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The Preferred Classroom Environment of College-Level Business Administration Students in Urban Community Colleges

Thomas J. Cox
Seton Hall Univerisity

THE PREFERRED CLASSROOM ENVIRONMENT OF COLLEGE -LEVEL BUSINESS ADMINISTRATION STUDENTS IN URBAN COMMUNITY COLLEGES

BY

THOMAS J. COX

Dissertation Committee

Dr. Joseph Stetar, Committee Chairperson
Dr. Carol Frances
Dr. Jacqueline Kineavy

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Chapter I

THE RESEARCH PROBLEM

Introduction

The U.S. community college movement has a rich tradition of serving as the United State's "people's college", a term initially coined to describe land-grant universities but used today to describe the community college (Vaughan, 1980). Through their commitment to access and comprehensiveness, nationally 2-year colleges enroll more than 58% of the nations' students who are enrolled in higher education (National Center for Education Statistics, 2005). Courses and programs provide university transfer, occupational-technical, basic skills, and cultural education to people from all segments of the community.

The New Jersey county college sector is comprised of 19 community colleges and represents a major sector of higher education in New Jersey. The 19 county colleges enrolled 151,885 credit students in the Fall 2005 semester. This represents 56.3% of all New Jersey public college and university undergraduates (New Jersey County College Fact Book, 2006).

In addition, the county college sector in New Jersey continues to grow. During the last 5 years (2001-2005) enrollment has increased 17.1% (New Jersey County College Fact Book, 2006). In comparison, the New Jersey 4-year institutions increased 4.4% (New Jersey County College Fact Book, 2006). It is clear that county colleges have a significant impact in higher education learning in New Jersey and nationally.

The mission of New Jersey community colleges is to serve the county with an open admissions policy. Such a policy serves to attract a larger number of culturally diverse students.

Research shows that community colleges are very diverse. Nationally, in Fall, 2004, minority enrollment in 2-year colleges was 38%. Enrollment by age was also very diverse. In fall, 2004, 60% of enrollment was students under the age of 25, and 40% was 25 or over. Enrollment by gender indicates that 56% are female and 44% male (National Center for Education Statistics, 2005). In New Jersey community colleges, gender, age and minority enrollment are comparable with national statistics. In fall, 2004, minority enrollment nationally was 30%, but isolating 2-year colleges, minority enrollment was 37% (National Center for Education Statistics, 2005). In fall, 2005, minority enrollment in New Jersey community colleges represented 49%. In comparison, at some urban community colleges, minority enrollment is staggering. At Hudson County Community College it was 89%, at Essex County College it was 88% and at Passaic County Community College it was 78% (New Jersey County College Fact book, 2006). By virtue of open access to college, community colleges admit a larger percentage of high-risk students than colleges with selective admission policies. In general, these students may be less prepared and at greater risk for failure (Cohen & Brawer, 1996, as cited in Wright & Lander, 2003). In the urban community colleges at-risk students have reached a staggering 80% (Division of Higher Education, 2001).

Statistics from the U.S. Department of Education, 2005, indicate that nationwide almost 62% of students that start a program at a 2-year institution do not complete the program; this compares with only 35% that start a program at a 4-year institution and fail to complete the program (National Center for Education Statistics, 2005). The focus of this study is urban community colleges in New Jersey, where there is a higher percentage of at-risk students in a culturally diverse environment. At Passaic County Community College, servicing primarily lower Passaic County, a very urban community, the drop-out rate from fall semester to fall

semester over the past 5 years is 48% (Passaic County Community College Fact Book, 2005). Statistics are not available measuring the percent of students that start a program and fail to complete the program. However, with a 48% drop-out rate from fall semester to fall semester over the past 5 years, it would be logical to conclude that a very small percentage of students that begin a program at Passaic County Community College will actually complete the program.

Characteristics of at-risk learners include social problems such as poverty, dysfunctional family life, poor medical care, and inadequate diet. The academic climate in high-risk, poor communities has been shown to affect student achievement (Stringfield & Teddlie, 1991, as cited in Stringfield & Herman, 1997). General trends throughout higher education show that minority students tend to have lower persistence and graduation rates as well as lower levels of academic preparedness (Pascarella & Terenzine, 1998; as cited by Just, 1999). At-risk learners generally exhibit a "loser's mentality" (Pierce, 1994). As a result, retention targets are unlikely to be achieved unless tertiary education can be changed to make it more attractive to students through appropriate changes that include classroom organization (Ruby, 1992, as cited in Fisher & Waldrid, 1999). In addition to 'at-risk' students, community colleges attract adult students, defined as those age 25 and older. Adult students attending community colleges are either attending college for the first time or coming back after many years. As a result, they are often inadequately prepared both academically and psychologically, for what will be expected for college-level learning. When adult students realize they must think for themselves, there often are no clear right or wrong answers, and the purpose may be to ask the right questions rather than find the right answers, they often feel confused, frustrated, and even cheated (Brookfield, 1999, as cited in Howell, 2001).

Student approaches to learning are influenced by the classroom environment in which learning takes place. A student's positive perception of the classroom environment influences one's responses (Walberg, 1976, as cited in Huang & Waxman, 1996). The classroom environment is very complex as it encompasses many characteristics including climate, ambience, tone, and atmosphere; all considered to be important and influential (Frasier, 1986, as cited in Diamantes, 2002). The creation of an enhanced, meaningful environment contributes to the development of creative potential. Fostering creative thinking, encouraging sensible risks, and questioning assumptions help foster a creative environment (Stern & Williams, 1996; as cited by Fleith, 2000). An intellectual classroom environment is one where the physical, social, and intellectual environment is optimally structured (Hativa, 1999). The focus of the classroom dynamics includes the student to student, and student and teacher interactions. These interactions can manifest positive attitudes leading to more desirable outcomes (Fouts, 1989, as cited in Byer, 1999). Other research suggests that well-developed personal relationships among students are very important to develop cohesiveness which promotes higher achievement in the classroom (Haertel, Walberg, and Haertel, 1981, as cited in Byrne & Hattie, 1986). Recent research suggests creating a supportive, positive classroom environment emphasizing collaboration will provide a more effective classroom environment (Simplicio, 1999). In addition to providing research substantiating the importance of the classroom environment, it is hoped that this research will provide the criteria representing the business student's preferred classroom environment at urban community colleges.

Research Question

Are there differences in the preferred classroom environment of college- level students majoring in business administration in urban community colleges as related to their background?

Subsidiary Questions

Are there differences between various age groups, genders, or ethnicities with respect to preferring a classroom environment that would allow them to freely participate?

Are there differences between various age groups, genders, or ethnicities with respect to preferring a classroom environment that requires students to participate with others in class in some academic forum?

Are there differences between various age groups, genders, or ethnicities with respect to preferring a classroom environment that requires instructors to be caring, respectful, and offer encouragement?

Are there differences between various age groups, genders, or ethnicities with respect to preferring a classroom environment that is more task oriented and demanding?

Are there differences between various age groups, genders, or ethnicities with respect to preferring a classroom environment where individual expectations need to be met in the classroom?

Are there differences between various age groups, genders, or ethnicities with respect to preferring a classroom environment where class objectives are clear and an effective plan to communicate those objectives are in place?

Are there differences between various age groups, genders, or ethnicities with respect to preferring a classroom environment where students should have input in designing the course or with input in setting course objectives?

Definition of Terms

Academic Tenure. Permanence of a position granted to an employee after a specific number of years.

At-Risk Student. Disadvantaged students in high poverty, predominantly minority contexts.

Classroom Atmosphere. Classroom setting where educators work to promote the academic, social, and behavioral skills of students

Classroom Environment. It is the context of education. It is a contributing source established by the instructor, that helps define the quality and kind of education a person receives.

Classroom Social Climate. Students' perceptions of classroom involvement and classroom affiliation.

Classroom Social Interaction. Students' behavioral engagement with others while active with designated classroom activities.

Classroom Management. The planning, organizing, motivation and leadership of the instructor in the classroom.

College Level Student. Student taking college courses that when successfully completed will apply towards the credits required for an Associate's or Bachelor's degree.

Community College. Student-centered, open-access institutions primarily devoted to quality instruction and public service. They provide counseling and other student services intended to promote the success of a diverse student population, particularly to those who have been traditionally underserved in other educational settings. Students often attend community

colleges for purposes other than to obtain a degree, such as for specific job-related training for career advancement.

Drop-Out Rate. Percentage that enroll, begin taking courses and have stopped attending school.

Ethnicity. Characteristics used to describe a group within a culture on the basis of variable traits including religion, linguistic, ancestral, or physical attributes.

Full-Time Student. Classification of student taking twelve credit hours or more for a given semester.

Millennial Students. Individuals attending an educational institution born in or after 1982.

Minority. A sociological group that does not constitute a politically dominant plurality of the total population of a given society.

Natural Critical Learning Environment. Classroom atmosphere that fosters critical thinking about questions/topics students find interesting and provocative.

Open Admissions Policy. A policy that enables anyone with the desire for learning to enroll in the educational institution.

Part-Time Student. Classification of student taking fewer than twelve credit hours for a given semester.

Urban Community College. Community College located in an inner-city location.

CHAPTER II

REVIEW OF LITERATURE

The review of the literature by this researcher identified no relevant research that specifically addresses the subject of this dissertation: If differences exist in the preferred classroom learning environment of college level, business students in urban community colleges as related to their background that includes gender, ethnic group, and traditional/non-traditional students. Research has found that the improvement of teaching and learning can emerge by examining the classroom learning environment as perceived by students themselves (Knight & Waxman, 1991; Walberg, 1976; Waxman & Eash, 1983, all as cited in Huang & Waxman, 1996). How students perceive and react to their classroom instruction may be more important in terms of influencing student outcomes than the quality of teaching (Anderson, 1987; Knight & Waxman, 1991; Walberg, 1976; Winne & Marx, 1977, 1982, all as cited in Huang & Waxman, 1996)

Since this study is directed toward the classroom learning environment, it is important to recognize that terms such as classroom atmosphere, classroom social climate, and classroom social interactions are often used interchangeably when scholars discuss the classroom learning environment.

The importance of the classroom environment has been recognized over 60 years ago. Lewin's (1935, as cited in Coll, Taylor & Fisher, 2002) research on field theory had important implications for the study of social climates. Lewin suggested that behavior was strongly

influenced by the mutual interaction between personal characteristics and the total environment. Henry Murray (1938, as cited by Byer, 2001) developed the Needs-Press Theory (individual needs and environment) to address the significance regarding behaviors as the result of interaction between the individuals and their environment. The Needs-Press Theory holds that people have needs for human fulfillment that include students' needs for classroom involvement and classroom affiliation. Environmental influences may exert stimulation that encourages students to perceive that they are benefiting from participating in a classroom that meets their needs for classroom involvement and classroom affiliation. Theoretically, students perceiving that they are benefiting from the classroom involvement opportunities and from the classroom affiliation opportunities offered by their classroom environments tend to be environmentally influenced toward positive learning outcomes that include positive academic outcomes. His focus was on the measurement and description of teacher-student and student-teacher relationships and on the organizational structure of the classroom. He characterized the classroom environment as having four levels: the relationship level, the individual-growth level, the system maintenance level, and the system development level. He identifies the relationship level with three indicators: involvement, affiliation, and teacher support. The individual-growth level has two indicators: task orientation and academic competition. The system maintenance level included three indicators; order and organization, rule clarity, and teacher control. The system development level had only one indicator, teaching innovation. Researchers believe this theory was one of the most important measures of the classroom environment and provided the foundation for all future classroom environment scales.

The original conceptualization of gathering research about the school environment began in the 1960s. However, the pioneering work, led by Halpin and Croft (1963, as cited in Dorman,

1996) gathered research about the school environment as seen by educational administrators. This was done through an instrument entitled the Organizational Climate Description Questionnaire (OCDC), developed also by Halpin and Croft (1963). This resulted in a school environment perception from a group that viewed schools not from a learning perspective, but as formal organizations (Thomas, 1976, as cited by Dorman, 1996). The result of these studies had little value since the central role of the school environment was to foster student cognitive and affective growth (Ely, 1971, as cited by Dorman, 1996).

Walter Doyle (1977, as cited by Simco, 1995) was the pioneer who began to consider the need for moving towards a full understanding of the complexity of the classroom environment and its role in the effective promotion of teaching and learning. Doyle provided a theory focusing on the description of rich classroom environments. He argued that the classroom environment is the first stage in the search for a deeper learning process. He is one of several pioneers who began to consider the need to move towards a full understanding of the complexity of the classroom environment and its role in the effective promotion of teaching and learning. It is in this respect that DesForges and Cockburn(1987, as cited by Simco,1995) express Doyle's position. They maintain that while learning is a covert process, it takes place in a school within the complex social world of the classroom (DesForges & Cockburn, 1987 as cited by Simco, 1995).

Doyle (as cited in Simco, 1995) outlined what he calls an ecological approach to the classroom. Classroom ecology is important because it acknowledges classrooms as a complex human environment. Doyle details three broad elements of classroom ecology. The first is naturalistic, a perspective that sees the classrooms as richly detailed and complex. In this respect, classrooms are seen as multidimensional and unpredictable. Multidimensional refers to

the large quantity of events and activities occurring in the classroom. The classroom is a place in which people have different preferences, and therefore, there are a broad range of social and personal objectives. Unpredictability is prevalent since it is not possible to state in advance the evolution of any particular classroom.

Doyle's second element is environment-behavior relationships. This means that the behavior of participants in the classroom is determined by the ecology of that environment. He argues that individual behavior in learning is positively correlated to the classroom environment. The third element in Doyle's approach to research is that there is a focus on 'the way of behavior'. This is important in so far as it is an empirical expression which has at its center the powerful role of environment in determining behavior. There is an appreciation of how the classroom gives meaning to and shapes human behavior. A student's actions are grossly controlled by the constraints and the opportunities that exist within the classroom.

Doyle's classroom model (1979, as cited in Simco,1995) embeds the notion of reciprocal causality, that is, the characteristics of a classroom environment are the outcome of ongoing negotiation between teachers and pupils. Pupils have substantial power in the negotiation of tasks in the classroom. The power can be seen in so far as the process slows down the pace of the classroom events and reduces the urgency of the tasks at hand.

More recent research by Clarke and Dart (1994, as cited by Dart, Burnett, Purdie, & Associates, 2000) shows that students learn in a natural critical learning environment. "Natural" because what matters most is that students are challenged with questions and tasks that they find of interest, make decisions, and defend their choices. "Critical" because by thinking critically students reason from evidence and examine the quality of their reasoning, make improvements while thinking, and ask probing and insightful questions. Clarke and Dart (1994, as cited in Dart,

burnett, Purdie & Associates, 2000) found that the deep approach to learning must include critical thinking which can exist when students find the topics discussed to be of interest. To achieve this, the classroom environment must contain high levels of personalization, participation, and investigative learning skills.

Bain (2004) confirmed the research by Clarke and Dart (1994) that the classroom environment must provide a structure for challenging students to think critically. A study at the Searle Center for Teaching Excellence at Northwestern University (Bain, 2004) studied more than 60 professors from various disciplines. The selected professors included those that students raved about. Bain (2004) concluded that creating a natural critical learning environment can be done many ways; lectures, discussions, case studies, role-playing, or through a variety of other techniques. The method of choice depends on many factors that include course objectives, the personalities and cultures of students, and learning styles. This belief is shared by other researchers. For example, Larry Johannessen (2004) emphasizes that a natural cognitive approach to teaching and learning focuses on techniques that make connections with students' cultures. However, in accordance with Bain (2004), there were four elements that account for an appreciable amount of all variables that result in a natural critical learning environment. The first key factor is to engage and challenge students by asking provocative questions and providing guidance. Never be content with one question, but continue to ask guided questions that would help students discover answers for themselves. The guided questions are to be surrounded by broader issues, often taking an interdisciplinary approach. The second important element is to grab students' attention and keep it focused. This can be done by providing guidance in helping students understand the significance of the question. The third element is engaging students in some higher-order activity; encourage them to compare, apply,

evaluate, analyze, and synthesize, but never to listen and remember. Fourth, begin where the students are rather than where the syllabi might dictate. Start with the simple and move to the complex. If the simple is understood, immediately challenge with something more complex.

