in the business end of things" (T10, 17-21); it also gave her the opportunity to go to Hawaii.

Dan's work in starting a community youth soccer league with his father has already been reported. That experience plus work in other youth sport leagues gave him five years experience as a coach and a referee. He said: "I enjoyed that and I could do that" (T10, 3, 15).
He also indicated that his EFX assignment, in junior high physical education, had worked out well and allowed him to build good relationships with the students. "I feel good about the relations with kids, and the things that I've done have just shown to me that I think that I can do what I want or would like to do, given the opportunity to do it" (T103, 19-22).

The EFX assignment was also cited as a facilitator by Jane and Donna. Jane's assignment in junior high physical education was a "great time." It gave her an opportunity to teach a class and have control over both planning and instruction, "so it was fun." She also found that she "got along with the kids really well" and that her cooperating teachers "were really nice" (T73, 1-11). Donna's EFX in elementary education was a reverse facilitator in that the experience showed her that elementary classroom teaching "just wasn't what I wanted to do . . . I knew I wanted to be in physical education" (T11, 1-3). As a result, she switched back into physical education.

Carl reported his experience, with his wife, as youth counselors at their church. Besides conducting weekly discussion and recreational basketball sessions, they spent a week with the youth group at a camp. The topic of the week at camp was "sexuality;" the group leaders received special training before camp. "We discussed problems that they might be facing, peer pressure and a lot of things like this. So that kind of steered me in the direction of trying to help people. I enjoyed that. It was interesting" (T26, 1-12).

For Gary, his experiences as football team manager helped him get inside "big time" coaching. He reported that because of the experience
he was "getting involved in plays, coaching philosophies" and he was making up his own plays so he would be "ready to coach when the time comes" (T2, 3-7). As manager, he had "gotten to know our coach quite well" (T4, 29-30). he also found out that a "good way to get in" big time coaching was to become a high school teacher and coach: "Several of the assistants . . . started that way" (T6, 31-33 & T7, 1).

Altogether, five of the eight elite interviewees specifically mentioned teaching-like and/or coaching-like activities as facilitators of their decision to go into physical education. All of the elites but one reported having these experiences. Art was the only one who did not report any previous experience in a teacher/coach-like role.

Another important facilitator for these students was their activity in sport and fitness as a participant (as opposed to a leadership role, e.g., teacher, coach). Six of the elites specifically mentioned their sports experience as a facilitator, and all eight indicated that they'd had such experiences (see previously reported data on student biographies). Although most students indicated that their sports experience influenced their decisions, they generally did not speak about them with the same intensity that they had when they spoke about their teaching/coaching-like experiences.

When Art was asked what influenced him to think about continuing on in physical education, he answered: "Sports . . . and my coaches and my gym . . . teachers" (T54, 26-27). Dan played five different sports in two different high schools. In talking about the influence of his sports experiences, he said: "I never got picked as all-state, but I participated a lot and got experience in all of them and that was
the kind of stuff I had in the back of my mind . . . as a phys ed teacher . . ." He went on to say that he thought it was good for a physical educator to be an all-state caliber player, but it was good to be "more rounded because the kids you are teaching are not at the college level. You need to teach them the basics . . ." (T96, 20-25).

There were other elites who saw their sports experiences as facilitators. Gary answered a question about the experiences that influenced him to go into physical education by talking about his sport experiences on school teams in baseball, wrestling, and football and on a community football team. He said he "wasn't the greatest athlete but I got two letters in both wrestling and baseball . . . I wasn't the greatest but I got the job done" (T2, 25-31 & T3, 2-4). Both Carl and Skip started sports on their own. Carl took up sports "as a past time" as a way to avoid going "down the wrong path" (T25, 10-13). Skip said, "I pretty much taught myself what I know today about sports . . . so I think that's what helped me. That's why I think I was naturally able to do sports, because nobody really taught me or really pushed it on me" (T64, 21-25).

Five of the eight elites indicated that they saw themselves as competent athletes, but not possessing outstanding skill. As reported above, Dan considered himself as "more rounded," not "all-state" (T96, 20-25). Gary earned letters but he "wasn't the greatest athlete" (T2, 29). Carl described himself as a 120-pound "finesse player" in football (T28, 9). He tried out but "never did make the basketball team" (T25, 8-9). Skip said he liked to play basketball but he stopped playing after his freshman year; he thought he "could have played -- I
have the talent" (P132, 15-16) but he was too short and he "probably
would have sat the bench" (P132/A). Meg said that she could not name
one particularly influential experience because "it's kind of a total
of my past experience . . . in all different kinds of sports. Ever
since I was little I jumped from one sport to another. I've never had
a chance to be really good in one" (T90, 12-15). Her high school
basketball coach encouraged her to "stick with one thing" but she
"could never give up one thing for another" (T90, 17-19). As a result,
against her coach's wishes, she was a cheerleader as well as a
basketball player; she felt the coach held her choice against her and
reduced her playing time as a result.

Two of the elites -- Art and Jane -- were top high school
athletes. Jane, who played three sports throughout high school, was
the setter on the volleyball team and one of the leading players in
basketball. Sarah Walker, the volleyball class instructor and a
college volleyball coach, said that Jane was "small college material"
as a volleyball player. Art was a three-sport athlete in junior high;
as he grew older, he specialized, finishing his high school sports
career as captain and a key member of the track team. As a result of
his skill in track, he received an athletic scholarship to the
University.

Donna did not talk much about her skill nor her experiences as a
gymnast and a cheerleader. She did say that she had "always been able
to do pretty much everything as long as I try" (T11, 7-8), but she was
one of the least skilled students in PE 220. (The investigator judged
that the self-assessments of skill were generally accurate, as
demonstrated in the volleyball class. The exceptions were Donna, as indicated above, and Meg, who started the class as one of the least skilled and did not improve much.)

While the main experiences-as-facilitators were teaching-like/coaching-like experiences and participation in sports, some of the students interviewed reported other influential experiences as well. Three elites cited the influence of their family living patterns. Both Carl and Skip talked about their parents schedules as facilitating factors for their initial involvement in sports. Carl's parents both worked "so they really didn't spend much time" (T25, 10-11) with him. He took up sports at the encouragement of his mother, to pass the time in an activity that met with her approval, something other than "shoplifting and stuff like that" (T25, 12). Skip said he learned "what I know today about sports" on his own because his parents were divorced and he only saw his father on weekends (T21-24). Dan's family moved several times because of his father's job. Consequently, he attended several different schools, including two high schools. He felt that the "moving around kind of hurt" because he didn't have the opportunity that he needed to specialize in a sport and fully develop his skill; however, the lack of specialization did give him experience in a variety of sports, which he saw as an advantage for a physical educator (T96, 15-26).

Two of these students talked about their concern for "underdogs." Art said he wanted to be the kind of teacher and coach who would spend time with the "bad athletes" as well as the good athletes (T56, 29-31). Carl, responding to a question about influential experiences, brought
up his concern:

"I always felt kind of sorry for the kids that were, what you might say, the brainy kids because they didn't really understand what it took to bounce a basketball, or anything like that. They didn't understand the concept of doing it because they had never done it. And I kind of felt sorry for them because everybody made fun of them. When you pick teams, they are always the last ones picked. I'm kind of that way too because I was so small" (T29, 29-30 & T30, 1-3)

Carl said he was very small throughout high school until his senior year when he grew 4-5 inches over the summer.

The last kind of facilitating experience reported by the elite interviewees were experiences that blocked entry into physical education. Some of these experiences have already been presented in previous sections; they will be briefly reiterated here. All but one of the reported "blocking facilitators" had to do with academic difficulties of some sort. Five of the elites -- Donna, Carl, Jane, Dan and Gary -- had been in other programs at the University but had not done well. When they found that those other programs were "not for me" (Donna, T11, 1-2), they switched to physical education. Except for Carl, the students who switched all reported that they had originally wanted to go into physical education from the start, but they did not do so because they had either been advised to go into more financially rewarding work (Dan, Gary and Jane) or were afraid that they did not fit in with the rest of the physical education students (Donna). This last blocker -- "everybody else looked masculine and jocky . . . I really felt out of it and different" (Donna, T10, 26-27) -- was the only blocker that did not fit the category of academic difficulties. It was categorized under threats by other students.
Findings About Expressed Subjective Warrants

In addition to data about student decisions and their recruitment into physical education, data were collected and analyzed for students' subjective warrants. Data collection for the subjective warrants was conducted using Lortie's (1975) interpretation of the subjective warrant as one of several different recruitment resources. Templin et al. (1982), in their study of physical education students, also used Lortie's conception of the subjective warrant; they defined it as "a subjective self-assessment by individuals about their suitability to enter a given occupation on the basis of personal interests and competencies" (p. 123). A somewhat broader view of the subjective warrant was proposed by Dewar and Lawson (1984) but it was not available until later in this investigation. Consequently, the data analysis used Lortie's (1975) notion of the subjective warrant as one of the means teachers are socialized into professional roles. (The interpretations, in Chapter 5, were prepared later in the study, and they were able to take advantage of Dewar and Lawson's work.)

Lortie (1975) suggested that one way to find out about subjective warrants held by individuals was to learn "what people think is required for success in a given work role, for this indicates the subjective filters associated with the occupation -- its 'subjective warrant'" (p. 39). Thus, several of the elite interviewees were asked why they thought they might be good as a physical educator.

Because the subjective warrant is, by definition, personal and based on the individual's perception of the requirements for professional success, it was assumed that the question-and-answer
process might pose a reactivity problem; in reacting to the question, students might "create" a subjective warrant to fit the interview situation. Therefore, it was decided to try to interpret the subjective warrants of a few of the interviewees without using direct questions. This strategy provided a way to check out the existence of reactivity in the answers of the students who were asked the direct question described above. Although it is not possible to know for sure, analysis of the subjective warrant data for all the interviewees suggested that direct questioning did not foster reactivity in their responses.

Presented here are statements made by the elite interviewees when they were asked direct questions about their suitability for physical education. Thus, the statements are expressions of the students' subjective warrants. In addition to direct expressions, the data were analyzed for student views of the requirements for success as physical educator. This provided another way to "see" the subjective warrants held by these students.

Two of the five students who were asked direct questions seemed to rely on their previous experience in teaching and coaching roles. After describing her experiences in teaching and coaching from her EFX assignment, Jane was asked why she thought she might be good as a physical educator. She said: "I have the talent. I have the patience. I have the ability to teach -- I've proven it to myself."

She went on to say that

"I've been in both roles: I've been a student and I've been a teacher, and I've had somebody look at me as a student and I've had somebody look at me as a teacher and tell me, you know, what the differences are. I know where teachers go wrong and I know
where I went wrong as a teacher, so I think in playing both roles, I have to look at it from both sides: if I become a teacher, I can always think back to the times when I was a student and remember what I did wrong, what I thought, you know, would have been a better way to teach" (T79, 4-18).

During a formal interview, Dan talked about physical education and physical education teachers, after which he was asked what made him think he could be the kind of ideal teacher he talked about. He said that some physical education teachers "are just down there messing around. But some of them work at it." He went on to say that even though some of the other teachers "kind of look down at phys ed teachers, phys ed is important . . . you learn different things in phys ed. You not only learn the skills . . . but you learn team work, responsibility, cooperation and things like that" (T102, 11-19). When asked how he thought he matched that ideal, he answered: "Just the opportunities and things I've done so far. I've had the kind of relationship with the kids that I've liked. I've got along with them. I've liked them. They will come up and talk to me."

Dan described a situation in which he had coached a soccer player who could "do circles around me," "who went to the state." Dan said that he "could tell him what he didn't know" but the player could perform skills that Dan was not able to do. "That was good -- it was making him strive harder and it kind of helps the gym teacher, or a coach . . . because it makes you think there is a little kid and he is doing better than me. I'm going to work hard too" (T102, 29-30 & T103, 1-7).

In his answers, Dan described how he and his father started a community youth soccer league. "I enjoyed that and I could do that. I
was young — I was only a freshman (in high school) — but with my father we kind of got things going and they respected me. . . . experiences like that make you feel like you can do what you want to do." He finished by saying:

"What I've done — I've been a referee, I've coached since 8th or 9th grade, I've coached different sports, I've had the relationships I like to have. I feel good about the relations with kids and the things that I've done have just shown to me that I think that I can do what I want or what I'd like to do, given the opportunity to do it" (T10-22).

Donna answered a bit differently than Jane or Dan. She first described some of the qualities of her view of an ideal teacher: "A teacher needs self-confidence . . . to be able to teach, you should be able to do it . . . communication, that's important, and at the level they can understand" (T12, 9-13). Then she emphatically stated that teaching physical education "that's for me . . . PE is what's made me the happiest -- that's what I want to do!" (T12, 14-17).

Art and Skip, who did not have much experience in teaching-like activities, both referred to their playing experience and to the training they would get in the Program. Art, who had earlier said he thought he could "teach people to be a good athlete . . . how to be a person" (T55, 17-20), estimated his chances for success as a physical educator:

"Well, right now I think that I wouldn't be the greatest coach or teacher . . . because I'm still young and this is my first year. And there's a lot of things I don't know about physical education that I have to learn during these four years in college. So right now I wouldn't say I would be a good physical education teacher; I need experience, more experience" (T57, 1-6).

Art thought that he was a good prospect as a future physical education teacher and coach because of "just bein' an athlete and . . . playin'
different types of sports . . .." He thought he "would be a good 
example of being a good physical education teacher." When asked about 
the past experiences that made him a good prospect, he responded: 
"experience in sports, training . . . I have a lot of experience in 
training, stretching, exercise [sic], drills, and that's about it" 
(T57, 16-22).

Like Art, Skip talked about the Program and his playing experience 
when he was asked why he thought he would be good at teaching and 
coaching.

"Because of the experiences I'll have in going through college -- 
the University probably. It is supposed to be one of the best 
education colleges around. And the experience I've had in the 
past playing -- it's not like you come to college and never played 
a sport in your life . . . Like I've noticed somebody in that 
class -- 200 -- this guy looks like he has never even put on a 
pair of sneakers in his life. He sits by me. He doesn't look 
like the athletic type guy. That's how I think I would help" (T67, 
3-9).

Skip was also asked about any personality characteristics that 
might be useful as a teacher or a coach. He responded: "My 
leadership. That's the way I am. I don't like to follow too many 
people. I like people to look up to me that way -- leadership. 
Sportsmanship, things like that. I've got pretty good sportsmanship 
and leadership. That would be the best aspects for me" (T67, 17-20).

As suggested by Lortie (1975), the data were combed for student 
statements in which they indicated what they believed to be the 
requirements for successful work as a physical educator. The 
statements were collected and organized into five categories. The 
categories that emerged were: personal qualities; teaching abilities; 
sports interest and experience; knowledge and commitments.
The elite interviewees reported a variety of personal qualities which they judged were necessary for success as a physical educator. Self-control and patience were each mentioned by two students. The other personal qualities were indicated once: be a good example; leadership; sportsmanship; and need to work hard. Other than Skip, who said that leadership and sports were his strengths (T67, 17-20), personal qualities were not reported as major requirements for success; they were often listed with other requirements, such as "I have the talent, I have the patience, I have the ability to teach" (Jane, T79, 4-5).

Almost all of the students indicated that successful teachers ought to possess the ability to do something, such as, teach to the students needs (Carl, T30, 14) or be able to communicate at their level (Donna, T12, 11-13). This category, labeled teaching abilities, was subdivided into general teaching abilities and abilities specific to physical education and coaching. Two general teaching abilities were cited more than once. They were the ability to "get along with kids" (Jane, T73, 10), and the ability to communicate at the students' level. The ability to get along with kids, which appeared in other forms, such as relating well, was cited by three different elites (Jane, Donna and Dan). The ability to communicate at the students' level was cited three times by two elites (Donna and Carl). Being able to earn respect from students was also mentioned by two different interviewees (Donna and Dan).

Two kinds of abilities for teaching physical education and coaching were cited often and by several different elites. The first,
cited by four different subjects, was the ability to enjoy or play several different sports activities. This ability was cited as be able to "do most skills" (Donna, T11, 7-8) or "be rounded" (Dan, T96, 24). One elite believed this ability was not necessary: "Maybe I can't do the skills out there myself but I could tell them the steps or how to do it" (Skip, T64, 7-8). The second ability cited several times was the ability to teach the proper techniques of sport skills (Carl, Skip, Art and Dan).

A few of the elites said that good physical educators need to have certain kinds of knowledge. General sports knowledge — "an understanding of the sports you are going to teach" (Meg, T87, 26) — was cited by three of the interviewees. Carl was the only one to say that knowledge of the "critical aspects of skill" (T32, 10) was important.

The final category, labeled commitments, encompassed attitudes and goals which the elites through important for good work in physical education. It was divided into two sub-categories. Some of the statements about commitments were applicable to teaching in general, and not to the teaching of a particular subject matter. The other kind of commitment statements found were those that were related specifically to physical education work. The major general commitment reported by these students was the commitment to helping people, especially "kids." This was reported, in some form, by five of the eight students interviewed, and it was often cited when talking about their decision to go into physical education, as if the desire to help people was a prerequisite to becoming a teacher: "... so that kind
of steered me in the direction of trying to help people" (Carl, T26, 11-12), and "I wanna coach because I wanna help students and teach people things that I've been taught" (Art, T53, 12-13). Also in the category of general commitments was the importance of finding enjoyment in work (Jane and Dan), particularly in lieu of "making money."

In the category of commitments specific to physical education, the need to "teach the basics" (Skip, 6-7) appeared often: it was cited by three different students. On the other hand, one said it was important to do more than "just teach sports, but teach them about life, what to expect, how to go about it" (Art, T56, 33-34). In a similar vein, Carl said "there is more to it" than just "hand you a ball" (T27, 16-17), as he said his high school physical education teacher had done.

**Section Summary**

To conclude this section concerning the students' decisions for and recruitment into physical education, the findings are summarized below to provide an answer to the second research subquestion.

1. Almost all of the students reported that they had either definitely or probably decided to pursue a physical education major leading to a teaching certificate. However, some students appeared to be somewhat less sure about their decision when talking in an informal interview than when responding to a written questionnaire item.

2. The main attractors to physical education work for these students were the joy of sports and physical activity and the opportunity to work and help people, especially children. Several were also attracted by the prospect of job satisfaction in lieu of financial rewards.

3. The main people cited by these students as facilitating their decision for physical education were: a) family members; b) teachers and other school staff members, including physical education teachers; and c) coaches, both good and bad.

4. Parents and other family members supported students' participation in sports as players but in several cases,
family members specifically advised against a physical education career, usually because they saw it as financially unrewarding.

5. The main experiences which facilitated student decisions for physical education were their teaching-like and coaching-like experiences.

