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**Classroom Environments of Coaching and Non-Coaching Teachers
at a Large Midwestern High School**

A Thesis

**Presented to the
Department of Teacher Education
and the
Faculty of the Graduate College
University of Nebraska
at Omaha**

**In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
University of Nebraska at Omaha**

by

Lance L. Raabe

December 1999

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CLASSROOM ENVIRONMENTS OF COACHING
AND NON-COACHING TEACHERS
AT A LARGE MIDWESTERN HIGH SCHOOL

Acceptance for the faculty of the Graduate College,
University of Nebraska, in partial fulfillment of the
requirements for the degree Master of Arts,
University of Nebraska at Omaha.

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Date November 5, 1999

CLASSROOM ENVIRONMENTS OF COACHING AND NON-COACHING TEACHERS AT A LARGE MIDWESTERN HIGH SCHOOL

Lance L. Raabe, MA

University of Nebraska, 1999

Advisor: Dr. Donald Grandgenett

This descriptive study examined the classroom environments of coaching and non-coaching teachers. The purpose of examining factors involving classroom environments is to help determine what the best possible learning environment is for both teachers and students. In this study, high school teachers and teacher-coaches were asked to give their perceptions of the environment of a single class period during the school day. Research done in this area has focused on the perceptions of students and has subsequently used and compared this data to describe the "ideal" and "real" classroom environment. This study, comparing teachers and teacher-coaches, used the Short Form version of the Classroom Environment Scale. This instrument contains 24 questions divided into 6 dimensions. The subjects of the study were asked to give "yes" or "no" responses to questions contained within each of the dimensions: involvement, affiliation, teacher support, task orientation, order and organization, and rule clarity. Data from the study was analyzed and the following divisions of the sample groups were compared: coaches and non-coaches, male and female coaches, coaches with differing years of teaching experience, and coaches with differing levels of academic advancement. The mean scores of coaches and non-coaches were calculated and all groups were compared according to each of the six dimensions of the study. Results of the study

showed that the perceptions related to classroom environments of coaching-teachers in regards to teacher support and classroom affiliation are higher than the perceptions of non-coaching teachers.

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Chapter I: The Problem

There are numerous factors that affect a students' performance in school. Certainly, commitments relating to work, family, and friends...as well as involvements in extracurricular and community projects affect young people's abilities to succeed during their high school years. A great deal of time has been devoted to examining factors, such as these, as educators continually struggle with the question, "Why do some students succeed, while others fail?"

Because these "outside" factors are often uncontrollable, a more realistic approach may involve looking at those factors "inside" the school building which impact our students each day. The "classroom environments" within a school may be an excellent place to start.

The socio-psychological environment of classrooms has been researched extensively in the past several years (Waxman, 1991). Attempts have been made to create links showing causality between the classroom environment and the achievement and satisfaction of both teachers and students (Raviv, Raviv, & Reisel 1990). Much of the work completed in this area has focused around two programs initiated by Herbert Walberg and Rudolph Moos (Fraser, 1980). These early programs focused on the environments of correctional institutions, therapeutic groups, and research completed at Harvard in the late 1960's (Fraser, 1980).

The study of individual classroom environments has helped educators and researchers understand the importance of understanding the "social climates" within a school (Maloy & Seldin, 1983). Because of this, numerous high-inference measurement

devices have been created to analyze individual classroom environments (Raviv, Raviv, & Reisel, 1990). One of the most widely used measurement devices has been the Classroom Environment Scale (CES) developed by Moos and Trickett (Raviv, Raviv, & Reisel, 1990). Manderscheid, Koenig, & Silbergeld (1977) wrote that the Classroom Environment Scale includes three major domains of environmental dimensions: personal development, which accounts for the perceived level of personal and instructional goal attainment permitted within the classroom; system maintenance, which refers to the perceived stability and authoritative quality of the classroom; and relationship, the perceived quality of student involvement in classroom activities.

A great majority of research done on classroom environments has focused on students' perceptions of junior high and high school classrooms (Raviv, Raviv, & Reisel, 1990). These studies have shown "meaningful differences between classes following different curriculum materials and interesting variations in classroom environments according to class size, subject matter and grade level" (Fraser, 1984, p. 336). Additional studies have revealed that "emphasis on supportive relationships and student participation in a well organized classroom promote student morale, interest in the subject matter, and a sense of academic self-efficacy" (Raviv, Raviv, & Reisel, 1990, p. 142).

Fewer studies, however, have focused on the teacher's perceptions of classroom environments (Raviv, Raviv, & Reisel, 1990). Undoubtedly, the teacher's role in the educational process is an important one. In selected studies, the perceptions of teachers have only been used as a means of comparing teachers to students (Raviv, Raviv, &

Reisel, 1990). In these studies, the “preferred” environment of teachers was matched against the “preferred” environment of the students (Fraser, 1984).

VanDeraa and Schug (1993) explored the classroom environments of coaching and non-coaching teachers. Basing their study on Fouts’ 1989 investigation of coaching and non-coaching social studies teachers, they attempted to examine the relationship between a teacher’s coaching status and his or her respective classroom environment through the responses and perceptions of the classroom students.

This study focuses on the teacher’s role in establishing the classroom environment. In this study, the effort has been made to compare the classroom environments of teachers who coach and teachers who do not coach.

In the present study, coaching and non-coaching teachers at a large, Midwestern high school were compared and contrasted according to their responses to the Short Form of the Classroom Environment Scale. The underlying factor, again, in this study was the coaching status of teachers. By learning more about the perceptions of teachers who coach and teachers who do not coach, it may be possible to look more closely at those factors which produce either positive or negative experiences in today’s classrooms.

Problem Statement

The study of classroom environments has received more and more attention in the past several years. The role of the teacher, in creating the classroom environment, is continuing to be recognized as a significant contributing factor. Given the fact that numerous studies have been done concerning classroom environments, that teachers play

a vital role, and that the perceptions of coaching teachers have yet to be studied and compared with the perceptions of non-coaching teachers, there appears to be sufficient reason to research this aspect of the classroom environment.

Definition of Terms

Classroom Environment: The shared perceptions of teachers as measured by the Short Form of the Classroom Environment Scale. The Classroom Environment Scale was developed by Rudolf Moos at Stanford University. The original scale is a 90 item high inference measurement device. The shortened version of the scale (as used in this study) consists of 24 true/false questions. This instrument measures six dimensions of the classroom environment: Involvement, Affiliation, Teacher Support, Task Orientation, Order and Organization, and Rule Clarity.

Coaching Teachers: Teachers who have head coaching or assistant coaching responsibilities at the school participating in this study.

Non-Coaching Teachers: Teachers who do not have head coaching or assistant coaching responsibilities at the school participating in this study.

Research Questions

In order to examine the relationship between a teacher's coaching status and his or her classroom environment, the following research questions were formulated:

1. How do the classroom environments of coaching and non-coaching teachers compare at a large, Midwestern high school?

2. How do the classroom environments of male and female coaches compare at a large, Midwestern high school?

3. How do the classroom environments of teacher coaches at a large, Midwestern high school compare according to years of teaching experience?

4. How do the classroom environments of teacher coaches at a large, Midwestern high school compare when considering the teacher-coach's level of academic advancement?

Background/Significance of the Problem

Today's teachers are being asked to take on many roles. They are given the responsibility to serve as: advisors, mentors, peace-keepers, counselors, and coaches. These "coaching-teachers" often find themselves having to balance a regular teaching schedule with the responsibilities of coaching one or more (usually two to three) sports each school year.

The perception of the "teacher-coach" is often discussed in today's high schools. Often, they are viewed as "coaches... who teach." Certainly, the added responsibilities of coaching requires added commitment in the forms of both time and energy. Those in education may wonder if this commitment impacts the classroom environments of teacher-coaches.

Fouts (1989) and Van Deraa & Schug (1993) attempted to answer this question in regards to social studies teachers. Their studies provided mixed results, but invited further discussion and research about this "classroom environment" question.

The purpose of this study is to examine the differences in classroom environments of coaching and non-coaching teachers at a large, Midwestern high school. Certain aspects of both Fouts and Van Deraa & Schug's studies will have been replicated

in this study. However, the goal of this study has been to look beyond the social studies classroom and, instead, examine the classroom environments within a single, school building.

Chapter II: Literature Review

A relationship exists between academics and athletics. Most would agree that athletics has filled many of the voids left in the lives of many of today's youths. Children in this country are not only looking for role models, but for direction, organization, discipline, acceptance...and success. Sports, and its' effects on high school students in this country, has become a worthwhile topic of discussion (DeVoe & Carroll, 1994).

A close examination of the role that athletics plays on students should encompass several different areas. Most research, in this area, has focused on the positive aspects that sports brings to our schools. These studies usually attempt to show causality between participation in athletics and its' affect on academic achievement (DeVoe & Carroll, 1994). Also, analogies have been drawn between the "sport" and the "sport of learning" (Passaro, 1996). Athletes, like students, need multiple opportunities to receive "appropriate instructional opportunities...regular diagnostic and prescriptive feedback...and increased practice time" (Passaro & Myers, 1996, p. 52).

The role of the coach, however, has received less attention during this discussion. Many coaches are asked to fulfill the dual role of teacher-coach. This situation has prompted a great deal of discussion about the impact that coaching responsibilities has on one's ability to teach effectively (Massengale, 1981). It may be worthwhile to look more closely at the classroom environment of coaches, to examine how their role as classroom teachers affects the achievement and success of students.

High School Athletics

Researchers have cited numerous examples showing the impact that participation in sports has on high school students (DeVoe & Carroll, 1994). Studies have mainly focused on: the importance of athletics, its' advantages and disadvantages, the relationship between athletics and academics, perceptions of student-athletes, and the philosophy of sports as it relates to education.

The Importance of Athletics

High school athletics play a significant role in society (Jable, 1992). They have filled inherent needs of Americans since their emergence in our culture over 100 years ago (Jable, 1992). For many students, athletics provide both direction and organization in a sometimes "disorganized" time of their lives. Michel & McCoy (1995) stated that, "high school athletics is a mechanism of socialization by nurturing discipline, order, obedience, cooperation, and team work" (p. 81).

Advantages and Disadvantages

Participation in athletic programs during one's high school career has its' advantages and disadvantages. The most obvious drawback is the immense time commitment required of each athlete. Goldberg (1991) found that the time investment necessary for today's high school athlete may somehow usurp the time required for young athletes to develop their identity and personal competence. Also, athletes are often viewed as a distinct group or "class" within the school. Sometimes perceived as the "overpriveleged minority", athletes are often labeled, "dumb jocks" (Michel & McCoy, 1995). Barrett & McCoy (1995) stated that, "Those opposed to high school

athletics programs feel that too much emphasis is placed on victory, and that the costs and staffing disputes resulting from athletics are balanced by a benefit to a small minority of students” (p. 6).

However, most research supports the idea that the advantages of high school athletics far outweigh any negative factors associated with a student’s participation in sports. Some believe that an individual’s participation in sports can be linked to several positive outcomes, including: feelings of self-reliance and self-confidence, the ability to lead, and the ability to set goals required for success in athletics and academics (Goldberg, 1991). Barrett & McCoy (1995) studied the perceptions of high school student-athletes using both a teacher and student driven survey. The results of the survey showed that 75 percent of those participating felt that the school’s atmosphere was aided by athletics (Barrett & McCoy, 1995). Ninety-five percent of the teachers participating in the study felt that sports were beneficial to the school in general (Barrett & McCoy, 1995). Michel & McCoy (1995) interviewed student-athletes and found that athletics provide a source of enjoyment and personal fulfillment as well as a chance to develop socially with classroom peers.