Another recent study that addressed classroom methods and strategies in promoting creative thinking and problem solving was a 1-year study (Hamza & Nash, 1996) conducted at Lone Star Community College, located in Central Texas Community College. One significant finding of professors that promote creative thinking and problem solving addressed the personality of the professor. The data collected was the result of conducting continuous, semi-structured and informal interviews with students. A total of 113 semi-structure interviews and numerous informal interviews were conducted. The respondents came from diverse backgrounds. Some initial screening resulted in interviewing only those respondents who stressed the importance of creative thinking and problem solving in the classroom. One significant finding was that it was essential that the professor possess a strong passion for teaching and the subject matter they were teaching. It was equally important that the professor produce excitement in the classroom. Some techniques mentioned to do this included: telling jokes, using humor, individualized stories, previous or current events, and metaphoric analogies. If the professor projects a positive personality, for example "friendly", "eager", or "motivated", the students' behavior in the classroom will be influenced accordingly. If the personality is negative, for example "lazy", "sluggish", or "disinterested", the professor's behavior will also be influenced accordingly. It is a well established principle that personality plays a major role in shaping perceptions of complex, ambiguous stimuli (Matlin, 1988; Goldstein, 1989, both as cited by Haney, Czerniak & Lumpe, 2003).

A study by Murray, Rushton and Paunonen, at the University of Western Ontario (1990) studied 29 different personality traits in relation to student ratings of teaching effectiveness. A sample of 46 psychology professors was evaluated in six different types of university courses that included graduate and undergraduate courses. The most significant finding of this study is that personality traits do contribute to the students' perception of effective teaching. Personality traits that correlated highest with teacher effectiveness ratings included leadership, extraversion, liberalism, supporting, intellectual curiosity, and changeableness. While the research showed some personality traits contributing to effective teaching vary substantially for different types of courses, the personality traits extraversion and liberalism correlated positively and significantly with student ratings of effective teaching in undergraduate courses. The trait definition of extraversion is someone easy to talk to, is exciting in the classroom, and optimistic. Liberalism is someone progressive, modern, adaptable, and seeks change. These findings have important implications for the validity and utility of student instructional ratings and on a more general note, for the improvement of university teaching.

In support of this view, Erdle, Murray, and Rushton (1985, as cited by Murray, Rushton & Paunonen, 1990) showed by path analytic procedures that more than 50% of the relationship between instructor personality and student ratings was mediated by specific classroom behaviors. As a result, it is not unreasonable to conclude that a correlation between instructor personality and student ratings provide positive evidence with respect to the validity of student ratings of teaching effectiveness.

The classroom environment is a learning environment that is comprised of the physical surroundings and social or cultural influences (Hiemstra, 1991, as cited by Barke & Garvin-

Doxas, 2004). Both the physical and social aspects of the classroom environment influence student satisfaction (Scruggs & Mastropieri, 1994, as cited by Maroney, Finson, & Associates, 2003) Dunn and Dunn (1992, as cited by Rayneri & Gerber, 2004) have indicated that a well structured classroom is an essential element for students' achievement. Researchers Dunn and Griggs (2003, as cited by Burke & Burke-Samide, 2004) confirmed that students respond academically to the classroom structure. Students achieve at a higher level and have improved attitudes when the learning environment reflects a well structured classroom. For example, the physical environment alone can have a substantial impact on students' achievement. To help illustrate this, if the physical environment is one where the seats are bolted down facing the lectern, student collaboration can be inhibited. According to Rosenfield, Lambert, and Black (1985, as cited by Bonus & Riordan, 1998) a circle, cluster, or U-shape seating configuration produces a greater amount of social interaction and was found particularly useful where the goal was to promote discussion. In the U-shape configuration, students tend to engage in a higher level of interactive verbal discussion. The U-shape influences participation and critical thinking which has a positive effect on learning (Wengel, 1992, as cited by Bonus & Riordan, 1998). The cluster arrangement, grouping students into small groups, is the preferred configuration for on-task interaction in a discussion-based format (Papalia, 1994, as cited by Bonus & Riordan, 1998). A study conducted by Hamza and Nash (1996), at Lone Star Community College, substantiates that grouping students into small groups in class stimulates critical thinking. The study consisted of 113 semi-structured student interviews. The findings included the importance of the design of the classroom physical set-up and there were positive, constructive student responses with small group interactions. It was essential the physical configuration was one where the students can

see each other as well as the instructor. The small group design was described as creating and fostering a climate that nurtures students' curiosity. However, when the physical environment is one where the seats are bolted down facing the lectern, in combination with instruction that is almost entirely lecture-based throughout the program, students can come to resist different teaching methods such as student-led discussion or small workgroups (Waite, Jackson & Diwan, 2002, as cited by Barker & Garvin-Doxas, 2004).

While the physical aspects contribute to the experience, the social climate is influenced by appropriate class activities and relationships; beliefs about trust, authority, status, and hierarchy. The features of the social climate are not static. They are negotiated through instructor-student and student-student interaction (Rorty, 1999, as cited by Barke & Garvin-Doxas, 2004). Positive student-student interaction is important for maintaining a healthy classroom environment (Varma, 2006). The social climate is affected by interaction between students and the way they participated in class. Student interaction gives a sense of camaraderie built around academic course work (Fassinger, 1995). Communication patterns are essential since it is by creating shared understanding that teaching and learning occur. In addition to the physical and social aspects of the classroom, classroom management can also affect student performance (Maehr, 1990, as cited by Cheng, 1994). Classroom management is divided into two parts: leadership style and power basis that a teacher uses in their class. Teachers have leadership influence on the psychological learning environment. The concept of classroom management is also relative to this study since one's leadership style will influence the classroom climate. The results of some Western studies indicate that, under democratic teacher leadership, classroom climate is positive, learning is active (Ho, 1989, as cited by Cheng, 1994).

A 2002 study at a southeastern university confirmed that the physical classroom setting, the social classroom climate, and classroom management all contributed to influencing student satisfaction. The study took place in a freshman English class that totaled 24 students. The ages of the class ranged from 18 to 40. A qualitative research design was used since it allowed for an in-depth examination of the student's experiences in the classroom. Individual interviews were conducted at the beginning and end of the semester. Group interviews with the same participants were conducted at the end of the semester. In addition to the interviews, the researcher observed the class every week throughout the semester. The findings from the study showed that all 24 students described their classroom environment being influenced by the classroom's physical structure, social climate, and instructor.

The preferred classroom physical structure was a horseshoe arrangement so they could see each other and instructor. When the class was structured in a traditional row design, the observations showed that the students who sat in the back or side of the instructor either did not participate or participated less than those who were front and centered. When the horseshoe physical structure was in place, the students were more interactive and many of those who did not freely participate when row design was in effect freely participated when the structure was horseshoe shaped.

The social climate is affected by the instructor and the students. The group interviews which were conducted emphasized that the instructor set the tone for the class. Having an instructor who encourages students to speak, an instructor that is very willing to listen and hear you out, someone personable and addresses students by their name, an instructor who was 'down to earth' so students can relate to, and someone who provides a supportive and relaxed

classroom so course topics can be openly discussed were all elements that the group interviews pointed out as important.

Finally, classroom management referred to managing the course content and the communication of the content. In this study, the class format emphasized group discussion. The floor was open to anyone and students could jump in anytime with comments. The instructor typically would set-up issues related to the topics and students would freely comment. Essentially the instructor was a moderator to keep the discussions on point and manage the discussions to avoid any heated dialogue.

DeYoung (2001) conducted a study at Florida State University that investigated the ideal social climate of an undergraduate social science class. It was hypothesized that an "Ideal" classroom climate would facilitate better course appreciation, involvement, and attendance by the student. The instrument used for this study was Moos and Trickett's Classroom Environment Scale (Trickett & Moos, 1974). A high score on the nine subscales represented the "Ideal" classroom climate. The study consisted of two social science classes for a total of 52 students who participated (23 students in class A, 29 students in class B, and 7 students in total elected not to participate). The results indicated there was no significant difference between the responses of the two classes. Both classes rated the subscales very high; therefore, both classrooms were considered having the "Ideal" classroom climate. The instructors in both classes indicated students' classroom involvement and attendance was better when compared to other sections of the same course or different courses both instructors taught.

Another study (Byer, 1999) investigated the effects of student's perceptions of the classroom social climate of an eight grade class in a southern middle school. The study consisted of 185 students in U.S. history courses. The instrument used in this study was Moos

and Trickett's Classroom Environment Scale. The focus of the study were two sub-scales of the Classroom Environment Scale: Classroom Involvement and Classroom Affiliation. The dependent variable of the study was academic self-concept which refers to the extent of students' confidence in their social studies work. The findings of the study indicated that a statistically significant positive relationship exists between students perceptions of the classroom social climate and academic self-concept. More specifically, an environment where students can freely participate (classroom involvement) and an environment where students can socially associate with other students in some academic group forum (classroom affiliation) were both found to provide students with the pride and confidence in their academic work.

As social beings, we concern ourselves with others' perceptions of us. In the classroom, we draw inferences about others that lead to attitudes or beliefs, thus creating an environment that lacks a communication climate which can potentially lead to a spiral of defensive behavior. When defensive behavior becomes habitual, it creates a defensive climate; a climate that will hinder student success. This view is shared by many researchers. Students perceptions of their own ability appear to be especially responsive to social comparison. Self-evaluation of ability can be decidedly more negative when focused on surpassing some normative standard or outperforming others. The classroom environment should induce improvement, but be non-threatening to promote learning (Ames, 1992). Since evidence exists that creation of a non-threatening classroom environment contributes to learning, what needs to be addressed would answer the question "What makes a classroom environment threatening to students"? The answer to this question depends on the student. However, research shows (Buskist, Epting & Zinn, 2004, as cited in Baker, 2004) that the social comparison, professor's mannerisms and communication styles, personalities of other students, and a larger class are some common

threatening variables. Professors can only attempt to minimize a threatened environment by focusing on what they can control in the classroom environment. Research shows that many students would have formed an opinion of the class by the end of the first 5 minutes. As a result, the introduction of ourselves to the class and how one approaches the first 5 minutes sets the tone for the class. Showing genuine interest in students and their diverse strengths and weaknesses can establish an initial safety zone. Establishing ground rules appropriate to the course can extend the student's safety zone (Robinson & Kakela, 2006).

The classroom is a critical locus for student interpersonal and educational development. The notion that classrooms have distinct atmospheres or climates that mediate interpersonal and educational development has been in the working vocabulary of educators and researchers for years (Anderson, 1939; Fraser, 1987; Walberg, 1969; Withall, 1949, 1951, all as cited in Ames, 1992). These findings agree with Goodlad's, (1984, as cited in Dorman, 1996) definition of classroom environment as having physical, emotional, and aesthetic characteristics that enhance attitudes toward learning. A good classroom environment is highly correlated with student affective performance (Fraser, 1993). Student approaches to learning are influenced by the classroom environment, a student's positive perception of the classroom environment influences one's responses (Walberg, 1976, as cited in Huang & Waxman, 1996). A study by Spencer and Schmelkin (1995, as cited in Murray, 2002) found that adult learners consider clarity, fairness, and respect to be most important in the determination of an effective classroom environment. A more recent study on effective classroom environment for adult learners (Murray, 2002) was completed that determined characteristics of classroom environments that met with students' expectations. This study's focus was on stimulating student interest and establishing confidence in the students. The research applied an action approach to the problem under investigation.

Action research uses a systematic approach to reflect on the day-to-day practice and delivery of instruction in the classroom. Action research is easily adapted to school settings and allows for research within the limitation of time and resources (Mills, 1997, as cited in Myhill, 2001). The study focus was an ethically diversified population of adult men and women ages 17 to 40. The classroom characteristics identified by the study that met adult learner expectations on stimulating their interest and confidence were: encouraging students to express ideas, the instructor's organization, enthusiasm, and effective communication.

Another study in 2000-2002 conducted by the Atlas Institute Evaluation and Research Group, University of Colorado, provided a deep understanding of the classroom learning environment. In one university, 13 courses in computer science were observed over 4 semesters for a total of 348 hours of observation. The data gathered for this study included observation records, academic records, class documents (e.g. syllabi), and 37 formal student interviews. The results of this qualitative study indicated that students clearly prefer a more supportive learning environment. Addressing students by name as quickly as possible; engaging in collaborative activities that will help students get to know each other; the professor moving around the classroom, even during lectures, so not to physically distance and separate from students, all had an affect on the positive student-professor interpersonal relations that developed. The environment bolstered student confidence. Students that failed admitted failure due to lack of willingness to spend the time studying, or because the subject matter was too hard, or simply the acknowledgement that they did not belong in the discipline. There was no mention of a lack of an effective learning environment.

In the past, the most common means of measuring the classroom environment has been the use of perceptions. Teachers' and students' perceptions of classroom environments (both secondary schools and universities) have received increasing attention from educators (Fraser, 1991, as cited in Coll Taylor, Fisher, 2002). Biggs(1993, as cited by Dart, Burnett, Purdie, & Associates, 2000) noted that students most likely have a preferred orientation toward a deep or surface approach to learning, but it is how they perceive the learning environment that will arouse or inhibit their learning. That perception is dependent on how students interpret the factors present in the learning environment in light of their personal characteristics.

Moos, 1979 (as cited by Byrne & Hattie, 1986) did considerable research on human characteristics and his work has influenced the development and use of instruments to assess the qualities of the classroom learning environment from the perspective of the student. With regards to his work on human characteristics, he found that general categories can be used in characterizing diverse learning environments. These categories are relationship dimensions which identify the nature and intensity of personal relationships within the environment and assess the extent to which people are involved in the environment and support and help each other.

His work on influencing the development and use of instruments has allowed researchers not only to measure perceptions of the actual classroom environment, but also to measure perceptions of the students' preferred classroom environment. A student's perception of their preferred classroom environment takes into account previous experiences. It is through their previous experiences that students develop their preferred classroom environment. Students' perceptions of their learning environments are believed to influence their classroom behavior and their learning (Fraser, 1993).

The initial instrument used in research to study the preferred classroom environment was the Classroom Environment Scale (CES; Moos & Trickett, 1974). The Classroom Environment Scale contains six scales. The content and concurrent validities of the CES have been established through correlation studies and classroom observation. Regarding its validity, the scale was proven to have a very high Cronbach alpha reliability. The Cronbach alpha reliability estimate is one of the most commonly reported reliability estimates in the language testing literature. The Cronbach alpha is used to estimate the proportion of variance that is consistent in a set of scores. It can range from 00.0 (if no variance is consistent) to 1.00 (if all variance is consistent) with all values between 00.0 and 1.00 also being possible. For example, if the Cronbach alpha for a set of scores is .90, you can interpret that as meaning that the test is 90% reliable. Adequate internal consistency reliability coefficients were obtained in previous studies that used the Classroom Environment Scale. The development of the Adult Classroom Environment Scale (ACES) by Darkenwald and Valentine (1986) was dominantly based on Moos and Tricketts Classroom Environment Scale. Studies show the Adult Classroom Environment Scale has a high alpha reliability. In a 1993 study done at a large 4-year regional Midwestern institution, the Adult Classroom Environment Scale was found to have a reliability coefficient of .94.