6. These students believed quite strongly that they were good prospects for becoming effective teachers and coaches. Some thought they had already proven themselves, and that their perceived success in previous teaching and coaching coupled with their desire to help children warranted their entry into a professional role as a physical educator.

Features and Activities of the Program and the Two Courses

The third question used to guide the research in this investigation was:

what are the features and activities of the Program and the two courses (PE 200 & PE 220)?

The question provides the link between the two main parts of the study. The findings for the first part, about the students themselves, include data on student biographies and their decisions and recruitment for professional training in physical education. The findings for the second part, which is about the students' experiences during two courses in the early part of their formal training, include data on student actions, evaluations of training experiences, and student compatibility with instructor perspectives. Question three, with data on the Program and the two courses, shifts the focus of the chapter from a more general view of the students-as-recruits to the somewhat more specific view of the students-as-trainees in a particular context.

The Program

As mentioned in Chapter Three, the Program was housed in the department of physical education at the University and had, as one of
its chief responsibilities, the task of preparing undergraduate students for certification as physical education teachers. At the time of the investigation, the Program staff had recently decided to tighten the admissions standards by decreasing the number of the students accepted per year and by limiting admissions decisions to once a year. This decision was based primarily on the desire to "get at them earlier, get better people, and then to more specifically socialize them in certain directions" (Dr. Stone, T15, 24-25). He went on to say that the Program hoped to socialize the students "into the fact that the Program holds sport and fitness to be the major values . . . and that we are really serious about performance in those areas" (T20, 2-4).

Most of the students in the two courses came under the new rules for admission. A few, like Donna, had started the teacher training sequence before the new rules were adopted but had not yet applied to the Program for admission. These "old" students were encouraged, throughout the term covered in the investigation, to apply during the winter or drop out of the program. The "new" program was designed to encourage students to apply for admission at the end of their first year and to limit the application process to once annually, at the end of the spring term.

Another feature of the Program was that it was designed to cover a four-year period for each student. This was especially important for students who had started at the University in other programs before switching to the physical education program. Because of the four-year
design, these students, as a general rule, were faced with the prospect of more than four years in college when they switched from another program to the teacher preparation program in physical education.

The admission decisions -- whether or not to accept a student into the Program -- were made by a committee of Program faculty members. The committee was aided by a graduate student whose task it was to help students maintain their application files and to make such files available to the faculty in time for the admission decision-making period. Sarah Walker, the instructor for the volleyball class, was the graduate student assigned to coordinate these materials; in that role, she spent one class period in the Introduction course explaining the admission procedures to the PE 200 students. Dr. Stone also made several announcements about the admission process during the term, including the announcement that student performance in the course would be used to make admission decisions. Students were expected to prepare their own admissions credentials and to make sure that their credentials were on file in the Program office by the due date, which was partway through the Spring term. The actual decisions were made soon after the completion of the spring term, and all students who applied were notified by letter of their status: application accepted or application denied.

PE 200 -- Introduction to Physical Education

The Introduction course was designed to introduce students to the Program and to certain key issues in physical education, such as the meaning of sport. Dr. Stone described the course as having two goals: a "substantive goal," which was "to introduce people to fitness and
sports in the culture and in the school" (T19, 1-2), and a "procedural
goal" which was "to get them to talk, get them to write, get them to
perform on tests so we get a measure of their ability to do those
things and their commitment to prepare to do them and do them well"
(T19, 3-6). He called the procedural goal a "kind of admissions agenda
for us" (T19, 7). In addition, the Introduction course was supposed to
"partly inform the students as to what lies ahead of them" (T19, 9-10)
in terms of coursework and other Program requirements, and give them
"some hint that it's going to require some real effort on their part .
... some demands ... our standards are high ... (no) shabby work"
(T19, 13-24).

The course was organized into five units, each on a different
topic. For each unit, one or two class sessions were spent in
discussion-lectures, and then one session for the unit test.
Additional sessions were devoted to an orientation to the Program and
the admissions procedure. Dr. Stone told the students that he expected
them to prepare for the class discussions by reading the assigned
material in two required texts. He also told them that he expected
them to talk about the issues in reference to their own experiences and
the assigned readings. The fieldnotes show that the discussion
sessions typically featured a series of questions from Dr. Stone about
the topic, student responses to the questions, and, usually, a wrap-up
3-5 minute "mini-lecture" by Dr. Stone summarizing either his view of
the issue or the position of "many people in the Program." The unit
tests were based primarily on the readings; most students usually
finished tests in 15-20 minutes.
In addition to the reading assignments, unit tests, and talking in class, students were expected to attend class (attendance was taken most class sessions), write a term paper, and take a final comprehensive examination. The term paper was to be based on student visits to three community sport or fitness agencies and was to include observations of what students found (e.g., program goals, clientele, activities), comparison of the three agencies, and some conclusions based on their visits. There was a special handout explaining the requirements for the paper, which included requirements for style (e.g., length, typed) and substance.

Final grades were awarded, as per the syllabus, on the basis of total points on unit tests, the paper, the final examination. Analysis of the instructor's records shows that some (6) students had their final grade raised or lowered on the basis of "participation and attendance" (GR200); most of these were raised or lowered one "notch" (from a C to a C+ or C-) but one student, who was recorded as missing seven classes, was dropped from a D to an E.

In addition to the course activities for which the students were actually held accountable (i.e., on which final grades were based), the data were also analyzed for what the students themselves saw as the main demands of the course. This information appears in the next section under "Student View of Course Demands."

**PE 220 -- Volleyball**

The primary goal of the volleyball class was to develop skills and techniques for playing the game. Sarah Walker, the course instructor, said the course also had a secondary goal, which was to develop an
"understanding" (T34, 3-5) of the sport, including rules, strategy and formations. In addition, she hoped that students would learn to use time effectively, follow instructions, and "be serious" (T34, 12-13).

In addition to development of volleyball skill, PE 220 was planned to help students learn to perform the basic skills well enough to correctly demonstrate them for their future students. As was the case for PE 200, student performance in the volleyball class was to be used by the Program for making admissions decisions.

In terms of content, the course started with the basic skills of volleyball: underhand pass; overhand pass; serve and spike. Once introduced, these skills were practiced throughout the term by means of partner and small group drills of increasingly complexity. About halfway through the term, offensive and defensive strategies were taught; these were usually practiced in six versus six person game-like drills. During the last part of the course, a battery of skill tests was administered and students were rated by the instructor and her student assistant while students played an interclass match against students from another section of the volleyball course. Additionally, there were written quizzes on the rules, skills and strategies covered in the class sessions and in the textbook.

Class sessions were held in a well-lighted gymnasium that was set up with three regulation volleyball courts. Most sessions were organized into a series of short (approximately 10 minutes long) mini-lectures or demonstrations followed by practice drills of the skills or strategies covered in the demonstration. Class sessions typically had 3-5 demonstration-plus-drill episodes. Games were seldom
played; in fact, the only time complete games were played was the last class session when the interclass games were held.

Early in the term, during the third week, the class was split into two sections because of the large number of students (about 40) initially enrolled in the course. Because of the possibility of "losing" some of the subjects important to this study (i.e., students who were in their first year of the Program and who were in both PE 200 and 220), the investigator requested that the class be divided so that these subjects remained in the section attended by the investigator. The investigator made a suggested roster for the revised sections, which was subsequently used by Sarah Walker to split the initial class into two sections. The new section was taught by another graduate student using the course design prepared by Walker. After the split, the section attended by the investigator had a roster of 22 students, not including the investigator; this revised roster included all the students targeted as possible elite interviewees.

Analysis of the data indicated that students were expected to engage in certain activities or tasks while in the course. Several of these tasks were stated in the syllabus or in the introductory session by Sarah Walker. Student performance on some of the tasks was used as the basis for final grades. Other tasks were indicated by means of instructions followed by prompting or scolding if the instructions were not followed. The list of tasks derived from the data:

1. Learn basic skills
2. Learn various strategies for covering the court
3. Read the textbook
4. Take written quizzes
5. Take skill tests
6. Be rated in the final interclass games
7. Practice skills
8. Follow instructions
9. Attend class

Analysis of the instructor's grade records shows that final grades were based on student performance on three tasks: average score on written quizzes, subjective rating of game performance, and total points earned on the battery of skill tests. Norm-referenced scales were used to determine final course grades; norms were established from performance records of the students in all three of the volleyball sections offered during the winter term.

Student perceptions of the course demands are found in the next section under "Student View of Course Demands."

PART TWO

The second goal of this investigation was to study "what went on" in these two training experiences for physical education teacher prospects. More specifically, the investigation studied the interaction between the recruits, the training experiences, and the primary agents of professional socialization with the intention of describing how these students were being socialized, through these experiences, into the world of physical education work.

Three guiding questions were used to guide the data collection and analysis in this phase of the study.
1. What do the students do and attend to during these training experiences? How do they respond to the demands placed on them?

2. What experiences do students see as valuable for their professional training? What experiences do they see as unproductive or counterproductive?

3. Do students share or reject the orientations and actions promoted by their teacher educators?

In the following section, the data used to answer Question 4 will be presented. Data for Questions 5 and 6 will be presented in following sections.

**Student Actions, Attention, and Responses to Course Demands**

The fieldnotes show that the dominate form of student behavior was compliance; students basically did what they were supposed to do and they paid attention in ways that were appropriate for the activities and expectations for the two courses studied. In the volleyball class, most of the students attended class faithfully and participated in class activities (such as drills, demonstrations, written quizzes, skill tests, and the final interclass matches) according to instructions. In the Introduction course, students indicated they read most of the assigned reading material, attended class regularly, and wrote tests and the term paper.

This general pattern of compliance was so pervasive that for much of the first half of the data collection phase of the study, it seemed as though "nothing" was happening. However, this may have been due, at least in part, to the investigator rather than to the "facts". The
reflective journal shows that gaining entry into the students' world and adopting the role of student-observer was a major concern during the first several weeks of the investigation. It is quite likely that this concern drew attention away from what was or was not going on in the courses and may have prevented the investigator from "seeing" more of the students' experiences. In addition, the investigator's long experience in college education, as a student and as a faculty member, probably conditioned him to expect compliance behavior on the part of students -- they did what they were supposed to do -- so that such behavior seemed "normal."

Nevertheless, the data show that the students in this case usually complied with the instructor's requests. Consequently, the data were analyzed by searching for examples of non-compliance which were exceptions to the general pattern of student action and attention. The analysis resulted in the categories of:

1. Avoidance strategies, in which students tried to avoid or get out of complying with the instructor's expectations.

2. Unsanctioned adjustment, in which students complied or tried to comply with course demands by adapting to a particular situation in a way that did not match the instructor's (or the Program's) expectations.

Avoidance Strategies

Most of the avoidance strategies were "normal" behavior for college students, such as missing classes, but the strategies were noted because they were attempts to avoid the stated or real demands of the two courses. In addition, virtually all of the avoidance strategies were individual, not collective, responses to course
demands; that is, they were used by individual students rather than by groups of students.

Perhaps the classic form of avoidance strategy employed by college students is "cutting" classes. In this case however, unlike much college coursework, attendance at class sessions was required and specifically stressed in the PE 200 syllabus and in the PE 220 opening session. The fieldnotes and instructor grade records show that most students attended class faithfully. In the Introduction class, only four students missed more than three sessions and one of those was a woman who had to drop out because of health difficulties. The leader in absences, with seven, was Skip, one of the elite interviewees, who said: "It's boring really . . . going to class is sort of drag . . . I know pretty much what we talk about, so I don't ever attend class a whole lot" (T63, 18-20). He went on to say that his strategy was to "got to class about once a week . . . I get my assignments and do the tests" (T63, 22-23). A check of the course grade records shows that Skip failed the course; the two other students with more than three absences received lowered grades on the basis of their "attendance and participation" (GR 200).

In the volleyball class, four students missed more than two classes, according to the instructor's records (which, by her own admission, were not completely reliable). Of these four students, three had explained their absences: illness, conflict with University athletic team, and injury (Donna said she suffered from a chronic wrist injury). Dan, who missed five volleyball classes, had two part-time jobs that took a great deal of his time.
Another avoidance strategy observed was not talking in class, which was a stated expectation of PE 200. While most students participated in class at least occasionally, some did so only minimally. Dr. Stone noted at the end of the course that Carl, who had otherwise done well in the course, hadn't "said a peep" (TP/DR). The fieldnotes show that Carl made 10 different responses in class on 4 different occasions.

Both courses required that students read assigned material over which they were tested. Although students were often observed studying the text material (usually before a test), some of the elites indicated they avoided assigned readings on occasion. For example, both Gary and Meg said they decided to skip assigned material for PE 200 when they had mid-term examinations in other subjects. In volleyball, purchase of the inexpensive ($4-5.00) text was strongly suggested by Sarah Walker at the opening class. However, several of the students reported that they neither bought nor read the book. Late in the course, Skip told the investigator he hadn't "even seen the book" (P153, 6) and Jane, who played varsity volleyball in high school, said she did not look at the book because she found it confusing so she answered quiz questions based on her experience and "paying attention" in class. Other students did report studying the book for quizzes and, on at least one occasion, several students shared a book for quiz preparation while they sat on the sidelines waiting their turn to participate in an all-class drill (P174).

There were only a few examples of students not paying attention to the instructor during class. The only occasions of this kind of
avoidance involved two of the volleyball girls, one of whom was Jane. During the first several weeks of the course, when Sarah Walker conducted mini-lectures or demonstrations, Jane and her friend usually talked and joked together and seemed to be largely unaware of Sarah's instructions (P71, 29-33). They were invariably the only students to engage in this sort of behavior, which Sarah generally ignored. Nevertheless, Jane later said that paying attention in class was one of the ways she learned quiz material and the two of them always did the correct drill after the mini-lectures were over.

The term paper for the Introduction class was one of the heaviest demands in these two courses, and generated several avoidance tactics. One student reported, two days before the due date, that he had not started the paper (he received 12 out of 15 points on his paper). Meg reported that she had gathered all her information on time but that she avoided going to the library because, as she said, "I don't know how to use it at all . . . I have no idea what I'm going to do and how I'm going to associate [the library sources with the data collected]" (T81, 25-30). She said she went to the library the night before the due date and then stayed up all night to finish the paper. (She was one of five students who received the maximum score on the paper.) Another student, Tanya, reported to a group of students discussing their papers on the due date, that she avoided using any source material at all, even though it was specifically required and was discussed at length during class time (A141). (She received a score of 12 out of 15 points on the paper.)

There was one avoidance strategy, used in the volleyball class by
lower-skilled students, that did not fit the pattern of typical college student behavior. Later in the term (about the sixth week), the investigator observed that several of the lower-skilled players quietly walked off the court when the instructor called for volunteers for a drill that involved the entire class together (P145, 14-23). This "drop-out" strategy was noted three different times in the fieldnotes, and each time some of the drop-outs removed themselves from the very places where players were supposed to be for the drill to occur. In addition, as the drop-outs moved off the court, they were replaced, without a word, by the most-skilled players, usually the volleyball girls (the group of 6-8 women who had played high school volleyball).

In an interview, Meg, who was one of the least-skilled players and who had been observed dropping out, explained that she felt "kind of intimidated because some of those bigger girls -- like Jane and B. [both volleyball girls] -- can really slam the ball and know exactly what they are doing . . . ." (T85, 8-10). She went on say that she and another lower-skilled student "just sit there and take our turn whenever she [the instructor] tells us to go take our turn instead of volunteering" (T85, 18-19). Another lower-skilled student waiting his turn on the sidelines with the investigator, said: "I don't want to go on that court . . . I don't want to embarrass myself" (Skip, P159, 2-3).

On another occasion, Meg was observed using a somewhat different avoidance strategy while she participated in a intraclass drill. It was a game situation drill with a full team of six players on each side, and Sarah Walker was teaching offensive positioning. Walker announced the drill procedure:
Sarah: "... One serve each side ... one serve, one play, then rotate ... Start from there (points to north side where Meg was standing in serving position).

K [a volleyball girl] rolls the ball back to Meg. Meg (while Sarah continues talking) looks around and rolls the ball back to K. She motions to K to change places with her. K smiled but rolled the ball back to Meg and turned to face the net.

K winked and grinned at us [observing from the sideline] when she rolled the ball back to Meg the second time (P149, 28-33 & P150, 1-18).

The notes also show that Meg, looking anxious, served the ball into the net twice and, after Sarah Walker's request to "step up a bit" (P150, 13), served it good on the third try. When interviewed, Meg said, "If there is people from volleyball there I just let them play and stay in the background" (T86, 1-2).

Unsanctioned Adjustment

In addition to avoiding the demands of these two courses, there were a few occasions in which students complied with course demands in unsanctioned ways. These strategies were observed or reported far less often than avoidance strategies.

The most obvious way students at any level try to illicitly adapt to the demands of an educational situation is by cheating. The investigator became aware of only two instances of involving cheating during this study. Once, during a conversation in the lounge, Donna told of a cheating attempt during unit test in PE 200:

Donna: I couldn't believe it -- this guy came in and set down next to me and asked if he could cheat off my paper. I told him it wouldn't do any good since I didn't study much anyway, and probably wouldn't help him (P91, 27-32).

She explained how she covered her paper and then wondered: "I'm not sure if that's what he really wanted because later he asked if I wanted
The other cheating episode occurred in the volleyball class during the skill tests at the end of the course. Sitting along the side of the gym at the beginning of class, Tanya talked about one of her skill tests, in which she had to pass the ball continuously against the wall while two partners judged and counted.

Tanya: I did terrible on the wall. I only got 4 in the passing part. But they gave me 10 (smiling).

Investigator: They gave you 10?

Tanya: Yes. I counted myself and I only got 4. But they were nice to me and wrote down 10 (P199-A).

The grade records show that even with this "help" from her friends, Tanya had the lowest skill test composite score in the entire class (GR 220).

Another unsanctioned adjustment strategy, one that was within the rules of the activity, was observed in use by a group of higher-skilled students during a skill test in the volleyball class. It was a test of serving ability in which the student being tested had to make a specified number of serves into a court marked into several target areas, with each area worth a different number of points. According to the test procedure, one partner was to act as a record keeper, writing the test score on a test record form; the other partner was to judge where each serve attempt landed and call the result to the record keeper. In this instance, the investigator was the person tested and his partners were two of the volleyball girls, Jane (one of the elites) and Kristin, who was perhaps the best player in class. The fieldnote entry:
I took my turn. Kristin [who was supposed to be the judge] stood in the 4-point section [the maximum point area] and called me to aim for her.

K: Hit it here (P183, 20-23).

By adjusting the "target" person, the investigator and both partners, when they had their turn, used this strategy to earn high scores on the serving test. Their scores were likely higher than they would have been without a target person. No other students were observed using this strategy. The grade records, although not broken down by individual tests, show that these three students ranked first, second, and fifth in the composite skill test score for the class (GR 220).