Academics and Athletics

Educators seem to be interested in exploring the relationship between participation in athletics and academic achievement. Most studies have shown a positive correlation between sports and school. In Michel & McCoy’s (1995) interview study, the following question was asked of the participants, “Does anything that you learn in sport help you in the classroom?” Responses included all of the following: dedication,

learning to focus, never giving up, and learning about teamwork and how to relate to other people (Michel & McCoy, 1995). These findings paralleled Goldberg's (1991) discovery that athletics positively influence an individual's ability to lead and set goals. Some schools have gone so far as to implement the most positive aspects of sport into their curriculum. The American Sports Institute (ASI) developed a year-long course entitled, "Promoting Achievement in School through Sport" (PASS) to weave aspects of sport culture into the academic environment of students ("Promoting Achievement", 1996). A four-year study ensued whereby students who completed the PASS class were compared to a control group of students who did not take the class. After comparing the grade point averages of all students, it was confirmed that "twice as many PASS students as control group students increased their grades by a full grade point or more during the school year" ("Promoting Achievement", 1996, p. 9).

Teaching and Coaching

The impact of athletics on education has been well researched and discussed. However, the role of the coach, in the educational process of students, has received less attention. Many of today's teachers find themselves having to balance their teaching schedule with extracurricular responsibilities including coaching. Odenkirk (1986) described the fact that the expansion of athletic programs in recent years by increased female participation has also helped to contribute to a shortage of coaches at secondary schools. Due to this shortage of coaches, coaching responsibilities have been given to an increasing number of teachers from academic areas of many secondary school programs, and it is probably a trend that will continue into the future (Odenkirk, 1986).

With this increased participation of teachers as coaches, researchers are taking a closer look at the impact teacher-coaches are making on the educational lives of their classroom students. Fouts (1989) studied the classrooms of coaching and non-coaching social studies teachers and suggested that “Although teachers’ involvement with students in sports activities may enhance relationships between teachers and student athletes, the time commitment and additional pressure may adversely affect or otherwise alter those teachers’ classroom performance” (p. 117). Leading to more discussion about the role of the teacher-coach has been the idea of the academic versus the coaching “clique” (VanDeraa & Schug, 1993). Many educators would agree that coaches are often viewed by others as focusing primarily on their coaching responsibilities as opposed to their teaching duties. Fouts (1989) writes, “Popular school folklore about social studies teacher-coaches at the secondary level presents an uncomplimentary stereotype. They are often perceived as caring more about coaching than about teaching and consequently as putting more energy into that part of their work” (p. 117).

The Teacher-Coach

For administrators, finding the right person to fulfill the role of teacher-coach is often a formidable task. Frost (1995) writes that “School executives say they are caught in a squeeze between the surge of popularity in athletics, especially among girls’ sports, and a dearth of qualified coaches” (p. 25). In addition, several factors are being identified as reasons for the coaching shortage: an aging faculty, the gender equity promoted in Title IX, a shrinking pool of new teachers willing to coach, the explosive growth of “new” sports, such as soccer and girls’ fast-pitch softball, meager budgets,

and a hyper-competitive attitude among many students and parents (Frost, 1995, p. 25). Schools are now having to resort to “walk-on” coaches to fulfill team requirements in schools (Frost, 1995). Obviously, having coaches readily available to students during the school day is advantageous for everyone involved in high school athletics.

Analogies may be drawn between teaching and coaching. Much can be learned from transferring theory into practice from one area to the next. Asthalter (1992) said, “The unique opportunity for modeling and nurturing individual and team character that occurs in a coach-player relationship is a rich resource for teachers... A good coach loves the game” (p. 6). Analogously, “A good teacher not only loves to teach, she also loves to learn (Asthalter, 1992, p. 6). Both teachers and coaches must “guide their team through plays, model calm and confidence, build on individual and team strengths, and celebrate victories with genuine joy” (Asthalter, 1992, p. 6). Undoubtedly, teachers must learn to “coach” as they provide their students with time to learn and make appropriate instructional opportunities available (Passaro & Myers, 1996).

This philosophy is being used in hiring practices as more and more administrators are seeking teachers who can fulfill multiple roles. One administrator stated openly, “We give strong consideration to the well-rounded applicant. We want teachers who are involved in school life in addition to being a teacher. When you have a good coach, you have a good teacher” (Frost, 1995, p. 26).

Teacher-Coach Role Conflict

An obvious source of strain and tension, for teacher-coaches, are the dual roles they must fulfill. The expectations for both roles are usually quite high, and

teacher-coaches are often forced to devote more effort towards one area, usually coaching (Figone, 1994). This role conflict certainly must be discussed when considering how the classroom environments of teacher-coaches compare to those of non-coaching teachers.

According to Templin (1980), "Occupational role conflict occurs when the role occupant perceives his or her role as containing certain aspects of incompatibility" (p. 1). Due to an inherent conflict, the prospect of becoming both a successful teacher and coach is difficult. Massengale (1981) discusses, in length, the idea that "their occupational roles and actual job descriptions vary greatly from what the educational organization expects from other teachers" (p. 23). In other words, teaching expertise does not make up for losing records...and teacher-coaches are rarely fired for deficiencies in the classroom (Massengale, 1981).

Workload

An obvious starting point when examining the teacher-coach role conflict is the increased workload. Teacher-coaches are under a great deal of pressure to perform consistently well both on the field and in the classroom. Chu (1981) discussed the workload at the higher education setting and found that teaching consumes 23.6 hours of male and 27.9 female hours per working week during a non-coaching season, and males devote 65.3 hours and females 50.1 hours to the combined duties of teaching and coaching during an athletic season.

Areas of Conflict

Templin (1980), surveyed a group of teacher-coaches using the Coaching Problem Survey. The instrument measured role conflict according to the following areas: value conflicts (a comparison between expected values held by coaches and those held by society), status (the idea that coaches are treated as less than equal within the educational realm), self-other conflicts (conflicts between an individual's desire for career advancement and the will to act in the best interest of the athletes), load conflict (the work load of both coaching and teaching), and role skills (those required for both teaching and coaching) (Templin, 1980). Using a Likert scale, the data indicated that "teacher-coaches judged value, status, and load conflicts as areas of greatest concern for the teacher-coach" (Templin, 1980).

Role Definition

Additional research has pointed to a lack of role definition as a source of frustration for teacher-coaches. Massengale (1981) described the situation as "a confused teacher-coach supervised by a confused administrator"(p. 23). Often, it seems, decision-makers within the school building are unable to "differentiate teaching from coaching while expecting competent performances in both" (Massengale, 1981, p. 23).

Primary Responsibilities of Coaches

Not surprisingly, many teacher-coaches view their primary responsibilities in education as coaching and winning (Massengale, 1981). They often view coaching as their true occupation, and due to issues of "occupational security", they may prioritize coaching over teaching whenever necessary (Templin & Washburn, 1981). Many

institutions of higher learning are dependent upon successful athletic programs for the continued success of their schools. Teacher-coaches in these situations may show “indifference to the academic achievement of their classroom students...especially when course content requires extensive preparation and updated knowledge” (Figone, 1994, p. 31). Figone (1994) states directly that, “The teacher-coach role conflict and the institutional redefinition of the roles of teacher-coaches have a direct influence on students and student-athletes” (p. 31).

For teacher-coaches, achieving success both in and out of the classroom seems to be an arduous task. Templin (1980) best summarized this apparent conflict when he wrote, “If the role of the teacher demands that the individual possess the skills and inclinations needed to deal with relatively large numbers of clients who are unmotivated, often hostile, relatively heterogeneous for ability and present under compulsion AND if one’s simultaneous role as coach demands that he or she possess the skills and inclinations required to deal with relatively small numbers of clients who are highly motivated, relatively homogeneous for ability and present as volunteers, THEN it follows that the two roles may not be equally attractive or compatible and when linked together, it is not unexpected that one would become the preferred role, leading perhaps, to dysfunction in the non preferred role” (p. 1).

Classroom Environments

Most educators would agree that the environment in which both teaching and learning occur is a critical factor for students. Trickett & Moos (1973) stated that “The classroom is a critical locus for student interpersonal and educational development, and

the notion that classrooms have distinct atmospheres or climates that mediate this development has been in the working vocabulary of educators and researchers for years” (p. 94). Some researchers have even proposed “that experiences within a school, such as contact with outstanding teachers and particular classes that create intensive individual interest, may have more influence than differences in overall school programs” (Moos, 1979, p. 136).

Numerous studies have investigated the role of the classroom environment as it relates to academic and social success for students. Olson (1971) found that the subject taught, class size, grade level, and type of teacher had a significant impact on the quality of education for students. Ackerson (1967) examined the relationship between a student’s rural or urban residence and his educational status and found that students in urban settings are almost always better educated than students in rural settings.

It is within this “classroom environment” idea that the discussion of both teachers and coaches continues. To effectively evaluate the concept of classroom environment as it relates to this particular study, the following topics will be discussed: defining the classroom environment, factors affecting the classroom environment, previous studies concerning the classroom environment, measurement instruments, the classroom environment scale, and studies relating classroom environments with teacher-coaches and teachers.

Definition

According to Moos (1979), the classroom environment can be defined in terms of the shared perceptions of persons in that environment. The classroom environment

(CE) pays particular attention to the high school classroom and “conceptualizes that environment as a dynamic social system which includes not only teacher behavior and teacher-student interaction but student-student interaction as well” (Trickett & Moos, 1973, p. 94). This approach attempts to encompass the “shared perceptions” of all of the classroom participants (Trickett & Moos, 1973).

Factors Affecting the Classroom Environment

Classroom environments can play a significant role in the educational lives of all students. Researchers have examined how different factors relate to classroom environments and subsequently, how students were either positively or negatively affected by those factors. Research concerning these “factors” as they relate to this study deserves recognition at this time.

Randhawa & Michayluk compared the learning environments of rural and urban classrooms (1975). They found that “Rural classrooms are characterized by cohesiveness, cliqueness, disorganization, and competitiveness...whereas, urban classrooms are characterized by environment, difficulty, and satisfaction” (Randhawa & Michayluk, 1975, p. 277). The study used a standardized classroom environment instrument and concluded that “Rural classes manifest pupils’ perceptions of the learning environment which are not facilitative of productive learning outcomes. The urban classrooms were perceived to provide sufficient challenge to the learners, to be abundantly equipped, and to be satisfying” (Randhawa & Michayluk, 1975, p. 277).

Myers (1995) studied how a teacher’s use of affinity-seeking strategies relates to student perceptions of classroom climate. In his study of undergraduate students at a

large Midwestern university, he found that a significant relationship did exist and that affinity seeking strategies had a positive effect in the classroom (Myers, 1995).

According to Myers (1995), an important aspect of classroom climate “rests on how well teachers establish an environment in which mutual interaction is valued, encouraged, or supported” (p. 193). Of the teaching strategies used to correlate with classroom climate, “supportiveness” was viewed as the most important (Myers, 1995). The results of the study showed that “teachers who engage in the use of the supportive strategy may encourage student interaction, engage in the use of confirming responses, provide positive reinforcement, and discourage student devaluation” (Myers, 1995, p. 195).

Several other studies have focused on learning and classroom environments.

Yamamoto, Thomas, and Karns completed a study focusing on the relationship between subject matter and classroom environment (1969). Anderson (1971) examined the relationship between teacher sex and course content as they relate to classroom learning climates. Finally, Fouts (1989) and Vanderaa & Schug (1993) studied the status of teachers as coaches and found that relationships do exist between teacher-coaches and their classroom’s environment. The findings of their studies will be discussed at the conclusion of this review.

Measuring the Classroom Environment

Assessing the environment in which students learn is often a difficult task. Educators, however, are learning more about the impact the classroom environment is having on today’s students. Because of this, researchers have created numerous methods for evaluating classroom environments.