The framework for this study is the classroom environment; utilizing the Adult Classroom Environmental Scale (ACES) as the instrument developed by Darkenwald and Valentine (1986) (see Appendix A). This scale consists of seven sub-scales designed to measure the classroom environment. Those seven sub-scales include: Involvement, Affiliation, Teacher Support, Task Orientation, Personal Goal Attainment, Organization and Clarity, and Student Influence. The Classroom Environment Scale (CES) is used extensively in classroom

environment studies at the elementary and high school levels. The Adult Classroom Environmental Scale (ACES) paralleled Moos and Trickett's three domains: Relationship domain (description of type and degree of personal relationship formed in class), personal development/goal oriented domain (fosters self-improvement and goal achievement), and a system maintenance and change domain (clearness of course requirements and reaction to change in the classroom). Darkenwald and Valentine modified the Classroom Environment Scale to use as a tool for measuring the classroom environment in adult education settings.

Instruments are now available to study a wide variety of learning environments. Research into perceptions and measurement of learning environments is dominated by studies at the secondary school and to a lesser extent at the elementary school level (Fraser, 1991; 1995, as cited in Aldridge, Fraser, & Huang, 1999). There is much less known about perceptions of learning environments at the tertiary level. The wealth of information obtained from secondary school studies and some at the elementary level, suggests that it could be of value for tertiary level educators to gain a fuller understanding of the students' preferred learning environment (Clarke, Chant, & Dart, 1989, as cited in Dart, Burnett, Purdie, & Associates, 2000; Entwistle & Tait, 1993, as cited in Coll, Taylor, & Fisher, 2002).

Over the past 20 years considerable progress has been made in the conceptualization, assessment, and investigation of the important but subtle concept of the classroom environment (Fraser, 1998, as cited in Coll, Taylor, & Fisher, 2002). Fraser (1989, as cited by Diamantes, 2002) reviewed over 60 studies in which the effects of the classroom environment on student outcomes were investigated. The findings of the studies suggest that student outcomes can be improved by creating classroom environments which are conducive to learning. Conducting a classroom where students are engaged and promoting an atmosphere of positive interaction

improves student learning. Teacher-student and student-student interaction is an integral part of the classroom environment. When students feel that they can respect and trust their instructor, and the instructor promotes a class where students can freely interact, they tend to grow more confident in themselves and perform better academically (Cho, 2003, as cited in Ozay, Kaya, & Sezek, 2004). Students who have less directive, less detached instructors, experience more positive interactions, display higher levels of development and are more competent in cognitive activities (Kruif et al., 2000, as cited in Ozay, Kaya, & Sezek, 2004). Student's perceptions of the classroom environment as predictor variables have established consistent relationships between the nature of the classroom environment and student cognitive and affective outcomes (Taylor, Fraser & Fisher, 1997, as cited in Ozay, Kaya, & Sezek, 2004). Researchers have indicated that instructors significantly contribute to a positive classroom social climate, especially for Millennial students. Many scholars emphasize the importance of student-faculty contact in higher education. Frequent student-faculty quality contact can enhance students' motivation, involvement, and intellectual commitment (King, 2003, as cited in Wilson, 2004). Substantive contact is what is important. Discussing career plans with faculty, joining a professor on a research project and discussing ideas outside of class are essential (Kuh, 2003, as cited in Wilson, 2004). Millennial students are described as cooperative team players (Howe & Strauss, 2000, as cited in Wilson, 2004). Cultivating interaction with class activities such as study groups and learning partners foster a positive emotional climate (Kuh, 2003). Group discussion methods are superior to lectures in students' retention of information as students are more motivated in a dynamic classroom environment (McKeachie, 2002).

Pajares (2001) revealed that beliefs around a particular situation form attitudes. Beliefs influence perceptions and behavior. If the classroom learning environment is incongruent with

their own images or beliefs, there will be a misalignment of educational goals thereby impeding effective teaching. At the university level, the teaching content, that is the teaching strategies as well as the classroom environment, must be congruent with the view of the student. Biggs (1996, as cited in Wright & Lander, 2003) referred to this as "constructive alignment". Meyer and Mullear's (1990, as cited in Haney, Czerniak, & Lumpe, 2003) assertion is that deep approaches to learning are strongly related to perceptions of the learning environment. Whitmore (1986 as cited in Rayneri & Gerber, 2004) confirms findings that underachievement occurs when there is a mismatch between student learning and classroom environment. When such a mismatch occurs, students will turn to daydreaming to escape unrewarding classroom environments that are unsatisfying. Hadi-Tabassum (1999, as cited in Diamantes, 2002) assessed that the nature and quality of students' attitudes toward their classroom environment affect learning. Changes in the classroom may be necessary to gain increased academic improvement and nurture a proliferation of ideas. Fouts and Myers (1992, as cited in Diamantes, 2002), performed a study that indicated their results led to a growing empirical base that student views are determined, in part, by the classroom environment.

The purpose of this study is to focus on the preferred learning environment of undergraduate students majoring in Business Administration in urban community colleges. A question that can be raised at this time: Is the learning environment for students majoring in Business Administration different compared with students in other majors?

While no research exists indicating that the preferred classroom environment is different for various academic areas, many previous studies of the classroom environment do limit their study to specific areas. In *Educational Psychology*, December, 1997, a study by Wong, Young, and Fraser entitled "A Multilevel Analysis of Learning Environments and Student Attitudes" was

conducted that consisted of 1,593 high school chemistry students. The study measured students' attitudes and their perceptions of chemistry laboratory classroom environment. Overall, the research revealed that students' classroom environment perceptions account for appreciable amounts of variance in student learning outcomes. The findings suggested that the chemistry laboratory classroom environments which exhibit favorable levels of student cohesiveness, open-ended laboratory activities, integration between theory and experimental work, clear rules, and adequate equipment were linked with positive attitudes among students. While we know the structure of the classroom is essential to promote learning, the strategy by how the task is delivered is equally important.

A study conducted twice in the area of mathematics at the secondary school level revealed very similar results. The study consisted of two scenarios: In Mr. D's class, challenging math problems are put on the board. Students are given 5 minutes to complete the problem and then volunteers are asked to come forward to offer their solution. In Mr. R's class, similar challenge problems are put on the board, students are given 5 minutes to work in groups, share solutions with each other and then each group was asked to present their solution. In Mr. D's class few student volunteers stepped forward and even fewer actually remembered the problem or solutions once the class ended. In contrast, more students participated in Mr. R's class, and the discussion reflected an active involvement of strategic thinking. This study was repeated twice with the same results. While the study is only illustrative, nevertheless, the different locus of responsibility and grouping arrangements create different tasks and engender different judgments.

Finally, a recent study by Murray (2002), limited to adult learners, ages 17 and older that were enrolled in an Adult Basic Education Program in New York City, had a dual purpose. The

purposes were to determine if a dominant learning style existed among adult learners and what the adult learner perceived as an effective classroom environment. Adults with any visual difficulties, serious language defects, Attention Deficit Disorders (ADD), Attention Deficit Hyperactivity Disorders (ADHD), or any other neurological impairment were excluded from the study. The sample was small, a total of 10 adults participated in the study. The results of the study indicated that while there were different preferred learning styles, the preferred characteristics of the classroom environment were the same. The Adult Basic Education learners desired a classroom environment that offers encouragement, sensitivity, and demonstrates fairness and respect for others, is clear and organized in delivery of instruction content, and responsive to student questions. The students also value access to the instructor outside of the class.

As college enrollment grows more diverse, it is important to determine if the student's preferred classroom environment which leads to increased learning and achievement, is the same for all ethnic groups, gender and types of students (traditional/non-traditional). Research shows that as classrooms become increasingly diverse, classrooms need to be culturally responsive. Culturally responsive classrooms provide culturally diverse students with relevant connections among themselves and with the subject matter and tasks assigned by the instructor. Establishing a classroom atmosphere that respects individuals and their culture is essential to provide an atmosphere that is comfortable for students. However, many instructors are faced with a limited understanding of cultures other than their own. Instructors and administrators must recognize that this limitation can negatively affect the students' ability to become successful learners (Bromley & Patton, 1998; as cited in Montgomery, 2001). Research does exist that indicate cultural differences do exist that can have an effect on the classroom environment. A 1999 study

by Aldridge, Fraser and Huang investigated the classroom environments in Taiwan and Australia. The study used the instrument What is Happening in this Class? (WIHIC), developed by Fraser, Fisher, and McRobbie (1996). The subscales measured with this instrument are closely tied with the Classroom Environment Scale (CES; Moos & Trickett 1974). The study included 25 biology classes and 25 physics classes in both Taiwan and Australia. Some of the findings indicated that in Taiwan the lessons were teacher-centered and the students were fairly passive. There were generally few opportunities for discussions or questions. Research revealed the teacher-centered approach was largely a result of the examination-driven nature of the curriculum. Good examination results are paramount in importance to students. In contrast, Australian teachers desire to use methods in their classes that were not teacher-centered. The view of Australia instructors was the development of the students' ability as learners was more important than the acquisition of content knowledge. The relationships between instructors and students tended to be cold and hierarchical in Taiwan rather than warm and egalitarian in Australia. A more recent study by Tucker (2003) addressed the question: "To what extent do we need to change our classroom format and teaching methodology to accommodate students from different cultures and countries?" The study compares Korean and American students. The study included a small liberal arts college in the East that had an affiliation with a sister "Korean Extension" college. Results of the research indicated that Korean students did not participate in classroom discussion and rarely took any notes from lectures. Lectures were the typical method of instruction. Excellent grades were paramount to the student. Students would never question the authority of the professor, this would be considered embarrassing to the intelligence of the expert (professor). The classroom environment is one of silence, with virtually little dialogue. The classroom is one of harmony, courtesy, and non-confrontational. However, outside of class,

students prefer to work in groups, as cooperation and quality of relationships is valued. In direct contrast, the classroom environment in the American classroom was one of informality and casualness. There were discussions in the classroom that led to confrontation, disagreements, and even open criticism. Students enjoyed working out problems or discussing issues in groups, followed by an open class discussion. However, outside of the classroom, student preferred to work independently as they view other students as competitors; therefore keeping thoughts and ideas to oneself is important.

The instrument used for this particular study is the Adult Classroom Environmental Scale (ACES), developed by Darkenwald and Valentine (1986) (see Appendix A). The Adult Classroom Environmental Scale (ACES) was developed based dominantly on Moos and Trickett's (1974) Classroom Environment Scale (CES). Studies show this scale has a high alph reliability, however, it was designed primarily for studies in secondary schools. While the scale was developed in 1974, it is still used today. A 1999 study that used Moos and Trickett's Classroom Environment Scale investigated the effects of students' perceptions of the classroom social climate in a southern middle school (eight grade). Another study in 1999-2000 included 392 11^{th} grade students who attended an Alabama high school and measured the effects of students' perceptions of their high school social studies class. While researching instruments for this study, the Adult Classroom Environmental Scale was the only scale this researcher found designed to measure the classroom environment in higher education. However, it is essential to mention that another instrument measuring adults' perception of their classroom environment is the College and University Classroom Environment Inventory (CUCEI), (Fraser, Williamson & Tobin, 1987). While this instrument was also intended for use in college settings, it is designed for use in gathering opinions about small classes at universities or colleges (sometimes referred

to as seminars or tutorials); but not suitable for the rating of lectures or laboratory classes (Treagust & Fraser,1986).

While the Adult Classroom Environmental Scale (ACES) was developed in 1986, the instrument has been used in more recent studies. In 1993, a 2-year branch of a large 4 year regional mid-western institution was the site of a study where one major variable studied was the classroom environment. The study was conducted by Miglietti and Strange (1993) entitled "Learning Styles, Classroom Environment Preferences, Teaching Styles, and Remedial Course Outcomes for under-prepared Adults at a Two-Year College". This study consisted of 61 adults (age 25 and over) and 95 traditional-age learners (age 24 and under). The majority of the respondents were females. With respect to the student's major, the greatest proportion of respondents, overall, were in business administration, followed by education, natural science, undecided, and humanities. The Adult Classroom Environmental Scale (ACES) was the instrument used. The data did not show any significant differences by age or gender. The adult students expressed a stronger preference for a teacher-centered mode of instruction. In 1994, the classroom environment was one variable studied in selected colleges that were members of the Tennessee Association of Colleges for Teacher Education. The paper, presented by Kariaki (1995) entitled "The Relationship between Student and Faculty Learning Style Congruency and Perceptions of the Classroom Environment in Colleges of Teacher Education" was presented at the annual meeting of the Mid-South Educational Research Association in Biloxi, Mississippi 1995. The Adult Classroom Environment Scale was used as the data gathering instrument. The subjects were 184 undergraduate students majoring in education and enrolled in foundation classes in Fall 1994. Also, 10 professors involved in teaching the students were included in the study. The results of the study indicated that students viewed Teacher Support as the most

prevalent element of the actual classroom environment and Student Influence as the least noticeable element of the classroom environment. However, the professors' views about the importance of the classroom environment were higher than students' views in all subscales except for Organization and Clarity.

At Michigan State University, a 4-year study (1994-1998) conducted by Freddolino and Sutherland (2000), entitled "Assessing the Comparability of Classroom Environments in Graduate Social Work Education Delivered via Interactive Instructional Television" reported the comparison of student perceptions of the classroom learning environment between on-campus and two district sites linked electronically via Instructional Interactive Television (ITV). The ACES was used to determine if the district site students' perceptions of their classroom environment differed significantly from the on-campus students' perception of their learning environment. The study included a total of 13 courses that were offered in one on-campus site with two district sites linked electronically. The results of the study indicated there were no significant differences with the students' perception of classroom environment in both electronically connected sites and the on-campus site.

Chapter III

METHODOLOGY

Design

The research design for this study is a descriptive survey followed by an analysis of the findings. The design will determine if there are differences in the reported preferred classroom environment of business majors in two urban community colleges. Characteristics will be measured as variables to determine any relationship. These characteristics include gender, ethnicity, and traditional/non-traditional students.

The data for the study were collected in Fall, 2003. The institutions selected for this study are Passaic County Community College, located in Paterson, New Jersey and Hudson County Community College, located in Jersey City, New Jersey. Both institutions are located in urban environments. These institutions were selected since they represent two dominant urban community colleges in Northern New Jersey. In addition, these institutions are similar institution in many respects. Total enrollment for Fall 2003 at Hudson was 6,408 and Passaic was 6,494. Enrollment by gender is the same at both institutions at about 35 percent male and 65 percent female. Enrollment by ethnicity includes 77 percent minority enrollment at Hudson and 71 percent at Passaic. Using institutions with similar demographic characteristics is important for consistency of the study.

This study reflecting students' preferred classroom environment will include students in both the day and evening programs. After reviewing enrollment in the day and evening

programs for academic years 2000-2001 and 2001-2002, approximately 40 percent of the students are in the day program and 60 percent in the evening at Passaic County Community College. At Hudson County Community College the percents were 50 and 50 respectively. As a result, this study will include an equal number of day and evening classes at Hudson. At Passaic, the sample of classes will include 40 percent day classes and 60 percent evening classes.

Data Collection

In the Business Administration Programs at both institutions, approximately a combined total of 90 sections of various business courses run in any given semester. (Passaic runs approximately 45 sections per semester, and Hudson an average of 48 sections). A sample of 30 percent was used in the study or 28 total sections. The sample sections were randomly selected. Since both institutions have approximately the same enrollment, 14 sections from Passaic County Community College and 14 sections from Hudson County Community College are included in the study. At Hudson, the day and evening enrollment is very much equal. Therefore, seven sections during the day and seven sections at night are included in the study. At Passaic, six sections were surveyed during the day and eight at night.