Attention to Other Students

Although compliance with course demands was the general pattern throughout both courses, it became apparent that paying attention to other students was an important way to get information, to improve in class, and to find out how to act. In addition to the avoidance and change strategies presented above in which attention to other students was featured (e.g., avoiding an opportunity to play because of fear of embarrassment, changing a skill test to achieve a better score), students paid attention to other students as coaches and as drill organizers.

It was not uncommon to observe students serving as coaches for each other. In the Introduction course, several students were observed quizzing each other in preparation for unit tests. This kind of coaching also occurred before the scheduled written quizzes in the volleyball class. Another kind of coaching also took place in volleyball when a student, usually one of the better players, helped
another student by demonstrating an alternate technique or giving feedback after a practice attempt. Students receiving this kind of coaching almost always paid close attention to their student coach, and often improved their skills as a result. In one example of student coaching, one of the volleyball girls showed Carl a different technique for the forearm pass, which significantly improved his skill almost immediately. Carl had been mis-hitting most of his passes during a drill; Sarah Walker came over and made a suggestion. After she left, Amy (the volleyball girl) coached Carl:

Amy: Try this. (Demonstrates a different technique from Sarah's.) I disagree with her way -- it doesn't flatten your forearms.

Carl copies Amy's technique ... Amy throws Carl a few balls and he tries the new technique -- makes good contact.

Carl: I like that much better -- I try to hit the ball up on my arms but I never can. This works real well (PSA, 9-26).

Later, in the same class session, students rated each other on their technique for the underhand pass. The fieldnote entry shows "Carl, with his new technique, looked good, especially from the side view -- I thought he was perfect in topography in all but one" (P87, 18-20).

Some of the volleyball girls also coached during game situation drills and in the interclass matches by hollering encouragement and making reminders such as "Rotate!" and "Let's go!" The volleyball girls were also selected by Sarah Walker to assist in drills and in setting up the equipment and floor markings for the skill tests.

The Heaviest Course Demands

The data were also analyzed for experiences that the students found to be the most demanding. The most demanding experiences were
those that seemed to generate extra or special attention from the students in the investigation.

For the most part this set of training experiences did not appear to be particularly demanding. In general, both courses were noteworthy for the lack of manifestations of student worry and concern about their class performance. Most of the time students did not talk together much about their coursework in ways that would indicate concern about their performance or concern about upcoming tests and other class activities. When students gathered together waiting for class to begin, they talked more often about non-class related concerns than about those having to do with the courses or the program. To be sure, there were occasions involving what Lortie (1975) called "collective strategies and deep sharing" but these occasions were all the more noticeable because they were unusual, not a common occurrence. Some examples of non-class related discussions were on topics such as a trip home (Tanya, A108), trying to "walk on" the football team (R, P81, 141, 154), the volleyball club (Jane, P144), the best campus bars (P ), part-time jobs (Dan, P200; S, P191), one of the female students who was considered a "knockout" (Skip & R, P160, 5-14), and a rose sent to Donna by a male physical education student (P132 & 133).

Also, it did not appear that a high degree of effort was needed to meet the course demands. When Art (who was enrolled in PE 200 only) was asked if he disagreed with anything in course, he said: "Not disagree with. I (laughs) think . . . there hasn't been that much homework (laughs again)" (T58, 27-30). In a post-course interview, he said he found the course "easy." Jane, who had played a lot of
volleyball, said that "for the people that know what they're doing, it's pretty boring" (T68, 8-9). For her, the volleyball class was "just practice" (T68, 33) and the Program had been "real easy so far" (T72, 8). When Skip was interviewed, he had just dropped his biology class (required for the physical education major) which he found "too fast paced" (T60, 8) and he said that "Everything is sort of boring now because I don't have a lot of challenging things. Everything is sort of easy" (T60, 27-28). At the time he made these comments, Skip was carrying a 1.6 grade point average (a 2.5 GPA was necessary for admission into the Program). Both Art and Skip had low ACT composite scores (the two lowest in PE 200); Jane's was among the highest in both classes.

In addition to student reports about the demands of these courses, the investigator was, on more than one occasion, struck by a strong feeling that he needed to work harder to improve at volleyball. The following entry from the reflexive journal describes the first time this realization occurred:

was really frustrated/annoyed today by not being "pushed." (I found I want to work harder but Sarah/classwork/drills don't push me.) I do try hard to do well . . . I try to hit them well. But to learn to pass well, I need somebody to really push me . . . That push is not there (RF11-12).

After this experience, the investigator increasingly looked for signs of the degree of effort by students and added a related question ("How hard do you work in . . . ?") to the interview guide.

Consequently, the data were analyzed for the course demands that did generate the greatest amount of student attention and concern. Three experiences were found to be the most demanding: getting into
the Program, the term paper in the Introduction course, and public performance in the volleyball class. In addition, preparation for unit tests in PE 200 and for the skill tests in PE 220 were course features that drew a good deal of student attention.

Many of the students were quite aware of the rules and procedure for getting into the Program. Both instructors had explained the admission procedure in class; both had pointedly stated that student performance in these courses would be used in the admission decisions and that they would provide a "first chance to demonstrate how good you are and serious you are" (Dr. Stone, A4, 20-23) about becoming a physical educator. Talks with the students and observations of their behavior showed that getting into the Program was a major concern for many students, something they paid extra attention to and something that generated strong feelings. On the basis of the intensity of student concern about their perceived chances of being admitted into the Program, the investigator judged program entry as one of the heaviest demands in these training experiences.

A methodological note is appropriate here. "Intensity" is not an easy thing to portray in words, and therefore, is not readily apparent from the fieldnotes and transcripts collected in this study. However, the lengthy period spent in the field talking, watching, and playing with the students in this case provided the investigator with an excellent opportunity to "see" these training events as students experience them. The judgment about which experiences were more or less demanding was based on this prolonged engagement in the field as an insider; from that perspective, judgments about which demands were
the heaviest were made using the investigator's intuitive sense as well as the data collected and recorded on paper.

Students reported three different concerns about getting into the Program: problems with getting in, problems with not getting in, and deciding not to try to get in (de-selection). Some students said that they were worried about getting into the Program because they did not meet the requirements for program entry, such as the necessary grade point average. This concern was most often expressed by "old" students such as one young man whom the investigator met informally in the lounge early in the study. He said he had been in college for three years but was not able to be admitted to the Program since he was still under the required 2.25 GPA. Like several of the elites, he had started in another field (natural resources) and had not done well in those courses; he said physical education was really what he wanted to be in all along (P12-13).

Another concern for getting into the Program was the problem of bad advice from the Freshman college advisors. At the University, Freshmen were assigned advisors who were not connected to either the education unit or the Program. Consequently, several students reported that their Program advice was bad and presented an obstacle to getting into the Program. Dan: "you really don't know exactly what is going on because the more I talk to the (freshman advisors) . . . you could be (stuck) for two years or so . . . they just have general stuff. Every time something gets changed . . . they don't know about it" (T92, 10-15). Donna (A121-122) and Gary (A151) expressed the same concern.

Because of the changes in Program admissions policy, "old"
students were required to make application to the Program during the investigation. That gave new students an opportunity to learn about Program entry problems from the old students. The investigator observed one occasion in which J., an old student, mentioned in an informal after-class discussion that he was not accepted for Program admission. He told Gary and the investigator that the freshman advisors "don't know how to give you help" and that he "didn't really expect to make it." He said that another old student, who had been accepted, told him that "it's not how well you do, but who you know that makes the difference. He hasn't taken classes and [he got in]" (P151, 4-31). J. went on to say that he had discussed his situation with Dr. Stone, who "said one of the purposes of this course [PE 200] is to see what students can do, and he said he thought I was doing real well, and that he would help me. I thought that was really nice" (P11, 17-22). Shortly after this conversation, Gary told the investigator that Dr. Stone "doesn't like me" (P152, 12). When asked why, he said "Just paranoid I guess" and then seemed reluctant to talk further (P151, 17).

Another kind of concern about getting into the Program were the consequences of not getting in. Students were afraid that, if they did not get into the Program, they would have wasted a large amount of their college work. Gary: "I got to get in -- I mean if I don't, that's three years wasted -- I might as well start over . . ." (P108, 1-3). Jane and Donna, who like Gary had been in other programs for a time, also reported concern about the years "wasted" if they were not accepted into the Program.
The third concern about getting into the Program had to do with deciding to forego application to the Program and to de-select themselves out of the physical education teacher training program. During this investigation, Dan, Art, and Skip each indicated that they were going to wait on their application or were considering dropping out altogether. Dan said that, since he had "just changed over" last year, he was going to wait a year before applying for entry into the Program so he could "get a little bit more under my belt first to insure a better shot at it" (T93, 20-25). He indicated that he was

"not in a bad way but I'm just about on the (grade point) average and just to insure that now with the new policies and all that I want to get into the Program without having to reapply and have my name thrown around a few times. Where grades won't have anything to do with whether you are accepted or not" (T94, 9-14).

Art also told the investigator he was going to wait a year before applying. He wanted to wait to see if he might be able "to make it" as a professional athlete. He said that if he could make it, he thought he would have the money to be a physical educator on the side. If he found that professional athletics was beyond his abilities, then he would probably reconsider his decision for physical education because he was concerned about "the money" and being able to afford "nice things" (TP/G2).

Skip mentioned in volleyball class one day that he was rethinking his decision -- "I might have decided too early" (P132, 2-3) -- and said that he was "taking it sort of slow . . . I'm not going to rush myself -- I don't like people rushing me" (T59.1, 2-4). He said he was going to wait "for next year because there is some requirements I don't
have yet . . . I don't have the grade point average -- 2.5 or whatever" (T60, 20-23). He said his GPA for the previous term (his first and only term to date) was 1.6.

Getting into the Program was clearly one of the major concerns of students in this study, and as such, was considered to be one of the heaviest demands from the student point of view. In addition to getting in, the term paper assignment in the Introduction course was another of the heaviest demands.

In short, the term paper caused more student "war stories" than any other single event in this investigation. The day the term paper was due to be turned in, there was a flurry of informal, small group conversations in which students reported to each other about how bad the conditions were under which they worked in order to complete this assignment. No other course topic or assignment generated the amount of excitement and consternation as the PE 200 term paper. Meg's library fear (previously reported; see page 85) caused her to wait until the night before to go to the library, even though she had gathered her information together and outlined her paper a week before (T81-82). Both Meg and Carl reported staying up all night to finish their papers; Meg fell asleep at her study desk and finished her paper in the morning after a roommate woke her up (P138). Carl stayed up to type his paper "if you can call this typing" (making one-finger typing motions) (P140, 25-33), and came to class unshaven and "tired" (P140, 28-29).

There were discussions about use of source material and use of the library. Tanya said she didn't use any sources and wondered if that
was OK. Meg said she saw Dan at the library the previous night; Dan said he "couldn't work there" so he went to his father's office and finished his paper (P189). Donna said she also went to an office, at her part-time job, and did her typing there; she missed class when she discovered she left her paper buried in a file folder at work and spent the morning searching for it (P126).

Several students missed class the morning of the due date so they could finish up. Besides Donna, Dan turned his paper in at Dr. Stone's office, and Meg and another student dropped their papers off just as class was breaking up. When jokingly told that she looked like she wrote the paper on her way to class, Meg told Carl and the investigator that she had done exactly that: "I wrote my conclusion in the locker room during class . . . That other girl and I were both in there writing -- we looked at each other and just laughed" (P139, 25-33).

Along with getting into the Program and the PE 200 term paper, public performance in volleyball class was judged to be one of the heaviest demands in these training experiences. The previous section on "Avoidance Strategies" contains examples of the intimidation (Meg) and embarrassment (Skip) felt by students when they performed in class, particularly when the performance was in an activity or drill that involved the entire class at one time and when they thought they were being observed by the better volleyball players.

The investigator was "tipped off" to these kinds of feelings by Meg in a formal interview, but it wasn't until much later in the study, when he experienced similar feelings during a skill test, that it became apparent that intimidation and embarrassment in public
performance might be very intense and deeply felt. Subsequently, the
data were searched for further examples of public performance as a
heavy course demand. It was common to hear comments like "I hope this
goes in -- I'm no good at this" (R, P80, 15-16) made by a lower-skilled
player to no one in particular as if explaining away an bad
performance. One of the middle-skilled players, Toni, remarked late in
the course that the volleyball class was "the first PE class that I
didn't like . . . I don't like to do poorly . . . I don't like it
especially when one of the others, who has played a lot of volleyball,
are nearby . . . it's hard" (P193, 4-13). Just after she made that
remark, Toni decided to move from a practice area where several
volleyball girls were working out to another area where the
lower-skilled students were practicing: "I'm going over there -- they
look a little less professional to me" (P194, 13-17).

Dan, who was also in the middle of the class in volleyball skill,
indicated that he compared himself to the other students and was
concerned when he did not do as well as he should: "maybe my bios were
off or something" (T95, 28-19). Highly skilled students were not
exempt from feeling embarrassed -- one of the volleyball girls looked
around sheepishly and blushed when she tried an incorrect pass in a
pre-class game (B., P147, 23) -- but this was the only observed
occurrence of embarrassment at public performance by a high-skilled
player. Most often it was the low-skilled players who reported that
performing in front of other students was very demanding: "I try so I
won't get embarrassed and do something wrong . . . I don't want to mess
up. I want to do well . . ." (Meg, T86, 22-23).
In searching for other course demands, it was found that tests and quizzes also drew the attention and concern of students. However, the amount of attention and the depth and intensity of concern over both written and skill tests was not as great as that for the three heaviest demands. Test days usually produced a flurry of pre-class studying, especially in the case of PE 200 unit tests, and last-minute practice, for PE 220 skill tests. Still, students did not talk about tests nearly as intensely as they did about the term paper or getting into the Program. And fear of failure in tests was never expressed with the kind of concern associated with the low-skilled players fear of public performance. When students worried about poor performance in skill tests their concern was more for "messing-up" in front of or in comparison to other students and less for receiving a bad grade. In addition, some students forgot test occasions (Toni, Donna, P189) -- no one forgot when the term paper was due or the requirements for admission to the Program. Some students found the tests "easy" (Carl, P196); by comparison, few students indicated that they found the term paper or performing in public easy.

Student View of Course Demands

After talking with the instructors about their courses and after talking with and watching the students in those same courses, it became apparent that there was a difference in the instructors' view and the students' view of the course demands. As a result, some of the elite interviewees were asked an interview question which was designed to elicit their views what they believed to be the "real" course demands of the two training experiences in this investigation. The question
was:  "If you were giving advice to a new PE 200 (and/or PE 220) student and s/he asked you what it takes to get a good grade in the course, how would you answer?"  Because answers to that question indicate which course features and activities they attended to, this data is presented here, in answer to research question four.  (Note that these data also provide an answer for questions five and six, which follow this section.)

When asked the question about the volleyball course, Jane answered:  "Participate.  Pay attention.  Do what she tells you (laughs).  Come to class.  That's the main purpose, come to class" (T70, 27-29).  Meg reported that in the Introduction course "You get to talk a lot and tell your feelings a lot . . . Anybody could get an A if they really study and learn their material" (T83, 10-21).  Her advice to a new PE 200 student was:  "Read your material and go to class . . . You really don't have to study hard; just look it over for the quiz" (T84, 1-5).  She also said she would inform new students that "they would have to write a term paper and start on it early and they have to go to the library" (T84, 6-7).

Analysis of the data showed that the answers given most often fell into the categories suggested by Jane:  Participate, pay attention, and go to class.  Some students, like Meg, indicated that it was also important to read the material for PE 200, but most felt that in PE 220 "you don't really need to read the book . . . most of the stuff that's important she'll tell you in class" (Jane, T71, 12-16).

Emphasis on the necessity of practicing volleyball skills varied with the skill level of the student:  a middle-level student said "you should work on skills" (Dan T99, 13-14), a low-skilled student said
"It's hard to get a good grade even if you try" (Meg, 88, 4-5), and a veteran player said that she already knew all the skills covered in the class -- she said the course was "just practice" for her (Jane, T68, 33).

**Student Achievement**

Another way to study how students responded to the course demands is to analyze their achievement in these two courses. The instructors' grade records were obtained and analyzed for student achievement. The investigator also discussed the achievement of various students with each of the instructors.

Table 3 shows the distribution of final grades in both courses. All the students in the volleyball class passed the course; only one student earned a grade lower than C, and she was ill much of the time but continued with the course at the instructor's suggestion. All but three students passed the Introduction class; six students received grades below C.

Women students earned significantly better grades in PE 200; the grades in PE 220 were about equal for men and women. The elite interviewees received grades across the entire spectrum except for the below-C grades in volleyball. The volleyball girls, women who had played high school varsity volleyball, received either A or B in PE 220, which included 7 of the top 12 grades awarded. The other two A's were awarded to Carl, who clearly was the most improved player in the class, and to the investigator, who had previous experience in volleyball as an instructor and a student.
### TABLE 3

**FINAL GRADES: PE 200 -- INTRODUCTION**

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>NG</th>
<th>Total</th>
<th>Mean GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>5</td>
<td>10</td>
<td>4</td>
<td>3</td>
<td>3</td>
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<td>2.44</td>
</tr>
<tr>
<td>Women</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>11</td>
<td>3.00</td>
</tr>
<tr>
<td>Men</td>
<td>1</td>
<td>5</td>
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<td>3</td>
<td>3</td>
<td>0</td>
<td>15</td>
<td>1.87</td>
</tr>
<tr>
<td>Elites</td>
<td>Meg</td>
<td>Donna</td>
<td>Art</td>
<td>Gary</td>
<td>Dan</td>
<td>Skip</td>
<td>7</td>
<td>1.86</td>
</tr>
</tbody>
</table>

**FINAL GRADES: PE 220 -- VOLLEYBALL**

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Total</th>
<th>Mean GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
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<td>6</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>23*</td>
<td>2.74</td>
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<tr>
<td>Women</td>
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<td>5</td>
<td>1</td>
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<td>13</td>
<td>2.77</td>
</tr>
<tr>
<td>Men</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td></td>
<td></td>
<td>10</td>
<td>2.70</td>
</tr>
<tr>
<td>Elites</td>
<td>Jane</td>
<td>Gary</td>
<td>Donna</td>
<td>Skip</td>
<td>Dan</td>
<td>Meg</td>
<td>7</td>
</tr>
</tbody>
</table>

| Volleyball | Girls | 4 | 3 | 0 | 0 | 7 | 3.57 |
| Other students | 1* | 13 | 10 | 1 | | 15 | 2.27 |

* does not include investigator
Section Summary

This completes the presentation of the data on student attention, actions, and responses to course demands. Some of the data in this section will be used to answer questions five and six. The following summary statement are offered as a composite answer to subquestion four.