Low and High Inference Measures

Measurement devices used to study classroom environments are referred to as either low or high inference (Nielson & Kirk, 1974). The responses to surveys, questionnaires, or observations (of specific measurements) are categorized according to the level of input from the subjects of the study (Nielson & Kirk, 1974). Low inference responses “tap the directly observable, specific, explicit phenomena of the environment, such as counting the number of teacher statements or asking a student if his teacher ever has them work together in subgroups of the class” (Nielson & Kirk, 1974, p. 58). High inference measures, on the other hand, “ask the respondent to make a judgment about the meaning of what is going on around him and of what he thinks or feels about it” (Nielson & Kirk, 1974, p. 58).

Low Inference Measures

Low inference measures can be traced to Getzel and Thelen’s Classroom as a Social System Model (Nielson & Kirk, 1974). In this model, the classroom climate “develops as a result of the teacher’s transactional style, that is, the way in which he or she balances role requirements and personality needs within the classroom” (Nielson & Kirk, 1974, p. 58). Several low-inference measures have been used to assess classroom environments. Withall (1951) studied the “climate index” and directed that teacher statements be categorized as either “teacher-centered” or “learner-centered”. Medley & Mitzel (1958) developed the Observation Schedule and Record which classified nonverbal behavior and the social structure of the classroom into three schemes: emotional climate, verbal emphasis, and social organization. The Interaction Analysis

System (IA), however, has been the most widely used low-inference classroom measurement instrument. Developed by Flanders, the IA is a system of coding for ten specific classroom events: accepts feeling, praises or encourages, accepts or uses ideas of student, asks questions, lecture, giving directions, criticizing or justifying authority, student talk-response, student talk-initiation, and silence or confusion (Nielson & Kirk, 1974). Low-inference measures have drawn criticism, in the past, because of the heavy costs associated with using these instruments in large-scale research (Fraser, 1978).

High Inference Measures

High inference measures have become a more popular method for examining classroom environments. They're based on Murray's Need-Press Model and are often based on students' perceptions of their classroom climate or environment (Nielson & Kirk, 1974). Murray's model proposes that "The demands, sanctions, and expectations within an environment (environmental press) give a social system its' particular climate" (Nielson & Kirk, 1974). Several high-inference measures have received attention in educational research.

My Class Inventory (MCI)

The My Class Inventory (MCI) is used for elementary students ages 8-12 (Chavez, 1984). The instrument consists of five scales in which students are asked to respond. The areas of each scale are: friction, competition, difficulty, satisfaction, and cohesiveness (Chavez, 1984). According to Chavez (1984), "Friction is defined as the extent of disagreement, tension, and antagonism in the classroom. Competition is the extent to which the students perceive class activities to be difficult. Satisfaction is the

extent to which students like their classroom. Cohesiveness is the extent to which the classroom develops a feeling of intimacy as a result of student interactions” (p. 247).

The MCI has been used successfully in numerous areas, including: desegregation programs, curriculum studies, basal program studies, and learning outcomes (Chavez, 1984).

Learning Environment Inventory (LEI)

The LEI (Learning Environment Inventory) was created as a means of measuring the social environments of classrooms through the perceptions of students. The LEI is based on the following scales: cohesiveness, diversity, formality, speed, environment, friction, goal direction, favoritism, cliqueness, satisfaction, disorganization, difficulty, apathy, democraticness, and competitiveness (Chavez, 1984). For each of the survey questions used, students are asked to express their agreement or disagreement using a four-point Likert scale. This instrument has been used to evaluate several factors including: mathematics achievement, effects of teacher sex on classroom climate, and changes in students’ perceptions of classroom climate over time (Chavez, 1984).

Classroom Environment Scale (CES)

The classroom environment scale was developed by Rudolph Moos and Edison Trickett. The scale “focuses on the psycho social environment of junior high and high school classes, and conceptualizes that environment as a dynamic social system that includes not only teacher behavior and teacher-student interaction but also student-student interaction” (Moos, 1979, p. 138). Trickett and Moos (1973), in

developing the scale, felt that a class could best be characterized through the eyes of the actual participants being studied.

The Classroom Environment Scale, itself, consists of nine sub scales. The sub scales of the CES are: involvement, affiliation, teacher support, task orientation, competition, order and organization, rule clarity, teacher control, and innovation. The instrument asks students to respond to several statements in the form of a questionnaire. For example, to determine the level of “involvement” in a class, the following statements would be offered: “students put a lot of energy into what they do here”...or ...”most students in this class really pay attention to what the teacher is saying” (Moos, 1979). To determine the environmental level in another area, such as “innovation”, a statement such as, “the teacher thinks up unusual projects for the students to do” would be used (Moos, 1979).

The Classroom Environment Scale has been used successfully in several different areas. Researchers studying different types of public schools, various subject matters, and classroom environments of teacher-coaches have found the CES to be an effective means for evaluating the perceptions of classroom environments (Fraser & Fisher 1983).

Short Form of the Classroom Environment Scale

Researchers have found several measurement instruments to be invaluable as a means of evaluating classroom environments. However, the amount of time required to administer these sometimes lengthy surveys has necessitated the development of several “short forms” (Fraser & Fisher, 1983). Fraser & Fischer (1983) completed an extensive study which attempted to validate the use of shortened versions of three classroom

environment instruments. The study concluded that “For each scale in each of the short forms developed, it was found that the correlation between the long form and short form was very large, and the internal consistency reliability and discriminant validity were satisfactory” (Fraser & Fisher, 1983, p. 126). At the conclusion of the study, the Classroom Environment Scale, one of the three instruments studied, was reduced from a 90 item survey to a 24 item survey containing six dimensions: Involvement, Affiliation, Teacher Support, Task Orientation, Order and Organization, and Rule Clarity (Fraser & Fisher, 1983). The goal of Fraser’s study was that “The short forms could be used in research analogous to prior studies which have investigated various factors (e.g., class size, grade level, subject matter, type of school) which affect the classroom environment” (Fraser & Fisher, 1983, p. 126).

Comparing Classroom Environments of Coaching and Non-Coaching Teachers

Research has shown that classroom environments can affect grades, absenteeism, and overall student achievement. Paramount to discussions and studies concerning the classroom environment is the role of the teacher. As the leader of the classroom, the teacher possesses the ability to motivate, encourage, organize, and “create” the classroom environment. Comparing teachers, according to coaching or non-coaching responsibilities, has provided mixed results.

Fouts (1989) examined the classroom environments of coaching and non coaching social studies teachers. He collected data from a random sampling of 47 social studies classrooms. Using the Classroom Environment Scale (CES), Fouts found no statistically significant differences between coaches and non coaches on eight of the nine

scales measured as part of the CES (Fouts, 1989). The only significant differences were seen in areas relating to teacher innovation. According to the study, non coaching teachers were viewed as more innovative than coaching teachers (Fouts, 1989).

VanDeraa and Schug (1993) attempted to replicate Fouts' study concerning teacher-coaches and their respective classroom environments. Again, the Classroom Environment Scale was given to a similar group of students. Using classroom means, standard deviations, and effect sizes on each scale of the CES, results of the study produced somewhat different results. Teacher-coaches in the replication study "had higher scores than those of non coaching teachers on the three scales of involvement, affiliation, and teacher support" (VanDeraa & Schug, 1993, p. 117). Also, in scales relating to personal development, "The classroom with non coaching teachers in the replication study had a higher mean score in task orientation and a lower mean score in competition than the classrooms of coaching teachers" (VanDeraa & Schug, 1993, p. 118). The mixed results of studies relating classroom environments to coaching and non coaching teachers prompts further research in this area.

Chapter III: Methodology

Population

The population for this study consisted of all teaching staff members at a large, Midwestern high school. The school administration and school district officials agreed to allow this study to be conducted. Eighty-five staff members were surveyed as a part of this study.

The teacher-coaches involved with the study represented several teaching areas throughout the building, including: science, math, physical education, social studies, art, speech/debate, english, business, and special education.

Sample

Purposeful sampling was used in this study. Because of the interest to examine two distinct groups within one school, a comprehensive approach was taken. All staff members were asked to participate in this study.

General Study Procedures

During the 1999 spring semester, each teacher was given an introductory letter containing instructions for the research study. In the letter, it was explained that “classroom environments” were being studied. All teachers were then given a copy of the Short Form version of the Classroom Environment Scale. They were asked to return the survey to a central location within one week. Teachers were assured, in the introductory letter, that complete confidentiality would be maintained. For purposes of comparing teacher-coaches, the survey also asked respondents to give information

concerning the following: gender, years of teaching experience, coaching responsibilities, and highest degree obtained.

For the purposes of this study, teachers were asked to use their third hour class as a source for responses. This hour was randomly selected and was to be used consistently by each teacher involved in the study. Teachers were directed to respond using their next immediate class...if their duty or planning period happened to take place during third period.

Instrumentation

The instrument used to collect the data for this study was the Short Form version of the Classroom Environment Scale. The CES scale is a high-inference measure for determining perceptions of classroom environments. The Scale consists of 24 questions which ask students or teachers to evaluate the learning environments of their class. The Scale was derived from the regular-length version created by Moos and Trickett (Fraser & Fischer, 1983).

The Short Form of the Classroom Environment Scale is divided into six dimensions: Involvement, Affiliation, Teacher Support, Task Orientation, Order and Organization, and Rule Clarity. Each of the six dimensions can be described in the following way:

1. Involvement: Extent to which students pay attention to and show interest in the activities of the class.

2. Affiliation: Extent to which students work with and come to know each other within the classroom.

3. **Teacher Support:** Extent to which the teacher expresses a personal interest in the students.

4. **Task Orientation:** Extent to which the activities of the class are centered around the accomplishment of specified academic objectives.

5. **Order and Organization:** Emphasis within the classroom on maintenance of order and the degree to which the activities of the class are well organized.

6. **Rule Clarity:** Degree to which the rules for conduct in the classroom are explicitly stated and clearly understood.

The scale was used to compare the groups studied in several ways. First, total responses to all 24 questions were calculated. Second, these responses were categorized according to the six dimensions of the study. Finally, mean scores were calculated for each response to compare coaching and non-coaching teachers.

For purposes of comparison and analysis, each individual statement was scored 3 and 1, respectively, for responses of Yes and No. All underlined questions were scored in a reverse manner...3 and 1 for No and Yes. To compile cumulative mean score results for each of the six dimensions, the mean scores of the four questions pertaining to each dimension was added.

Data Collection

Each teacher was asked to complete an individual survey instrument. Teachers were directed to return the survey to a mailbox located in the central office of the school building. Non-response issues were handled through additional bulletin reminders and inter-school mail announcements.

Data Analysis

A descriptive analysis was conducted on the data gathered from the Short Form version of the Classroom Environment Scale. Data were analyzed by individual questions, questions grouped according to each of the six dimensions studied, and mean scores for both individual questions and cumulative dimension totals.

Chapter IV: Data Analysis

The Short Form of the Classroom Environment Scale was given to each teacher in May of 1999. The scale, consisting of twenty-four questions, has been used to evaluate and analyze perceptions of classroom environments through the eyes of classroom participants. The 24 item survey contains six particular dimensions: Involvement, Affiliation, Teacher Support, Task Orientation, Order and Organization, and Rule Clarity (Fraser & Fraser, 1983). Of the 85 surveys handed out, 57 were returned. This provided a return rate of 67%.

The following analysis describes responses of the following groups: coaches and non-coaches, coaches according to gender, coaches according to years of teaching experience, and coaches according to academic advancement.

The analysis for each category shows total responses to each of the twenty-four questions and total responses according to each of the six dimensions of the Short Form version of the Classroom Environment Scale.