At both Passaic and Hudson County Community Colleges, an average of 18 students are in each class for a total of approximately 504 seats occupied in approximately 28 sections. The data collected represents unduplicated responses. Passaic County Community College's research for the Fall 2003 semester indicated that 47 percent of the seats occupied are students taking only one business course. Forty-one percent represent seats occupied by students taking two business courses and 12 percent by students taking three business courses (Passaic County Community

College Factbook, 2004). Taking into consideration 10 percent of the students are not present the day of the survey, a total of approximately 420 surveys were collected and data analyzed. The data was collected by administering a questionnaire to students in the classroom (see Appendix B). The conceptual framework of the questionnaire is the Adult Classroom Environmental Scale developed by Darkenwald and Valentine (1986). The theoretical concepts and model upon which the Adult Classroom Environmental Scale is based is the Classroom Environment Scale (CES) developed by Moos and Trickett (1974). This instrument was used extensively in classroom environment studies at elementary schools and high schools. The reliability and validity of the Classroom Environment Scale has been well established and documented (Fraser & Fisher, 1983, as cited in Byrne & Hattie, 1986). Darkenwald and Valentine modified the Classroom Environmental Scale to be used as a tool for measuring the classroom environment setting in adult education. The Adult Classroom Environmental Scale is the only instrument to measure adult education. Other instruments used for the study of preferred classroom environments include My Class Inventory(MCI), developed by Fraser and Fisher (1982) which is useful for elementary schools. This was developed from Fraser, Anderson, and Waldberg's (1982) Learning Environment Inventory. The only other instrument, developed originally by Rentoul and Fraser (1979), is the Individualized Classroom Environmental Questionnaire (ICEQ). Research shows that this instrument has been used primarily for assessing dimensions of classroom individualization at the secondary school level.

The Adult Classroom Environment Scale is designed to measure the perceptions of the classroom environment by adults. Today adult learners are a rapidly growing segment of the postsecondary student population. Students are returning to school or starting school at a later

age. Students are classified adult students at 25 years and over (Compton, Cox, Laanan, 2006). Research shows that 51 percent of community college students are 25 and older, and 67 percent of the students are 22 and older (N.J. Community College Fact Book, 2005). There could be a concern using the Adult Classroom Environment Scale for the 49 percent of the student body less than 25 years of age or 33 percent less than 22 years of age. However, some of the research cited earlier used the Adult Classroom Environmental Scale instrument for students under 25 years. In the 1993 study cited earlier by Miglietti and Strange, there were 156 respondents of which 61 were 25 or older and 95 were 24 and under. A 1994-1998 study by Freddoline and Sutherland, (2000) included 158 graduate students, but age was not disclosed. However, graduate students can be under the age of 25. The focus of this study was to measure if significant differences exist between traditional and non-traditional students. The distinguishing variable is age. For consistency, the Adult Classroom Environment scale (ACES) by Darkenwald and Valentine (1986), was used for both traditional and non-traditional students. The multi-dimensional scale consists of 49 items measuring seven discrete dimensions with seven items subsumed under each dimension. The seven discrete dimensions include: Involvement, Affiliation, Teacher Support, Task Orientation, Personal Goal Attainment, Organization and Clarity, and Student Influence. The questionnaire was administered at Passaic County Community College and Hudson County Community College. A description of the procedure to administer the questionnaire at Passaic County Community College is included in Appendix C. In addition, a similar procedure to administer the questionnaire at Hudson County allowing approximately 30 minutes for students to complete the questionnaire. In the event students could not complete the questionnaire within the allotted time, students took the questionnaire home, completed it, and returned the questionnaire next class. Since the survey

was tested indicating the approximate amount of time it should take to complete the survey, allowing 30 minutes should have allowed ample time for completion.

Method of Analysis

The data analysis included the following statistically significant tests: descriptive, a three-way ANOVA, and the *t-test*. The descriptive table identifies the means and standard deviations of all dependent variables. The *t-test* describes the differences between genders and traditional/nontraditional students on all the dependent variables. The hypothesis testing includes a 3-way analysis of variance where the main effects are the criterion variables: age, gender, and ethnic group. A 3-way factorial design was completed for the seven dependent variables: Involvement, Affiliation, Teacher Support, Task Orientation, Personal Goal Attainment, Organization & Clarity, and Social Influence. Since this study had multiple dependent variables, the MANOVA tests were performed to determine if the differences were significant. The criterion for significance was set at alpha = .05

Chapter IV

RESULTS AND FINDINGS

The purpose of this study was to determine if there are differences in the preferred classroom environment of college level, business students in urban community colleges as related to their gender, age, and ethnicity.

The study was conducted in two northern New Jersey urban community colleges, Passaic County Community College and Hudson County Community College. Both day and evening classes were approached to complete the survey. A total of 526 students were available to complete the survey when the survey was administered. A total of 24 students refused to complete the survey and 69 students had completed the questionnaire in a previous class that was surveyed. As a result, the sample ($n = 433$) for the study was the result of surveying a total of 198 students at Passaic County Community College and 235 students at Hudson County Community College. A total of 176 unduplicated students attending day classes were surveyed and 257 unduplicated evening students were surveyed.

Table 1

Comparison: Population and Sample

	Sample %	Population %*
Gender		
• Female	59%	60%
• Male	41%	40%
Ethnicity	Sample %	Population %*
• Asian	14%	11%
• White	11%	15%
• Hispanic	46%	43%
• African American	20%	18%
• Other	9%	13%
Age	Sample %	Population %*
18 – 21	38%	47%
22 – 24	22%	18%
25 – 29	17%	14%
30 – 39	17%	15%
40 +	6%	6%

*New Jersey County College Fact Book, 2006

Table 1 reflects aggregate population percentages reported by Passaic County Community College and Hudson County Community College. The population percentages were gathered from the New Jersey County College Fact Book (2006), which data were compiled from the New Jersey Commission on Higher Education.

The sample percentages, also taken from Passaic County Community College and Hudson County Community College, are close to the population percentages of the same schools. The sample taken for the variables gender and ethnicity closely replicates the population. With respect to age, the sample taken for the age group 18 – 21 is lower than the population. This is explained by the increased number of evening students who participated in the study (257 evening students compared with 176 day students; 45% more evening students surveyed). Students attending evening classes are more likely to be older students compared with students attending day classes.

A total of 13 questionnaires were not included in this study since the demographic data form was not completed for each questionnaire. As a result, the data used for this study included from Hudson County Community College ($n = 228$) and from Passaic County Community College ($n = 192$). For statistical purposes the data from both community colleges were merged into a single file ($n = 420$). Data was entered into an excel spreadsheet and transferred to an SPSS 10.0 worksheet.

Descriptive statistics were computed for all survey items. Frequency tables were examined for outliners. A factor analysis was designed with the following descriptive conditions: principle components, varimax rotation, and eigenvalues over 1.

Table 2

Cronbach's Alpha Reliability

Dimension	Cronbach's Alpha
Involvement	0.7452
Affiliation	0.8752
Teacher Support	0.7206
Task Orientation	0.7687
Personal Goal Attainment	0.7385
Organization & Clarity	0.8717
Student Influence	0.8020

Reliability of seven discrete dimensions was determined using Cronbach's Alpha. The design was run for seven dependent variables. Nunnaly (1978) has indicated 0.7 is an acceptable reliability coefficient. In this study the Cronbach's Alpha reliability for each of the seven discrete dimensions had an alpha above 0.7 . This indicates that the items subsumed under each discrete dimension are good predictors for each discrete dimension.

Table 3

Leven's Test of Variance

	Age Levene Statistic	Sig	Gender Levene Statistic	Sig	Ethnicity Levene Statistic	Sig
Involvement	0.65	0.894	0.02	0.894	1.41	0.231
Affiliation	**4.34**	**0.002**	0.76	0.385	0.25	0.911
Teacher Support	1.01	0.404	2.66	0.103	0.87	0.483
Task Orientation	0.96	0.431	0.58	0.447	**4.47**	**0.002**
Personal Goal Attainment	0.20	0.936	**4.42**	**0.036**	0.74	0.566
Organization & Clarity	1.38	0.239	0.34	0.558	**4.92**	**0.001**
Student Influence	1.16	0.330	**7.09**	**0.008**	0.84	0.500

The Levene's test of variance was done to determine if the samples have equal variances. While the Levene's test of variance showed some random significant differences, it does not show any apparent pattern.

The mean and standard deviation (see Appendix E) for each of the subscales related to the independent variables -- age, gender and ethnicity -- assist the research by indicating the subscales most important to the independent variables.

The sub-scales, Involvement and Organization & Clarity were the most important sub-scales for students. Involvement infers students want an environment where they can freely participate. Organization and Clarity infers the need to have clear classroom objectives and an effective plan is required to communicate those objectives. The mean scores were 4.44 and 4.48 respectively, with 5.0 the highest rating (strongly agree).

Historical and current literature is replete emphasizing the importance of Organization & Clarity. College-level professors who were highly organized, plan lessons carefully, and set goals were all considered exemplary teachers. A review of general research on teaching effectiveness (Feldman, 1989, as cited in Murray, Rushton, & Paunonen, 1990) found that

among 22 main teaching characteristics, "clarity and understandableness" and "teacher preparation and organization" are the most important characteristics identified by both teachers and students that lead to student success.

Pohlmann (1975) in a study at Southern Illinois University, identified 21 different factors the university used to measure the rating of instructors. After examining over 30,000 student ratings of instruction in 1,439 different sections or courses, the results in all academic disciplines rated professors who were very organized and clear well above the mean rating of all factors.

Another study conducted by Barke and Gravin-Doxas (2004) at a designated minority-serving public research university examined undergraduate students in computer science classes. In-depth interviews were conducted with 40 individuals: 34 undergraduates majoring in computer science and six in management information systems. The research indicated that in typical public research universities, the faculty decides what will be taught, how it will be taught, and the standards of evaluating what has to be learned. This was one issue addressed in the interviews. The interview results strongly indicated that clear classroom objectives were very important as students expected the instructor to come to class with a goal and objective(s). Students felt that since professors are professionals, they are in the best situation to determine what needed to be taught.

Involvement was another sub-scale that was very important to students. Much like Organization & Clarity, there is considerable literature and studies that reinforce the importance of Involvement. In the 2004 study just cited, the study also indicated that students want a classroom that is "friendly", that is, an environment where they felt the instructor was open to student questions, ideas, and comments. Another study conducted in 2002 at Michigan State University used in-depth interviews to measure the importance of Involvement. The study

involved an environmental science class of approximately 30 students. The class was designed to be very interactive. The instructor saw his role as a facilitator with his primary objective to promote a classroom environment that would allow students to engage with him and the other students. This type of environment, the researcher believed, resulted in deep learning and meaning. At the conclusion of the course, the students reacted very positively with the amount and value of student interaction. Initially students indicated this approach was intimidating, however, they later indicated they became very comfortable with this approach. Students indicated that with the professor's personality and his consistency promoting interaction, students became comfortable with the environment, each other, and were not, in any way, inhibited to interact. Students felt this encouraged original thinking and expanded the boundaries of their thinking. The professor was able to make the class interactive on a constant basis through a planned process. Each exercise had a point or topic that was effectively communicated.

Table 4

Analysis of Variance

	Age		Gender		Ethnicity	
	F	Sig.	F	Sig.	F	Sig.
Involvement	1.06	0.374	0.23	0.633	0.86	0.489
Affiliation	2.90	0.022*	9.49	0.002**	4.25	0.002**
Teacher Support	0.35	0.847	0.21	0.647	1.61	0.171
Task Orientation	3.38	0.010**	2.40	0.122	0.16	0.958
Personal Goal Attainment	2.67	0.032*	10.54	0.001**	4.91	0.001**
Organization & Clarity	1.25	0.291	0.00	0.961	2.39	0.050*
Student Influence	3.44	0.009**	2.81	0.094	6.69	0.000**

*$p < .05$
**$p < .01$

An analysis of variance (ANOVA) was conducted for the seven dependent variables: Involvement, Affiliation, Teacher Support, Task Orientation, Personal Goal Attainment, Organization and Clarity, and Social Influences with the criterion variables being age, gender and ethnic group. The analysis of variance will test age, gender, and ethnicity with respect to each of the seven dependant variables.

Table 4 shows that there are some significant differences in the preferred classroom environment with respect to age, gender, and ethnicity and some of the seven dependant variables. To be specific, there is a significant difference in the preferred classroom environment with age, gender, and ethnicity and the students' perception of Affiliation and Personal Goal Attainment. There is also a significant difference in the preferred classroom environment with age and the student's perception of Task Orientation and Student Influence. Finally, there is a significant difference in the preferred classroom environment with ethnicity and the student's

perception of Organization & Clarity and Student Influence. The subsidiary questions will attempt to explain the findings in Table 4.

Subsidiary Question #1.

Is there a significant difference in the preferred classroom environment with age, gender or ethnicity and the student's perception of Involvement?

Hypothesis: There are no significant differences in the preferred classroom environment with age, gender or ethnicity and student's perception of Involvement as measured by the Adult Classroom Environment Scale. Research results accept the null hypothesis at a .01 level of significance. Research results indicate there are no significant differences with the student's perception of involvement as relate to age, gender and ethnicity. This infers that all students equally want an environment that allows them to freely participate.

The results of this study suggests that there is a need for the sub-scale Involvement for both genders, all age groups, and all ethnicities. However, extant research appears to suggest an ethnicity difference for the sub-scale Involvement, specifically as it relates to the Asian culture. Literature shows that in the Asian culture, the professor has traditionally been held in high esteem and is revered for his or her knowledge and wisdom. Since the professor is the expert, deference is honorable (Speece, 2002). To a large extent, the respect for the professor is an extension of the absolute respect for one's parents. Therefore, to ask one's professor questions is perceived as disrespectful or challenging authority. Asian students talk only when called on by the professor and will ask questions after class so as not to publicly question the professor's expertise (Lieberman, 1997, as cited in Gates, 1998). A study by Niehoff, Sheu, Turnley, and Yen (2001) comparing U.S. students and Taiwanese students confirmed findings reported in the

literature. A study of 512 students at a Midwestern U.S. state university (n=265) and a Taiwanese public university (n=247) confirmed that Taiwanese students were less likely to ask questions and participate in class discussions compared to the U. S. students. This combination can suggest that the need to freely participate may not be as important to the Asian culture when compared to other ethnic groups.

While the results of this research indicated that the sub-scale Involvement was equally important for both genders, some extant research studies suggest it is more important for males and other research indicates it is more important for females. Extant research exists to suggest that males have a greater need for the sub-scale Involvement when compared to females. This is true specifically when we researched one specific entity of the sub-scale Involvement, that is, the need to take part in classroom discussions. The idea that males and females interact differently in the classroom has been well researched. Researchers throughout the decade (Lakoff, 1975; Spendor, 1980; Cameron, 1997; Mills, 1997, all as cited in Myhill, 2001) would agree that males tend to dominate class talk and instruction time. Females tend to defer to men and to avoid confrontation or challenging conversational situations. Swann and Graddol (1998, as cited by Myhill, 2001) found that males interact more than females in the classroom. Davies (1998, as cited by Niehoff, 2001) contends that the masculine traits of domination are the embryonic form of the powerful speech practiced by mainly male leaders in politics, business and professions. A comprehensive study by Howe (1997, as cited by Myhill, 2002) in a Midwest School district confirmed that males are more likely to take part in class discussions. Data was drawn on observations of 144 high school students in a total of 106 teaching lessons. The implications from this study were: (a) Males are more willing to participate in class discussions, (b) Males

are more open in a public forum to express their views, (c) Females are more independent workers and (d) Females are reluctant to share their ideas in a public arena.