1. Generally, the dominant pattern of student behavior was attentiveness and compliance with the course demands.

2. There were noteworthy exceptions to the dominant pattern of student behavior. These exceptions took the form of two kinds of social strategies -- avoidance and unsanctioned adjustment.

3. The course demands found to be heaviest were entry into the Program, the term paper in PE 200, and public performance in PE 220.

4. Paying attention to other students was an important way to get information, improve in class, and find out how to act.

5. Student skill level was important in the way students responded in volleyball class.

6. In general, the students found the course demands to be relatively light. Their view of the course demands was different than the view of their instructors. Students said they viewed participation, paying attention, and attending class as the "real" demands of these courses, even though they generally complied with most of the course demands.

Training Experiences Valued by the Students

Guiding question five was designed for the collection and analysis of data concerning the perceptions of the students to the value of the two courses in the investigation. Question five:

What experiences do students see as valuable for their professional training, and what experiences do they see as unproductive and counterproductive?

The focus of the question was the point of view held by the students, not by the instructors, the Program, or the investigator.
The elites were asked in formal interviews about their opinions of the two courses, with particular attention to their judgments about how the coursework helped them learn to become a good physical education teacher. The data were searched for any student remark, in informal as well as formal contexts, in which the student made a judgment of value concerning course activities. Judgments were labeled "valuable," "unproductive," and "counterproductive." Valuable experiences were those that students found helpful to their professional preparation, unproductive experiences were ones that students felt did not help or assist their professional preparation, and counterproductive experiences were experiences that students perceived to be obstacles or hindrances to their preparation.

**Valuable Training Experiences**

The students reported that they found several aspects of both courses valuable. Five of the seven elites enrolled in PE 200, spoke favorably about the course. Carl said that the Introduction course was "interesting" with "applications to the world" (T31, 2-3). He indicated that he had learned the difference between fitness and sports and the value of knowing his students' abilities for teaching (T31, 11-20). Art thought the course showed him how to "relate" to different age and ability students; he said it was a "nice class . . . it'll really help" (T58, 7-10 & 17-18). Meg and Skip both talked about how they learned the "pros and cons of youth sports" (Skip, T63, 1-5): "I always thought sports were the greatest but there are bad points too" (Meg, T82, 21-30).

Dan also felt that PE 200 "helped a lot." He said that "it really
gives you a good idea of what the thoughts are today; what's expected of you and what you should base your ideas on or if you need to change your ideas or adapt yourself" (T93, 3-5). The course helped him orient himself to "what is happening when I get out of college -- the way that institutions are going to want children taught, by ideas they have now and ones that they'll come up [with] more research into children's sports" (T92, 19-22).

Several of the elites reported that the volleyball class was good because it helped them to "tell them how to do it" (Carl, T31, 25-30). "It has taught me the basics" (Skip, T64, 7); "it gave me a better understanding of volleyball" (Meg, T87, 26). Meg also said that she was "definitely" a better player as a result of her work in PE 220; "I've learned more [than I knew before] and I think I'm a little better" (T87, 12-21).

Carl was the only elite who mentioned that outside-class practice was valuable for him in learning volleyball (although Jane indicated that her participation on the University volleyball club kept her game sharp). Carl said he usually practiced before class, hitting against the gym wall while he waited for class to begin (P 197, 16-22); he also played regularly in the daily pre-class "pick-up" games with some of the volleyball girls and students from another volleyball class.

The main outside training experiences which students perceived to be valuable for them was the Early Field Experience (EFX) in teaching, a course that was operated by the education program at the University. Jane, who was one of three elites who had completed her EFX, said she had a "great time . . . it was fun . . . I got to teach . . . whenever
I wanted and whatever I wanted to teach, I taught" (T73, 5-8). Dan and Donna also reported that their EFX was valuable for them, especially in confirming their decision to pursue teacher training for physical education.

**Unproductive Training Experiences**

Training experiences were considered to be unproductive if students reported that course activities did not help or assist their professional preparation.

Two elites found the Introduction course unproductive. One of the "old" students, Donna, thought that PE 200 was "pretty basic . . . it seems like commonsense -- anybody in PE should know the kinds of things he's covering, if they have any experience at all" (T12, 24-27). She also told the investigator that she knew most of the course material from her past experience as a student and as an instructor. Skip said that although he had "learned a lot of stuff," he thought the class was "boring . . . Going to class is sort of a drag . . . I know pretty much what we talk about" (T63, 18-21). "Just talk about sports and stuff. The other day we just talked about the [1984 Winter] Olympics. Wow. Get in there and write notes about the Olympics. Not for me" (T63, 25-26). As a result, he said he went to class "about once a week," making sure to get his assignments and do the tests (T63, 22-23).

In the volleyball class, five of the elites indicated that there was not enough time in game play: "you don't get a big chance to play . . . makes it a little less fun" (Meg, T88, 14-15). "It's kind of boring to sit there and do skills, skills, and not see any play time . . . Then you get people that don't want to go to class" (Carl, T30,
26-29). Skip was, as usual, straight forward: "we've gone through how many weeks now (about 2/3 through the term) and we haven't even got a game situation. And I think that's a crock" (T62, 7-10).

Some students reported that they did not read nor buy the textbook for volleyball. Jane found the book "confusing" (T71, 18-20). Also, some of the elites thought that there was too much "stress" on learning skills. Dan said we may "be able to teach somebody how to do it but still be learning it ourselves . . ." (T94, 30 & T95, 1). Along similar lines, Jane said that it was possible to increase a player's knowledge by reading the book and studying, "But skills, I think it's just talent. It's natural ability, practice" (T70, 1-3).

Counterproductive Training Experiences

Training experiences were labeled counterproductive if they were specifically cited by students as obstacles or hindrances to their professional preparation. The line between unproductive and counterproductive experiences was not perfectly clean, and there was some overlap between the two categories. The main difference was that unproductive experiences were negative by default: they didn't assist in professional preparation. On the other hand, counterproductive experiences were those that students felt actually worked against them and made their preparation more difficult.

No counterproductive experiences were cited for the Introduction course. In the volleyball class, some students though there was "too much pressure . . . she expects a lot" (Skip, P161, 6-7). "I can't think that fast (about court positions) and then do it . . . It's confusing" (Toni, P161, 4-5). Jane also felt that Sarah "goes a little
too fast, she expects a bit too much, especially of people who haven't had much volleyball" (T80, 12-14). And Carl, chatting with the investigator after class one day, said there were not enough people in the class for teams, not enough practice space, and not enough chances to play (P162, 1-16). Skip summarized this judgment:

She's a nice lady but she is a real stressful person. You've got to do it right: We're going to do it over until you get it right . . . she acts like it's real competitive. I'm out there just to learn how to do it -- to be able to teach it to somebody (T62, 18-22).

One elite, Jane, found that one of the volleyball skill tests was "hard . . . wrong too" (P181, 26-29). She went up to Sarah Walker and told her that the test actually encouraged incorrect form; Sarah agreed and said that the tests were the "best we have" (P182, 20-25).

Several students reported that the academic advice they received from their freshman advisors was highly counterproductive for them. Dan said they know only "general stuff. Every time something gets changed . . . they don't know about it" (T92, 11-15). Donna felt that the freshman advisors "have to be the worst advisors in the world . . . I didn't get the information I needed and now I'm in my third year . . . now it will probably take me 5 1/2 years to get finished . . . I wasted money, time and now I have an awful grade point . . ."(T11, 32-33 & T12, 1-2).

This concludes the data presentation for question five on the students' judgments about the value of various training experiences. The data used to answer question four and five provide a backdrop for answering question six.
1. Students found several course features or activities to be valuable training experiences, such as the "practical applications" of PE 200 and learning "the basics" of volleyball in PE 220.

2. They found some training experiences to be unproductive (e.g., boring classes, too little game time) or counterproductive (e.g., "stress," bad academic advice).

3. Experiences judged as valuable tended to be viewed from the standpoint of a teacher; experiences seen as unproductive or counterproductive tended to be viewed from the standpoint of a student.

4. The students clearly did not value volleyball skill development as much as the course instructor did.

The Compatibility of Student and Instructor Perspectives

The final guiding research question was:

do students share or reject the orientations and actions promoted by their teacher educators?

The question was designed to aid in the collection and analysis of data that would clarify the perspectives held by both students and their instructors, and to determine if and how their perspectives of professional preparation for physical education were compatible.

The concept of "perspective" is used extensively in two classic qualitative studies conducted by sociologist Howard Becker and his colleagues: Boys in White (Becker, Geer, Hughes & Strauss, 1961), which is about the professional education of medical students, and Making The Grade (Becker, Geer & Hughes, 1968), on the academic life of college undergraduates. They use the term perspective "to refer to a coordinated set of ideas and actions a person uses in dealing with some problematic situation, to refer to a person's ordinary way of thinking and feeling about acting in such a situation" (p. 34). The present
study borrowed Becker's idea of perspective to analyze the ways that physical education students thought and felt about acting in their formal training to become physical educators. It was assumed that the identification of the perspective of these physical education students and their instructors would help make clear "what went on" in these particular training experiences and, in so doing, provide a deeper understanding of the nature of professional preparation for physical education.

As a means to getting at student and instructor perspectives in this case, the data were searched for orientations, or beliefs, and actions of both students and instructors. Much of this data has already been presented in previous sections of chapter four under different research questions. In this section, particular attention in data analysis was given to the compatibility of student orientations and actions with those of the two instructors. In the terminology of socialization theory, this section presents the congruence and dissonance of the collective behavior and ideology of the recruits as compared to that of the socializing agents. In deference to Becker et al. (1961, 1968), the term perspective is used here, and the section is divided into two parts: perspectives not shared and the shared perspectives.

Before the data presentation, the notion of perspective should be clarified by highlighting two of its main features as described by Becker et al. (1961, 1968). First, perspectives can be individually or collectively held; like Becker, this study is primarily concerned with collective perspectives which are perspectives that arise "when people
see themselves as being in the same boat and when they have an opportunity to interact with reference to their problems" (Becker et al., 1961, p. 36). An understanding of individual perspectives is important and useful, but in this case, the collective perspectives are more so, in that an understanding of the students' collective perspectives will provide a deeper awareness of the socialization processes at work in teacher preparation for physical education. Secondly, "a perspective contains, in addition to the cognitive elements . . . , a set of actions" (Becker et al., 1968, p. 92). The strength of this notion of perspective is the combination of actions with beliefs. In this sense, the actions of the students manifest what they perceive to be "really" important in these training situations. Knowledge of their beliefs helps make meaning of their actions; knowledge of their actions helps make their beliefs transparent.

**Perspectives Not Shared**

Analysis of the data shows that there were several perspectives that were not shared by students and the instructors. Chief among these was that the main criteria for success in these training experiences, from the students point of view, was to get into the Program and get through the courses with acceptable grades. An acceptable grade was one that they could live with and one that would not jeopardize their admission into the Program. The instructors, on the other hand, viewed student success in terms of their potential for becoming an effective physical education teacher, a teacher who is "willing to teach and hold students accountable for performance gains in [sport and fitness]" (Dr. Stone, T17, 14-15).
In addition to this chief difference, students and instructors did not share the same perspective of the importance of competence in volleyball skill. Most of elite interviewees plus several other volleyball students made comments to indicate they did not agree with the way Sarah Walker "was stressing skill" (Dan, T94, 26-30). Some said the instructor went too fast (Jane, T80) or that the course was not "fair" because it was too hard to get an A -- "some people can't do certain things at all" (Meg, T88, 5-10). Most shared the perspective "I'm out there just to learn how to do it -- to be able to teach it someday" (Skip, T62, 18-22). Sarah Walker was also interested that the students be able to "teach it someday" but she clearly expected students to reach a higher degree of volleyball skill. This was evidenced not only in her expectations for the course but also in her teaching style, which was impatient with students who, in her words, "compromised" correct technique; she often stopped students after an incorrect hit and reminded them that they should "not compromise" and "do it right."

Students and the instructors did not share perspectives about the acceptable level of effort and participation in PE 200 and PE 220. Students generally did what was necessary to get by, which sometimes meant that they were not prepared for class, particularly if they had competing demands, such as a midterm exam for another course, part-time work, or team practice. Often these competing demands for student time and energy were not viewed favorably by the instructors. On three different occasions Dr. Stone told the investigator he was "disappointed" with the level of effort of many students in the
Introduction course. In the post-course interview, he said he was disappointed that about half of the students did not read the assigned material even though it was, he felt, "fairly basic stuff" (TP/DR). Sarah Walker also indicated that several volleyball students did give the kind of effort she expected; she labeled two low-effort student groups as the "Flirters" and the "Laughers" (T43, 14-16). The students in volleyball generally acted so as to get through the course with just enough effort and the least amount of embarrassment.

Avoiding embarrassment in front of the other students and in front of Sarah was more important to several students than working hard and trying hard to improve their volleyball skills. In this sense, student achievement in terms of improved skills was significantly more important for Sarah Walker than it was for the students, particularly those at the lower end of the skill range. Instead of taking extra practice and seeking help, the "Flirters" and some other students avoided participation especially when the "professionals" were nearby.

Finally, there was a strikingly noticeable (to the investigator) difference between the perceptions of at least some of the students and the instructors on the quality of good work. When either Dr. Stone or Sarah Walker talked about students who did good work, they invariably talked about students who received A's. The students, on the other hand, seemed to have predetermined acceptable grades, which depended what they needed to get into the Program or their own personal view of a "good" grade. Students, like Gary, who was an "old" student trying to get into the Program before the new policies went into effect, were very aware that they needed to "do well", one of Gary's oft-expressed
concerns. Other students, especially the low-skilled, like Meg and Donna (who were among the three or four lowest-skilled players in the course), did not appear overly concerned about receiving a grade of "C" even though they wished they could earn a higher grade.

The only student who talked and acted as though he shared the instructors' perspective of good work and the importance of increasing his competence in volleyball was Carl. Carl started the class with average athletic ability (in the judgment of the investigator) but finished with the highest grade awarded, A-. Along with two volleyball girls, he was observed in pre-class pick-up games almost every class session, and he reported that he practiced on his own regularly. He increasingly became more aggressive in drills and game-situations in appropriate ways for volleyball; in the final interclass matches, he repeatedly dove for balls, a tactic that was previously used only by the best of the volleyball girls. Other than Carl, students seemed resigned to accept their "fate" in grades -- the low-skilled players were ready to take a C as long as it was good enough to get through, and the higher-skilled players banked on their past experience, which in fact did provide them with the knowledge and skills to earn a good grade.

Shared Perspectives

Although there appeared to be more differences than common views between students and the instructors on their perspectives, there were at least three important shared perspectives.

The students agreed with the instructors that it was important for physical education students to develop sports skill. They differed
markedly as to the degree of skill necessary to teach sports, but they
did share the perspective that sports skill competence is necessary for
prospective physical education teachers. In a post-course interview,
Jane said "some people say they're (skill courses) are not important
but they are . . . if you can't do the skills, how can you teach it?"
(TP/GI).

Students and instructors also shared the perspective that
participation, attendance and paying attention were important to
success in both courses. The data presented previously (see p. 101)
shows that the student perspective of the "real" course demands is to
participate, pay attention and go to class (Jane, T70, 27-29).
Although the instructors viewed achievement of the course objectives
and demonstration of serious effort as the chief demands of their
courses, there is evidence to show that they also viewed participation,
attendance and paying attention as important criteria for successful
student performance. The evidence also indicates that they
communicated this perspective to the students. The fieldnotes of the
initial volleyball class session: Sarah came off friendly but tough,
particularly on attendance (P6, 31-33), and: on the need for
attendance, she was at her toughest -- "the rule is not to be bent. . .
you should not miss a class" -- she took more time on this part of the
syllabus than any other part (P7, 19-33). On another occasion,
discussing her course expectations, Sarah said that her expectations
for the students were: "Be serious . . . not wasting time . . . not
goofing around . . . not talking while the teacher is talking. Do what
you are told to do . . ." (T34, 12-13). The course requirements were:
"attendance is required unless you are excused by a doctor. Tardiness is unacceptable ... you are expected to be there ... to be dressed ... to participate ..." (T36, 25-30). It should be noted that during these occasions, Sarah also mentioned other requirements as well.

Similarly, Dr. Stone listed attendance as one of the class requirements in the syllabus, and he regularly took attendance records in class. In discussing why he was disappointed in the class performance of some students he told the investigator: "Some kids really surprise me -- there's that one [Skip] ... he must skip at least once a week -- he comes to all the tests and does the assignments, but he doesn't participate much and must have skipped a third of the course" (A169, 16-19). The grade records show that Skip's coursework in PE 200 averaged a D, but his final grade was lowered to E on the basis of a category labeled "attendance and participation" (GR 200). In the post-course interview, while discussing how well some of the students did in the course, Dr. Stone used attendance and students' talk in class as two of four criteria in his judgments of student performance. Like Sarah, Dr. Stone used other success criteria as well, criteria which were based on student performance on tests, the term paper, and the final exam, but the data show that both Dr. Stone and Sarah Walker shared with the students the perspective that attendance, participation, and paying attention were important criteria for student success in these two training experiences.

Finally, the students and the instructors shared the perspective that it was important for the trainees to become good teachers. In
spite of the fact that students were largely oriented to getting into the Program and through their coursework, analysis of interview data indicated that, in the long view, students were also very interested in becoming a good teacher. The presented earlier in the section on the students' subjective warrants (see pp. 66-73) shows that these students came into physical education because they want to help and work with people. In that sense, they exhibit a strong altruistic quality, a commitment to helping students learn, even at the cost of lessened financial rewards. (It is not clear, however, whether or not they really had the option of work with greater financial rewards; afterall, four of the eight elites dropped out of business because they did not do well in that program.) There is little question from the data that the instructors shared the perspective that it was important that trainees learn to become good teachers. Indeed, becoming a good teacher was perhaps the single most pervasive for student success in their conversation about teacher preparation, and it was a criterion that was often echoed in other areas of the Program as well.

Section Summary

This section is concluded with the following summary statements of the findings for research subquestion six on the compatibility of student and instructor perspectives.

1. The primary perspective of these students during these training experiences was the student perspective.

2. The chief valuables in the student perspectives were to get through the course, get into the Program, and eventually obtain a physical education job.

3. The instructors viewed their work from a profession perspective that was substantially different from the student perspective.
4. On occasion, students did use the professional perspective. However, the professional perspective was found to be subordinate to the student perspective.

Summary

This chapter presented the data that were collected and analyzed in this investigation of the socialization of prospective physical education teachers during an early part of a formal professional training program. The data were organized around six research guiding questions that were, taken together, used to: 1) describe the background of these students (recruits) and the influence of their biographies on their decisions to go into physical education, and 2) describe and explain the students' actions and perceptions of their coursework in the pre-admission year of their program in physical education teacher education.