For the purposes of analysis, each question has been examined within the context of the six dimensions studied.

Research Question 1

How do the classroom environments of coaching and non-coaching teachers compare at a large, Midwestern high school?

A total of 35 non-coaching teachers and 22 coaching teachers participated in the study. Table 1 shows the comparison of total responses by coaches and non-coaches to questions 1-24 of the Short Form version of the Classroom Environment Scale.

Table 1
Coaches and Non-Coaches Responses to Questions 1-24

<u>Question #</u>	<u>Coaches Yes</u>	<u>%</u>	<u>Coaches No</u>	<u>%</u>	<u>Non-Coaches Yes</u>	<u>%</u>	<u>Non-Coaches Yes</u>	<u>%</u>
1	8	36%	14	64%	18	53%	16	47%
2	19	86%	3	14%	31	89%	4	11%
3	3	14%	19	86%	16	46%	19	54%
4	4	18%	18	82%	2	6%	32	94%
5	20	91%	2	9%	32	91%	3	9%
6	20	91%	2	9%	32	94%	2	6%
7	5	23%	17	77%	6	18%	28	82%
8	3	14%	19	86%	3	9%	30	91%
9	22	100%	0	0%	33	92%	3	9%
10	19	86%	3	14%	34	97%	1	3%
11	9	41%	13	59%	12	36%	21	64%
12	0	0%	22	100%	0	0%	34	100%
13	4	18%	18	82%	14	40%	21	60%
14	19	90%	2	10%	27	77%	8	23%
15	7	32%	15	68%	6	17%	29	83%
16	3	14%	19	86%	3	9%	32	91%
17	2	10%	19	90%	8	23%	27	77%
18	21	95%	1	5%	31	91%	3	9%
19	17	77%	5	23%	28	80%	7	20%
20	14	70%	6	30%	17	50%	17	50%
21	19	86%	3	14%	33	94%	2	6%
22	3	14%	19	86%	3	9%	31	91%
23	8	36%	14	64%	13	38%	21	62%
24	22	100%	0	0%	34	100%	0	0%

Table 2 shows a comparison of total responses by coaches and non-coaches according to each of the six dimensions of the Short Form of the Classroom Environment Scale.

Table 2
Coaches and Non-Coaches Responses by Dimension

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
<u>Involvement</u>								
1	8	36%	14	64%	18	53%	16	47%
7	5	23%	17	77%	6	18%	28	82%
13	4	18%	18	82%	14	40%	21	60%
19	17	77%	5	23%	28	80%	7	20%
<u>Affiliation</u>								
2	19	86%	3	14%	31	89%	4	11%
8	3	14%	19	86%	3	9%	30	91%
14	19	90%	2	10%	27	77%	8	23%
20	14	70%	6	30%	17	50%	17	50%
<u>Teacher Support</u>								
3	3	14%	19	86%	16	46%	19	54%
9	22	100%	0	0%	33	92%	3	9%
15	7	32%	15	68%	6	17%	29	83%
21	19	86%	3	14%	33	94%	2	6%
<u>Task Orientation</u>								
4	4	18%	18	82%	2	6%	32	94%
10	19	86%	3	14%	34	97%	1	3%
16	3	14%	19	86%	3	9%	32	91%
22	3	14%	19	86%	3	9%	31	91%
<u>Order and Organization</u>								
5	20	91%	2	9%	32	91%	3	9%
11	9	41%	13	59%	12	36%	21	64%
17	2	10%	19	90%	8	23%	27	77%
23	8	36%	14	64%	13	38%	21	62%

Rule Clarity

6	20	91%	2	9%	32	94%	2	6%
12	0	0%	22	100%	0	0%	34	100%
18	21	95%	1	5%	31	91%	3	9%
24	22	100%	0	0%	34	100%	0	0%

Table 3 examines the responses of coaches and non-coaches by looking at individual questions within the context of the six dimensions being studied: Involvement, Affiliation, Teacher Support, Task Orientation, Order and Organization, and Rule Clarity.

Table 3
Responses to Individual Questions by Coaches and Non-Coaches

Dimension 1: InvolvementQuestion 1: Students put a lot of energy into what they do here.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
1	8	36%	14	64%	18	53%	16	47%

Question 7: Students daydream a lot in this class.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
7	5	23%	17	77%	6	18%	28	82%

Question 13: Students are often "clockwatching" in this class.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
13	4	18%	18	82%	14	40%	21	60%

Question 19: Most students in this class really pay attention to what the teacher is saying.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
19	17	77%	5	23%	28	80%	7	20%

Dimension 2: AffiliationQuestion 2: Students in this class get to know each other really well.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
2	19	86%	3	14%	31	89%	4	11%

Question 8: Students in this class aren't very interested in getting to know other students.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
8	3	14%	19	86%	3	9%	30	91%

Question 14: A lot of friendships have been made in this class.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
14	19	90%	2	10%	27	77%	8	23%

Question 20: It's very easy to get a group project together.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
20	14	70%	6	30%	17	50%	17	50%

Dimension 3: Teacher Support

Question 3: The teacher spends very little time just talking with students.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
3	3	14%	19	86%	16	46%	19	54%

Question 9: The teacher takes a personal interest in students.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
9	22	100%	0	0%	33	92%	3	9%

Question 15: The teacher is more like a friend than an authority.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
15	7	32%	15	68%	6	17%	29	83%

Question 21: The teacher goes out of his/her way to help students.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
21	19	86%	3	14%	33	94%	2	6%

Dimension 4: Task Orientation

Question 4: We often spend more time discussing outside student activities than class-related material.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
4	4	18%	18	82%	2	6%	32	94%

Question 10: Getting a certain amount of classwork done is very important in this class.

Question #	Coaches Yes	%	Coaches No	%	Non-Coaches Yes	%	Non-Coaches No	%
10	19	86%	3	14%	34	97%	1	3%

Question 16: Students don't do much work in this class.

Question #	Coaches Yes	%	Coaches No	%	Non-Coaches Yes	%	Non-Coaches No	%
16	3	14%	19	86%	3	9%	32	91%

Question 22: This class is more a social hour than a place to learn something.

Question #	Coaches Yes	%	Coaches No	%	Non-Coaches Yes	%	Non-Coaches No	%
22	3	14%	19	86%	3	9%	31	91%

Dimension 5: Order and Organization**Question 5: This is a well-organized class.**

Question #	Coaches Yes	%	Coaches No	%	Non-Coaches Yes	%	Non-Coaches No	%
5	20	91%	2	9%	32	91%	3	9%

Question 11: Students are almost always quiet in this class.

Question #	Coaches Yes	%	Coaches No	%	Non-Coaches Yes	%	Non-Coaches No	%
11	9	41%	13	59%	12	36%	21	64%

Question 17: Students fool around a lot in this class.

Question #	Coaches Yes	%	Coaches No	%	Non-Coaches Yes	%	Non-Coaches No	%
17	2	10%	19	90%	8	23%	27	77%

Question 23: This class is often very noisy.

Question #	Coaches Yes	%	Coaches No	%	Non-Coaches Yes	%	Non-Coaches No	%
23	8	36%	14	64%	13	38%	21	62%

Dimension 6: Rule Clarity**Question 6: There is a clear set of rules for students to follow.**

Question #	Coaches Yes	%	Coaches No	%	Non-Coaches Yes	%	Non-Coaches No	%
6	20	91%	2	9%	32	94%	2	6%

Question 12: Rules in this class seem to change a lot.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
12	0	0%	22	100%	0	0%	34	100%

Question 18: The teacher explains what will happen if a student breaks a rule.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
18	21	95%	1	5%	31	91%	3	9%

Question 24: The teacher explains what the rules are.

<u>Question #</u>	<u>Coaches</u> <u>Yes</u>	<u>%</u>	<u>Coaches</u> <u>No</u>	<u>%</u>	<u>Non-Coaches</u> <u>Yes</u>	<u>%</u>	<u>Non-Coaches</u> <u>No</u>	<u>%</u>
24	22	100%	0	0%	34	100%	0	0%

Teacher coaches and non-teaching coaches were also studied according to mean scores for each question and also for each of the six dimensions in the short form version of the classroom environment scale. The six dimensions are: Involvement (questions 1,7,13,19), Affiliation (questions 2,8,14,20), Teacher Support (questions 3,9,15,21), Task Orientation (questions 4,10,16,22), Order and Organization (questions 5,11,17,23), and Rule Clarity (questions 6,12,18,24).

To compare mean scores for each question, individual responses were scored 3 and 1 for responses of “Yes” and “No.” Underlined questions on the survey were scored in a reverse fashion...3 and 1 for “No and “Yes.” Table 4 illustrates the data compiled of mean scores for individual questions about coaching and non-coaching teachers.

Table 4
Coaches and Non-Coaches Mean Scores For Questions 1-24

<u>Question #</u>	<u>Coaches</u>	<u>Non-Coaches</u>
1	1.73	2.06
2	2.73	2.77
3	2.64	2.09
4	2.82	2.88
5	2.82	2.83
6	2.82	2.88
7	2.54	2.65
8	2.73	2.82
9	3.00	2.83
10	2.73	2.94
11	1.82	1.73
12	3.00	3.00
13	2.64	2.20
14	2.81	2.54
15	1.64	1.34
16	2.73	2.83
17	2.81	2.54
18	2.91	2.82
19	2.54	2.60
20	2.40	2.00
21	2.73	2.88
22	2.73	2.82
23	2.27	2.23
24	3.00	3.00

Comparison of Mean Scores

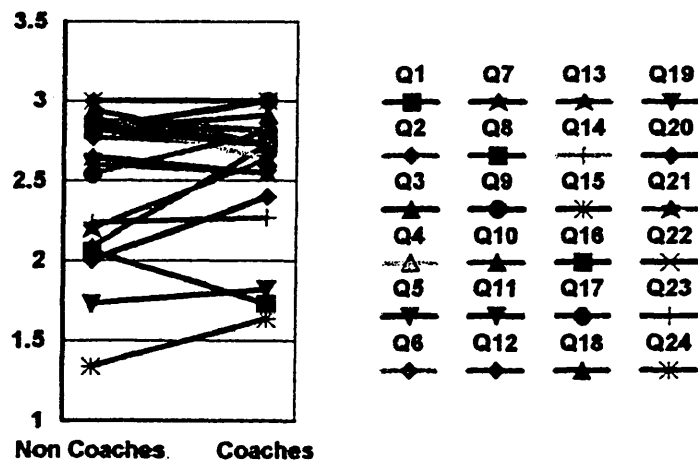


Table 5 displays the mean scores of coaches and non-coaches responses to questions 1-24 according to each of the six dimensions of the Short Form of the Classroom Environment Scale.

Table 5
Mean Scores of Coaches and Non-Coaches by Dimension

Dimension 1: Involvement

Question 1: Students put a lot of energy into what they do here.

Coaches	Non Coaches
1.73	2.06

Question 7: Students daydream a lot in this class.

Coaches	Non Coaches
2.54	2.65

Question 13: Students are often "clockwatching" in this class.

Coaches	Non Coaches
2.64	2.20

Question 19: Most students in this class really pay attention to what the teacher is saying.

Coaches	Non Coaches
2.54	2.60

Dimension 2: Affiliation

Question 2: Students in this class get to know each other really well.

Coaches	Non Coaches
2.73	2.77

Question 8: Students in this class aren't very interested in getting to know other students

Coaches	Non Coaches
2.73	2.82

Question 14: A lot of friendships have been made in this class.

Coaches	Non Coaches
2.81	2.54

Question 20: It's very easy to get a group project together.