Other extant research suggests the need for Involvement is more important for females. Contrary to the aforementioned, Henderson, Fisher, and Fraser (1998) presented a 1996 study conducted in Tasmania, Australia, which measured students' perception of their learning environment. This study also found the scale Involvement to be very important. Although a different instrument was used, the scale Involvement measured much the same factors as the sub-scale Involvement of the Adult Classroom Environmental Scale (Darkenwald and Valentine, 1986). The finding there was a significant difference between males and females regarding the degree of importance for the scale Involvement. Females were found to be more involved and want to participate more in classroom activities. Literature also suggests that the sub-scale Involvement may be more important to older students. The older, more mature students bring to the classroom more life experiences, and as a result, are free in class to express their life experiences as they relate to the subject matter (Knowles, 1984, as cited in Hadfield, 2003; Brookfield, 1986, as cited in Merrill, 2001). Studies show that, at times, traditional students find the adult students dominating class time. Other studies had found that once the adult becomes more comfortable in the college setting, adult students participate more than traditional-age students (Confessore, 1993; Howard & Henney, 1998; Howard, Short, & Clark, 1996, all as cited in Faust & Courteny, 2002).

Subsidiary Question #2.

Is there a significant difference in the preferred classroom environment with age, gender or ethnicity and student's perception of Affiliation?

Hypothesis: There is no significant difference in the preferred classroom environment

with age, gender or ethnicity and students perception of Affiliation as measured by the Adult Classroom Environment Scale. Research results reject the null hypothesis with all three-criterion variables. Research results reject the null at a .05 significance level with the variable, age. Research rejects the null at a .01 significance level with both gender and ethnicity. There is a significant difference with respect to the students perception of affiliation as related to age, gender and ethnicity. This infers that participating in some academic forum with other students does not have the same degree of importance with respect to gender, age, and ethnicity. This research shows that males have a stronger need to participate with others in class in some academic forum and generally have a stronger need for the class to be interactive with other students. Asians want the class to be more interactive with a greater need to participate with others. Finally the younger (18-24) and older (40+) student prefer more class interaction than those in the middle age groups (25-39).

Extant research appears to confirm that there are differences with respect to the sub-scale affiliation as we look at age, gender, and ethnicity. However, extant research appears to confirm that females have a stronger need to participate in an academic forum than males and females prefer the class to be more interactive. A 1996 international research study by Henderson, Fisher and Fraser conducted in Australia involved five Environmental Science classes (equivalent to 12^{th} grade in U.S.) confirms that females have a stronger need to participate with others in some in-class academic form. This study consisted of a total of approximately 100 students. The instrument used was the Environmental Science Learning Inventory (ESLEI). The instrument contained 35 items measuring five scales: Student Cohesion, Integration, Involvement, Material Environment, and Task Orientation. The scale, Student Cohesion, replicates the sub-scale Affiliation of the Adult Classroom Environment Scale (Darkenwald and Valentine, 1986).

The data of the study indicated there was a statistically significant difference in students' perception of their learning environment with females perceiving greater levels of Student Cohesion. Females prefer associating socially in some academic forum with other students; a contradiction to this study that indicated males prefer associating socially with others. A 1994 study by Migliette and Strange, that used the Adult Classroom Environment Scale, also contradicts this study's findings. The study consisted of 184 undergraduate students majoring in Education. The study was to determine the perceptions of the classroom environment by gender. While this research indicated that males have a stronger need for Affiliation, the 1994 study indicated that women viewed the ideal class environment different from males and females were more likely to prefer interacting in some academic forum with other students. Clearly, secondary research studies yield contradictory results to this study with respect to gender. This research indicates males have a stronger need to participate and want more class interaction, whereas the secondary research indicated females have a stronger need to participate and interact in class. Specific reasons for this contradiction are not known. Speculation can include the fact that this study included inner-city, mostly minority students. The secondary research cited does not indicate demographic characteristics. There may be a response difference based on gender and this demographic difference. More research would need to be conducted.

With respect to ethnicity, this study indicated that Asian students have a stronger need for Affiliation compared to other ethnic groups. Extant research appears to confirm this finding. Research (Niehoff, Turnley, Yen and Sheu, 2001)shows the Asian student values a collectivism dimension, while and the U.S. culture more individualistic. In a Collectivistic culture, students are conditioned to expect and accept group work. Asian students prefer more group assignments and group activities. Group activities are conducted during class and group assignments

represent graded work done outside of class. In a study published by Niehoff, Turnley, Yen and Sheu in 2001, involving a total of 512 second year business majors (265 students from a U.S. Midwestern university and 247 students from a Taiwanese public university), results showed that at .01 level of significance, Taiwanese students are more accepting of group activities and assignments than U.S. students.

Finally, regarding age, the results of this study coincides very much with extant literature, that is the sub-scale Affiliation is very important for younger students (18-24) and adult students. Literature identifies adult learners as 25+ years old. It does not distinguish between the age of adults within periods of 10 years; that is 25-34, 35-44, and so forth.

Some earlier research by Malcolm Knowles (1990, as cited in Ime, 1991), who is regarded as the father of adult education, concluded that adult learners differ significantly from traditional undergraduate students (18-22 years old) from the perspective that adult learners bring with them a wealth of personal and professional experiences to the classroom. They expect validation from their experiences and look to incorporate their experiences into the learning process. The adult student envisions the learning process as one where they are actively engaged in a give and take process. This is done through in-class discussion groups mixed with a whole class discussion (Knowles, 1990, as cited in Ime, 1991). Clearly the need for affiliation is very important to adult learners. More recent literature on younger students indicates that the millennial student (born 1982 or later) prefer the team-oriented approach to learning as they grew-up working in groups and being on teams (Howe & Strauss, 2003, as cited in Wilson, 2004). Cooperation among millennial students can be promoted by focusing on the social dynamics in a class. Social factors in the classroom foster learning and helps the millennial students' achieve their higher education goals (Hirsch & Wilson, 2002, as cited in Wilson, 2004).

While literature supported partial findings of this study, extant research study did not. A 1993 study at a 2-year branch of a large 4-year regional Midwestern university consisted of 61 adults (age 25 and older) and 95 traditional-age students (age 24 and younger). These 156 students were taught by 10 different instructors. The classes that were part of the study were remedial English classes. One of the variables measured in this study was the teaching style of the instructor. The teaching styles were identified as either learner-centered or teacher-centered. The learner-centered style reflected an instructor supporting a group study approach encouraging the groups to take responsibility for their learning. The teacher-centered approach was a traditional, individual learning structure. The findings of this study did not determine that age was a variable in the determination of a preferred style. With respect to the success of the various classes, the teacher-centered style led to the most learning. To the extent that the classes studied were remedial classes only, additional studies would need to be done with the focus on college-level courses.

Subsidiary Question #3.

Is there a significant difference in the preferred classroom environment with age, gender, or ethnicity and the student's perception of Teacher Support?

Hypothesis: There is no significant difference in the preferred classroom environment with age, gender, or ethnicity and student's perception of Teacher Support as measured by the Adult Classroom Environment Scale. Research result accepts the null hypothesis at a .01 level of significance. There is no significant differences with students' perception of teacher support as related to age, gender and ethnicity. All students want instructors to be caring, respectful and offer encouragement.

Experiencing a caring school environment at all levels of education (elementary, secondary, and higher education) does influence student academic performance (Boylan, 1995, as cited in Ray, 2003). Students provided with care and support from faculty and administrators are more satisfied with school. Teacher behavior as perceived by students shapes students' attitude toward school life (Applegate, 1981). A number of case studies illustrate the importance of Teacher Support as a variable in the classroom environment. A case study by Barke and Gravin-Doxas (2003) conducted at a minority-serving public research university conducted in-depth interviews with 40 students in a computer science class. The ages of the students ranged from 18-42. Results of the in-depth interviews indicated that the students wanted to feel valued by the instructor for his or her potential. Students are influenced by what they believe the instructor thinks of them and their abilities. Students appreciated instructors that show respect and for those they can interact with outside the classroom. The study made no mention of any differences for age, gender, or ethnicity.

Another study in the mid 1990's at Lone Star Community College, (Hamza & Nash, 1996) located in central Texas, identified teacher support as one major element that helps creative thinking and problem solving skills. A total of 113 semi-structured interviews and numerous informal interviews were conducted. The students interviewed were enrolled in classes that were taught by teachers that had exemplary student ratings. Results of the study indicated that increasing students' creative thinking and problem solving skills was done through classroom techniques such as debates and discussions. Debates and discussions were often controversial as they emerged from opposing student views. The students indicated that it was essential the instructors showed respect towards students for their different opinions. During such controversial debates and discussions, instructor's guidance and direction was important as

the instructor coached the groups during the debates. Students felt that the instructors inspired students through their positive attitude and passion. A third study in 1994 consisting of 184 undergraduate students majoring in education and 10 teachers were asked to reflect on their perceptions of the actual classroom environment. For this study the Adult Classroom Environmental Scale (Darkenwald amd Valentine,1986) was used. Both students and teachers viewed Teacher Support as the most important dimension of the actual classroom environment. A team of researchers (Wubbels et al., 1985, as cited in Cheng, 1994) in Australia extended classroom environment research by focusing on interpersonal behavior between teachers and their students. Wubbels et al. (1985, as cited by Cheng, 1994) developed a model that was used for their study which was extrapolated from the Leary Model that consisted of eight sectors, each describing different behavior aspects. One section of the model was labeled "helpful/friendly", which paralleled the sub-scale Teacher Support of the Adult Classroom Environment Scale (ACES). The Australian study included a sample of 3,785 science students in 186 classes in 67 secondary schools (12^{th} graders). The study indicated that a "helpful & friendly" instructor is very important to student effectiveness in the classroom and to the overall student body. Another study that reflects the findings of this study was a study done in the mid 1990's that focused on gender differences in the classroom at the postsecondary level.

Twenty-four classrooms across eight departments at a major university were observed. This included 308 male and 262 female students (N=570). This study looked at many different behavioral differences between males and females. One dependent variable it reviewed equates to the 'Teacher Support' subscale of this research. Using a Likert Scale (1-*extremely unimportant*, 6-*extremely important*), it was determined that both genders placed significant

importance that faculty facilitate the classroom in a caring and respectful way. The mean scores for this variable were 5.4 for females and 5.2 for males.

While these case studies reflected on the fact that teacher support was crucial for success, neither study identified a specific gender, age, or ethnic group that indicated teacher support was more or less important.

Subsidiary Question #4.

Is there a significant difference in the preferred classroom environment with age, gender, or ethnicity and the student's perception of Task Orientation?

Hypothesis: There is no significant difference in the preferred classroom environment with age, gender or ethnicity and student's perception of Task Orientation as measured by the Adult Classroom Environment Scale (Darkenwald and Valentine, 1986). Research result accepts the null hypothesis at a .01 level of significance for the independent variables of gender and ethnicity. However, at a .01 level of significance, there is a significant difference with Task Orientation related to age. Students at different ages view Task Orientation at different levels of importance. As students mature chronologically, they feel the class should be more task oriented and demanding.

While this researcher was unable to find literature or studies that directly substantiate the finding of this research, there is certainly circumstantial extant research that can validate that the sub-scale Task Orientation is very important for adults.

Non-traditional (or adult students) are often individuals, who for one reason or another, did not attend college earlier in their life. What they have are life experiences that would include both personal experiences brought by experiencing life itself, and years of experience

"performing" for managers and employees. The decision to come to college is the result of some motivational aspect that can be classified as either *extrinsic* or *intrinsic*. Extrinsic refers to engage in something as a means to an end; that is, participation will result in desirable outcomes (e.g. better position, advancement).Intrinsic refers to engage in something for its own sake; that is the activity is enjoyable (Pintrich & Schunk, 1996, as cited in Jarvela & Volet, 2004). Most adult students (85 percent) report that career reasons are the key college enrollment goals (Aslanian, 2001, as cited in Kasworm, 2005). In most instances, adults feel they have lost time and, as a result, have little or no time to waste. Once adults experience the apprenticeship role of learning to be a student again, they enter into a deeper approach to learning than the typical traditional student (Donaldson, 2000, as cited in Ime, 2001). These students are not afraid to exert and search for creative strategies to balance the demands of their family and work while completing their long overdue education (Vandewalle, 1997, as cited in Sample, 2002).

Kasworm (2005) found that adults are influenced to enroll in college following either key life transitions or changes (e.g. divorce, denied job promotion) or they are proactive about creating new life changes. A research study by Kasworm and Blowers (1994) revealed that many of adult students sought out college studies after years of thinking and strategizing. Many noted their decision to attend college was purposely planned with a specific goal in mind. As a result, adult students take their learning very seriously and are hungry for as much course material the instructor can provide. Certainly the manner which the material is presented is very important. But, as we reflect on student learning, adults are hungry for information and willing to learn as much as they could. Adults see a clear purpose in their learning (Kasworm, 2005).

A 2002 study (Kasworm, 2005) that included two community colleges explored the meaning of education for adult students. In both community colleges, a random sample of 14

students participated in the study. The students were 30 years or age or older and in good academic standing. Approximately 2- hour interviews were conducted. The results of the interviews indicated that adult students believe their commitment to attend college influences their learning in the classroom. They felt the adult students worked harder in class since they know the value of what they missed. They indicated that the traditional students were upset with the adults in the classroom as the adults worked harder, therefore set a benchmark for the class to perform at a higher level.

Another factor that would validate the importance of the sub-scale Task Orientation is purely economics. Adult students report that their most important issue and most stressful concern is their financial fragility to support college attendance (Kasworm, 2005). Since most adult students work, and are part-time students, they are less likely to qualify for financial aid. However, their financial obligations are usually greater than those of traditional students; adult students usually support other members of the household. With the financial commitments of the adult students, they have limited discretionary family income. However, their educational financial obligations must be paid from that limited discretionary income. As a result, the adult student have neither the time or financial means to waste. They are often more conscientious about their education and their return for dollar spent. To substantiate this study is a 2005 National Adult Learners Satisfaction-Priorities Report. The report represents responses of 20,466 adult students from 45 institutions. This includes 4-year and 2-year colleges. The report included concerns students had regarding their decision to continue their education. The survey included a total of 17 concerns with degree of importance in descending order. The cost to pay for their education was a major consideration as it was ranked as their 3rd major concern for attending college.

Subsidiary Question #5.

Is there a significant difference in the preferred classroom environment with age, gender or ethnicity and the student's perception of Personal Goal Attainment?

Hypothesis: There is no significant difference in the preferred classroom environment with age, gender or ethnicity and student's perception of Personal Goal Attainment as measured by the Adult Classroom Environment Scale (Darkenwald and Valentine, 1986). Research result rejects the null hypothesis with all three criterion variables. Research rejects the null hypothesis at a .05 level of significance with the variable, age. Research rejects the null hypothesis at a .01 level of significance with both gender and ethnicity. There is a significant difference with the student's perception of Personal Goal Attainment as related to the three independent variables: age, gender and ethnicity. Students at different ages have significantly different views on the importance of individual expectations being met in the classroom. However, the results of this research showed no significant pattern. Males and females have a significantly different view on individual expectations being met in the classroom. Finally, different ethnic groups have views that are statistically significantly different on the idea that the classroom should meet individual expectations.