The chapter also moved from simple description (e.g., data about participation in sports) to increasingly more interpretative data, culminating in the identification of student and instructor perspectives regarding these training experiences. This shift to greater interpretation provides a link between the presentation of the data (Chapter Four) and further interpretations of the data in the next chapter (Chapter Five).
Beginning with Dio Lewis' Normal Institute of Physical Education in Boston in 1861 (Van Dalen & Bennett, 1971), teacher training has had a long and rich history in physical education. Virtually every major leader in the development of physical education in North America since Lewis up until the 1960's made the preparation of physical education teachers an important priority, generally taking the position that one of the best ways to promote physical education was to train people to teach it. The 1960's brought a de-emphasis of the professional orientation of teacher education in favor of a discipline orientation that promoted research and specialization. However, encouraged by a burgeoning body of useful, reliable knowledge in classroom teaching and spurred recently by calls for nationwide educational reform, the past decade has seen the growth of data-based research in physical education teaching and a resurgence of attention to the preparation of physical education teachers (Siedentop, 1985). Yet, in spite of this grand tradition and the excitement of new knowledge and renewed attention, the process of teacher preparation for physical education (PETE) has gone largely unstudied (Locke, 1984).

The lack of research on teacher education for physical education would not be as great a problem if most teachers and teacher educators agreed that physical education teacher education functioned well in preparing physical educators for their work in school gyms and playfields. Unfortunately, that is not the case. Teachers complain
almost universally that their formal training was too idealistic and impractical; teacher educators wonder why their former students, even those who were successful as undergraduates, seem to "forget" or reject the skills and commitments they were taught in college and adopt the patterns of teaching found in the schools, patterns which researchers have found to be ineffective. Locke (1984) has labeled this "the problem of transfer" and he has called for research that can inform teacher educators about "what goes on" in teacher education. Without an accurate understanding about what really happens in training programs, efforts to change physical education teacher education will be hit or miss, and that, in turn, decreases the chances for successful training experiences. The result? The transfer of skills and knowledge taught in college to their application in the real world of the gym will continue to be problematic, and physical education classes will likely continue to feature large amounts of student waiting time, low rates of time in activity, and a minimum of student achievement.

This investigation was designed to respond to the need for an accurate understanding of the process of teacher education for physical education. The aim of the study was to get inside the "Black Box" (Dunkin & Biddle, 1974) of teacher education and observe first-hand the experiences of physical education teacher trainees during a part of their formal professional preparation. Professional socialization theory was used to frame and focus the research on the process whereby recruits adopt the ideology and technical culture of the profession they hope to enter (Lawson, 1983a, 1983b).

There were two main goals. The first was to investigate the
backgrounds of the recruits and to describe how their biographies influenced their decisions to enter physical education teacher training. The second goal was to investigate the experiences of the recruits in their early coursework in teacher education and to describe their actions and perceptions while engaged in their initial year of the Program. The methodology of qualitative research was chosen as an appropriate means for collection and analysis of trustworthy data capable of meeting the research goals. Qualitative research methods allowed for the investigation to take place inside the training process and to capture the insiders' perspective of the training experiences while, at the same time, minimizing the disturbance to the natural setting in which these events occurred.

The data were organized according to six guiding research questions drawn from the two research goals and were presented in the preceding chapter (Chapter Four). In this chapter, interpretations of the findings, based on the data, are presented. In addition, conclusions and implications for teacher education and for future research are presented as well.

**Interpretations of the Findings About the Students**

A questionnaire and indepth interviews were used to collect biographical data about the students in the two courses. The questionnaire was used to collect data from all the students in the Introduction to Physical Education class; interviews with eight elite interviewees (Dexter, 1970) were used to collect additional data and to check the credibility of the questionnaire.
On the basis of the data, the following interpretations of data are offered.

The students in this case had extensive experience in school and non-school sport before starting at the University. They participated, on the average, in 8.7 seasons of competition in 2.8 different sports, with track, football (men only), baseball/softball, and basketball as the most popular. Fifteen of the 22 questionnaire respondents played three or more sports during their secondary school days; of the 15, six were women and nine were men.

In non-school sports, where the average age of participation was 14.6 years, the students participated an average of 10.4 seasons in 2.26 different sports, with baseball/softball by far the most popular. Boys and girls participation in school sports was about the same, in non-school sports, boys participation was about 25% greater than girls (12.1 seasons to 9.1 seasons). About half (12) of the respondents reported they were involved in non-school sports as a participant after age 18; about a third (8) of them started in non-school sports at age 8 or earlier.

Most of the students had a great deal of previous experience in teaching-like and/or coaching-like activities. Seventeen students indicated they had spent an average of over three (3.4) years in two (1.94) different activities in a teacher- or coach-like role. Of those 17, 9 students had the chief responsibility in such roles as youth sport coach, YMCA counselor, health spa instructor, and the like. However, five of the 22 questionnaire respondents reported no teaching-like or coaching-like experience.
After entering college, most of the students (17) had, in effect, retired from the sports in which they had participated in high school. Only five of the 22 questionnaire respondents had continued to spend at least six hours per week in one of the sports they played in high school. In addition, six other students reported that they regularly engaged in serious fitness activity at the time of the investigation. Of the eleven students who were still very active, six were men and five were women; two were varsity athletes at the University. Although most of the students (19) reported they were engaged in some kind of activity at the University, only nine reported involvement that could be considered serious and of their own volition.

Additionally, the biographical data suggest these interpretations:

1. The age and year in school was fairly typical for students in the early years of college. Ages ranged from 18 to 27, with the average at 19.9 years; 17 were in their first or second years in college.

2. All but one were in-state students; only three of the students had spent a part of their previous school years outside the midwest.

3. Their ACT composite scores, which is the college entry test most commonly used in the midwest, were significantly lower than the average for all freshmen who entered the University during the academic year of the study. The average ACT score for the physical education students was 15.7, ranging from 8 to 23 (36 is the maximum possible on the ACT); the average score for all entering freshmen that year was 21.3 and ranged from 3 to 34.

The questionnaire and interview data were analyzed in order to collect information about their decisions to pursue formal training in physical education. These data suggested the following interpretations.

Almost all of the students intended to pursue the physical education major -- 16 indicated they had definitely decided and 4
indicated "probably yes" for going into physical education. Only four students -- two "maybe's" and two "no's" -- indicated they were either unsure about or definitely against going into physical education. From interviews with the eight elite interviewees, four said they were firmly committed to going into physical education work. Two elites, both males, were judged to be "fairly firm" and two, also males, were "on the fence," waiting to see how things went.

On the questionnaire, the students favored a coaching role over a teaching role, but not by much. Coaching and teaching physical education were by far the preferred roles, over roles such as athletic director, sport business employee, sport researcher, etc. The preferred level was senior high school indicated by 18 students (78%); however, other data from interviews and a preferred role combination item (e.g., preferred coaching assignment plus a non-preferred physical education assignment) in the questionnaire, showed that the role preferences of several students were neither stable nor reliable. For example, Jane, a 3-letter winner in high school volleyball, said "I wanna coach volleyball . . . maybe working my way up to the college level," but she also said "I wanna teach and I wanna coach." On the questionnaire, which was completed at a different time, she ranked physical education teaching ahead of coaching and she indicated that the most attractive role combination would be physical education teaching and no coaching. Half of the elite interviews presented this kind of apparent inconsistency in their role preferences, thus raising questions about the accuracy of student perceptions of the roles played by physical educators and about the reliability of questionnaires used.
to determine role perceptions.

The interviews with the eight elite students were also analyzed for data concerning the extent to which they believed that their previous experiences and their personal qualities warranted their decision to pursue professional training for physical education teaching. Lortie's (1975) model of occupational recruitment was used to guide the analysis. Lortie (1975) argued that there is a "silent struggle" (p. 25) among occupations to recruit suitable members, and that they use various recruitment resources -- certain comparative benefits, or "attractors," and social mechanisms, or "facilitators," which influence recruits to join the occupation -- to draw in new members. In addition, recruits make judgments about the requirements for job success in different occupations and assess themselves against those criteria -- this self-assessment of professional fitness is the recruit's "subjective warrant." The data in this study were analyzed for the recruitment resources that influenced these particular students and for their subjective warrants for entry into work as physical educators. Those data suggest these interpretations.

The main attractors for work as physical educators for these students were the joy of sports and physical activity and the opportunity to help or work with people. When asked what influenced them to go into physical education, five of the eight students interviewed specifically mentioned something similar to "I've always been interested in sports" (Skip, T59.1, 7). They also said things like "I want to work with people -- it's nice to make money, but it's more important for me to help people" (Gary, T2, 15-17).
In addition to these ten attractors, half of the elites said they were also attracted by the opportunity for a satisfying, enjoyable job, even if it meant limited financial rewards: "I don't look at the money aspect ... I want something I will enjoy" (Art, T53, 31-34).

These students reported two kinds of influences which facilitated their decisions to go into physical education: certain people and certain past experiences. The main people-as-facilitators for these students were: a) family members, particularly mothers, fathers, and older brothers; b) teachers and other school people, including physical education teachers (indicated by 3 students); and c) coaches, both good and bad. Some of the students reported that there were people who blocked their entry into physical education; these included family members, other majors and bad academic advisors. None of these students said they were influenced by a sister or their youth sport coaches.

The data also show that the support these students received from home concerning their choice of a career in physical education was minimal at best. Although parents and other family members encouraged them to engage in sports as a player, often at an early age, some students were specifically advised against becoming a teacher and maintaining an involvement with sports as a professional educator. The students reported that the biggest factor in this lack of support was that these significant others viewed teaching as financially unrewarding. Where there were exceptions to the lack of family support, students were encouraged to go into physical education by having a physical educator in the family (e.g., Meg's older brother...
with a Ph.D. in exercise physiology, and Donna's brother-in-law who was working on his master's degree in physical education).

The main facilitating experiences reported by these students were their teaching-like and coaching-like experiences and their participation in sports and fitness activities. Among the former, three students talked favorably about the University early field experience (EFX) course which confirmed their interest in becoming a physical educator. Concerning their participation in sports, students described themselves similar to Gary, who said "I wasn't the greatest, but I got the job done," and Meg who said she played a lot of "different sports." In addition, five of the elites started in other programs at the University (4 in business) where they did not do well; that experience also facilitated their entry into physical education.

All eight of the interviewees judged themselves to be suitable recruits for physical education. The occupational success criteria most often indicated were: the desire to help people, enjoyment of teaching, and enjoyment of sports. Some students also indicated that personal qualities, such as self-confidence, and teaching skills, such as the ability to communicate "at their level", were also important. Two of the interviewees thought they were not ready "to be the greatest teacher or a coach" yet (Art) but that the Program would help them get the "experience" that they needed in order that they might realize their perceived potential for becoming a good physical educator. Three students judged themselves ready and able to do a good job -- "I've proven it to myself" (Jane, T79, 5) -- on the basis of successful teaching-like experiences.
The overall picture of these students, who were "recruited" by the profession as prospective physical educators, is that they were pleasant, friendly people with extensive experience as participants and teacher/coaches in sports and physical activity. As a group, they were significantly less able academically (based on ACT scores) than their fellow University students. They were competent, but not outstanding athletes and, although most were currently engaged in regular physical activity, many were effectively retired from the high school sports through which many of them were recruited into physical education. They were attracted to physical education by the prospect of staying in sports and physical activity and by the opportunity to help and work with people, particularly children. Most of them had decided definitely to pursue formal training for physical education teaching, and their decisions were influenced largely by their interest in sports, certain family members, and their experiences as sports teachers, quasi-teachers, and coaches. Finally, they believed quite strongly that they were good prospects for becoming effective teachers and coaches; some thought they had already proven themselves, and that their perceived success in previous teaching and coaching coupled with their desire to help children warranted their entry into a professional role as a physical educator.

Interpretations of the Findings About the Training Experiences

The second goal of the study was to go inside the two courses and examine the students' actions and perceptions as they experienced this part of their training for physical education.

At this University, one of the main thrusts of the undergraduate
major is the preparation of future physical education teachers. Students who want to major in physical education are expected to take coursework in the Program over four years; they apply for admission to the Program at the end of their first year, during which they take several for-majors-only sports activity classes and the Introduction to Physical Education course. The data collection phase of this investigation took place during the winter term of 1984, which was the first year for the group that is expected to graduate in 1987 or 1988.

The volleyball class, which met for 1 1/2 hours twice a week, was designed to teach volleyball skills and develop the playing ability of future volleyball teachers. The class was taught by a graduate teaching assistant, a former college volleyball coach. The Introduction course also met twice a week and was taught by a tenured faculty member. The course was intended to: 1) introduce the students to the Program and to key issues in professional physical education (e.g., equity in physical education and sport); and 2) gather information about the students' verbal skills and their seriousness about pursuing a physical education career.

Analysis of the fieldnotes taken from participant observations of the class sessions found that the students generally attended to and met the demands of the two courses. In volleyball, almost all of the students came to class faithfully and participated in the drills and demonstrations according to instructions; they prepared for and wrote quizzes on rules and techniques; and took part in a battery of standardized skill tests and were rated for playing ability in a match against another class. All of the 22 students received a passing grade
(only one student, who missed several classes due to a chronic illness, received a grade lower than C).

In the Introduction to Physical Education course, the picture of participation was similar, although 3 of the 25 students received failing grades. Students indicated they read most of the assigned readings in preparation for class sessions and the unit tests. Most of them attended class regularly, which was required; only four students missed class more than three times. Students were generally cooperative and attentive during class sessions, which primarily involved student response and discussion on a set of questions over the readings and the students' personal experiences. In addition, the students wrote term papers and an essay-type comprehensive final examination.

Although the overall picture of student behavior was one of attentiveness and responsible participation, there were some noteworthy exceptions. Some of the students used and developed strategies to avoid participation in assigned activities, and a few students engaged in strategies to the course demands in unsanctioned ways. Since, in some cases, the elite interviewees were involved, it was possible to talk with them after these strategies were employed.

Most of the avoidance strategies and unsanctioned adjustment strategies were actions commonly used by college students. Cutting classes, keeping quiet during class discussions, avoiding the library, and prioritizing work in preparation for class were examples of avoidance strategies which were employed by students in these courses. Cheating and attempts to cheat were examples of unsanctioned
adjustments that are not uncommon in college contexts. In addition to these typical strategies, the physical education students in this study were observed avoiding participation in the volleyball class by dropping out of drills in much the same manner as Tosignant's (1982) "competent bystanders." Some students cleverly modified skill tests so as to earn higher scores. Both kinds of strategies -- avoidance and unsanctioned adjustment -- are ways to "play the system" and they indicate that students in those particular situations have not adopted the definition of the situation espoused by the instructors. Taken together, these strategies show how these students employed the social strategy of situational adjustment (Becker et al., 1971) in which individuals transform themselves for the time being into "the kind of person the situation demands" (Lacey, 1977, p. 72) in order to "get by."

Furthermore, the demands of these two courses were relatively light. Several students reported that the courses were easy, and the lack of what Lortie (1975) called the "shared ordeal" was experienced by the investigator and observed in the behavior of the students. The occasions that were "tough enough to lead to collective strategies and deep sharing among students" (Lortie, 1975, p. 74) -- the term paper, and, to a lesser extent, getting ready for written tests and taking skill tests -- were all the more noticeable in contrast to the usual daily course of events during class sessions.

The students did, in some instances, fully adapt or "buy into" their instructors' definition of the training situation. There were examples of individuals looking at their coursework from the point of
view of a teacher: some commented about how PE 200 showed how "to relate" to students and about how PE 220 would help in teaching "the basics" of volleyball. Individuals also indicated that they gained a new understanding of health fitness (Carl) and that they improved their playing ability at least "a little" (Meg, T87, 20). There were other examples of students changing in ways that were promoted by their instructors. However, the students also resisted and even rejected some of orientations and actions that their instructors thought important.

Student skill level was found to be important in the way students responded in the volleyball class. Low-skilled students held back and "dropped out" because they felt the effort probably would not pay off with a grade anyway and because they became embarrassed or intimidated when performing in front of the high-skilled players. The high-skilled players seemed to be sensitive to helping their lower-skilled classmates, something that several of the volleyball girls were observed doing. But the high-skilled players were able to coast through the course; one volleyball girl reported that she knew all the course material before entering the class and she did not increase her skill in any observable way throughout the term (Jane). The middle-skilled students seemed to improve their playing ability the most. Carl epitomized this improvement: he started the course as a rank beginner and, by means of regular outside-class practice and play plus good effort in class drills, he improved his game more than any other student in the class. Verification of his improvement was the perfect 30-point rating he received from the instructor for his play
during the final interclass matches; the only other students to earn perfect ratings were the two best volleyball girls (GR 220).

The students' judgments about which training experiences were valuable provide clues about what went on during these two courses, particularly in terms of their socialization into physical education careers. Students reported several course features or activities which they found valuable, such as the "practical applications" of the Introduction course and "the basics" of volleyball. They also judged that several aspects of these training experiences, such as boring classes, not enough game time in volleyball, too much "stress" on learning skills, and bad academic advice, were unproductive or counterproductive to their goals. The early field experience course (EFX) was cited as very valuable by each of the students who had completed it. Experiences judged as valuable tended to be viewed from the standpoint of a teacher: their value was related to their contribution to the students' conception of future work as a physical educator. Experiences judged to be unproductive or counterproductive tended to be viewed from the standpoint of a student: their usefulness was related to the contribution of the experience to getting through the coursework with an acceptable grade and to getting in the Program with a minimum of wasted time.

The students did not value getting better at the execution of volleyball skills as much as the course instructor did. Although some students said that they felt it was important to be able to do the skills in order to teach them, the students had a much lower expectation of how well they should be able to perform the skills than did the instructor.
Overall, students expressed substantially greater concern over their training experiences from the perspective of a college student than that of a future physical educator. The instructors, on the other hand, viewed their work from a professional perspective which emphasized their goal of training students to become good physical education teachers. There were times when students also held a professional perspective, when they related the experiences in these two courses and the Program to their image of themselves as teachers, but the predominate perspective, through which they thought about and acted in these training experiences, was the perspective of a college student. The chief valuables in this student perspective were getting successfully through the coursework, getting into the Program, and, in the long range, getting a physical education job. Thus, the college student perspective was found to be the primary functional perspective of these students during the training experiences observed in this study. A professional perspective was used by some students on occasion; as such, it was interpreted to be latent and subordinate to the college student perspective.

Conclusions

Over the course of Chapter Four, the data were presented in such a way as to move from the lowest inference questionnaire data to progressively more interpretative data. The first part of this chapter continued that progression by presenting a number of interpretations of the data. In the following section, the data and the interpretations are used to draw conclusions about the students in this investigation and their experiences in their pre-admission year of the University's
teacher training program for physical education.