Coaches	Non Coaches
2.40	2.00

Dimension 3: Teacher Support**Question 3: The teacher spends very little time just talking with students.**

Coaches	Non Coaches
2.64	2.09

Question 9: The teacher takes a personal interest in students.

Coaches	Non Coaches
3.00	2.83

Question 15: The teacher is more like a friend than an authority.

Coaches	Non Coaches
1.64	1.34

Question 21: The teacher goes out of his/her way to help students.

Coaches	Non Coaches
2.73	2.88

Dimension 4: Task Orientation**Question 4: We often spend more time discussing outside student activities than class-related material.**

Coaches	Non Coaches
2.82	2.88

Question 10: Getting a certain amount of classwork done is very important in this class.

Coaches	Non Coaches
2.73	2.94

Question 16: Students don't do much work in this class.

Coaches	Non Coaches
2.73	2.83

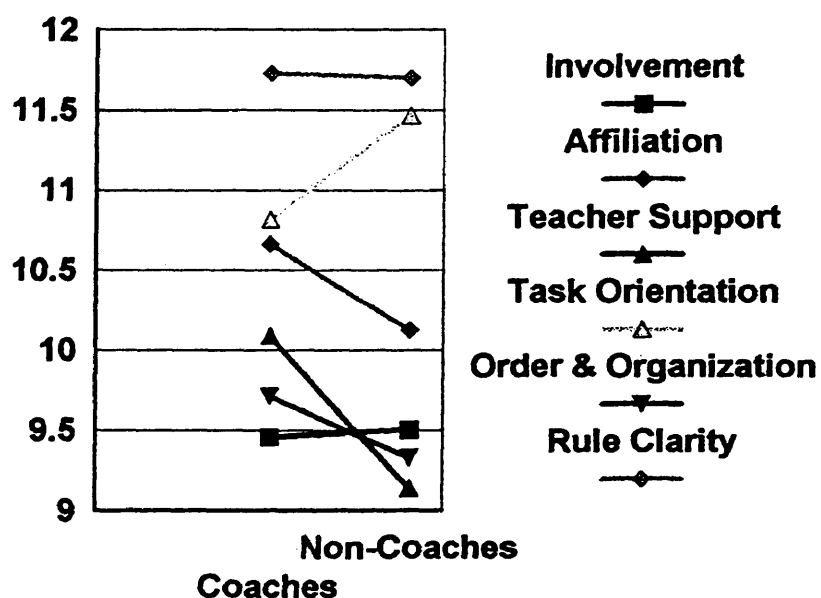
Question 22: This class is more a social hour than a place to learn something.

Coaches	Non Coaches
2.73	2.82

Dimension 5: Order and Organization**Question 5: This is a well-organized class.**Coaches
2.82Non Coaches
2.83**Question 11: Students are almost always quiet in this class.**Coaches
1.82Non Coaches
1.73**Question 17: Students fool around a lot in this class.**Coaches
2.81Non Coaches
2.54**Question 23: This class is often very noisy.**Coaches
2.27Non Coaches
2.23**Dimension 6: Rule Clarity****Question 6: There is a clear set of rules for students to follow.**Coaches
2.82Non Coaches
2.88**Question 12: Rules in this class seem to change a lot.**Coaches
3.00Non Coaches
3.00**Question 18: The teacher explains what will happen if a student breaks a rule.**Coaches
2.91Non Coaches
2.82**Question 24: The teacher explains what the rules are.**Coaches
3.00Non Coaches
3.00

The mean scores of the six individual questions comprising each dimension were added together creating a combined dimension score. These scores for each of the six dimensions have been used to further compare coaches and non-coaches in table 6.

Table 6
Coaches and Non-Coaches Combined Dimension Score



Mean Totals of Each Dimension

<u>Dimension</u>	<u>Coaches</u>	<u>Non-Coaches</u>
Involvement	9.46	9.51
Affiliation	10.66	10.13
Teacher Support	10.09	9.14
Task Orientation	10.82	11.47
Order and Organization	9.72	9.33
Rule Clarity	11.73	11.70

The data shown concerning research question 1 compared coaches with non-coaches. These two groups were compared in several ways. Tables one, two, and three provided results of both coaches and non-coaches' responses to each question of the scale. Also, responses were categorized according to each of the six dimensions being studied. Tables four and five compared coaches and non-coaches according to mean scores calculated for both individual responses and responses to the six dimensions.

In dimension 1, Involvement, coaching and non-coaching teachers provided similar responses to the questions asked. Both coaches and non-coaches felt that their class paid attention to what they were saying (question 19). A slight difference was found in question 1 which stated, "Students put a lot of energy into what they do here." 36% of coaches answered "yes" while 53% of non-coaches answered "yes."

In dimension 2, Affiliation, responses by coaches and non-coaches were, again, similar. Coaches, however, responded more favorably to the statement, "A lot of friendships have been made in this class." 90% percent of coaches answered "yes" while 23% of non-coaches answered "no."

In dimension 3, Teacher Support, several differences were found in the answers given by coaches and non-coaches. The mean totals for each dimension (Table 5) showed nearly a full point difference between the two groups. Non-coaches were less apt to spend time "just talking with students" (question 3) and coaching teachers perceived themselves as taking a great personal interest in their students (question 3). Also, differences were apparent in terms of the teacher seeing him/herself as more like a

friend than an authority. 32% of coaches felt as if they were friends while 83% of teachers did not.

In dimension 4, Task Orientation, differences again appeared between coaches and non-coaches. Coaches were much more likely to spend more time discussing outside student activities than class-related material. 18% of coaches felt that “outside” discussions took precedent while only 6% of teachers did. In addition, non-coaching teachers felt more strongly about “getting a certain amount of classwork done” (question 10). 97% of teachers said that this was important, while only 86% of coaches agreed.

In dimension 5, Order and Organization, both teachers and teacher-coaches provided similar responses. Both groups felt that their classes were organized and that students were NOT almost “always quiet.”

In dimension 6, Rule Clarity, the most striking similarities were seen between coaches and non-coaches. Both groups feel that they explain what the rules are and that those rules do NOT change.

Research Question 2

How do the classroom environments of male and female teacher coaches compare at a large Midwestern high school?

A total of 16 male and 6 female coaches participated in the study. Table 7 shows the comparison of total responses by male and female coaches to questions 1-24 of the short form version of the classroom environment scale.

Table 7
Male and Female Coaches Responses to Questions 1-24

<u>Question #</u>	<u>Male Coaches Yes</u>	<u>%</u>	<u>Male Coaches No</u>	<u>%</u>	<u>Female Coaches - Yes</u>	<u>%</u>	<u>Female Coaches - No</u>	<u>%</u>
1	4	25%	12	75%	4	67%	2	33%
2	13	81%	3	19%	5	83%	1	17%
3	3	20%	12	80%	0	0%	6	100%
4	4	25%	12	75%	0	0%	6	100%
5	15	94%	1	6%	5	83%	1	17%
6	15	94%	1	6%	5	83%	1	17%
7	5	31%	11	69%	0	0%	6	100%
8	1	7%	14	93%	1	17%	5	83%
9	16	100%	0	0%	6	100%	0	0%
10	14	88%	2	12%	6	100%	0	0%
11	7	44%	9	56%	2	33%	4	67%
12	0	0%	16	100%	0	0%	6	100%
13	3	19%	13	81%	1	17%	5	83%
14	15	94%	1	6%	4	80%	1	20%
15	5	31%	11	69%	2	33%	4	67%
16	3	19%	13	81%	0	0%	6	100%
17	2	13%	14	87%	0	0%	5	100%
18	15	94%	1	6%	6	100%	0	0%
19	12	80%	3	20%	4	67%	2	33%
20	10	67%	5	33%	4	80%	1	20%
21	14	88%	2	12%	5	83%	1	17%
22	3	19%	13	81%	0	0%	6	100%
23	6	38%	10	62%	2	33%	4	67%
24	16	100%	0	0%	6	100%	0	0%

Table 8 shows a comparison of total responses by male and female coaches according to each of the six dimensions of the Short Form of the Classroom Environment Scale.

Table 8
Male and Female Coaches Responses by Dimension

<u>Question #</u>	<u>Male Coaches - Yes</u>	<u>%</u>	<u>Male Coaches - No</u>	<u>%</u>	<u>Female Coaches - Yes</u>	<u>%</u>	<u>Female Coaches - No</u>	<u>%</u>
<u>Involvement</u>								
1	4	25%	12	75%	4	67%	2	33%
7	5	31%	11	69%	0	0%	6	100%
13	3	19%	13	81%	1	17%	5	83%
19	12	80%	3	20%	4	67%	2	33%
<u>Affiliation</u>								
2	13	81%	3	19%	5	83%	1	17%
8	1	7%	14	93%	1	17%	5	83%
14	15	94%	1	6%	4	80%	1	20%
20	10	67%	5	33%	4	80%	1	20%
<u>Teacher Support</u>								
3	3	20%	12	80%	0	0%	6	100%
9	16	100%	0	0%	6	100%	0	0%
15	5	31%	11	69%	2	33%	4	67%
21	14	88%	2	12%	5	83%	1	17%
<u>Task Orientation</u>								
4	4	25%	12	75%	0	0%	6	100%
10	14	88%	2	12%	6	100%	0	0%
16	3	19%	13	81%	0	0%	6	100%
22	3	19%	13	81%	0	0%	6	100%
<u>Order & Organization</u>								
5	15	94%	1	6%	5	83%	1	17%
11	7	44%	9	56%	2	33%	4	67%
17	2	13%	14	87%	0	0%	5	100%
23	6	38%	10	62%	2	33%	4	67%

Rule Clarity

6	15	94%	1	6%	5	83%	1	17%
12	0	0%	16	100%	0	0%	6	100%
18	15	94%	1	6%	6	100%	0	0%
24	16	100%	0	0%	6	100%	0	0%

Table 9 shows both male and female coaches responses to the six dimensions of the Short Form of the Classroom Environment Scale.

Table 9
Responses to Individual Questions by Male and Female Coaches

Dimension 1: InvolvementQuestion 1: Students put a lot of energy into what they do here.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
1	4	25%	12	75%	4	67%	2	33%

Question 7: Students daydream a lot in this class.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
7	5	31%	11	69%	0	0%	6	100%

Question 13: Students are often "clockwatching" in this class.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
13	3	19%	13	81%	1	17%	5	83%

Question 19: Most students in this class really pay attention to what the teacher is saying.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
19	12	80%	3	20%	4	67%	2	33%

Dimension 2: AffiliationQuestion 2: Students in this class get to know each other really well.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
2	13	81%	3	19%	5	83%	1	17%

Question 8: Students in this class aren't very interested in getting to know other students.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
8	1	7%	14	93%	1	17%	5	83%

Question 14: A lot of friendships have been made in this class.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
14	15	94%	1	6%	4	80%	1	20%

Question 20: It's very easy to get a group project together.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
20	10	67%	5	33%	4	80%	1	20%

Dimension 3: Teacher Support

Question 3: The teacher spends very little time just talking with students.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
3	3	20%	12	80%	0	0%	6	100%

Question 9: The teacher takes a personal interest in students.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
9	16	100%	0	0%	6	100%	0	0%

Question 15: The teacher is more like a friend than an authority.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
15	5	31%	11	69%	2	33%	4	67%

Question 21: The teacher goes out of his/her way to help students.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
21	14	88%	2	12%	5	83%	1	17

Dimension 4: Task Orientation

Question 4: We often spend more time discussing outside student activities than class-related material.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
4	4	25%	12	75%	0	0%	6	100%

Question 10: Getting a certain amount of classwork done is very important in this class.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
10	14	88%	2	12%	6	100%	0	0%

Question 16: Students don't do much work in this class.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
16	3	19%	13	81%	0	0%	6	100%

Question 22: This class is more a social hour than a place to learn something.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
22	3	19%	13	81%	0	0%	6	100%

Dimension 5: Order and Organization**Question 5: This is a well-organized class.**

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
5	15	94%	1	6%	5	83%	1	17%

Question 11: Students are almost always quiet in this class.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
11	7	44%	9	56%	2	33%	4	67%

Question 17: Students fool around a lot in this class.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
17	2	13%	14	87%	0	0%	5	100%

Question 23: This class is often very noisy.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
23	6	38%	10	62%	2	33%	4	67%

Dimension 6: Rule Clarity**Question 6: There is a clear set of rules for students to follow.**

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
6	15	94%	1	6%	5	83%	1	17%

Question 12: Rules in this class seem to change a lot.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
12	0	0%	16	100%	0	0%	6	100%

Question 18: The teacher explains what will happen if a student breaks a rule.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
18	15	94%	1	6%	6	100%	0	0%

Question 24: The teacher explains what the rules are.