Literature supports the finding that there is a significant difference with the sub-scale Personal Goal Attainment as related to age. Literature appears to indicate that the sub-scale Personal Goal Attainment is very strong for adult students. A 3-year research study investigating the adult learners' lives indicated that adults are not passive recipients. Adult learners clearly express what they want to learn and why, with a clear view of how they will achieve their goals. This conclusion is reinforced with other literature. Adult undergraduates do not view learning as a process of knowledge reproduction, that is, they are not passively receiving knowledge. They

are actively engaged in constructing meaning from classroom material within the broader context of their lives (Donaldson and Graham, 1999; Donaldson, Graham, Kasworm, and Dirk, 1999, all as cited in Justice & Dorman, 2001). Instructors and instructional strategies are necessary to help them accomplish the constructive meaning that are valued. In the adult learning process, the learner sets their own goals. The educational goal is to fulfill the expressed needs of the learner (Cranton, 1994, as cited in Okezie, 2003). This is congruent with *the Encyclopedia of Informal Education,* by Smith (2002), entitled "Malcolm Knowles, Informal Adult Education, Self Direction and Anadragogy", that the perspective of adult learning is self-directed learning. In 1998, Miglietti and Strange studied 185 students in developmental education classes and focused on age as the variable for student satisfaction in the classroom. The instrument used was Conti's Principles of Adult Learning Scale (Conti, 1990). The findings of this study indicated there was a significant difference in satisfaction with students 25+ years old. The study indicated they found a greater source of satisfaction if the classroom provided flexibility for personal development.

With regards to gender, this research shows Personal Goal Attainment is important for both males and females, however, there is a significant difference between genders; that is Personal Goal Attainment was statistically more important for males. This researcher was unable to find any literature or studies that would either substantiate or challenge the results of this research.

The results of this research imply that classrooms meeting individual expectations were most important for Asians. However, extant research appears to contradict this finding. A 1998 study compared science classrooms of 9^{th} and 10^{th} grade students. The science classes included biology and physics. The sample consisted of 1,879 Asian students from 50 classes in 25

schools. The Taiwanese classrooms overall were described as teacher-centered where the students play a passive role. There were generally few opportunities for discussions and questions. Interviews with teachers revealed that the teacher-centered approach was used because of the examination-driven curriculum. This method was considered the most efficient way to teach students and have them get good scores. Since this was a very teacher-centered approach, meeting individual expectations was not a consideration.

Subsidiary Questions #6.

Is there a significant difference in the preferred classroom environment with age, gender or ethnicity and the student's perception of Organization & Clarity?

Hypothesis: There is no significant difference in the preferred classroom environment with age, gender or ethnicity and student's perception of Organization & Clarity as measured by the Adult Classroom Environment Scale. Research results accept the null hypothesis at a .01 level of significance for the independent variables of age and gender. However, at a .05 level of significance, there is a significant difference with Organization & Clarity related to ethnicity. Students with different ethnicities view Organization & Clarity at different levels of importance. The need to have clear classroom objectives and an effective plan to communicate those objectives is different based on ethnic group. The research shows that while all ethnicities view Organization & Clarity as one of the most important sub-scales of the Adult Classroom Environment Scale, Caucasian and African American ethnic groups view Organization & Clarity as more important than other ethnicities. However, this researcher was unable to find any extant research that would either substantiate or contradict this finding.

Subsidiary Question #7.

Is there a significant difference in the preferred classroom environment with age, gender

or ethnicity and the student's perception of Student Influence?

Hypothesis: There is no significant difference in the preferred classroom environment with age, gender or ethnicity and student's perception of Student Influence as measured by the Adult Classroom Environment Scale (Darkenwald and Valentine, 1986). Research results accept the null hypothesis at a .01 level of significance for the independent variable, gender. However, for age and ethnicity, reject the null hypothesis at a .01 level of significance. Students at different ages view Student Influence with different degrees of importance. Older students (30+) do not view the sub-scale Student Influence as important as do younger students. They generally feel students should not have as much input in designing the course or in setting course objectives. Also, different ethnic groups view Student Influence with statistically significant different degrees of importance. Asians view this more important than other ethnic groups. Caucasians also view this more important than other ethnic groups, but not as significant as Asians.

This researcher was unable to find other research studies that either confirms or rejects the results of this study, with respect to ethnicity. Literature does exist that can question this study, specifically, that Asians view Student Influence more important than other ethnic groups. While no research directly addressed the sub-scale Student Influence, the cultural background can lead one to question the result of this study; that is, Asians view Student Influence as more important than other ethnic groups. Asian students have a need for structure in their learning environment. As part of the learning environment, they ask few questions and have few requests (Gudykunst & Kim, 1997; as cited in Chamberlain, Guerra, & Garcia, 1999). Student input in designing a course or setting course goals is a proactive approach with the instructor. Teachers

and professors are viewed in the Asian culture with reverence. Pratt et al, (1999, as cited by Chiang, 2000) studied Asian students' conceptions of effective teaching. They reported that loyalty, duty, and obedience were common characteristics towards teachers and professors by Asian students. Asian students usually do not like to speak-up and offer opinions. Directness is considered threatening and rude. If the textbook and the teacher disagree about some point, they would respond that the teacher must always be right. The strong cultural social hierarchy provides the response that students should behave as if the teacher is always right. Communication that employs any kind of open confrontation is avoided. Desire for harmonious relationships outweighs open confrontation. With an apparent strong cultural background, input in designing a course or setting course goals appears to contradict the Asian cultural heritage.

The results of this research appear to be both contradictory and supportive of literature regarding age groups that may find the sub-scale Student Influence important. The finding of this research is that older students do not view Student Influence as important as do younger students. Literature and other research studies appear to contradict this finding. Miglietti and Stranger (1998) indicated that adult students put more emphasis on Student Influence compared to traditional students. Extant research suggests that to produce learning, specifically with adults, they should be involved as a facilitator of their own learning (Barr & Tagg, 1995). This implies that students should be involved in planning course objectives. Knox (1977, as cited by Howell, 2001) points out "active interest and participation of the student are more likely when the student help identify objectives and selects learning tasks" (P.4). Therefore, college teachers should seek participation of students in determining approaches to learning and are encouraged to invite students to help identify the goals and objectives of the course. On the other hand, other

research indicates that adult students see the instructor as the expert and, thus, knows what the student needs to know and the best method of communicating the material. This would confirm the findings of this study. Miglietti and Strange (1998), studying 185 adult students in developmental education classes, found that age does influence preferred teaching style with respect to having interaction effort on course outcomes. There was a greater sense of satisfaction and accomplishment among adult students (25+ years old) with learner-centered instruction. This style of instruction is characterized by an emphasis on learn-centered activities, such as, personalized instruction, relating the course to student experiences, assessment of student needs, and maintaining the flexibility for personal development. Miglietti and Strange (1998) also determined that the learner-centered instruction is more prominent as the preferred instruction method when the adult student is well intrenched into the classroom environment. Initially adult students will lack confidence as they adjust to the environment. During this period their need for learner-centered instruction may not be as great. Initially many adult students adhered to a stereotype image of what college professors were like. The image was one of being intellectual and knowledgeable and, therefore, viewed in high esteem. As a result, there was no reason to question them on content or style. Murray (1997, as cited in Wilson, 2004) indicates millennial students (24 years or younger) are more trusting of systems, and not very self-reflective; that is, they expect instructors to display authoritative expertise. They are likely to appreciate clear expectations, explicit syllabi, and well-structured assignments. This contradicts the results of this study that indicate younger students feel they should be involved with the course design and course objectives.

Chapter V

CONCLUSION

As college enrollments grow more diverse, meeting the instructional needs of a changing Student population is paramount. Extant research shows that to serve students well, examining students learning styles, as well as students classroom environments both contribute to students' academic achievement and satisfaction. Biggs (1993, as cited in Dart, Burnett, Purdie, & Associates) noted that students may have a preferred orientation towards a deep or surface approach to learning, but it is how they perceive the classroom environment that will arouse or inhibit that approach. Their perception is dependent on how students interpret the factors present in the learning environment in light of their personal characteristics. Whitmore (1986, as cited in Rayneri, 2004) confirmed findings of students underachievement based on a mismatch between student learning needs and the classroom environment. The overall lack of motivation to excel is often the result of a mismatch between type of activities provided in the classroom and the individual's personal characteristics.

Learning styles is an approach to learning emphasizing the fact that individuals perceive and process information in different ways (e.g. visual, auditory, kinesthetic and tactical). The learning style theory implies that how much individuals learn has to do with whether the educational experience is geared toward their particular style of learning.

The purpose of this study was to examine the preferred classroom environments of business students in urban community colleges. Although studies of the classroom environment exist, relatively little work has been done in higher education. A literature search yielded little that would yield a profile of an effective classroom environment in terms of measuring

components that are important for facilitating improvement of the learning environment and not studies relating specifically to an effective classroom environment in urban community colleges.

An analysis of the data collected at the two urban community colleges will assist the administration and faculty to recognize the classroom elements that are important to the students. Providing what the students prefer will yield an environment that is more effective for student learning. The instrument used was the Adult Classroom Environmental Scale (Darkenwald and Valentine, 1986)) which divides the environment into seven sub-categories. The data collected from 421 students have underscored the importance of each sub-scale and statistically documented the importance of each sub-scale as they relate to age, gender, and ethnicity.

Analysis of the data with respect to the first sub-scale involvement, shows very strongly that business students attending urban community colleges want an environment where students in the class enjoy the class, the professor is open to questions, and students can freely participate in class activities. This was the outcome for all business students regardless of race, age, or ethnicity. Extant research substantiates the need for what is equivalent to the sub-scale of Involvement. An education philosophy, constructivism, states that students construct understanding for themselves (Lowery, 1997; Aldridge, Fraser, Taylor, & Chen 2000; all as cited in Haney, Czerniak, & Lumpe, 2003) definition of constructivist teaching includes allowing students to plan and justify their ideas while examining the ideas of other students. This will then allow students to reflect upon the viability of their own ideas. Cambourne (2001) after 7 years of research studying the orchestration of the classroom complexity, determined that classroom communication interaction is necessary for a dynamic, multi-dimensional experience.

A critical issue in the assessment of student development is to get students, specifically in higher education, to critically think (Hanson, 1982, as cited in Kloss, 1994). Marsha Baxter (1992, as cited in Kloss, 1994) in her study of student development, points out that allowing students' their voices focuses on their emerging knowledge and is essential for student development. Dillon (1988, as cited in Tinzmann et al.,1990), has done empirical research on questioning within the classroom. He convincingly argues for the value of the instructor's silence in the classroom and how critical it is to involve students actively in the classroom. His research shows that free guided discussions, with students taking 80-90 percent of time, nurtures growth by increasing the reliance on peer's perspectives and contributions to creating knowledge. Stimulating discussions in the classroom cannot happen if the instructor cannot stimulate emotion. Without emotion there is no learning (Restak, 1995, as cited in Rayneri, 2004). The emotion generated must result in a classroom experience that is enjoyable for the student (Gardner, 1993, as cited in Morse, 2004).

The sub-scale, Affiliation, infers associating socially in some academic forum with other students. Students working together in some forum enjoy doing so. This research shows this was seen as overall moderately important, however, there was a significant different degree of importance associated with Affiliation based on age, gender, and ethnicity. Before addressing the significant degrees of importance based on age, gender and ethnicity, it is necessary to substantiate through other research the general importance of Affiliation. Extant research (Miglietti and Strange, 1998) shows that learner-centered classes in the community colleges have been found to relate to higher grades, a greater sense of accomplishment, and greater overall satisfaction among students. Learner-centered classes exist when the instructor supports more collaboration and encourages students to take a responsibility for their own learning. Lawler

(1991, as cited in Howell, 2001) listed nine principles through which professors can facilitate learner-centered education.

Many of the nine principles relate to the sub-scale, Affiliation. Encouraging collaboration, build on students experiences, participative environment and empowering students are all principles tied into the sub-scale Affiliation. Recent literature shows that dynamic learning environments are characterized by an increased variety of social interactive activities, and collaborative learning activities (Jarvela & Volet, 2004).

Blumenfeld and Meece (1987, as cited in Ames, 1992) determined that the success of a classroom task is influenced by student involvement. They developed a scenario exemplifying this. In two randomly selected college freshman mathematics classes, both instructors selected low risk math problems with multiple paths to the solution. Both instructors put a math problem on the board in the beginning of the class. They gave the students 5 minutes to work on the problem. Instructor A, after allowing students 5 minutes to work, asked for volunteers to offer different solutions. Instructor B, also allowed 5 minutes, but students worked in groups of three. The group was then asked to share their solutions with the class. In the class with Instructor A, only a few students volunteered and even fewer actually remembered the problem or solution once the class ended. In contrast, significantly more students participated with Instructor B, and the discussions reflected active involvement of strategic thinking. This single scenario illustrated that group learning may have benefits depending on the type of classroom task. Another example illustrating the general importance of Affiliation takes us back to the mid 1990s at Joliet West High School, located in Joliet, Illinois. Many of the content teachers were trained to make their classroom a community with the incorporation of collaboration efforts (both classroom and homework assignments required student collaboration). The study included content teachers

instructing seniors. Since the programs inception, within a 3- year period (1998, 1999, 2000) failures have decreased by 20%. The outcome illustrated that students working together has a positive effect. In another study at the University of Canberra, (Stewart and McCormack, 1997) an institution specializing in social sciences, economics, management, journalism, and teacher education, the effectiveness of the sub-scale Affiliation is demonstrated. Two professors, Dr. Jenny Stewart and Dr. Coralie McCormick, both suspected that a lack of student interaction was not encouraging students to think deeply about subject content. Both felt students were missing "the richness" of the subject matter. Both professors agreed to make their classes more student interactive. The interaction included a process of students working out their own understanding and synthesis of material in a group environment. The objective was to get students to feel free to take the discussions in directions they found interesting. The findings by both professors were similar. The primary benefit to the students was a "deeper level of understanding" that was achieved by being able to highlight the concepts and apply them to everyday, practical examples. The students were excited about working with each other as they freely opened up and expressed their ideas that would generally not occur if the environment was instructor-centered. In a final illustration and on a larger scale, a study taking place at the University of Nottingham (Biddulph and Adey, 2001) was a study that measured students' perception of the classroom environment that they found enjoyable, and through which they felt they learn most effectively. The subject areas measured were History and Geography. Both subject areas were found to be of little interest because it was difficult for the students to relate the subject matter to their own career interests. The findings of the study measured the classroom environment. It was the classroom environment that made the subject matter interesting or dull, not the subject content per se.

In 1999 over 1,400 freshmen in 10 secondary schools completed a questionnaire related to the classroom environment in their History and Geography classes (Adey & Biddulph, 2001). Two years later, the same cohort of 1,400 students, now in their junior year, were interviewed addressing the same content as the questionnaire measured 2 years earlier (Adey & Biddulph, 2001). In the 1999 survey, an enjoyable classroom environment was one that involved group work, discussions and debates. The interviews conducted 2 years later with the same cohort strongly supported these findings. The study shows clearly that the main subject content per se does not shape students' attitudes to the subject, but the classroom environment employed was far more influential.

All these findings do not specifically address the findings of this research that indicates males, Asians, and young (18-24) and older students (40+) have a stronger need for the class to be interactive compared to other students. The above findings do substantiate the general importance of Affiliation in the classroom.