First, the students in this case were generally friendly and well behaved. They were willing and able to openly discuss their experiences with the investigator. The students interviewed outside of class were virtually unanimous in saying that they were committed to helping or working with people, a commitment that they felt, at least, partly justified their decision to go into physical education work. On the basis of their ACT scores and reported academic records, they were not high achievers in their academic work; some had academic records that were poor. On the basis of their reports about their achievement in sports and physical activity, most were competent and very actively involved in several different school and non-school sports but were, by their own admission and by observed athletic ability, "not the greatest" (Gary). Of the two athletic exceptions, one (Jane) was a leading player in three sports at a small high school, and the other (Art) was an outstanding athlete of national class potential in his specialty. These two, however, were the exceptions in athletic achievement, rather than typical examples of the rest of the students.

It is also concluded that these students held strong subjective warrants for entering work as professional physical educators. That is, they judged themselves to be highly suitable candidates for physical education teaching and coaching, a self-assessment that was based on their past experiences in sports as players and as quasi-teachers and coaches and on their conception of good work in physical education.

Although students differed as to their assessment of their
readiness to teach — those who had more teaching field experiences tended to see themselves as more ready — all of their students saw themselves as good prospects for becoming successful physical educators. Their views of successful physical education work were oriented toward their past experiences rather than toward a vision of ways to change physical education programs for the better. Their criteria for success as a physical educator focused on helping their students and their own enjoyment, of teaching and of sports. None of the students indicated that their success in teaching and coaching would be related to the increased skill or fitness of their own students.

The difficulty in determining these students' orientations toward teaching or coaching leads to the conclusion that the students were either unclear as to the differences between the two roles or that they did not see much of a distinction between the two roles. Although there is also the possibility of instrumentation error, the qualitative data from formal and informal conversations with these students tend to confirm the questionnaire data and suggest that the students in this case saw teaching and coaching as similar, if not identical, roles.

The data also clearly point to these students as active decision makers armed with, in their perception, an already fairly developed knowledge base about teaching and coaching. A few of them saw themselves as true beginners as teachers and coaches; most of them viewed their past experience in teaching-like and coaching-like roles as their starting point in their professional preparation. From this perspective, they operated during these training experiences as
consumers in that they measured what they were taught against their own subjective warrants. They selectively accepted or rejected the intended lessons, in both volleyball and the Introduction class, on whether or not the lessons suited their conception of good teaching and coaching.

Although students were actively selective in their professional development, their chief involvement in these two courses was as a student. Just as they filtered the course material through their subjective warrants for physical education work, they filtered the course demands and requirements through their perspective of what was "really" important. What was really important to these physical education students was to get into the Program, get through the coursework, and, eventually, into a physical education job. In this sense, it is concluded that, like Becker et al. (1968), the trainees in this study were driven by a student perspective, and not by the professional perspective of their instructors. Although it is true that they were able to envision themselves as physical educators, especially when thinking and talking long range about "when the time comes", most often they thought and acted like students whose primary view of the training experiences was to successfully get through them.

The central difference in the two perspectives is that the professional perspective of the instructors and the Program was oriented toward improving or changing physical education programs; the student perspective was oriented toward program maintenance. In the short run, the students' efforts were directed to the immediate demands of coursework and Program entry. In the long run, when they did
consider their professional future in physical education, they processed new information through their strong subjective warrants which were based on valued past experiences in sports and which were not based, like their instructors, on the need for better ways to do sport and fitness education in the future.

It is also concluded that fully two-thirds of these students did not value sports and fitness enough to stay actively involved personally at a serious level. In fact, many of them had already been "retired" from the very sports that had been so important to them only a year or two prior to undertaking their coursework in the training program at the University. In addition, most of them were content to attend volleyball classes and participate at a minimal level without making a serious effort to improve their volleyball ability in a significant way. The higher-skilled students coasted through the course on the strength of previously developed skills, and the lower-skilled and some middle-skilled students avoided participation when possible so as not to "mess up" in front of the other students. For the majority of these students, the image of physical education students as people who are highly active, highly-skilled in sport and fitness was not borne out. Except for their age, these students were more like recently retired journeyman athletes, "finesse players" who were "not the greatest, but who got the job done," and who were now looking for a way to continue in the sportsworld that had meant so much to them in the past. It was more important to the students in this case to do what they had to to get through the course than it was to put forth the necessary effort to get better at volleyball, even though
they were quite aware that it was a sport they would someday have to teach.

Thus, in spite of a volleyball expert as teacher and ideal conditions in terms of court space and student-teacher ratio, most of these students did not take advantage of the situation to learn volleyball and improve their skills. When placed alongside their strong subjective warrants for physical education, perhaps this becomes more understandable. It is possible that their attraction to physical education work on the basis of the opportunity to help and work with people and on their past involvement in sports leads them to focus on their interaction with students and participation in sports, rather than on serious skill development and ability to play the sport well. What this holds for their ability and commitment to teach sports and fitness to their future students is ominous for teacher educators like Dr. Stone and Ms. Walker who are strongly committed to training physical education teachers who "hold students accountable for performance gains" and whose "main concern is the subject matter, not with the kid" (Dr. Stone, T17, 14-24).

Up to this point, the conclusions have been group oriented. However, in the presentation of the data it is possible to see differences among the students, and these differences provide clues as to the patterns of socialization of this particular group of prospective physical educators. That the dominant form of student behavior was compliance with the course demands was previously noted. Borrowing Lacey's (1977) notion of "situational adjustment" (p. 72), it can be concluded that different students used different strategies to
comply with the course demands. With a brief analysis of these different strategies and the students who used them, a clearer picture of the socialization of these students emerges.

Lacey (1977) noted two varieties of situational adjustment or compliance. The first, "strategic compliance," analogous to impression management (Goffman, 1959), is used when an "individual complies with the authority figure's definition of the situation and the constraints of the situation but retains private reservations about them" (p. 72). The second strategy, "internalized adjustment, in which the individual complies with the constraint and believes that the constraints of the situation are for the best" (p. 72), is used when the student complies in such a way as to "buy in" to the course and Program activities as the instructors intended. In this study, the student perspective, with its emphasis on getting through the coursework and getting into the Program, is essentially a collective use of strategic compliance in that students did what was asked of them in order to get the grade that would allow them to successfully complete the course and get into the Program. That they did not share the professional perspective of their instructors shows that their compliance with the course demands was largely strategic and did not internalize the instructors' view of these training experiences.

Assuming that the professional socialization of these students was most complete when their perspective matched that of their instructors, it is possible to analyze which course activities were most effective in socializing these students into the Program at the University. Compliance, either strategic or internalized adjustment, was the basic
condition for students to meet in order to meet both their goals and those of their instructors. Since the course demands were, for the most part, light, the students were "right" in seeing that class attendance, a minimal level of class participation, and paying attention enough to follow instructions were the essential criteria for getting through these courses. Strategic compliance was an acceptable strategy to employ to meet these essential criteria, as several students demonstrated. Meg, Donna, Skip and Jane all made sure they met the basic criteria for the volleyball class, and they successfully got through without fully conforming to the stated purposes of the course: each received a grade of C or better without making a serious effort throughout the course to get better at playing volleyball. Jane was able to bank on her already well-developed volleyball skills to earn one of the highest grades in the course. Meg, Donna, and Skip avoided performing skills whenever they could, (by not volunteering, by claiming injury, and other avoidance strategies) and put up with embarrassment and intimidation when they had to; all three received "C" grades, which were probably lower than they would have liked but still acceptable in terms of getting through the coursework. Gary, who otherwise practiced regularly in class and improved his skills somewhat (he received a "B"), demonstrated that non-compliance with the basic demands was quickly punished when he was kicked out of class after he angrily smashed a ball into the wall during a fit of frustration over a mis-hit shot.

In PE 200, where the demands were more clear and seemingly more attainable (no one complained that it was too difficult to get a good
grade in PE 200 as Meg had done about volleyball) and where there was less opportunity for undercover avoidance strategies, students found that basic criteria for success were relatively easy to achieve but, nevertheless, essential. Both Skip and Dan had their final grades lowered a full grade, from D to E, because they did not meet the basic criteria of attendance and participation. It is interesting to note that, although Dan and Skip earned very low grades on coursework in PE 200, neither indicated that the work was difficult; in fact, Skip said he found that "Everything is sort of easy." (T60, 28).

It is, therefore, concluded that effective socialization in this case began with meeting the basic criteria for course success: attendance, responsible participation, and paying attention. It was possible for students to meet these criteria without "buying in" to the instructors' perspective, but it was not possible to get through the courses without meeting these basic criteria. That most of the students complied with the course demands most of the time shows that they saw the demands as acceptable; that several students saw the demands as "easy" indicates that the demands quite probably could have been greater without jeopardizing student compliance.

However, the notion of complete successful socialization is one of internalized adjustment, in which individuals adopt or buy in to the perspective of the socializing agents. Lawson (1983a) suggests the term induction "in which a recruit's inaccurate subjective warrant is replaced by a new self-image forged out of new ideological commitments and newly-acquired knowledge and skill" (p. 13). Socialization is not
complete and possibly unsuccessful when compliance is only strategic. Attention is now turned to situations in which students went beyond strategic compliance and appeared to share the instructors' perspective. These are situations of internalized adjustment and are demonstrative of effective socialization.

The most obvious example of internalized adjustment in the study was Carl's concerted and successful effort to improve his skill and playing ability in volleyball. He was, from an instructor's standpoint, a model student in that his actions fit the educational purpose of the course, skill development. Further evidence that he adopted the instructor's perspective is shown by his voluntary outside-class practice and gameplay. As mentioned previously, Carl's actions were all the more noticeable in contrast to the skill practice and skill development of his classmates, whose strategy of dealing with skill development was generally that of strategic compliance.

Other examples of internalized adjustment were seen in single events rather than in a set of actions over the duration of the course (as Carl's skill development). There were several occasions in the Introduction course when students continued class discussions after class, debating the day's topic long after class was over. The emphasis in the post-class debates was on what could or should be done in sports and physical education to change current practice, one of the major aspects of the professional perspective. There were also a number of occasions with individual students in which they reacted to or reflected about class events as a teacher, rather than as a student. Typically, these discussions were about better ways to teach the class
("there would be more activity time if we had enough people for two teams in volleyball") or about how the class issue in PE 200 might affect their future teaching ("I used to think you could get fit playing games; now I know differently"). In either case, these occasions showed students thinking like a teacher in ways that matched the professional perspective of their instructors; in these examples, they demonstrated that they had, at least for that particular time, adopted the professional way of looking at the situation, as opposed to the more common student perspective.

This analysis of the strategies used by the students to comply with the course demands suggests three propositions about the professional socialization in this case. First, in order to achieve complete socialization, compliance with the basic criteria for success (here, attendance, responsible participation, and paying attention) is essential; without this elementary, prerequisite form of compliance, socialization into the professional perspective of the instructors' and the Program will not take place. In addition, student factors will affect the probability of the use of strategic compliance and internalized adjustment. The second proposition is that the probability of a student using the strategy of strategic compliance, a form of incomplete socialization, will increase with: 1) a strong subjective warrant of the kind "I'm a good recruit and I'm ready to teach," 2) high investment of time in college -- "I can't afford to spend any more time here," 3) perceived success in teaching-like and coaching-like experiences, and 4) decreased career options. The third proposition is that the probability of a student employing the strategy
of internalized adjustment, a strategy that suggests effective socialization, will increase with: 1) a subjective warrant that "I am a worthy prospect as a physical educator," 2) a willingness to learn and practice sports skills and fitness habits, and 3) a tendency to reflect critically on coursework from the point of view of a teacher as well as that of a college student.

The foregoing analysis and discussion focused on the response of individual students to the training experiences. It is also useful to look at socialization patterns in a more general, collective way. By taking a step back for a broader look at what happened here in terms of teacher socialization, it is possible to find clues to the difficult and persistent "problem of transfer" (Locke, 1984) that has bedeviled teacher educators in and out of physical education for some time.

Zeichner and Tabachnick (1981) have suggested three possible scenarios for why new teachers, recently trained in colleges and universities, apparently "forget" or reject the knowledge and skill received during their formal training and adopt the patterns of teaching found in the schools, patterns which were not espoused in the training program. By comparing Zeichner and Tabachnick's (1981) scenarios to the results of this study, some final conclusions will be drawn about socialization patterns of preservice physical education teachers.

The first two scenarios suggest that the impact of teacher education on the socialization of teachers is not as great as the impact of schools and that the schools eventually win out. Both scenarios would explain why the lessons of teacher training do not seem
to transfer in the long run to teaching practice in the "real world" of schools. The first is labeled the "commonly accepted scenario" (p. 7) because it is thought to be the scenario generally accepted by the teacher education community. In this theory, "students become increasingly more progressive or liberal in their attitudes towards education during their stay at the university and then shift to opposing and more traditional views as they move into student teaching and inservice experience" (p. 7). In this view, the effects of teacher training are "washed out" by the more powerful effects of school experience.

The second scenario also finds the school effects overpowering the effects of teacher training but in quite a different way. In this theory, prospective teachers are powerfully presocialized into traditional teaching perspectives before they even enter the University for formal training, and the low impact of teacher education is not strong enough to offset the effects of the "apprenticeship-by-observation" (Lortie, 1975) that future teachers gain during their elementary and secondary school years.

The third scenario differs from the first two in that teacher education and the schools are not seen to be in competition, but in cooperation. This theory holds that schools and universities are "partners in the development of traditional teaching perspectives" (p. 9) and that "the effects of the University are not washed out by school experiences, but are in fact strengthened by school experiences" (p. 9).

The results of this study provide strong support for the second
scenario, but they also lend evidence to support the third theory as well. In support of the second scenario, it is concluded that the strong subjective warrants of these physical education students, developed from extensive past experience in sports, served as a screening device through which students filtered their training lessons and which was used to make decisions about what they would adopt, what they would manage so as to get through, and what they would reject. In other words, the students were powerfully presocialized into physical education by their past experiences and their professional education experiences, at least in this stage of their formal training, were not strong enough to outweigh the impact of long experience as players, sports instructors, and coaches. Since it is likely that physical education students may be involved in more quasi-teaching experiences than teacher prospects in other subject areas, it is reasonable to speculate that recruits in physical education have an even greater capacity than other recruits for reducing the impact of teacher education, which in turn, suggests that there is a greater likelihood of maintenance of present school teaching patterns found in the gyms and outdoor areas of our elementary and secondary schools.

Although the results of this investigation provide substantial support for the "strong biography" scenario, they also lend some support to the "partnership" scenario in which formal teacher training strengthens school experience. This is the scenario that suggests, contrary to prevailing views concerning preparation of teachers, that teacher education works. The evidence here for the partnership scenario rests primarily on the shared perspective of the importance of
the basic criteria for course success: attendance, responsible participation and paying attention. The instructors demonstrated by their words and their actions that they held these criteria to be vital aspects of student performance in their courses. The students clearly recognized their importance and found that going to class, achieving a minimal performance level, and following instructions were crucial to their success in getting through the courses. Although students and instructors saw these success criteria as achieving different ends — students viewed them as the keys to an acceptable grade; the instructors viewed them as necessary, but not sufficient, responses to training experiences designed to produce good physical educators — they both shared the view that these criteria were important to student success in these two courses.

In addition, research on teaching school physical education has found that the main functional criteria (Dodds, 1985) for successful student performance in gym classes is similar to the results of this investigation into physical education teacher education: Tousignant (1982) found that student "participation at a minimal level" and "no disruption of the peace" were the primary outcomes for which teachers held physical education students accountable. Placek (1983) found that both experienced teachers and preservice teachers judged student success in terms of whether or not students were "busy, happy and good." Imwold, Rider and Johnson (1982) found that physical education grades were determined by teachers' "subjective assessments of their students' citizenship, sportsmanship, preparedness and effort" (p. 14).
The similarity between the basic criteria for success in this case and in the predominant accountability patterns found in the research is most striking for attendance and attention. There is, however, an important difference regarding the nature of participation. In this case, students were held accountable for their class performance and their final grades were based primarily on the quality of classwork. Even though these students found the course demands relatively light, a minimal level of responsible participation was required to get through the courses. In contrast, the research on success and accountability in school physical education shows that the participation often required of those students was that they only had to act as good citizens, class "members in good standing" (Tousignant, 1982). Nonetheless, there is little evidence from the data in this investigation that these teacher education students recognized this distinction.

Given that minimal participation is what these recruits were likely held accountable for in their own schools in physical education and given that they viewed class attendance, participation, and attention as the primary criteria for their success in these training experiences, it is reasonable to conclude that the patterns of accountability found in school physical education may well have been confirmed rather than rejected for the prospective physical education teachers in this case. These are precisely the patterns of accountability that teacher educators, Dr. Stone and Sarah Walker among them, argue strongly against: "More and more, in the last few years it has become clear that the differences among physical educators out
there in the field are the ones who are willing to teach and hold students accountable for performance gains in [sport and fitness] and those who are not" (Dr. Stone, T17, 12-15).

The data show that the instructors in this study did hold students accountable for performance gains in the Introduction course and the volleyball class, but the evidence concerning shared and unshared perspectives supports the partnership scenario. Although they were held accountable for their class performance, these students demonstrated by their actions, especially in volleyball, that they did not "buy into" the view that skill development was "the bottom line" (Sarah Walker, T40, 9-10). On the other hand, working out of their college student perspective, they did accept and adopt the minimal participation pattern of accountability. There is little question that the instructors viewed this kind of accountability as only a means to a more important, from their perspective, kind of accountability, but this study just as clearly points to the conclusion that most of their students did not share that view.

In this way it can be seen that, innocently and entirely unintentionally, teacher education may have cooperated with the schools to confirm aspects of an accountability pattern that most teacher educators in physical education work very hard at professing to change. As unlikely as Zeichner and Tabachnick's (1981) third scenario seems at first glance, the evidence from this study provides support for its existence -- there are ways in which schools and teacher education cooperate to maintain existing patterns of teaching in schools, even though the dominant view of the teacher education community is that they do otherwise.
Implications for Teacher Education

This study was conceived as research into teacher education for physical education. Although qualitative research methods were used as the means to investigate the problem and professional socialization theory was used as a framework through which to view the problem, the problem itself -- to gain an accurate, in-depth picture of physical educator trainees and their professional training experiences -- is a teacher education problem and, ultimately, the research goal was the discovery of potential solutions that can help teacher educators do their jobs better and, in the long run, increase the productivity of physical educators and their programs. These implications, drawn from the research results, are offered toward that end.

These implications are also based on the possibility of generalizability. Generalizability depends upon this case being at least somewhat typical of other places where teacher education for physical education takes place. Although the impossibility of a perfect fit between this situation and other situations is acknowledged, this study was undertaken in the hope that the findings might provide information that could help teacher educators at the University and other teacher education institutions discover better ways to train future physical education teachers. Previous research on physical education students shows that these students were not atypical in biography, preferred roles, or conceptions of teaching success. This suggests that the possibility of application of these results to other situations is reasonable. To assist teacher educators and other readers interested in generalizing from this study to their own
contexts, "thick descriptions" (Geertz, 1973) of these students and their training experiences were provided.