Question #	Male Coaches Yes	%	Male Coaches No	%	Female Coaches Yes	%	Female Coaches No	%
24	16	100%	0	0%	6	100%	0	0%

The data shown concerning research question 2 compared the responses of both male and female coaches to the survey instrument. Tables seven and eight examined the total responses to each question by both groups. Table nine provided results according to each of the six dimensions of the study.

In dimension 1, Involvement, female teacher-coaches felt more strongly that their students put a lot of energy into what was done in class. They also perceived their students as less likely to daydream in class.

In dimension 2, Affiliation, responses by male and female coaches were quite similar. Table 9 shows the similarities in questions 2,8,14, & 20. Both groups felt that the level of affiliation in their classrooms was quite high.

In dimension 3, teacher support, the following results were shown. Table 9 supports the idea that about 1/3 of both male and female coaches felt more like a friend than an authority to their students. Also, both groups unanimously felt that they took a

personal interest in their students. Finally, both male and female coaches perceive themselves as going out of their way to help their students.

In dimension 4, Task Orientation, female coaches separate themselves slightly from male coaches. Female coaches tend to perceive their class as being more on-task. No female coaches spend more time discussing outside student activities than class-related material. In addition, female coaches feel more strongly about getting work done in class and making their classes more a “place to learn” than a “social hour” (Table 9, Dimension 4).

In dimension 5, Order and Organization, both groups provided similar responses to questions 5, 11, 17, & 23. Table 9 shows that both groups perceive their classes as being organized, “somewhat” noisy, and a place to NOT “fool around.”

In dimension 6, Rule Clarity, female and male coaches’ responses are nearly identical. Both groups perceive their classes’ rules as established, explained, and not subject to change.

Research Question 3

How do the classroom environments of teacher-coaches at a large Midwestern high school compare according years of teaching experience?

The following is a breakdown of the number of coaches participating in the study by years of teaching experience: 0-5 yrs - 7; 6-10 yrs - 6; 11-15 yrs - 3; 16-20 yrs - 1; 20+ yrs - 5. Table 10 shows a comparison of total responses by coaches according to years of teaching experience.

Table 10
Percentage of Total Responses by Teacher Coaches by Years of Teaching Experience

question #	<u>0-5 Years</u>		<u>6-10 Years</u>		<u>11-15 Years</u>		<u>16-20 Years</u>		<u>20+ Years</u>	
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
1	43%	57%	50%	50%	33%	67%	0%	100%	20%	80%
2	86%	14%	67%	33%	100%	0%	100%	0%	100%	0%
3	0%	100%	17%	83%	33%	67%	0%	100%	20%	80%
4	0%	100%	17%	83%	33%	67%	0%	100%	40%	60%
5	100%	0%	83%	17%	67%	33%	100%	0%	100%	0%
6	71%	29%	100%	0%	100%	0%	100%	0%	100%	0%
7	14%	86%	17%	83%	33%	67%	100%	0%	20%	80%
8	14%	86%	17%	83%	0%	100%	0%	100%	20%	80%
9	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%
10	100%	0%	83%	17%	33%	67%	100%	0%	100%	0%
11	43%	57%	17%	83%	33%	67%	0%	100%	100%	0%
12	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%
13	14%	86%	33%	67%	0%	100%	0%	100%	20%	80%
14	100%	0%	83%	17%	100%	0%	100%	0%	80%	20%
15	29%	71%	33%	67%	33%	67%	0%	100%	40%	60%
16	0%	100%	17%	83%	33%	67%	0%	100%	20%	80%
17	0%	100%	0%	100%	33%	67%	0%	100%	20%	80%
18	100%	0%	100%	0%	100%	0%	100%	0%	80%	20%
19	100%	0%	67%	33%	0%	100%	100%	0%	100%	0%
20	100%	0%	50%	50%	33%	67%	100%	0%	75%	25%
21	86%	14%	83%	17%	100%	0%	100%	0%	80%	20%
22	0%	100%	33%	67%	33%	67%	0%	100%	0%	100%
23	29%	71%	83%	17%	33%	67%	0%	100%	20%	80%
24	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%

Table 11 shows a comparison of coaches with differing years of teaching experience according to the six dimensions of the Short Form of the Classroom Environment Scale.

Table 11
Teaching Experience of Coaches by Dimension

<u>question #</u>	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
<u>Involvement</u>										
1	43%	57%	50%	50%	33%	67%	0%	100%	20%	80%
7	14%	86%	17%	83%	33%	67%	100%	0%	20%	80%
13	14%	86%	33%	67%	0%	100%	0%	100%	20%	80%
19	100%	0%	67%	33%	0%	100%	100%	0%	100%	0%
<u>Affiliation</u>										
2	86%	14%	67%	33%	100%	0%	100%	0%	100%	0%
8	14%	86%	17%	83%	0%	100%	0%	100%	20%	80%
14	100%	0%	83%	17%	100%	0%	100%	0%	80%	20%
20	100%	0%	50%	50%	33%	67%	100%	0%	75%	25%
<u>Teacher Support</u>										
3	0%	100%	17%	83%	33%	67%	0%	100%	20%	80%
9	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%
15	29%	71%	33%	67%	33%	67%	0%	100%	40%	60%
21	86%	14%	83%	17%	100%	0%	100%	0%	80%	20%
<u>Task Orientation</u>										
4	0%	100%	17%	83%	33%	67%	0%	100%	40%	60%
10	100%	0%	83%	17%	33%	67%	100%	0%	100%	0%
16	0%	100%	17%	83%	33%	67%	0%	100%	20%	80%
22	0%	100%	33%	67%	33%	67%	0%	100%	0%	100%
<u>Order & Organization</u>										
5	100%	0%	83%	17%	67%	33%	100%	0%	100%	0%
11	43%	57%	17%	83%	33%	67%	0%	100%	100%	0%
17	0%	100%	0%	100%	33%	67%	0%	100%	20%	80%
23	29%	71%	83%	17%	33%	67%	0%	100%	20%	80%

Rule
Clarity

6	71%	29%	100%	0%	100%	0%	100%	0%	100%	0%
12	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%
18	100%	0%	100%	0%	100%	0%	100%	0%	80%	20%
24	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%

Table 12 depicts coaches responses to each question according to the six dimensions of the study. The level of experience was divided into five categories: 0-5 years, 6-10 years, 11-15 years, 16-20 years, and 20+ years.

Table 12
Coaches Responses by Dimension According to Years of Teaching Experience

Dimension 1: Involvement**Question 1: Students put a lot of energy into what they do here.**

question #	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
1	43%	57%	50%	50%	33%	67%	0%	100%	20%	80%

Question 7: Students daydream a lot in this class.

question #	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
7	14%	86%	17%	83%	33%	67%	100%	0%	20%	80%

Question 13: Students are often "clockwatching" in this class.

question #	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
13	14%	86%	33%	67%	0%	100%	0%	100%	20%	80%

Question 19: Most students in this class really pay attention to what the teacher is saying.

question #	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
19	100%	0%	67%	33%	0%	100%	100%	0%	100%	0%

Dimension 2: Affiliation**Question 2: Students in this class get to know each other really well.**

<u>question #</u>	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
2	86%	14%	67%	33%	100%	0%	100%	0%	100%	0%

Question 8: Students in this class aren't very interested in getting to know other students.

<u>question #</u>	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
8	14%	86%	17%	83%	0%	100%	0%	100%	20%	80%

Question 14: A lot of friendships have been made in this class.

<u>question #</u>	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
14	100%	0%	83%	17%	100%	0%	100%	0%	80%	20%

Question 20: It's very easy to get a group project together.

<u>question #</u>	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
20	100%	0%	50%	50%	33%	67%	100%	0%	75%	25%

Dimension 3: Teacher Support**Question 3: The teacher spends very little time just talking with students.**

<u>question #</u>	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
3	0%	100%	17%	83%	33%	67%	0%	100%	20%	80%

Question 9: The teacher takes a personal interest in students.

<u>question #</u>	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
9	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%

Question 15: The teacher is more like a friend than an authority.

<u>question #</u>	<u>0-5 Years</u>	<u>0-5 Years</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>11-15 Years</u>	<u>11-15 Years</u>	<u>16-20 Years</u>	<u>16-20 Years</u>	<u>20+ Years</u>	<u>20+ Years</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
15	29%	71%	33%	67%	33%	67%	0%	100%	40%	60%

Question 21: The teacher goes out of his/her way to help students.

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
21	86%	14%	83%	17%	100%	0%	100%	0%	80%	20%

Dimension 4: Task Orientation**Question 4: We often spend more time discussing outside student activities than class-related material.**

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
4	0%	100%	17%	83%	33%	67%	0%	100%	40%	60%

Question 10: Getting a certain amount of classwork done is very important in this class.

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
10	100%	0%	83%	17%	33%	67%	100%	0%	100%	0%

Question 16: Students don't do much work in this class.

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
16	0%	100%	17%	83%	33%	67%	0%	100%	20%	80%

Question 22: This class is more a social hour than a place to learn something.

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
22	0%	100%	33%	67%	33%	67%	0%	100%	0%	100%

Dimension 5: Order and Organization**Question 5: This is a well-organized class.**

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
5	100%	0%	83%	17%	67%	33%	100%	0%	100%	0%

Question 11: Students are almost always quiet in this class.

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
11	43%	57%	17%	83%	33%	67%	0%	100%	100%	0%

Question 17: Students fool around a lot in this class.

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
17	0%	100%	0%	100%	33%	67%	0%	100%	20%	80%

Question 23: This class is often very noisy.

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
23	29%	71%	83%	17%	33%	67%	0%	100%	20%	80%

Dimension 6: Rule Clarity**Question 6: There is a clear set of rules for students to follow.**

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
6	71%	29%	100%	0%	100%	0%	100%	0%	100%	0%

Question 12: Rules in this class seem to change a lot.

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
12	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%

Question 18: The teacher explains what will happen if a student breaks a rule.

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
18	100%	0%	100%	0%	100%	0%	100%	0%	80%	20%

Question 24: The teacher explains what the rules are.

question #	0-5 Years	0-5 Years	6-10 Years	6-10 Years	11-15 Years	11-15 Years	16-20 Years	16-20 Years	20+ Years	20+ Years
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
24	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%

The data shown concerning research question 3 compared coaches according to years of teaching experience. Each coach's response was categorized and compared with other coaches with differing levels of experience. All responses were also compared according to each of the six dimensions of the study.

In dimension 1, Involvement, responses by teacher coaches according to years of teaching experience were similar. According to the data, teacher-coaches with less experience, however, were more likely to perceive their students as putting more energy into classwork (Table 12).

