Learning team participation: the effects on pre-business first-year students

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Learning team participation:

The effects on pre-business first-year students

by

Lynnae Patrice Diefenbach

A Thesis Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE

Department: Professional Studies in Education
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Signatures have been redacted for privacy

Iowa State University
Ames, Iowa
1996
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CHAPTER ONE
INTRODUCTION

Increased competition for a diminishing pool of college students has forced higher education institutions to look beyond simply increasing the recruitment of new students as a method to maintain enrollment. The growing need in higher education is to provide an environment which encourages students to stay at an institution once they enroll. The many theories and programs which have been developed fall under the umbrella of college student retention. The definition of college student retention varies from a quantitative percentage indicating whether students graduate from an institution to looking at the success of the individual college student. Tinto (1990) suggests that "...successful retention is no more than, but certainly no less than, successful education" (p. 47).

College student retention is providing students with every possible opportunity to be successful and hopefully reach at least some of their goals. For example, some students attend college with the goal of taking one course to enhance their careers or others may plan to transfer after completing their general education requirements. These students have been successful if they reach those goals. College student retention is also meeting the goals of the institution. There should be a balance between the goals of the student and the goals of the institution. Retention rates should be stable if the institution is committed to the mission of providing a well-rounded education to the students (Tinto, 1990).

Learning communities have evolved as a method of increasing college student retention through providing a better education by integrating the course work. Learning communities also encourage social and academic integration into the institution, which are
two central components to Tinto’s (1993) Model of Student Departure. There are many definitions of learning communities because there are many variations of the basic model. Tinto describes them as “…self-sustaining student communities that have an academic focus” (p. 168). Learning communities usually include multiple courses that students take together as a cohort. There are differences in the amount of faculty involvement and integration of course work, but the basic elements of social and academic integration are usually present.

Research has shown that learning communities enhance student-faculty interaction, peer interaction, perception of the campus environment, grade point average, and persistence rates. The research is more limited in the area of gender and other demographics. Student-faculty interaction is a significant variable in the retention of college students and learning communities provide increased opportunities for informal student-faculty interaction (Terenzini & Pascarella, 1994). In learning communities, faculty can become more involved in the teaching process and become actively engaged in the learning process with the students (Finley, 1990). Students also feel more comfortable communicating informally with their learning community faculty (Dukes & Gaither, 1984).

Learning communities enhance peer interaction which is one of the most noticeable influences on college students (Astin, 1993a). Peer interaction is the informal interaction between classmates and other students. The most common reason students join learning communities is to meet people (Tinto & Goodsell, 1994). For example, a first-year student at the University of Missouri, Columbia explained why she joined a learning community “I thought life would be a lot easier if I already had a study group set up for me and the chance
to meet friends who are studying what I am" (Gose, 1995). The academic peer relationships in learning communities also serve a dual purpose of making college students feel more comfortable at their institutions and become more involved in the learning process.

The perception of the campus environment affects students' satisfaction with college and ultimately their persistence (Pennington, Zvonkovic, & Wilson, 1989). Studies have shown that learning community participants are more likely to view their campus environment as positive than learning community non-participants (Lacy, 1978; Tinto, Goodsell Love, & Russo, 1994). This finding may occur because learning community participants feel more comfortable in their classes, with their instructors, and with their peers. The positive perception of the campus environment indicates that the effects of learning community participation are pervasive.

Grade point average is an additional indicator of persistence (Cabrera, Nora, & Castaneda, 1993). Many research studies have proven that learning community participants earn higher grade point averages and persistence rates than learning community non-participants (Gablenick et al., 1990). These findings can be attributed to the integration of course work, student-faculty interaction, peer interaction, and perception of the campus environment. Learning community effects appear to be significant even for students with lower pre-college characteristics such as high school grades and entrance exam scores (Gablenick et al.)

Finally, gender is an important consideration in college student retention. Research has shown that men and women have different goals when seeking informal student-faculty
interaction, the most influential type of peer interaction is same-gender interaction, and women are more likely to earn higher college grade point averages and graduate in four years than men (Astin, 1993b; Astin, Korn, & Green, 1987; Pascarella & Terenzini, 1979). There is limited research on gender differences specifically in learning communities and this study will hopefully provide a better indication of how learning communities impact women and men.