With respect to the findings of this study that indicated there is a significant difference of importance with respect to age, gender, and ethnicity, empirical research exists that does substantiate some of these findings. However, other research does exist that contradicts some findings of this research. The findings of this research indicates that age, the younger (up to age 24) and the older (40+) appear to feel that interaction with others for academic purposes is important. Males prefer more social classroom interaction than females, and Asians prefer more classroom interaction compared to other ethnicities. To address research findings of the sub-scale. Affiliation with the results of this study as we address ethnicity, empirical research does exist substantiating the results of this study; that is the sub-scale Affiliation is most important to

Asians. This was illustrated in a study published in 2001 showing cross-cultural comparisons of classroom expectations by college sophomores, specifically business majors. The cross-cultural comparison included U.S. students and Taiwanese students. A total of 512 students participated in the study. The findings of this study showed there is a significant difference between Taiwanese students and U.S. students with respect to the acceptance of group activities and assignments. Taiwanese students were more accepting of group activities and assignments than U.S. students. This result supports the finding of this research. The sub-scale Affiliation proved to show significant differences as related to ethnicity. Associating socially with other students or in some academic group forum was most important to Asian students.

Additional extant research substantiates the findings of this research, specifically that affiliation is very important to both traditional and adult learners. Research (Wilson, 2004) suggests that millennial students (those born between 1982 and 2003, Note: no consensus has emerged specifying exact dates of the Millennial generation) view affiliation as very important. Using the framework published by Chickering and Gamson (1987), seven principles for good practice in undergraduate education, researches have provided recommendations that will substantiate the findings of this study. Howe and Strauss (2003, as cited by Wilson, 2004) indicates that Millennials grew up working in groups and playing on teams since they have likely experienced more collaborative learning environments prior to college. This bodes well for their willingness and ability to work with peers in college classrooms to enhance learning. They very well might consequently face difficulties in learning when thinking independently. While anecdotal reports indicate that students prepare less for class if some form of group work exists, Kuh (2003) suggests this is minimized through the incorporation of peer evaluations and grading individual contributions to group activities. Cress and Sax (1998, as cited by Wilson, 2004) cited

research that millennial students are more active learners. Cooperation and collaboration are two forms of active learning. Research shows that millennial students are more engaging. They are more active learners as compared to, for example, generation X students that were more passive learners. Millennial students have a self-fulfilling prophecy to perform well and realize they will need to exert more effort to meet expectations (Chickering & Gamson, 1987). Since students must devote adequate time and effort to educationally enhance their learning (King, 2003, as cited in Wilson, 2004), students expect to study more in college than the effort they put into high school. Their time necessary to devote to college studies is double the time they spent studying in high school (Kuh, 2003). With millennial students more active than prior generations with sports, organizations, and jobs, students realize the importance and necessity to collaborate with others as they increase their time on task (Kuh, 2003).

While extant research appears to substantiate the findings of this study as related to age and ethnicity, other research (Drudy and Chathain, 2002) found contradicts the findings of this study as it looked at the variable gender. Findings of this research study indicated that males prefer more social classroom interaction than females. However, numerous studies cited earlier clearly indicated that females prefer more classroom interaction in some academic forum compared to males. Reasons substantiating why this research contradicts earlier studies cannot be explained. Additional studies measuring gender in urban areas would need to be conducted.

The third sub-scale, Teacher Support, relates to professors being helpful, respectful, caring, and offering encouragement. Teacher support is doing what one can to help students succeed. All students surveyed found this sub-scale to be equally very important.

Extant research supports the sub-scale, Teacher Support as essential to the community college student. Many students attending community colleges are considered at-risk students.

Schools serving larger numbers of racial and ethnic minorities, students in high school that have been low achievers, and adult students returning to school after being out of school a number of years are all categories of at-risk students. Research shows that students in one of these categories need not only experience effective programs, but also need caring individuals to carry out these programs. For students labeled "at-risk", the classroom can be profoundly alienating (Seeman, 1975, as cited in Kagan, 1990). Many of these students come into the classroom questioning their ability and exhibiting a "loser's mentality" which makes them vulnerable to a positive experience. Extant research shows that at-risk students need a safe haven that would make available an opportunity to learn in a non-threatening environment. The instructor needs to develop a classroom environment where the instructor is sensitive towards students, provides support to students, and is enthusiastic about working with students. Knowles (1988) suggests that establishing a classroom climate that helps adult students to feel accepted, respected, and supported is important. Zull (1998, as cited by Morse, 2004) indicates that for learning to take place in the classroom, the classroom environment needs to feel safe with positive connections between students and instructor. It is suggested that the instructor must have some personal involvement and caring for deep learning to exist. The National Council for the Accreditation of Teacher Education (2000) has indicated in their conceptual framework for effective teaching that learning occurs best in an environment that contains positive relationships and interactions where the learner feels appreciated, acknowledged, and respected.

The results of this research indicated that the sub-scale Teacher Support is very important to students. There proved to be no significant differences with respect to age, gender, and ethnicity. Extant research substantiates these findings. Providing Teacher Support is very important not only for at-risk students, but students overall.

Task Orientation, another sub-scale of the Adult Classroom Orientation Scale (ACES), infers a classroom with specific objectives and a plan to carry to meet deadlines are important. Task Orientation was seen important to all students. However, there was a significant difference in the perception of Task Orientation based on age. This research shows that as students get older, Task Orientation becomes more important. The descriptive for age (see Appendix E) clearly illustrate this fact. Extant research reinforces this finding (Brookfield, 1999, as cited in Merrile, 2001). Adult learners traditionally place responsibility for the learning process on the instructor as they are passive recipients of knowledge. Adult students taking classes for the first time are seeking direction from the professor as many often feel confused, frustrated, and perhaps even cheated (Brookfield, 1999, as cited in Merrill, 2001). As a result, they view college professors as all-knowing experts. Empirical research also exists substantiating the findings of this research. Age is a factor that influences the Task Orientation sub-scale of the Adult Classroom Orientation Scale (ACES). A small sample size, case study research (Yin, 2002, as cited in Belzel, 2004) interviewed five students between four and eight times for a total from 8 to 16 hours (number of hours spent depended on how long it took to address the interview questions). The students were all female between the ages of 26 and 41. There was a disparity in the ages of the students interviewed. The study confirmed the fact that the older students who were interviewed had a stronger resolve to Task Orientation compared to those younger.

Since all students interviewed were classified as adult learners, they all expressed the importance of Task Orientation. The interviews indicated a number of experiences. One experience indicated a kind of dissonance causing adult learners to feel discomfort and tension leaving them with a sense of ambivalence about learning. This was more apparent with the older students. To overcome this ambivalence was a belief that a good teacher can successfully

transmit information. Adult students were in favor of more structure. They were catalysts for homework, reporting that they felt homework was essential to keep them on track. In general, adult students were highly motivated indicating their lost time provides them the motivation they need to complete what they need to do as quickly as possible. Several other studies (Lynch & Bishop-Clark, 1994, as cited in Faust & Courtney, 2002; Ross-Gordon & Brown-Haywood, 2000, as cited in Ross-Gordon, 2003) all provide research results pointing to a lack of confidence experienced by many adult learners and the need for structure.

Personal Goal Attainment, the fifth sub-scale of the Adult Classroom Environmental Scale (ACES) is the need for the class to meet individual expectations. The instructor should not expect every student to learn the exact same things. Students value the class if it is relevant to their current or future life. Therefore, the professor needs to assess each class to determine the interests of the students which can be detected based on the students background. This research indicated this need is overall moderately important, but there is a significant difference for this need with respect to age, gender, and ethnicity. Males have a stronger need for Personal Goal Attainment than females. Asian students view Personal Goal Attainment more important than other ethnicities. Regarding age, while there is a significant difference across various age groups, there does not appear to be any pattern with preference for Personal Goal Attainment.

Overall, Personal Goal Attainment is important for adult students. Adult students who enroll in community colleges bring more experience and practical information than younger students. They are interested in knowing how the new knowledge relates to what they already know so they can create a framework within which they can make sense of the new information (Brookfield, 1986; Knox, 1977; both as cited by Howell, 2001). Adult learners differ significantly from traditional undergraduate students (who are 18 to 22 years old) in a variety of

ways. They bring a wealth of personal and professional experience to the learning process. As a result, it is essential that their experiences and ideas are incorporated into the learning process. It is through their experiences they can easily relate. The desired approach used to educate adults must utilize their experiences (Lumsden, 1985, as cited in Okezie, 2003). To elicit interest that leads to involvement, the curriculum must be structured to take into account questions most intriguing and significant to students (Barr & Tagg, 1995). Students benefit from being able to associate the new learning with previous experiences and accomplishments. The connection of teaching a class catering to the needs of students is not a recent finding. Murray (1938, as cited in Byer, 2001) described the concept that personal needs of an individual are met in the classroom through the environment that includes stimuli, treatment and process variables. While it would appear that Personal Goal Attainment is most important for adult learners, this research did not find any age pattern regarding the importance of Personal Goal Attainment, empirical research exists substantiating that students 25+ years old have a significantly greater satisfaction with Personal Goal Attainment.

With regards to gender, this study indicates that Personal Goal Attainment is more important for males than females. Since this researcher could not find research that studied the relationship between Personal Goal Attainment and gender, additional studies would need to be done. Finally, this researcher produced results that appear contrary to literature by indicating Personal Goal Attainment is more important for Asians. Since in the Asian culture, the professor is revered for knowledge and wisdom, is considered the expert and deference is honorable, it would appear that this research result be questioned. However, as students from different cultures become more Americanized, their cultural beliefs can change. Additional studies would need to be done with Personal Goal Attainment and different ethnicities.

The sub-scale, Organization and Clarity, was a very important variable based on the research findings. Organization and Clarity relates to the professor having clear classroom objectives and a plan. Each class should have a purpose, goal, and the instructor should be well organized and prepared to accomplish the planned objectives. This sub-scale, Organization and Clarity, was considered very important by both genders, all ages, and ethnicities. This research shows a significant difference at $P<.05$ with respect to ethnicity. While important for all ethnicities, it was most important to Caucasian and African American ethnic groups. This researcher was unable to find literature or research substantiating or contradicting this finding. However, literature exists substantiating the importance of Organization and Clarity with adult students. Feldman (1988, as cited in Murray, Rushton & Paunonen, 1990) presented a synthesis of studies that employed surveys to examine the attributes of effective classroom environments. One such finding indicates that adult learners place great importance on instructors being prepared and organized. Spencer and Schmelkin (1995, as cited in Murray, 2002) found that adult learners considered issues of clarity and organization to be paramount. Literature suggests the findings of this study are true, specifically as it relates to at-risk students. Stringfield (1997) recent study of special strategies for delivering services to at-risk students identified several ways in which classroom leadership can make a difference. For example, the study indicated the need for the instructor to have focused vision and insist on high standards in a work-centered environment. At-risk students must be provided a "safe-haven" atmosphere that will enhance learning outcomes. This requires a learning strategy that is well thought out and preparation of a classroom climate where individuals feel valued. Woolfolk (2004) provides key classroom approaches for helping at-risk students achieve success. Many of the approaches include the characteristics that are included in the Organization and Clarity subscale of the Adult Classroom

Environmental Scale (ACES). These approaches are considered "the basics" and the best way of reaching students that have traditionally struggled in school. These key approaches include: determining clear learning objectives, organization, covering subject matter thoroughly and asking convergent questions. Avoiding interruptions and nonacademic conversations are also essential.

The final sub-scale of the Adult Classroom Environmental Scale (ACES) is Student Influence. This variable highlights the concept that the student should be involved in determining the course objectives. The class is handled in a manner the students agree with and the instructor allows students to do things their way. This research shows this sub-scale was the least important of the seven sub-scales of the Adult Classroom Environmental Scale with respect to age, gender, and ethnicities. The overall findings indicate that students felt very neutral about this sub-scale. However, statistically there was a significant difference with respect to age and ethnicity. This research shows that older students placed less importance on Student Influence, while Caucasian and Asian ethnic groups placed more importance on Student Influence than any other ethnic groups.

While this researcher was unable to find much extant research on the sub-scale Student Influence, the little research found (Hadfield, 2003) appears to both contradict and reinforce the finding, specifically as we relate Student Influence to age. The research conducted shows that older students place less importance on Student Influence. However, with respect to ethnicity, no research could be found either substantiating or contradicting the findings of this study; that is, the Asian and Caucasian ethnic groups placed more importance on Student Influence than any

other ethnic groups. Some literature would appear to question whether Student Influence is most important to Asians. No research was found addressing Caucasians, importance on Student Influence.

This study provides a verification of the preferred classroom environment of business majors in urban community colleges. These data were collected at two urban community colleges in Northern New Jersey. In some instances the findings of this research is substantiated by extant literature and case studies; in other instances literature and case studies contradict the findings of this study. It is not the intention of this writer to claim that any findings here can be generalized to all urban community colleges. Nevertheless, the findings of this study are substantiated by ethnographic research, suggesting that the findings are not unusual. To the extent the reader is a business instructor or administrator at an urban community college, the analysis presented here may be valued for permitting reflection about how the classroom environment should be managed.

Recommendations for Further Study

Literature suggests that the classroom environment is an important focus of educational research since the classroom environment facilitates student learning (Fisher, 1992; Fraser & Walberg, 1991, both as cited in Cheng, 1994) Literature also suggests that the classroom environment is very complex as it encompasses many characteristics, all considered important and influential. Extant research has also shown that students learning in their preferred classroom environment leads to improved student achievements and attitudes (Fisher & Frazier, 1983, as cited in Byer, 1999).

The results of this study suggest that two additional factors should be included in future research when analyzing the student's preferred learning environment. First, the results of this study clearly indicate that as we look at the preferred classroom environment of various different ethnic groups, we need to distinguish between immigrants and non-immigrants. The need to do this becomes apparent as we review the results of this study compared with literature findings; particularly as we look at Involvement, Personal Goal Attainment, and Student Influence, three dimensions of the Adult Classroom Environment Scale, the instrument used in this study. The results of this study indicate that Asians want a classroom environment that will allow them to freely participate, interact with others, and give them the opportunity to pursue their individual interests. All of these findings appear to contradict literature. Extant literature (Speece, 2002) indicates that, culturally, Asian students talk only when called on and they do not question the instructor in class, as this would be perceived as disrespectful and challenging authority. Asian students do not speak-up or offer opinions; since directness is considered rude. Also, the classroom structure is teacher-centered, with few opportunities for discussion and questions since the instructor is seen as the expert and held in reverence (Speece, 2002).

As a result of these findings, future studies that look at ethnicity when measuring the classroom environment or possibly for other studies, distinguishing between immigrants and non-immigrants should be considered. It is the hypothesis of this researcher that as immigrants spend more time living in the West; their traditional ethnic cultural values are replaced by Western culture values suggesting that responses from immigrants and non-immigrants for any given question can be very different.

The second recommendation for future studies when measuring the classroom environment is the inclusion of technology's impact on the classroom. Technology has emerged

as a permanent, respected, and increasingly essential component of the college experience, both outside and inside the classroom.

This study shows that students want to actively participate and interact in class, be provided with opportunities to pursue individual interest, and even participate in course planning decisions. This would indicate that the classroom environment needs to be more student-centered. Students want a learning environment that is more interactive and collaborative which will require faculty to function more as facilitators and partners in student learning. While there can be many different technology elements that can be brought into the classroom, one such element that can be used is the World Wide Web. This brings real time into the classroom (e.g. stock market), possibly making the classroom more interactive and increase students' participation. For future studies that analyze a student's preferred classroom environment, technology is an element that should be considered.

Implications for the Profession

Urban community colleges service a population that is both highly culturally diverse and varied with respect to age. As a result, urban community colleges service an above average percentage of at-risk students. Extant research (Hall, 1994) shows there is a greater propensity for at-risk students to drop out of college. Hall points out that a significant reason for a student dropping out is the lack of a positive, successful experience with classroom activities in school. Extant research (Snow, 2003) clearly indicated that the classroom environment is one crucial variable that contributes to a student's academic success or failure.