In dimension 2, Affiliation, teacher-coaches seemed to perceive a high level of affiliation in their classes. They felt that their students were interested in getting to know each other, and that a lot of friendships had been developed. Teacher-coaches with 6-10 years and 11-15 years of teaching experience, however, seemed to feel as though it was more difficult to get a group project together.

In dimension 3, Teacher Support, data shows that teacher-coaches with 0-5 years of teaching experience are most apt to spend time just talking with students. In addition, all teacher-coaches feel as if they're taking a personal interest in their students. Interestingly, teacher-coaches with 20+ years of teaching experience are most likely to perceive themselves as more of a friend than an authority.

In dimension 4, Task Orientation, data shows that teacher-coaches with 20+ years of teaching experience are most likely to spend a majority of class time talking about "outside" activities. Questions 10 and 12 (Table 12) also provide data showing

that teacher-coaches with 11-15 years of teaching experience are much less concerned about getting a certain amount of classwork done.

In dimension 5, Order and Organization, the following data proved to be most prominent. First, teacher-coaches with 11-15 years of teaching experience perceived their classes to be less organized. Second, teacher-coaches with 20+ years of experience unanimously felt that their students were almost always quiet. Third, those with 11-15 years of experience perceived their students as more likely to fool around. Lastly, teacher-coaches with 6-10 years of experience were much more likely to perceive their classrooms as “noisy.”

In dimension 6, Rule Clarity, all subjects felt as if their students were aware of and following an established set of rules. This finding was consistent with each group examined in this study.

Research Question 4

How do the classroom environments of teacher coaches at a large Midwestern high school with differing levels of academic advancement compare?

The following is a breakdown of the number of coaches participating in the study by level of academic advancement: BA - 4; BA+12 hrs - 3; BA+24 hrs - 6; MA - 5; MA+36 - 4. Table 13 shows a comparison of total responses by coaches according to professional academic advancement.

Table 13
Teacher-Coaches Responses Categorized by Academic Advancement

<u>Question #</u>	<u>BA Yes</u>	<u>BA No</u>	<u>BA+12 Yes</u>	<u>BA+12 No</u>	<u>BA+24 Yes</u>	<u>BA+24 No</u>	<u>MA Yes</u>	<u>MA No</u>	<u>MA+36 Yes</u>	<u>MA+36 No</u>
1	75%	25%	100%	0%	0%	100%	20%	80%	25%	75%
2	75%	25%	100%	0%	83%	17%	80%	20%	100%	0%
3	0%	100%	33%	67%	0%	100%	20%	80%	25%	75%
4	0%	100%	33%	67%	0%	100%	20%	80%	25%	75%
5	100%	0%	33%	67%	100%	0%	100%	0%	100%	0%
6	50%	50%	100%	0%	100%	0%	100%	0%	100%	0%
7	25%	75%	0%	100%	17%	83%	40%	60%	25%	75%
8	25%	75%	0%	100%	17%	83%	0%	100%	25%	75%
9	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%
10	100%	0%	67%	33%	83%	17%	80%	20%	100%	0%
11	50%	50%	33%	67%	33%	67%	20%	80%	75%	25%
12	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%
13	0%	100%	33%	67%	33%	67%	20%	80%	0%	100%
14	100%	0%	100%	0%	83%	17%	100%	0%	75%	25%
15	50%	50%	67%	33%	17%	83%	0%	100%	50%	50%
16	0%	100%	0%	100%	0%	100%	40%	60%	25%	75%
17	0%	100%	50%	50%	0%	100%	0%	100%	25%	75%
18	100%	0%	100%	0%	100%	0%	100%	0%	75%	25%
19	100%	0%	33%	67%	100%	0%	20%	80%	100%	0%
20	100%	0%	67%	33%	83%	17%	60%	40%	67%	33%
21	75%	25%	100%	0%	83%	17%	80%	20%	75%	25%
22	0%	100%	33%	67%	17%	83%	20%	80%	0%	100%
23	25%	75%	33%	67%	33%	67%	60%	40%	25%	75%
24	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%

Table 14 shows a comparison of coaches with differing levels of academic advancement according to the Short Form version of the Classroom Environment Scale.

Table 14
Six Dimensions Studied: Coaches by Academic Advancement

<u>Question #</u>	<u>BA</u> <u>Yes</u>	<u>BA</u> <u>No</u>	<u>BA + 12</u> <u>Yes</u>	<u>BA + 12</u> <u>No</u>	<u>BA + 24</u> <u>Yes</u>	<u>BA + 24</u> <u>No</u>	<u>MA</u> <u>Yes</u>	<u>MA</u> <u>No</u>	<u>MA + 36</u> <u>Yes</u>	<u>MA + 36</u> <u>No</u>
<u>Involvement</u>										
1	75%	25%	100%	0%	0%	100%	20%	80%	25%	75%
7	25%	75%	0%	100%	17%	83%	40%	60%	25%	75%
13	0%	100%	33%	67%	33%	67%	20%	80%	0%	100%
19	100%	0%	33%	67%	100%	0%	20%	80%	100%	0%
<u>Affiliation</u>										
2	75%	25%	100%	0%	83%	17%	80%	20%	100%	0%
8	25%	75%	0%	100%	17%	83%	0%	100%	25%	75%
14	100%	0%	100%	0%	83%	17%	100%	0%	75%	25%
20	100%	0%	67%	33%	83%	17%	60%	40%	67%	33%
<u>Teacher Support</u>										
3	0%	100%	33%	67%	0%	100%	20%	80%	25%	75%
9	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%
15	50%	50%	67%	33%	17%	83%	0%	100%	50%	50%
21	75%	25%	100%	0%	83%	17%	80%	20%	75%	25%
<u>Task Orientation</u>										
4	0%	100%	33%	67%	0%	100%	20%	80%	25%	75%
10	100%	0%	67%	33%	83%	17%	80%	20%	100%	0%
16	0%	100%	0%	100%	0%	100%	40%	60%	25%	75%
22	0%	100%	33%	67%	17%	83%	20%	80%	0%	100%
<u>Order & Organization</u>										
5	100%	0%	33%	67%	100%	0%	100%	0%	100%	0%
11	50%	50%	33%	67%	33%	67%	20%	80%	75%	25%
17	0%	100%	50%	50%	0%	100%	0%	100%	25%	75%
23	25%	75%	33%	67%	33%	67%	60%	40%	25%	75%

Rule Clarity

6	50%	50%	100%	0%	100%	0%	100%	0%	100%	0%
12	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%
18	100%	0%	100%	0%	100%	0%	100%	0%	75%	25%
24	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%

Table 15 shows the individual responses of coaches according to the six dimensions of the study. Coaches have been categorized according to years of teaching experience. The following categories were used for purposes of data analysis: BA (Bachelors degree), BA + 12 (Bachelor's degree plus 12 hours), BA + 24 (Bachelor's degree + 24 hours), MA (Master's degree), and MA + 36 (Master's degree + 36 hours). The survey included the category of MA + 18 but none of the participants of the study met this qualification.

Table 15
Individual and Categorized Coaches Responses According to Academic Advancement

Dimension 1: Involvement**Question 1: Students put a lot of energy into what they do here.**

<u>Question #</u>	<u>BA Yes</u>	<u>BA No</u>	<u>BA + 12 Yes</u>	<u>BA + 12 No</u>	<u>BA + 24 Yes</u>	<u>BA + 24 No</u>	<u>MA Yes</u>	<u>MA No</u>	<u>MA + 36</u>	<u>MA + 36</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
1	75%	25%	100%	0%	0%	100%	20%	80%	25%	75%

Question 7: Students daydream a lot in this class.

<u>Question #</u>	<u>BA Yes</u>	<u>BA No</u>	<u>BA + 12 Yes</u>	<u>BA + 12 No</u>	<u>BA + 24 Yes</u>	<u>BA + 24 No</u>	<u>MA Yes</u>	<u>MA No</u>	<u>MA + 36</u>	<u>MA + 36</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
7	25%	75%	0%	100%	17%	83%	40%	60%	25%	75%

Question 13: Students are often "clockwatching" in this class.

<u>Question #</u>	<u>BA Yes</u>	<u>BA No</u>	<u>BA + 12 Yes</u>	<u>BA + 12 No</u>	<u>BA + 24 Yes</u>	<u>BA + 24 No</u>	<u>MA Yes</u>	<u>MA No</u>	<u>MA + 36</u>	<u>MA + 36</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
13	0%	100%	33%	67%	33%	67%	20%	80%	0%	100%

Question 19: Most students in this class really pay attention to what the teacher is saying.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
19	100%	0%	33%	67%	100%	0%	20%	80%	100%	0%

Dimension 2: Affiliation

Question 2: Students in this class get to know each other really well.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
2	75%	25%	100%	0%	83%	17%	80%	20%	100%	0%

Question 8: Students in this class aren't very interested in getting to know other students.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
8	25%	75%	0%	100%	17%	83%	0%	100%	25%	75%

Question 14: A lot of friendships have been made in this class.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
14	100%	0%	100%	0%	83%	17%	100%	0%	75%	25%

Question 20: It's very easy to get a group project together.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
20	100%	0%	67%	33%	83%	17%	60%	40%	67%	33%

Dimension 3: Teacher Support

Question 3: The teacher spends very little time just talking with students.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
3	0%	100%	33%	67%	0%	100%	20%	80%	25%	75%

Question 9: The teacher takes a personal interest in students.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
9	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%

Question 15: The teacher is more like a friend than an authority.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
15	50%	50%	67%	33%	17%	83%	0%	100%	50%	50%

Question 21: The teacher goes out of his/her way to help students.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
21	75%	25%	100%	0%	83%	17%	80%	20%	75%	25%

Dimension 4: Task Orientation**Question 4: We often spend more time discussing outside student activities than class-related material.**

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
4	0%	100%	33%	67%	0%	100%	20%	80%	25%	75%

Question 10: Getting a certain amount of classwork done is very important in this class.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
10	100%	0%	67%	33%	83%	17%	80%	20%	100%	0%

Question 16: Students don't do much work in this class.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
16	0%	100%	0%	100%	0%	100%	40%	60%	25%	75%

Question 22: This class is more a social hour than a place to learn something.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
22	0%	100%	33%	67%	17%	83%	20%	80%	0%	100%

Dimension 5: Order and Organization**Question 5: This is a well-organized class.**

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
5	100%	0%	33%	67%	100%	0%	100%	0%	100%	0%

Question 11: Students are almost always quiet in this class.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
11	50%	50%	33%	67%	33%	67%	20%	80%	75%	25%

Question 17: Students fool around a lot in this class.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
17	0%	100%	50%	50%	0%	100%	0%	100%	25%	75%

Question 23: This class is often very noisy.

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
23	25%	75%	33%	67%	33%	67%	60%	40%	25%	75%

Dimension 6: Rule Clarity**Question 6: There is a clear set of rules for students to follow.**

Question #	BA Yes	BA No	BA + 12 Yes	BA + 12 No	BA + 24 Yes	BA + 24 No	MA Yes	MA No	MA + 36	MA + 36
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
6	50%	50%	100%	0%	100%	0%	100%	0%	100%	0%

Question 12: Rules in this class seem to change a lot.

<u>Question #</u>	<u>BA Yes</u>	<u>BA No</u>	<u>BA + 12 Yes</u>	<u>BA + 12 No</u>	<u>BA + 24 Yes</u>	<u>BA + 24 No</u>	<u>MA Yes</u>	<u>MA No</u>	<u>MA + 36 Yes</u>	<u>MA + 36 No</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
12	0%	100%	0%	100%	0%	100%	0%	100%	0%	100%

Question 18: The teacher explains what will happen if a student breaks a rule.