The implications presented here are based on a set of assumptions about the role and conduct of school physical education. Readers who share these assumptions are likely to find these implications more compelling than readers who do not share these assumptions. However, it is hoped that all readers will find the implications of this study useful as a springboard for examining the results, drawing their own conclusions, and making implications of their own.

The assumptions used as a foundation for this section are similar to the professional perspective held by Dr. Stone and Ms. Walker. They are:

1. Sport and fitness are important cultural features in civilized society. It is to that society's benefit for people to play often and well and for them to be fit and healthy.

2. A legitimate task of our nation's schools is to provide sport and fitness instruction. Although other institutions can and do provide forms of physical education, schools offer the best chance for reaching all children at a time when learning is their primary occupation.

3. As it is presently conducted in most of our schools, physical education is "poorly conceived, weakly taught, and devoid of important personal meaning" (Siedentop, 1982).

4. Learning in physical education is synonymous with increased playing ability in sports and with increased health fitness. The best measures of learning in physical education are
measures of student performance.

5. In order to produce good physical education programs, present practices will have to be changed.

6. Perhaps the best way to effect change in physical education is through the preparation of physical education teachers. By preparing physical educators who are both willing and able to increase the achievement levels of their students in sports and fitness activities, teacher educators stand a fair chance at turning physical education into a subject that is exciting and valued rather than boring and unimportant.

Based on the foregoing assumptions the following implications of the results of this investigation are offered.

The results of this investigation imply both good news and bad news for those of us who prepare physical education teachers. The good news is that these students, in general, paid attention in appropriate ways and that they appeared to adopt some of the skills and attitudes they were taught. The bad news is that they were not an easy sale -- they could and did resist at least some of those aspects of their training which did not suit their goal of getting through their coursework or their view of successful physical education work. If this case is typical of teacher education in other colleges and universities, it shows that it will take very strong interventions on the part of teacher educators to induce trainees such as these to drop their system-maintaining subjective warrants and replace them with a professional perspective committed to bring about genuine change in the sport and fitness activities of their students.
If teacher educators are going to have a fighting chance at changing the way school physical education is conducted, they will need to do one of two things. One option is to recruit different people to become physical educators. Although the students in this case were friendly, reasonably well behaved and cooperative, experienced in their subject matter, and committed to working with and helping people, they were more oriented toward the past and doing things the way they were taught rather than toward the future and better ways to teach and coach. One wonders what would have happened if these recruits had been brighter than average, seriously active in sports and fitness activities, already highly skilled and anxious to become even better, and, perhaps most important, mindful of the need to change physical education and eager to learn how to do it. Based on the results of this study it seems reasonable to speculate that, with students possessing the latter set of characteristics, these training experiences might have gone quite differently and the likelihood of the students sharing the professional perspective of their instructors might have been much greater.

However, as attractive as this option appears to be, it has its disadvantages. It is not at all clear that teacher education can attract top students; the rewards, financial and otherwise, may not be great enough to lure recruits who are talented in academic and athletic endeavors. Indeed, the absence of this kind of student in the group studied is an indicator of the difficulty in recruiting outstanding students, even though the Program at the University is thought to be first-rate. Furthermore, in spite of recent calls for upgrading the
quality of prospective teachers (see for example, National Commission for Excellence in Teacher Education, 1985), the tradition in teacher education has been that recruits choose to enter teaching, teacher educators do not choose recruits. So, to attract better trainees, not only would teaching need to be seen as more attractive, but teacher educators would have to break tradition and become more active in recruiting top prospects. On the other hand, more active recruitment strategies may not be all that difficult. The relatively simple changes in the admission procedures enacted by the Program in this investigation should be seen as a small, but important, success story in that tightened entry policies demanded students' attention in such a way as to encourage them to carefully review their qualifications and to give the Program greater control over admission decisions.

The second option that physical education teacher educators might choose to use to change school physical education is to do teacher education differently. More specifically, the results of this investigation suggest the need to increase the demands of the training experiences and socialize trainees into a change orientation. Given that the general pattern of student behavior was compliance with course demands and that the demands themselves were relatively light, the possibility of increasing the course demands without sacrificing compliance is a good one. Although based on only a small part of the pre-admission experiences in this particular training program, the evidence here suggests that increased demands may well lead to collective strategies for dealing with students' shared ordeals (Lortie, 1975), and collective experiences are likely to have greater impact on recruits than individual experiences (Lawson, 1983a).
In addition, since these trainees' subjective warrants were both strong and oriented toward maintaining physical education as currently practiced, it will take strong interventions during the training program to induce students to drop their system-maintaining, past-oriented perspectives in favor of the change-oriented, future-facing professional perspective that is necessary if significant change is to be effected in school physical education. The results of this study suggest several such interventions:

- increase the involvement of trainees in sports and fitness activities; promote increased performance and hold students accountable for achievement

- build the program into a support group for student achievement in sport and fitness instruction; this is necessary because of lack of family support for the choice of a physical education career and lack of school support for physical education programs that emphasize student achievement

- establish program policies that make minimal participation (attendance, participation, paying attention) as baseline expectations, but that focus the greatest attention on achievement of program goals, for example, skill development in sports activities

- avoid mixing high-skilled students with extremely low-skilled students in sport activity classes. The development of clear, measurable performance standards for such courses would make it possible for high-skilled students to "test out" of activities that they already know; it might also help turn the attention of low-skilled students toward developing their own abilities (rather than toward trying to hide their lack of ability), even in the event that students cannot be separated by skill level

- socialize students into membership in the Program by development and identification of a few program "rites of passage" such as, acceptance into the Program and successful completion of student teaching, and then provide visible symbols of program membership for all students who are judged to be successful in passing these "rites" (an example of such a symbol might be a warm-up suit emblazoned with the Program's title). Minimize program awards to a few top students; to increase the likelihood of complete socialization of all members, maximize the attention given to each student who achieves membership status.
In summary, if the status of physical education is going to improve so that school programs are well conceived, well taught, and meaningful to students, substantial changes will need to be made. Teacher education for physical education is probably one of the best places to effect such change, but if this study is typical of teacher education in other institutions, desired results will not likely occur without recruiting different kinds of students or without increasing the demands of the training program and socializing trainees into change orientations.

**Implications for Future Research**

In addition to implications for teacher education, the results of this investigation provide some leads for future research on physical education teacher socialization.

1. **Who should be admitted to teacher education programs for physical education?** Who should programs recruit? Future research aimed at investigating which recruits programs have the best chance of helping to become good physical educators would be useful in aiding recruiting efforts and admissions decisions.

2. **How does sports skill influence the teacher education process?** What is the relationship between playing ability and teaching ability in sports instruction? Research correlating sports skill and teaching skill would be most useful for planning student recruitment strategies and for determining relative allotments of program resources to skill development courses and to professional education courses.
3. Which school physical education programs produce good recruits? Which programs don't? Research is needed on how school programs influence the anticipatory socialization of recruits to physical education careers. Lawson (1983b) has pointed out that teacher socialization is essentially cyclical, from elementary and secondary school to formal training at the university to a professional role in schools where physical educators are influential in attracting new recruits. It would be very valuable to know just how this process works, and one of the keys would be to know how school programs influence young people to pursue or reject physical education careers.

4. What do teacher educators look for in trainees? How do teacher educators conceive of successful work in physical education? Teacher educators are the primary means of control in training programs. Research on teacher educators in physical education has just begun (Mitchell, 1983; Metzler & Freedman, 1985); further research is needed to determine their subjective warrants and to determine the functional bases for their judgments about the suitability of recruits and trainees.

5. How and in what ways are physical education trainees socialized in other parts of their training programs? This study investigated only a small part of the whole of teacher education for physical education. Research into the socialization patterns in other portions of the program would
provide a broader picture of teacher socialization during formal training. Some work has been done during student teaching (Templin, 1978, 1981; Tinning, 1983) but research on other aspects of the preservice program is needed. Furthermore, longitudinal data, from anticipatory socialization through formal training and into work roles, is the ultimate in teacher socialization research. By following recruits, such as those in this study, throughout their training and into their eventual teaching and coaching positions would the best, albeit costly and most demanding, way to conduct research on teacher socialization.

6. Why do recruits to physical education drop out? What goes on during the deselection process in which students decide not to pursue further training in physical education? Teacher educators need to know more about why their students drop out of their programs. Are the students who drop out good recruits or is it best that they try another occupation? One would hope that the deselection process is effective, that is, it "rejects" recruits who would not become good physical educators. Whether or not this is, in fact, the case remains to be seen. In this study, there is little question that it was to the Program's advantage that Skip deselected, but it is less clear that Dan's dropping out was beneficial. In addition, the Program was not able to "hold on" to Carl who was perhaps the best recruit out of the eight elites. Research into this important area would aid programs in their retention of good recruits and in their rejection of bad ones.
Summary

The chapter concludes this report. But the story is not finished. The research reported here shows that the socialization of these individuals into the world of professional physical education began long before the 11-week slice-of-time covered by this study. In fact, these students were silently yet effectively recruited for teacher education in physical education through considerable sports experience and seemingly successful teaching-like and coaching-like roles. Even though these powerful past experiences led them to possibly premature self-assessments of their suitability for the profession and a narrowed view of the professional preparation that they received in these two courses, much of their formal training and the whole of their professional life lies ahead of them. What remains to be told is the rest of the story of their professional socialization. Will their instructors in the Program succeed in winning the students over to the professional perspective of physical education? Will the Program succeed in arming them with the skills, know-how, and commitment to develop sport skill and health fitness in their future pupils? When they get on the job in a school, will they be truly effective in developing their students' sport skill and fitness, or will they be content to "throw out the ball" and check only if their students "show up, dress up, and shut up" and take the ubiquitous shower afterward? Only time will tell.

For the future of physical education, the stakes are high. There are signs on the horizon that the present state of affairs in "gym" may be approaching an end — whether it dies of lost requirements (Illinois
APER, 1984), underfunding, overexposure (Siedentop, 1983), public inattention (Dodds & Locke, 1984), or simply fades away as an unpleasant memory is not yet clear. What is clear is the growing realization, inside the field and out, that the "state of the art" in physical education is too much like a joke and not enough like a vital, productive part of school curricula to continue to survive (Dodds & Locke, 1984).

Obviously, something needs to change. Better teacher education seems to be a logical place to begin. What this study shows is that change will not be easy. Not only were the teacher prospects in this case able to resist at least some of the aspects of their training, but there were also signs that pointed toward the confirmation of the very practices that need to be changed. However, this research also provides hope in that the trainees met most of the course demands in appropriate ways and appeared to adopt some of the skills and attitudes they were taught. If the Program can succeed in blending the demonstrated commitment of these recruits to help people through sports and fitness activities with new teaching skills and a commitment to produce significant student achievement, then physical education stands a chance. If that happens, the real winners will be the school children fortunate enough to have these students as their future teachers.
EPILOGUE

Late in June of 1984, the Program faculty met to make admissions decisions concerning the students who had applied during the Spring term. Along with members of the full-time Program faculty, Sarah Walker was also present, in her role as coordinator of Program admissions.

Prior to the meeting, the faculty had an opportunity to review the files that each applicant had prepared. Sarah Walker had organized the files and made them available for faculty perusal. At the meeting, the faculty considered about 20-25 applications, including both "old" and "new" students. Of the 39 students who were enrolled in two courses in this investigation, 9 were selected for admission to the Program. Most of the remaining 30 students had assembled incomplete admission files or no file at all, which the faculty took to be indicators that those students were not requesting admission.

Among the "new" students who were admitted were Jane and Meg. Meg was accepted unconditionally. Jane was accepted on the condition that she improve her grade point average to 2.5 or better by the end of the next academic year. As were the other students admitted into the Program, they were informed of the faculty's decision by letter shortly after the meeting.

Five of the eight elite interviewees did not present a complete file and were considered to be non-applicants. Both Carl and Gary dropped out of school during the Spring term. Carl was called back to work full-time and, although he told the investigator that "it was hard
decision," he said he had "to think of his family too" and opted for work over school. He said he hoped to return to school in January when business would probably slow down and he intended to apply to the Program next year. He wanted the investigator to "tell everyone I said 'Hi'" (phone interview, May 30, 1984). The admission files show that Carl did not make application to the Program in Spring, 1985 as he intended.

According to his instructors, Gary dropped out of the University about midway through the Spring term. He told one instructor that he had serious family problems at home, but that he hoped to finish the term. He did not return to school and did not finish his Spring coursework. He has not had any contact with the Program.

Skip and Dan also did not apply for Spring, 1984 admission. In May, Skip told the investigator that he was "still unsure" about the Program. He said he was now less sure about going into physical education and "pretty sure" about going into photography. He found that "phys ed" was something he "didn't like too much;" it was "pretty feeble." "If I went to another college, it might be OK, but not here. . . I learned about half the stuff [already] in high school." It was his judgment that, although "sports is still my main interest," he "may not be cut out for PE." He planned to be back in school in the fall (phone interview, May 28, 1984).

Dan had indicated during the investigation that he intended to wait a year before applying to the Program. He was also the most puzzling elite to the investigator, in that he seemed to be very "in tune" with the Program but still did poorly in class. The investigator
tried to make several contacts with Dan by phone but Dan never returned any of the calls, even though his mother and sister were enlisted to help. Dan did not take any physical education courses during the next academic year and he did not apply, as he had said, in Spring, 1985.

During the Spring (1984) term following the investigation, Art also decided to wait a year before applying to the Program. On one occasion, he said he wanted to concentrate on his track career and see if he "could make it" as a professional athlete. He said he discovered that "nice things" were more important to him than he had realized and he was concerned that a teaching career would not allow him the lifestyle he anticipated. Still, he did not want to give up on physical education, and he figured he would apply in 1985. Art was very successful in track his freshman year (the year of the investigation) when he set new University and conference records, but the next year he sustained a leg injury that was serious enough to curtail most of his sophomore season. In Spring of 1985, he made good on his plan to apply in 1985, and the faculty admitted him to the Program at their meeting in June of 1985.

The eighth elite student, Donna, had been admitted to the Program during the investigation along with several other "old" students. During the 1984-85 year, she cut back her schedule to half-time in anticipation of transferring to another university in the state. She planned to get married in Summer of 1985 and she and her husband would be living near his workplace, in another city. She told the investigator she planned to continue in physical education and obtain her teaching certification.
Meg and June became part of the first group of "new" students and started their first year as official physical education majors in the 1984-85 academic year. Meg established a reputation among Program instructors as someone with a weak, limited background in sport skills. Different instructors also reported that she occasionally tried to duck her coursework responsibilities. Unlike Meg, Jane became known among the staff as hard working, dependable, and cooperative. One instructor remarked that she had "really blossomed" during the year. In spite of regular pain from a chronic back injury, she seldom missed a class and was an active participant in all her coursework.

Along with their classmates, eight college students set out to investigate or enter training to become certified physical education teachers. A year and a half later, four have applied and been admitted to the Program and four have decided against making application. At least two of the eight dropped out of college and another decided to transfer to a different university. Of those who were successful in getting into the Program, one has done good work and another has tried to slide through.

It is now known which students got into the Program; it remains to be seen who will get through and which ones, if any, will become the good teachers that the Program works hard to produce. Here's hoping they succeed.
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APPENDIX A

ANNOUNCEMENT OF RESEARCH PROJECT TO PE 200 & PE 220
Instructor's introduction of researcher to the class. Delivered at initial class meeting.

"I want to introduce you to Tom Steen, who will be part of the class this term. Tom is serving on our teaching staff and he will be conducting a research project on teacher education in physical education during this course."

Researcher's introduction of project. Delivered after instructors' introduction.

"Hi. As (Dr. Stone, Ms. Walker) said, I am going to be joining you in this class this term. I am planning to study how students react to coursework in the physical education "major's" program. I am particularly interested in the student's point of view of physical education and of the events of this course.

I'd like to learn something about your past experiences in physical education and sports and how you came to be interested in this course and the teacher education program in physical education. And I am interested to learn what influence these experiences and interests might have on your coursework here.

I am looking forward to being here throughout the term and learning along with you."
APPENDIX B

PHYSICAL EDUCATION 200 QUESTIONNAIRE
1. In what state(s) did you attend elementary and secondary school? List state(s) for each level.

   **Elementary School**
   **Junior High/Middle School**
   **Senior High School**

2. In elementary school, did you have physical education classes taught by a physical education teacher (not by your regular classroom teacher)?

   Yes _____    No _____

   How many physical education class sessions per week did you have in elementary school?

   0 1 2 3 4 5 sessions per week (circle one)

3. At your junior high/middle school . . .

   What grades did your school have? 5 6 7 8 9 (circle all grade levels)

   How many semesters of physical education classes did you have in junior high/middle school?

   0 1 2 3 4 5 6 7 8 (circle one)

   How many physical education classes did you have per week in junior high/middle school?

   0 1 2 3 4 5 (circle one)

4. At your high school . . .

   What grade levels did your high school have? 9 10 11 12 (circle all levels)

   How many semesters of physical education classes did you have in high school?

   0 1 2 3 4 5 6 7 8 (circle one)

   How many physical education did you have per week in high school?

   0 1 2 3 4 5 (circle one)
5. What is the extent of your past involvement on school sports teams? Please give the following information about which sports you played, when you played, and the number of letters you earned:

<table>
<thead>
<tr>
<th>Sports</th>
<th>Your grade level(s) when you played</th>
<th>Number of letters you earned</th>
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<td></td>
<td>7 8 9 10 11 12</td>
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<td>7 8 9 10 11 12</td>
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</table>

6. Did your high school have an intramural program? Yes ___ No ___

If yes, please answer the following:

On the average, how many sports or activities did you participate in per year? ________________

How many sports or activities did your school's intramural program offer per year? (check one)

1-5 _____ 6-10 _____ 11-15 _____ 16 or more _____

7. What is the extent of your past involvement in non-school sports? Please list the following information:

<table>
<thead>
<tr>
<th>Sport</th>
<th>Sponsoring organization*</th>
<th>Your age when you participated</th>
<th>Number of years you participated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

*Sponsoring organization, e.g., Little League, YWCA, CYO, etc.

8. What is the extent of your current involvement in exercise and fitness activities? Please list as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Average number hours per week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. Have you had experience as a sport instructor or a coach (or as an assistant instructor or coach?) Please list as follows:

<table>
<thead>
<tr>
<th>Activity/Sport</th>
<th>Your role*</th>
<th>Number years of experience</th>
<th>Grade level(s) of students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Role, e.g., instructor, head coach, assistant instructor, gym aide, etc.

10. Have you been involved in other leadership (non-teaching, non-coaching) experience in physical education and/or sport? Please list as follows — write "none" if no experience.