Purpose of the Study

Researchers have proven that learning communities are an effective method of enhancing college student success. However, much of the research has been qualitative which makes the findings more difficult to generalize to other higher education institutions. This study is quantitative and seeks to determine if learning communities are meeting the needs of a large, land-grant institution. The findings will serve as an evaluation of the learning teams in an effort to test their effectiveness.

The purpose of this study is to determine if the students who participate in learning teams (a) experience more informal student-faculty interaction, (b) experience more peer interaction, (c) have a more positive perception of the campus environment, (d) have higher grade point averages, and (e) persist at a higher rate than those students who are not participating in learning teams when gender is considered.

Research Questions

The following research question and sub-questions are a product of the review of literature and the experiences of the researcher.
What is the effect of learning team participation on pre-business first-year college students?

A) Are the persistence rates for students participating in the learning teams higher than the persistence rates of students who do not participate?

B) Are the first semester grade point averages for students participating in the learning teams higher than the grade point average of students who do not participate?

Operational Definitions

The terms used in this study are defined by the researcher as the following:

Retention - providing opportunities which will assist college students in reaching their goals, most often graduation

Learning Teams - linked group of standing courses specified by the College of Business in which students registered as a group

Informal Student-Faculty Interaction - any interaction the student has with faculty beyond the confines of the classroom including personal interaction as well as phone calls and/or electronic mail

Peer Interaction - academic peer relationships or interactions with classmates outside of the classroom for social or academic reasons

Campus Environment - classes, other students, faculty, academic advisors, administrators, office staff, campus climate, and students themselves
Grade Point Average - the Fall 1995 semester grade point average

Persistence - whether or not the student has enrolled in the Spring 1996 semester

Assumptions

The assumptions of the study are as follows:

1. The respondents gave complete and honest answers on the questionnaire.

2. The respondents' participation in the research was voluntary.

3. The survey instrument used was an effective means of collecting the necessary data.

Limitations

The limitations of the study are as follows:

1. The respondents of the study may not be inclusive of all learning community participants and non-participants.

2. The findings may not be generalizable to other colleges at this institution or other institutions because the learning team design was unique to the needs of the College of Business.

3. The learning team participants in this study were not chosen randomly by the researcher. The participants were assigned by the College of Business based on pre-college attributes and participation in summer orientation.

4. This study was completed during the tenth week of the semester and perceptions may have changed by the end of the semester.
5. Pre-college attributes were not considered in this study which could have impacted the differences in experiences between learning team participants and non-participants.

6. The questionnaire was administered at the end of a class period and respondents may have rushed their answers.

Significance

The study of college student retention has become increasingly prevalent as the demographics of college students continue to fluctuate. The population of traditional-age college students, 18-24, decreased 4.5 million from 1980 to 1990. The non-white population increased seven times faster than the non-Hispanic white population in the last ten years. From 1982 to 1992, the number of African-Americans enrolled in higher education increased three times more than whites, Hispanics increased ten times greater than whites, and Asian Pacific Islanders increased eleven times greater than whites enrolled in colleges and universities across the nation (Outtz, 1995).

These statistics indicate that the college student population is becoming increasingly diverse and will bring new needs and demands to higher education. As retention programs are explored, the changing student population needs to be considered. Effective retention programming should be flexible and meet the needs of a variety of students. Learning communities, which create an encouraging atmosphere for learning, may be one such retention tool.

Although learning communities have been around for a long time, their use has become more widespread in recent years. For example, in a directory of learning
communities published by the Washington Center for Improving Undergraduate Education (McLaughlin & MacGregor, 1996) there were 109 learning communities in 26 states. The research indicates learning communities are an excellent means of increasing college student retention, although the research has been limited in using quantitative methods and comparing the effects of learning community participation and gender.

This study is significant because it will make a contribution to the literature by continuing to test the effectiveness of learning communities, incorporating gender as a variable, and using quantitative methodologies. The focus of this study is on six areas which have an impact on retention: student-faculty interaction, peer interaction, perception of the campus environment, grade point average, persistence, and gender. These variables were chosen because the literature indicates they are pertinent to the college experience.