<u>Question #</u>	<u>BA Yes</u>	<u>BA No</u>	<u>BA + 12 Yes</u>	<u>BA + 12 No</u>	<u>BA + 24 Yes</u>	<u>BA + 24 No</u>	<u>MA Yes</u>	<u>MA No</u>	<u>MA + 36 Yes</u>	<u>MA + 36 No</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
18	100%	0%	100%	0%	100%	0%	100%	0%	75%	25%

Question 24: The teacher explains what the rules are.

<u>Question #</u>	<u>BA Yes</u>	<u>BA No</u>	<u>BA + 12 Yes</u>	<u>BA + 12 No</u>	<u>BA + 24 Yes</u>	<u>BA + 24 No</u>	<u>MA Yes</u>	<u>MA No</u>	<u>MA + 36 Yes</u>	<u>MA + 36 No</u>
	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>	<u>Yes %</u>	<u>No %</u>
24	100%	0%	100%	0%	100%	0%	100%	0%	100%	0%

The data shown concerning research question 4 compared coaches according to level of academic advancement. Each coach's response was categorized and compared with other coaches with differing levels of academic advancement. All responses were also compared according to each of the six dimensions of the study.

In dimension 1, Involvement, the data shows that coaches with differing levels of academic advancement were generally unable to agree on how involved their students were in classroom activities. The data did show, however, that teachers with lower levels of academic advancement tended to perceive their students as putting more energy into the class.

In dimension 2, Affiliation, teacher-coaches at all levels of academic advancement felt that their classrooms were places in which their students were well affiliated. Consistencies were shown in all four questions of the dimension (Table 15).

In dimension 3, Teacher Support, coaching-teachers perceived themselves as being supportive to their students. Table 15 showed a 100% consistency in responses to statement 9: “The teacher takes a personal interest in students” and statement 3 provided data showing that all teachers feel that it’s important to “just talk with students.”

In dimension 4, Task Orientation, coaching-teachers agreed that generally their classes stayed on-task (Table 15).

In dimension 5, Order and Organization, the data compiled produced several inconsistencies. Responses of coaching teachers by academic advancement varied from question to question. For example, coaching teachers with a master’s degree were the only group to perceive their class as being noisy; While those with a BA + 12 hours were the only group to perceive their class as being disorganized.

In dimension 6, Rule Clarity, all coaching teachers surveyed felt as if the rules established for class were clearly communicated and not subject to change.

Chapter V: Summary, Conclusion, and Recommendations

Restatement of the Problem

The primary purpose of this study was to compare the classroom environments of coaching and non-coaching teachers. A great deal of attention has been given to the study of and subsequent importance of classroom environments. The role of the teacher, in researching this topic, has proven to be an important one.

This study examined and compared the perceptions of the following groups in regards to the classroom environment:

1. Coaches and non-coaches.
2. Male and female coaches.
3. Coaches with differing years of teaching experience.
4. Coaches with differing levels of academic advancement.

Description of Procedure Used

The Short Form version of the Classroom Environment Scale was used in this study. The scale consists of 24 questions divided into 6 dimensions: Involvement, Affiliation, Teacher Support, Task Orientation, Order and Organization, and Rule Clarity. Each teacher, in the school being studied, was given a copy of the scale and asked to answer each question using their 3rd period class as a source for responses.

Once gathered, the information was tabulated and analyzed in order to show the perceived differences concerning classroom environments felt by the participating groups in the study.

Principle Findings and Conclusions

Research question 1 asked, “How do the classroom environments of coaching and non-coaching teachers compare?” Overall, the data from this study suggests that coaching teachers perceive themselves as being more supportive of their students than non-coaching teachers. Coaching-teachers are more likely to take a personal interest in their students by discussing activities that take place outside of class. Also, they’re more likely to see themselves as being a friend...in addition to being a teacher.

There may be other reasons why coaching-teachers perceive themselves in such a way. First, the nature of being a coach may impact the classroom setting, itself. Sports, in general, is a social phenomenon. Coaches must have the ability to communicate effectively with their players and that often involves taking a “personal” interest in their lives. In fact, the level of competition present in today’s high school sports activities necessitates the highest level of personal involvement and commitment in order to compete successfully. Strategies which produce positive results on the playing field might be used by coaches in the classroom in an attempt to produce these same positive results.

Second, teachers who coach may have a distorted view of their dual role. When asked if they take a personal interest in their students...or if they see themselves as being a friend, it’s possible that their responses reflect experiences in coaching as well as in teaching. Simply put, it may be difficult for the teacher-coach to distinguish between these two roles.

Coaching and non-coaching teachers, however, share similar views about classroom rules and organization. Both groups feel that their classes are conducted in an orderly fashion and that students have been made readily aware of what expectations have been set concerning classroom management.

Research question 2 asked, “How do the classroom environments of male and female coaches compare?” Overall, the data from this study suggests that male and female coaching teachers perceive their classroom environments similarly. Coaches, regardless of gender, take a personal interest in their students and promote a sense of affiliation in the classroom.

Female coaching teachers in this study, however, separate themselves from male coaching teachers in one distinct way. They perceive their classrooms as maintaining a more “on-task” approach. Responses by female teachers were unanimous in questions concerning task orientation. All of the female teachers surveyed responded “no” to questions concerning whether or not outside activities are discussed during class time and whether the class is perceived as more of a social hour than a place for learning.

It’s difficult to create broad generalizations due to the extremely limited sample size, but it is possible that female coaching teachers prefer a more controlled learning environment. The subject area being taught may also lend itself to the development of a more “on-task” expectation on the part of the teacher. Many male coaches teach subject areas relating to social sciences and physical education. Because fewer female coaches, in this study, teach in these subject areas, the classes they teach may be a factor in this development of a more “on-task” approach in the classroom.

Research question 3 asked, “How do the classroom environments of coaching teachers with differing years of teaching experience compare? According to the study, coaching-teachers with more teaching experience are most likely to see themselves as friends and are more open to discussing outside activities during class. Teacher-coaches who fall within the 11-15 years of experience range, however, appear to experience the most difficulty in promoting a positive classroom environment. In this study, their perceptions of student effort and class organization are generally negative.

Again, due to the limited samples, creating broad generalizations according to the data collected would be premature. Few coaching-teachers are being compared within each category of “teaching experience.” However, it may be possible to explain these findings to some extent. Coaching-teachers, in this study, with a great deal of teaching experience may well have discovered a “comfort level” in teaching. They’ve developed expertise in the areas of classroom management and organization which has allowed them to promote a more positive classroom atmosphere. Those coaching-teachers who have between 11 and 15 years of teaching experience may feel as though they are trapped “in the middle.” Although no formal data was collected on reasons for these responses, it follows that possible explanations for this may be that the honeymoon period of the beginning teacher has long since passed...and feelings of frustration about students’ efforts and motivation may be affecting their class perceptions.

Research question 4 asked, “How do the classroom environments of coaching teachers with differing levels of academic advancement compare? Coaching-teachers at all levels of academic advancement consider their classes to be well-affiliated and

supported. They also unanimously take a personal interest in their students and go out of their way to help their students. Because immediate patterns did not emerge with this limited sample, it's difficult to draw additional conclusions concerning research question 4. This may have been expected due to the general body of literature suggesting that academic advancement hasn't been traditionally noted to be linked with classroom environment as defined for this study.

Recommendations

Researchers have explored the area of classroom environments through the development of scales, questionnaires, and observation measurements. In this field of study, the perceptions of teachers, however, deserves more attention.

Generalizations beyond this study should not be made. Studying larger populations would certainly be useful in studies examining teachers' perceptions of their classroom environments. Although this descriptive study focused on the "what is" aspect of a particular school, other studies using a larger sample would best be able to provide evaluative answers to researchers' questions. It may also be interesting to replicate this study in the comparison of schools with varied athletic traditions to determine if a school's athletic success (or lack of) impacts the classroom environments of coaching teachers.

Additional studies may also be valuable in examining the personalities and intrinsic variables which distinguish coaching teachers from non-coaching teachers. Questions concerning "why" coaching teachers perceive themselves as more supportive may be addressed by examining the differences in personality types of all teachers.

Additional studies should also be completed to investigate the legitimacy of the teacher-coach role. Comprehensive studies using “interaction-analysis”-type observations may be useful in helping to explain these differing perceptions of coaching and non-coaching teachers.

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APPENDIX A
SHORT FORM OF THE CLASSROOM ENVIRONMENT SCALE

- | | | |
|---|------|----------------------------|
| 1. Students put a lot of energy into what they do here. | TRUE | FALSE |
| 2. Students in this class get to know each other really well. | TRUE | FALSE |
| 3. The teacher spends very little time just talking with students. | TRUE | FALSE |
| 4. We often spend more time discussing outside student activities than class-related material. | TRUE | FALSE |
| 5. This is a well-organized class. | TRUE | FALSE |
| 6. There is a clear set of rules for students to follow | TRUE | FALSE |
| | | |
| 7. Students daydream a lot in this class. | TRUE | FALSE |
| 8. Students in this class aren't very interested in getting to know other students. | TRUE | FALSE |
| 9. The teacher takes a personal interest in students. | TRUE | FALSE |
| 10. Getting a certain amount of classwork done is very important in this class. | TRUE | FALSE |
| 11. Students are almost always quiet in this class. | TRUE | FALSE |
| 12. Rules in this class seem to change a lot. | TRUE | FALSE |
| | | |
| 13. Students are often "clockwatching" in this class | TRUE | FALSE |
| 14. A lot of friendships have been made in this class | TRUE | FALSE |
| 15. The teacher is more like a friend than an authority. | TRUE | FALSE |
| 16. Students don't do much work in this class. | TRUE | FALSE |
| 17. Students fool around a lot in this class. | TRUE | FALSE |
| 18. The teacher explains what will happen if a student breaks a rule. | TRUE | FALSE |
| | | |
| 19. Most students in this class really pay attention to what the teacher is saying. | TRUE | FALSE |
| 20. It's easy to get a group project together | TRUE | FALSE |
| 21. The teacher goes out of his/her way to help students. | TRUE | FALSE |
| 22. This class is more a social hour than a place to learn something. | TRUE | FALSE |
| 23. This class is often very noisy. | TRUE | FALSE |
| 24. The teacher explains what the rules are. | TRUE | FALSE |
| | | |
| 25. Are you currently an assistant or head coach of any sport at (name of school participating in study)? | YES | NO |
| 26. Gender | MALE | FEMALE |
| 27. Yrs of teaching experience | 0-5 | 6-10 11-15 16-20 20+ |
| 28. Highest degree obtained | BA | BA+12 BA+24 MA MA+18 MA+36 |

APPENDIX B
IRB APPROVAL FORM



Institutional Review Board (IRB)
Office of Regulatory Affairs (ORA)
University of Nebraska Medical Center
Eppley Science Hall 3018
986810 Nebraska Medical Center
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May 10, 1999

Lance Raabe
528 S. 55th St.
Omaha, NE 68105

IRB#: 190-99-EX

TITLE OF PROTOCOL: Coaching and Non-Coaching Teachers at a Large Midwestern High School

The IRB has reviewed your Exemption Form for the above-titled research project. According to the information provided, this project is exempt under 45 CFR 46:101b, category 2. You are therefore authorized to begin the research.

It is understood this project will be conducted in full accordance with all applicable sections of the IRB Guidelines. It is also understood that the IRB will be immediately notified of any proposed changes that may affect the exempt status of your research project.

Please be advised that the IRB has a maximum protocol approval period of five years from the original date of approval and release. If this study continues beyond the five year approval period, the project must be resubmitted in order to maintain an active approval status.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. D. Prentice' followed by a stylized flourish.

Ernest D. Prentice, PhD
Vice Chair, IRB

EDP:jlg