<table>
<thead>
<tr>
<th>Leadership experience</th>
<th>Number years experience</th>
<th>Your grade(s) during participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Have you decided to pursue training to become a physical educator? Select the best choice:

- Definitely yes
- Unsure but probably yes
- Maybe
- Unsure but probably no
- Definitely not

12. What area of professional work are you most interested in?

- Elementary school
- Junior high school
- Senior high school
- College
- Sport business
- Other (please list)
13. Which of the following roles seems most attractive to you as a future physical educator? Rank your first, second, and third choices; write 1 by your first choice, 2 by your second choice, and 3 by your third choice.

physical education teacher _____ school team coach _____
athletic director _____ sports researcher _____
sport business owner/employee _____ other (list) ________

14. Which of the following professional situations seems most attractive to you? Rank you first and second choices only; write 1 by your first choice and 2 by your second choice.

_____ Physical education teacher at the level you prefer and in the subjects you prefer and coach at a level and/or in a sport you do not prefer.

_____ Coach at the level you prefer and in the sport(s) you prefer and physical education teacher at a level and/or in subjects you do not prefer.

_____ Physical education teacher at the level you prefer and in the subjects you prefer and no coaching assignment.

_____ Coach at the level you prefer and in the sport(s) you prefer and teacher of a subject other than physical education.
APPENDIX C

INTERVIEW GUIDE FOR FORMAL STUDENT INTERVIEWS
Introductory questions -- for permission:

A. May I use the information you give me for my research and for publication? I promise you won't be identified -- I won't use your real name and I won't identify the school. (Continue if student agrees.)

B. Do you mind if I use a tape recorder? (Continue if student agrees.)

Major questions and outline for probes:

1. How set are you on going into physical education?
   Decision made
   (If yes) When
   Role, level preferred
   Other career options

2. Where are you in the program now?
   Courses taken in the Program
   Other courses; GPA
   Intent to apply for Program admission

3. Tell me about your past experiences -- especially in physical education and sports -- that might have influenced you to get into P.E. and/or coaching.
   School physical education
   School sports
   Non-school sports
   Teaching and other leadership

4. Which experiences or persons have been the most important in deciding about physical education and coaching?

5. What is your impression at this time of PE 200/220 as far as helping you to become a physical educator?
   How are you doing so far -- quizzes, paper, etc.?
   Do you think the course will help you become a good physical education teacher? Coach?
   Do you find the course hard?
   Study habits. Practice skills. Reading.
   Is the course meeting your expectations for helping you become a physical educator?

6. If another physical education student -- with the same background and ability as you -- asked you for advice about 200/220, what would you say about what you have to do to get a good grade?
7. Why do you think you decided to become a physical educator? (For those who have made positive decisions.)

8. What is your idea of a good physical education teacher and a good coach? What kind of teacher and coach would you like to be?

9. Why do you think you might be good at it?

OR

What personal qualities do you think you have that would help you be a good physical educator?

10. Where did you go to high school?

Size of school, community
Grades received (average)

11. How hard do you work in PE 200 and/or PE 220?
APPENDIX D

SCHEDULE OF FORMAL INTERVIEWS CONDUCTED
January 26  --  Gary
January 31  --  Donna
February 7  --  Carl
February 8  --  Dr. R. Stone
February 10 --  Ms. Sarah Walker
February 16 --  Art
February 21 --  Skip
February 28 --  Meg
March 8    --  Dan
March 13   --  Dr. R. Stone
April 24*  --  Art, Gary and Jane
May 31*    --  Art and Jane

*conducted after the period covered by the field research.
APPENDIX E

SCHEDULE OF CLASS SESSIONS OBSERVED AND CORRESPONDING FIELDNOTES
(Fieldnote codes: A -- PE 200; P -- PE 220; numbers refer to page numbers in field notebooks.)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>PE_200 FN's</th>
<th>PE_220 FN's</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 5</td>
<td>A 1-10</td>
<td>P 1-10</td>
</tr>
<tr>
<td>2</td>
<td>January 10</td>
<td>A 11-18</td>
<td>P 11-25</td>
</tr>
<tr>
<td>2</td>
<td>January 12</td>
<td>A 19-26</td>
<td>P 26-37</td>
</tr>
<tr>
<td>3</td>
<td>January 17</td>
<td>A 27-36</td>
<td>P 38-46</td>
</tr>
<tr>
<td>3</td>
<td>January 19</td>
<td>A 37-42</td>
<td>P 47-61</td>
</tr>
<tr>
<td>4</td>
<td>January 24</td>
<td>A 43-50</td>
<td>P 62-70</td>
</tr>
<tr>
<td>4</td>
<td>January 26</td>
<td>A 51-59</td>
<td>P 71-81</td>
</tr>
<tr>
<td>5</td>
<td>January 31</td>
<td>A 60-68</td>
<td>P 82-90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p. 69 not used)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>February 2</td>
<td>A 70-77</td>
<td>P 91-108</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(pp. 78-79 not used)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>February 7</td>
<td>A 80-89</td>
<td>P 109-122</td>
</tr>
<tr>
<td>6</td>
<td>February 9</td>
<td>A 91-98</td>
<td>P 123-128</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(pp. 129-130 not used)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>February 14</td>
<td>A 99-107</td>
<td>P 131-139</td>
</tr>
<tr>
<td>7</td>
<td>February 15</td>
<td>(at the Lounge)</td>
<td>A 107A</td>
</tr>
<tr>
<td>7</td>
<td>February 16</td>
<td>A 108-116</td>
<td>P 140-152</td>
</tr>
<tr>
<td>8</td>
<td>February 21</td>
<td>A 117-122</td>
<td>P 153-163</td>
</tr>
<tr>
<td>8</td>
<td>February 23</td>
<td>No Class</td>
<td>P 164-175</td>
</tr>
<tr>
<td>9</td>
<td>February 28</td>
<td>A 123-131</td>
<td>P 176-187</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(pp. 132-137 not used)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>March 1</td>
<td>A 138-150</td>
<td>P 1881-97</td>
</tr>
<tr>
<td>10</td>
<td>March 6</td>
<td>A 151-161</td>
<td>P 198-206</td>
</tr>
<tr>
<td>10</td>
<td>March 8</td>
<td>A 162-169</td>
<td>P 207-216</td>
</tr>
<tr>
<td>Final Exam</td>
<td>March 13</td>
<td>A 170-178</td>
<td></td>
</tr>
</tbody>
</table>
AUDIT REPORT

COMMISSIONED BY THOMAS STEEN

FOR HIS INQUIRY INTO

TEACHER SOCIALIZATION IN

PHYSICAL EDUCATION DURING

EARLY TRAINING EXPERIENCES

Submitted by Ellen D. Beck

July 19, 1985
A. INTRODUCTION

The richness of inductive and emergent naturalistic research needs to be supported by evidence of the trustworthiness of the data. Lincoln and Guba (1982) discuss four aspects of trustworthiness to be addressed: confirmability, credibility, dependability, and applicability of data and research findings.

Lincoln and Guba (1982) suggest that an audit of naturalistic inquiry by an outside critic can help establish or verify the confirmability and dependability of the research. Information on audits of naturalistic research is sparse, although Lincoln and Guba (1982) provide some extremely useful guidelines for audit procedures; other than this valuable source, little has been written to guide naturalistic researchers and research auditors in education. Those of us who engage in such activities hope to build a body of information to assist future researchers. This audit is a serious attempt to critique naturalistic research and may be viewed as a step in the direction of refinement of the process.

In December 1984 Thomas Steen asked me to conduct an audit of his dissertation research on the socialization of physical education students during early training experiences. The audit was to take place in Spring or Summer 1985. Although I had not conducted a research
audit before, Steen and I had similar training in naturalistic research and we share an appreciation of this type of inquiry. I am utilizing naturalistic methodology in conducting my own doctoral dissertation research. This audit, it is hoped, will be of value to Steen, to me, and to the practice of naturalistic research.

On July 1, 1985, I received Steen's research outlines, field notes, and Chapters 1, 3, 4, and 5 of the dissertation. Using the Lincoln and Guba (1982) guide for audits, "Establishing Dependability and Confirmability in Naturalistic Inquiry Through an Audit," I conducted a review of Steen's work. This report includes a description of the audit process. The report is divided into the following sections:

A. Introduction

B. The Audit Procedure

C. The Auditor

D. Organization of the Report

E. Audit Work and Auditor Judgements
   1. Audit Trail
   2. Completeness of Audit Trail
   3. Methodology-Comparison of Raw Data to Final Product
   4. Shifts
   5. Logic of Inferences

F. Conclusion

G. Recommendations

References and Resources
E. THE AUDIT PROCEDURE

The essential purpose of the audit was to establish that the research was carried out in a reasonable manner (Lincoln and Guba, 1982, p.4), and to accomplish this the auditor had two main tasks:

1. To review the inquiry processes to be certain that they fell within the norms of "good professional practice," in order to address the issue of dependability of research findings.
2. To review the inquiry products to be certain that they could be substantiated from the data collected, in order to establish the confirmability of the findings.

Establishing the credibility and applicability of the research were beyond the purpose of this audit.

Lincoln and Guba (1982) list eight steps in the audit process, and these steps were followed for this audit with some adaptations as required by the nature of Steen's research. These eight steps are:

1. The decision to do the audit
2. Acquisition of the inquirer's report and all portions of the audit trail (all notes, transcripts, documents, etc.)
3. Determination of whether or not audit trail is sufficiently complete to perform audit
4a. Comparison of procedures to problems addressed
4b. Comparison of raw data to final product (written narrative) and a check of unitizing and categorizing systems and labelling procedures
5. Description of the results from both comparisons in step 4
6. Notation of shifts in methods of deployment of personnel, and judgments about context and problem
7. Notation of whether inferences flow logically from data
8. Certification in the final report of what is found.
C. THE AUDITOR

Lincoln and Guba (1982) describe the research audit as somewhat analogous to a fiscal audit, but while a fiscal audit is conducted by a certified professional there is no specific certification for a naturalistic research auditor. Lincoln and Guba (1982) suggest that the auditor be a professional peer of the inquirer/researcher.

The auditor for Steen's research is a doctoral candidate in Adult Education at The Ohio State University. She earned baccalaureate and Masters degrees in Psychology and has taught at the college level for sixteen years. One of the cognate areas in her doctoral work is research including both quantitative and qualitative approaches. Her dissertation research is naturalistic in design.

D. ORGANIZATION OF THE AUDIT REPORT

This report follows the audit process suggested by Lincoln and Guba (1982). Each step of the process is described. The auditor's comments and judgments about the acceptability of the research procedures conclude each section.

E. AUDIT WORK AND AUDITOR JUDGMENTS

1. Audit Trail
The Audit Trail includes evidence of the inquirer's work. It is this documentation with which the auditor works. On July 1, 1985, I received from Steen the following evidence of his research:

- Chapters I, III, IV, and V of his dissertation, typed. Chapter II (Literature Review) was not available.

- Verbatim transcripts of ten interviews, some typed and some hand written. The transcripts were labeled by date, location of interview, and name of interviewee. The lines of the transcript pages were numbered.

- Fieldnotes, handwritten, of observations in two physical education courses. The fieldnotes, written on pages with wide left-hand margins and numbered lines to facilitate notations, covered each class meeting of the two courses during Winter Quarter 1984.

- A reflexive journal, handwritten, of Steen's thoughts, feelings and perceptions related to the research activity during Winter Quarter 1984. The journal entries were dated.

- An activity log of research related
activity during Winter Quarter 1984.
The log contained dates, times, activities, and locations.
- assorted plans and guides for interviews and analyses of data.
All the above mentioned materials remained in my possession until the completion of the audit on July 19, 1985. After I began the audit process I requested and obtained information about Steen's coding and categorization systems. I did not obtain:
- Chapter II (Literature Review) of the dissertation
- audio tapes of recorded interviews
- grade reports of the two observed classes

2. Completeness of the Audit Trail
I read and reflected on all of Steen's data and inquiry products in my possession. It is my opinion that Steen was thorough in implementation of the research methodology and that the audit trail is sufficient to carry out an audit. A clearer key to the system of categorization of data would have been helpful, but the lack of a key
did not detract greatly from the audit process. I reasoned out the system and obtained clarification from Steen.

3. Methodology - Comparison of procedures to Problems

Lincoln and Guba (1982, p. 17) state that

"the purpose of this step is to discover whether the inquiry problem was one which suitably might be addressed by naturalistic inquiry, and whether a naturalistic inquiry was in fact carried out."

To assess the propriety of fit between the research problem and the method of inquiry I reviewed the research questions and the procedures used in gathering data to answer the questions.

Steen's research stemmed from the desire and need to improve recruitment and training of physical education teachers. As a step toward that end, Steen strove to expand understanding of the process of socialization of physical education teacher candidates during their first experiences in formal teacher education. His two interrelated research goals were:

1. "to investigate the characteristics
and orientations of the recruits and to describe personal qualities and past experiences that influenced their decisions to enter physical education teacher training, and

2. to investigate the experiences of the recruits in their formal professional coursework, describe their behavior during the training experiences, and their perceptions of the impact of those experiences on their professional roles as physical educators. (Steen, Ch.I, p.7)"

The goals are reflected in the two main research questions: "1) Who are these students?, and 2) What went on during the training experiences? (Steen, Ch. I, p.7)"

Steen's goal, then, was to build a description of the students and selected parts of their training experiences. He used the naturalistic research techniques of a questionnaire, participant observation, interviews, and document review to gather the descriptive data. It is my judgment that these research methodologies are particularly useful or fitting to derive answers to the research questions. The research is intended to be emergent and
inductive; the research techniques, including conceptual analysis, facilitate emergence and induction by allowing for reflection, new perceptions, and testing of new ideas, thoughts and questions throughout the research process. I believe that the methodologies Steen selected are the most useful among those available to achieve his goals.

4. Methodology - Comparison of Raw Data to Final Product

Lincoln and Guba (1982) suggest that there are two parts to the auditor's task in the comparison of raw data to the final product; the data analysis systems should be checked and the raw data should be compared to the final product.

Data from the Steen's questionnaire and the grade reports were categorized and analyzed straightforwardly according to the questions asked. The categorization systems for analyzing data from field notes and interviews were derived from the research questions. (Steen, Ch. IV, p.11) Steen developed descriptions of the student interviewees using categories which allowed for comparison as well as individual uniqueness to emerge. Each profile of the
elite interviewees was developed by lengthy combing of the interview protocols for data, and then similarities and differences among the interviewees emerged as the data for each question was sorted. All of the categories seemed logical and inclusive enough to obtain information useful to Steen.

Data from fieldnotes and from interviews also enabled Steen to develop categories of student tasks and socializing experiences in the first training experiences (classes) of the potential physical education teachers (Steen, Ch. 4, p. 80). For example, student behaviors were derived again from combing the fieldnotes. Some characteristics as well as individual behaviors became apparent; examples include compliance, avoidance, and change strategies (Steen, Ch. IV, pp. 81-90). These categories of behaviors and responses of the students seemed logical and reasonable, and certainly seemed to be supported by the information in the fieldnotes and interviews. The data are available for additional study and analysis, so that alternate interpretations could emerge from
further study.

In order to compare the raw data to the final product I made twelve "example checks" in which I spot checked randomly selected data samples that Steen reported in Chapter IV -Findings, and Chapter V - Interpretations, Conclusions and Implications. I approached examination of each example with three questions:

1. Was the example documented in the data?
2. Was the example accurately reproduced?
3. Was the example a reasonable example of the phenomenon in question?

The first two questions addressed the dependability of the selected samples and the last question addressed the issue of their confirmability.

I found that each of the twelve examples was supported in the raw data and that each was reported accurately. According to my understanding of the research problem and the research questions, I judged that each was appropriate and reasonable as illustration of the phenomenon described. Lack of time prevented further examination of specific examples, but from reading all the data and the interpretations
I believe that Steen was scrupulous in his reporting and his descriptions. The interpretations he made seemed well justified from the data presented.

5. Shifts

Lincoln and Guba (1982) suggest that the auditor note shifts in methods of inquiry and interpretation during the course of the research and judge "whether or not the shifts were supportable or sensible in view of the data collected" (p. 18). Steen made only one shift in methodology, the effect of which was to enhance research results. He intended to gather information about each of the elite interviewee's teacher/coach orientations as one indication of the student's professional socialization. Steen discovered early in the process of data gathering that teacher/coach orientation was not easily judged, and so the interviewee's school sport experience was substituted as a variable to be considered. Previous research, cited by Steen in Chapter III, provides support for the linkage of school sport experience and role orientation in physical education.
Shifts in perception and interpretation are part of emergent naturalistic research. Such shifts in Steen's work seemed to flow logically and sensibly.

6. Logic of Inferences

Lincoln and Guba (1982) suggest that the auditor judge whether or not the researcher's inferences are logical and seem to emerge reasonably from a study of the data. They suggest that this is especially sensitive because the auditor may be able to track the audit trail process but may not be able to come to insights similar to the researcher's. In any case Lincoln and Guba (1982) suggest that the auditor should be able to perceive that the researcher's inferences appear to be logical.

I do not have background information about physical education, professional socialization, or teacher education. However, as I reviewed Steen's data and reasoned through his interpretations, the flow seemed coherent and logical, and certainly seemed to follow the procedures. The issues Steen studied seem important to anyone concerned with improvement of teacher training, and the methodology Steen used and
subsequent logical analyses and inferences seem to produce useful information. I will leave it to his doctoral committee to judge the logic of his inferences in the light of their professional expertise.

F. CONCLUSIONS

It is my judgment that Steen's study of teacher socialization in physical education during early training experiences was a thoughtfully, logically carried out piece of naturalistic research. I conducted the audit trail examining all of Steen's fieldnotes, logs, outlines, and dissertation in my possession and conclude that

1. The research and the final report are structured in a logical and reasonable fashion
2. the processes as well as the products of the research are consonant with accepted naturalistic research practice, and
3. the conclusions Steen draws seem justified or warranted from the data presented.

In addition, Steen seemed to be meticulous and thorough in his descriptions and in reporting the raw data in the dissertation via, for example, extensive use of verbatim quotes from the interviewees, and this process allowed the reader to be
part of the observation process in a vicarious way.

G. RECOMMENDATIONS

Conducting the audit of Steen's research was an extremely helpful experience to me as a fellow naturalistic researcher. It assisted me in crystallizing some of the issues and procedures around my own research. The audit process also crystallized some problems with such audits as they are now performed.

Clear guidelines for the process, starting with Lincoln and Guba's excellent base, need to be expanded and refined so that auditors can proceed with more clarity.

Perhaps those of us who have conducted such audits and those who review the audits can cooperatively build a more sophisticated and refined system for documenting the credibility, confirmability, dependability and applicability of naturalistic research.
REFERENCES AND RESOURCES