This study will benefit a wide range of individuals and groups. It will contribute to current college student retention research by continuing to test new retention theories. This study will benefit student affairs professionals and their preparation programs as well as academic affairs. The findings and implications of this study will provide insight into the benefits of learning communities and about who should be involved in designing, implementing, maintaining, and assessing learning communities.

The institution at which this study took place will discover whether using learning communities is an effective method of increasing retention at a large, land-grant university. Retention is an important issue for this institution and this study will demonstrate the value of learning communities. The College of Business specifically will gain an in-depth analysis
of their learning team design. It is vital that the learning teams were evaluated so they could be improved for the next group of first-year pre-business students.

Most importantly, this study will benefit the students. They are the individuals for whom learning teams are designed and without their input any evaluation would be incomplete. Learning communities have been proven effective thus far, but continued assessment is necessary as student needs change. Learning communities could become a lasting retention tool if they are flexible and continue to encourage college student success.

Organization of the Study

Chapter Two is a review of the literature relevant to this study. Tinto's model of student departure is presented in an attempt to understand retention theory. A thorough description of learning communities is followed by a discussion of the variables used in this study: student-faculty interaction, peer interaction, campus environment, grade point average, and persistence. Finally, gender, as it applies to retention and the above variables, is explored.

Chapter Three includes a review of methodology used in other studies and the methods and procedures used in this study. The sample population, instrument, and data collection methods are described. The hypotheses to be tested and the data analysis techniques are also included.

Chapter Four provides the results from the data analyses. The findings for the research questions, hypotheses, and qualitative responses are discussed.

Chapter Five summarizes the entire study. A brief summary of the study leads to recommendations for future study and implications for higher education.
CHAPTER TWO
LITERATURE REVIEW

Throughout the research on college student retention, the need for social and academic integration emerges as a common theme. Learning communities have evolved in an attempt to apply retention theory to practice. Learning communities create social and academic integration as a means of encouraging college student success. This chapter will explore college student retention theory as it applies to learning communities. Tinto’s (1990) Model of Student Departure will be examined followed by a discussion of learning communities. Student-faculty interaction, peer interaction, campus environment, grade point average, and persistence will be individually discussed as these variables apply to retention and learning communities. Finally, gender will be examined both with these variables and separately as a factor affecting college student retention.

Tinto’s Model of Student Departure

Tinto’s (1993) longitudinal model of student departure explores the interaction between the student and the institution over time. The model asserts that students enter an institution with various pre-college attributes such as family background, various skills and abilities, and prior schooling. These, in turn, affect the students’ goals, institutional commitment, and intention to attend a college or university.

Tinto describes the institutional experience, once a student is enrolled in an institution, as having two systems: academic and social. Within these two systems there are formal and informal experiences. An example of a formal academic experience would be academic performance or grades, as compared to student-faculty interaction which is an
informal academic event. In the social system, the extracurricular activities are structured and considered formal while day-to-day peer group interactions are more informal (Tinto, 1993). These institutional experiences, both formal and informal, affect the students’ academic and social integration. Students need not have an equal amount of social and academic integration because social and academic integration are intertwined and compensate for each other (Pascarella & Terenzini, 1983; Tinto, 1993). Positive academic and social integration subsequently affect students’ institutional commitment and intention to persist, which leads to departure or persistence.

The model also accounts for external commitments such as family, work, etc. particularly for older students who may have multiple responsibilities outside of their college student role. External communities are represented on the model because they can cause withdrawal even if all other experiences at the institution are positive (Tinto, 1993). On the other hand, external communities may also enhance persistence if they are providing support for the student.

This theory increases understanding of college student attrition, and from this Tinto (1990) has defined three principles of effective retention programs. First, the principle of community is to create a sense of “membership and belonging” (Tinto, 1990, p. 36). This is accomplished by reaching out to students and encouraging integration into the institution. Integration may be promoted through opportunities for involvement and encouraging student-faculty interaction (Tinto, 1993). The frequency and quality of student-faculty interactions has been proven to be one of the strongest predictors of retention (Tinto, 1990).
Second, the principle of institutional commitment to the student is displayed through the daily activities of the college or university (Tinto, 1990). This principle focuses on the values of the institution. If the institution is committed to the students, then it will be apparent in everything the institution does and not just in individual retention programs. Therefore faculty, staff, and administrators should all be committed to a student-centered institution. Together, academic and student affairs can create a balance which is beneficial for the students.