With respect to this study, it appears to be clear that the student's preferred classroom environment varies by age, gender, and ethnicity. Based on the classroom environment variable

we are measuring, some classroom variables are more important to students of a specific gender, age group, and/or ethnicity. On the other hand, this study shows that some classroom variables are equally important to both genders, all age groups and ethnicities. This study indicates that it is essential for the instructor to be aware of his/her audience in order that the instructor can create an effective academic learning environment. While this study was directed towards students majoring in business at urban community colleges, the results of this study could very well apply to all college level students attending either urban or non-urban community colleges.

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Adult Classroom Environmental Scale (ACES)

Involvement

Students are often bored in the class. (-)
Students often ask the teacher questions.
Most students enjoy the class.
Most students in the class pay attention to what the teacher is saying.
Most students take part in classroom discussions.
A few students dominate the discussion in the class. (-)

Affiliation

Students often share their personal experiences during class.
The students in the class work well together.
The students in the class learn little from one another. (-)
The students in the class enjoy working together.
Students in the class feel free to disagree with one another.
Friendships have developed in the class.
Students seldom interact with one another during class. (-)

Teacher Support

The teacher makes little effort to help students succeed. (-)
The teacher talks down to students. (-)
The teacher encourages students to do their best.
The teacher cares about students' feelings.
The teacher respects students as individuals.
The teacher likes the students in the class
The teacher cares whether or not the students learn.

Task Orientation

The teacher seldom talks about things not related to the course.
Students regularly meet assignment deadlines.
Students often discuss things not related to course content. (-)
Activities not related to course objectives are kept to a minimum
Students do a lot or work in the class.
Getting work done is very important in the class.
The class is more social hour than a place to learn. (-)

Personal Goal Attainment

The class is flexible enough to meet the needs of individual students.
Many students think the class is not relevant to their lives. (-)
The teacher expects every student to learn the exact same things. (-)
Students in the class can select assignments that are of personal interest to them.
Most students in the class achieve their personal learning goals.
The teacher tries to find out w hat individual students want to learn.
Students have the opportunity to learn at their own pace.

Organization and Clarity

The teacher comes to class prepared.
Learning objectives were made clear at the start of the course.
The class is well organized.
The class lacks a clear sense of direction. (-)
The subject matter is adequately covered.
Students do not know what is expected of them. (-)
Learning activities follow a logical sequence.

Student Influence

Students help to decide the topics to be covered in class.
The teacher makes all decisions in the class. (-)
The teacher sticks to the lesson plan regardless of student interest. (-)
Students participate in setting course objectives.
The teacher rarely dominates classroom discussion.
Students feel free to question core requirements.
The teacher seldom insists that you do things his or her way.

Note: Items denoted (-) are reverse scored.

RESEARCH QUESTIONNAIRE

You are going to read 49 statements related to the classroom environment. I would like you to tell me how strongly you agree or disagree with each statement as it relates to the classroom environment you prefer. We are interested in determining what you feel would produce a good learning environment for you. Your response choice to each question is: Strongly agree, agree, neutral, disagree, strongly disagree. Simply check your desired choice.

Statements	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
1) I feel students should not be bored in class.					
2) I feel that students should often ask the instructor questions.					
3) I feel that students should enjoy the class					
4) I feel students should look forward to the class.					
5) I feel students in class should pay attention to what the teacher is saying.					
6) I feel students should take part in class discussions.					
7) I feel the class discussion should not be dominated by a few students					
8) I feel students should share their personal experiences during class.					
9) I feel students in class should work well together.					

Statements	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
10) I feel students should learn from one another.					
11) I feel students in the class should enjoy working together.					
12) I feel students in the class should feel free to disagree with one another.					
13) I feel friendships should develop in the class.					
14) I feel students should interact with one another during class.					
15) I feel instructors should make a reasonable effort to help students succeed.					
16) I feel instructors should not talk down to students.					
17) I feel instructors should encourage students to do their best.					
18) I feel instructors should care about students' feelings.					
19) I feel instructors should respect students as individuals.					
20) I feel instructors should like the students in the class.					
21) I feel instructors should care whether or not the students learn.					

Statements	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
22) I feel the instructor should not talk about things that are unrelated to the course.					
23) I feel it is important for the instructor to expect students to meet assigned deadlines.					
24) I feel students should not discuss things not related to the course.					
25) I feel activities not related to course objectives should be kept to a minimum.					
26) I feel students should do a lot of work in the class.					
27) I feel getting work done is very important in the class.					
28) I feel the class should not be a social hour rather a place to learn.					
29) I feel the class should be flexible enough to meet the needs of individual students.					
30) I feel the class should be relevant to my life (current or future).					
31) I feel the instructor should expect every student to learn the exact same things.					
32) I feel students should be able to select assignments that are of personal interest to them.					

Statements	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
33) I feel most students in the class should achieve their personal learning goals.					
34) I feel the instructor should try to find out what individual students want to learn.					
35) I feel the students should have the opportunity to learn at t heir own pace.					
36) I feel the instructor should come to class prepared.					
37) I feel learning objectives should be made clear at the start of the course.					
38) I feel the class should be well organized.					
39) I feel the class should not lack a clear sense of direction.					
40) I feel the subject matter should be adequately covered.					
41) I feel students should know what is expected of them.					
42) I feel learning activities should follow a logical sequence.					
43) I feel the students should help decide the topics to be covered in the course.					

Statements	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Agree
44) I feel the students should have input regarding decisions in the class.					
45) I feel the instructor should prepare the day's planned lesson based on the student's interest.					
46) I feel students should participate in setting course objectives.					
47) I feel the instructor should not dominate classroom discussion.					
48) I feel students should feel free to question course requirements.					
49) I feel the instructor should allow the student to do things his or her way.					

Demographic Data

(Please check the box that applies for each question)

1) Ethnicity

White ☐ Alaskan ☐

African American ☐ Asian ☐

Hispanic ☐ Alien ☐

American Indian ☐ Other ☐

☐

2) Gender

Male ☐

Female ☐

3) Age

Less than 18 ☐

18 – 21 ☐

22 - 24 ☐

25 – 29 ☐

30 – 39 ☐

40 and older ☐

PROCEDURE TO ADMINISTER THE RESEARCH QUESTIONNAIRE AT PASSAIC COUNTY COMMUNITY COLLEGE

1. Insert letter (see attachment I) into the mailboxes of the instructors teaching the classes selected for the study.

2. On day indicated by the instructor to do the survey, I will go to each class. I will read a statement to the class prior to administering the questionnaire (see attachment II)

3. Questionnaires will be handed out. I will read statement on the questionnaire to the class, and instruct them re: time allotted.

4. Upon completion, students will put into envelope provided.

Attachment I (For Passaic County Community College)

(ON PCCC LETERHEAD)

DEAR (Instructor's Name)

WE NEED YOUR HELP!

The Business Administration Department will be conducting a student survey seeking feedback related to the preferred classroom environment of the students. We are interested in determining what the students feel would produce a good learning environment for them. **This survey is not to determine what you are doing in class.** This survey will provide information that will hopefully lead to improving the overall performance of our Business Administration Programs.

The students will be asked to complete in class a 49-item questionnaire. Students will respond to statements by simply checking their appropriate response: strongly agree, agree, neutral, disagree or strongly disagree. I am requesting 30 minutes of class time to administer the questionnaire. In order to maximize student participation, request the last 30 minutes of class time for classes that meet twice per week and 30 minutes following the break for classes meeting once per week. In order that you may plan accordingly, please provide below a date I can come into your class to administer the questionnaire. I would appreciate a date in late September or early October to administer the survey. Please indicate a date below and plan your evening accordingly. I will be in contact with you prior to that date to confirm.

THE DATE TO ADMINISTER THE QUESTIONNAIRE IN MY CLASS IS

_____

THANK YOU for allowing some time to administer the survey. If you have any questions, please call Tom Cox at 973-684-5308.

Attachment II

READ TO CLASS PRIOR TO ADMINISTERING QUESTIONNAIRE

I want to thank Prof. _____ for allowing me the time to administer a survey to you. The purpose of this survey is to find out what you feel are some important characteristics of the classroom environment. What do you feel would produce a good learning environment for you. **Note: We are not asking what is happening in this specific class;** again, your responses should reflect what you feel would produce a good learning environment for you. You have the next 30 minutes to read and think seriously about your responses. You will read 49 statements. Your response choices to each question is: Strongly agree, agree, neutral, disagree, or strongly disagree.

Simply check your desired choice. I will not be able to answer any questions once the questionnaire is administered. **Do not** put your name on the questionnaire, but do respond honestly. The last part asks for some demographic information. Please complete this section as it is vital to the study. When you have completed the questionnaire, simply put into this envelope.

(Proceed to hand out questionnaires and read statement).

PROCEDURE TO ADMINISTER THE RESEARCH QUESTIONNAIRE AT HUDSON COUNTY COMMUNITY COLLEGE

1. All materials will be delivered to Dan Bozza, Associate Dean for Business and Social Science Programs.

2. Letter (see attachment I) will be inserted into the mailboxes of the instructors teaching the classes selected for the study.

3. Faculty will be instructed to pick-up questionnaire packet from Dean Bozza's office.

4. Instructor will read statement prior to administering questionnaire (see attachment II).

5. Questionnaires will be handed out

6. Instructor will read statement on the questionnaire to the class and instruct them re: time allotted.

7. Upon completion, student will put into envelope provided and return to Dean Dan Bozza's office.

8. Thomas Cox will pick-up

Attachment I (for Hudson County Community College)

(ON HCCC LETERHEAD)

DEAR (Instructor's Name)

WE NEED YOUR HELP!

The Business Administration Department at Hudson is working in conjunction with the Business Administration Department at Passaic County Community College in conducting a student survey seeking feedback related to the preferred classroom environment of the students. We are interested in determining what the students feel would produce a good learning environment for them. **This survey is not to determine what you are doing in class.** This survey will provide information that will hopefully lead to improving the overall performance of our Business Administration Programs. The students will be asked to complete in class a 49-item questionnaire. Students will respond to statements by simply checking their appropriate response: strongly agree, agree, neutral, disagree or strongly disagree. I am requesting 30 minutes of class time for you to administer the questionnaire. In order to maximize student participation, request the last 30 minutes of class time for classes that meet twice per week and 30 minutes following the break for classes meeting once per week. Please plan a date in late September or early October to administer the survey in your class. Please indicate the date below that the survey will be administered.

THE DATE I WILL ADMINISTER THE QUESTIONNAIRE IN MY CLASS IS

_____

THANK YOU for allowing some time to administer the survey. If you have any questions, please call Dan Bozza at 973-714-2214.

Attachment II

INSTRUCTOR: **PLEASE READ TO CLASS PRIOR TO ADMINISTERING QUESTIONNAIRE**

Hudson County Community College is working in conjunction with Passaic County Community College to find out what you feel are some important characteristics of the classroom. What do you feel would produce a good learning environment for you. **Note: We are not asking what is happening in this specific class;** again, your responses should reflect what you feel would produce a good learning environment for you. You have the next 30 minutes to read and think seriously about your responses. You will read 49 statements. Your response choices to each question is: strongly agree, agree, neutral, disagree, or strongly disagree. Simply check your desired choice. **Do not** put your name on the questionnaire, but do respond honestly. The last part asks for some demographics information. Please complete this section as it is vital to the study. When completed, simply put into this envelope.

(Proceed to hand out questionnaires and read statement on questionnaire).

Descriptives for Age

		N	Mean	S.D.
Involvement	18 - 21	158	4.42	0.423
	22 – 24	92	4.46	0.440
	25 – 29	71	4.39	0.473
	30 39	74	4.49	0.383
	40+	26	4.55	0.417
	Total	**421**	**4.44**	**0.429**
Affiliation	18 – 21	158	3.90	0.476
	22 – 24	92	3.95	0.583
	25 – 29	71	3.71	0.631
	30 – 39	74	3.82	0.472
	40+	26	4.00	0.503
	Total	**421**	**3.87**	**0.535**
Teacher Support	18 – 21	158	4.36	0.492
	22 – 24	92	4.37	0.495
	25 – 29	70	4.36	0.425
	30 – 39	74	4.29	0.421
	40+	26	4.35	0.466
	Total	**420**	**4.35**	**0.466**
Task Orientation	18 – 21	158	3.67	0.609
	22 – 24	92	3.80	0.624
	25 – 29	70	3.89	0.568
	30 – 39	74	3.91	0.521
	Total	**420**	**3.80**	**0.593**
Personal Goal Attainment	18 – 21	158	3.68	0.581
	22 – 24	92	3.78	0.618
	24 – 29	70	3.62	0.613
	30 - 39	74	3.51	0.612
	40+	26	3.83	0.674
	Total	**420**	**3.67**	**0.611**
Organization & Clarity	18 – 21	158	4.43	0.434
	22 – 24	92	4.50	0.498
	25 – 29	70	4.56	0.468
	30 – 39	74	4.44	0.594
	40+	26	4.57	0.416
	Total	**420**	**4.48**	**0.485**
Student Influence	18 – 21	158	3.57	0.619
	22 – 24	92	3.49	0.685
	25 – 29	70	3.58	0.721
	30 39	74	3.25	0.698
	40+	26	3.40	0.562
	Total	**420**	**3.48**	**0.670**

Descriptive for Gender

		N	Mean	S.D.
Involvement	Female	247	4.43	0.428
	Male	174	4.46	0.430
	Total	421	4.44	0.428
Affiliation	Female	247	3.80	0.541
	Male	174	3.96	0.508
	Total	421	3.87	0.508
Teacher Support	Female	246	4.35	0.450
	Male	174	4.33	0.494
	Total	420	4.35	0.468
Task Orientation	Female	246	3.83	0.581
	Male	174	3.74	0.609
	Total	420	3.80	0.594
Personal Goal Attainment	Female	246	3.59	0.558
	Male	174	3.78	0.663
	Total	420	3.67	0.610
Organization & Clarity	Female	246	4.48	0.496
	Male	174	4.47	0.470
	Total	420	4.48	0.485
Student Influence	Female	246	3.44	0.628
	Male	174	3.55	0.722
	Total	420	3.49	0.670

Descriptives for Ethnicity

		N	Mean	S.D.
Involvement	Asian	61	4.48	0.368
	White	47	4.42	0.500
	Hispanic	193	4.42	0.436
	African American	83	4.51	0.408
	Other	38	4.39	0.434
	Total	422	4.44	0.429
Affiliation	Asian	61	4.07	0.536
	White	47	3.88	0.539
	Hispanic	193	3.77	0.536
	African American	83	3.91	0.499
	Other	38	3.94	0.507
	Total	422	3.87	0.535
Teacher Support	Asian	61	4.43	0.511
	White	47	4.39	0.474
	Hispanic	192	4.28	0.440
	African American	83	4.39	0.480
	Other	38	4.37	0.94
	Total	421	4.35	0.469
Task Orientation	Asian	61	3.76	0.780
	White	47	3.78	0.482
	Hispanic	193	3.81	0.582
	African American	83	3.82	0.504
	Other	37	3.75	0.628
	Total	421	3.79	0.593
Personal Goal Attainment	Asian	61	3.94	0.601
	White	47	3.77	0.675
	Hispanic	193	3.58	0.597
	African American	83	3.68	0.604
	Other	37	3.56	0.488
	Total	421	3.67	0.611
Organization & Clarity	Asian	61	4.39	0.466
	White	47	4.60	0.393
	Hispanic	193	4.46	0.452
	African American	83	4.55	0.428
	Other	37	4.35	0.784
	Total	421	4.47	0.485
Student Influence	Asian	61	3.84	0.635
	White	47	3.64	0.654
	Hispanic	193	3.39	0.663
	African American	83	3.43	0.595
	Other	37	3.33	0.742
	Total	421	3.49	0.670