The third principle focuses on education. "Education, not retention, is the primary principle of effective retention" (Tinto, 1990, p. 38). It is important that the institution not lose sight of the students when looking for solutions to departure. If students would be more successful at another institution, the college or university should not attempt to keep the students merely to improve retention statistics. This supports Tinto's (1990) suggestion of a paradox of institutional commitment. The more willing an institution is to allow its students to leave, the more committed the students will be to the institution. Students can sense when an institution has their best interest in mind and is willing to support them to seek opportunities elsewhere if that is best for the student. Thus students have a stronger interest in staying because they know they institution is committed to providing education.

Learning communities are one type of retention program that meets Tinto's (1990) principles of effective programs. Learning community is a broad term defining a variety of curricular models that purposefully restructure the curriculum to link together courses or coursework during the same quarter or semester so that a group
of students finds greater coherence in what they are studying or experiences increased intellectual interaction with faculty members and other students (Smith, 1991, p. 42). Learning community participants register for classes as a cohort in an effort to encourage both social and academic integration as well as a better understanding of the interaction among their courses.

Learning communities create a sense of “membership and belonging” (Tinto, 1990, p. 36) by grouping students who are taking their classes together. They may walk to classes together, live in the same residence hall, and/or study together. The students can identify their group and feel involved in their learning. Implementing learning communities requires institutional commitment. Student affairs and academic affairs must work together to develop and maintain this student-centered retention program (Schroeder & Hurst, 1996). It may require time, effort, and money, but the benefits outweigh the costs. Finally, learning communities support and encourage education. They provide students with academic peers to study with and learn from. Many learning communities integrate the course work so the students can understand how their classes relate to the “big picture.”

Learning Communities

Learning communities are not a new trend, in fact they have been around since the beginning of the twentieth century. Alexander Meiklejohn and John Dewey are considered to be the fathers of the learning community model (Gablenick, MacGregor, Matthews, & Smith, 1990). Meiklejohn focused on the need to reorganize curricular structure to integrate courses and emphasize the importance of the general education curriculum. Dewey advocated teaching and learning, student-faculty interaction, and a “shared-inquiry”
method of teaching instead of the usual authoritarian style (Gablenick et al., 1990). The first learning community followed Meiklejohn’s philosophy and was established at the Experimental College at the University of Wisconsin in 1927. It was an “integrated, full-time, two-year, lower-division program focusing on democracy in fifth-century Athens and nineteenth- and twentieth-century America” (Gablenick et al., 1990, p. 11).

The early learning community has evolved into many forms today which still emphasize integrated courses, student-faculty interaction, student learning, and a more interactive teaching pedagogy. The full range of learning communities makes it easier for a variety of institutions to implement learning community programs. Concerns of time and cost can be eliminated by the many choices available. The five basic models of learning communities are linked or paired courses, learning clusters, freshman interest groups, federated learning communities, and coordinated studies programs (Gablenick et al., 1990; Smith, 1991).

The simplest model is the linked or paired courses. In this model, the students co-register for two courses which link a study skills or composition class with a large lecture class program (Gablenick et al., 1990; Smith, 1991). For example, students may enroll in a large Biology course and an integrative writing course in which all of the writing is about Biology. This allows the students to understand the connection between the sciences and writing. Courses are not stand alone courses, but instead are interactive just as they are in life. Faculty are usually not involved in this model but they may coordinate the syllabi between the large and smaller class if they wish.
Two types of mid-level learning communities are learning clusters and freshman interest groups. Learning clusters consist of multiple courses, usually three to four, linked by a theme for which students may co-register (Gablenick et al., 1990). There is often more faculty involvement in this model because they may coordinate the syllabi. The freshman interest groups are similar to the learning clusters, but they have an additional peer advisor function. The peer advisor is usually an upper-division student who gathers the group of students weekly for discussions, social activities, study groups, and information about campus resources (Smith, 1991). The peer advisor becomes the facilitator of the interaction in the learning community. The peer advisor can also help students make the connection among the classes they are taking. Although freshman interest groups were founded at the University of Oregon, they are probably most noted at the University of Washington due to the research by Tinto, Goodsell Love, and Russo (1994).

Two comprehensive learning community models are federated learning communities and coordinated studies programs. Federated learning communities also have three courses linked by a theme, but are differentiated by the Master Learner. The Master Learner is most often a faculty member who is not given a teaching load and enrolls in the courses with the students (Gablenick et al., 1990). The Master Learner is not from the discipline of the course work so she or he is new to the curricula similar to the students. The Master Learner facilitates an integrative seminar where the cohort discusses what they have learned and attempts to understand the material from an integrative perspective (Gablenick et al., 1990). This model tends to be costly, so there have been many variations of the model including using an upper division student as a Master Learner.
Finally, the coordinated studies program is a model which is completely integrated. It consists of a full-time course load which students register for as a cohort. This creates flexible blocks of time for lectures, field trips, discussions, and seminars (Gablenick et al., 1990). Coordinated studies programs alter the traditional curriculum and require collaboration among the faculty. They are team taught and focus on the process of learning rather than the product (Tinto, 1993). For example, instead of faculty teaching three separate courses, they work together to create a syllabi which integrates the three disciplines into one combined course. Gablenick et al. (1990) provide examples of coordinated studies programs such as “Science Shakes the Foundations: Dickens, Darwin, Marx, and You” which integrates English composition, physical anthropology, history of science, and economics or “Gods, Heroes, and Humans: Sources of Our Western Traditions” which combines English composition, history, literature, and psychology.

Much of the learning community research has originated from the Washington Center for Improving the Quality of Undergraduate Education and the National Center on Postsecondary Teaching, Learning, and Assessment. The Washington Center was established in 1985 at Evergreen State College with help from the Exxon Foundation and the Ford Foundation. The center coordinates much of the learning community activity in the state of Washington. The Washington Center also maintains records of various learning community initiatives within the state and across the nation, as well as acting as a resource, publishing a quarterly newsletter, and sponsoring conferences (Gablenick et al., 1990).

The National Center on Postsecondary Teaching, Learning, and Assessment is funded by the United States Department of Education’s Office of Educational Research and
Improvement. The National Center sponsored the Collaborative Learning Project which studied learning community initiatives at the University of Washington, LaGuardia Community College and Seattle Central Community College. This intensive study provided significant research on the benefits of learning communities.

Learning communities provide a multitude of benefits which ultimately lead to increased college student retention. Some of the most prevalent benefits of participation in learning communities are (a) increased student-faculty interaction, (b) increased peer interaction and social integration, (c) a more positive perception of the campus environment, (d) enhanced student learning which can be quantified as grade point average, and (e) increased persistence. Each of these benefits can individually increase retention, but together they create an atmosphere of institutional commitment to college student success. The remainder of this literature review will examine each of these benefits and discuss the importance to college students.

Student-Faculty Interaction

Student-faculty interaction, predominately informal, has been cited as an important factor in the retention of college students (Endo & Harpel, 1982; Lamport, 1993; Pascarella, 1980; Pascarella & Terenzini, 1977; Terenzini & Pascarella, 1994). Informal interaction is usually defined as interactions beyond the classroom experience. Kuh, Schuh, and Whitt (1991) suggest that most student-faculty interaction is after class and is most often related to academic concerns. For example, after a particularly stimulating discussion, students may talk with the professor about the lecture after class. These discussions may
begin to link the course work to the students' life experiences (Kuh, Schuh, & Whitt, 1991; Pascarella, 1980).

Pascarella (1980) found that informal student-faculty interactions which focus on "intellectual/literary or artistic interests, value issues, or future career concerns have the greatest impact” (p. 565) on educational outcomes. Student-faculty interactions also have a strong effect on academic learning and a lesser effect on cognitive development (Franklin, 1995; Terenzini, Pascarella, & Blimling, 1996). In their interactions with students, faculty are also able to influence student change and behavior (Kuh, 1996; Springer, Terenzini, Pascarella, & Nora, 1995). In addition, there is a gender difference in student-faculty interactions. Female student interactions are intrinsic and include discussions of campus issues, while male students are usually fulfilling instrumental needs such as seeking information about careers, courses, or majors (Pascarella & Terenzini, 1979).

Students may also interact with faculty through departmental clubs or undergraduate research opportunities. However, Kuh, Schuh, and Whitt (1991) found few instances of mentor relationships developing unless the faculty member saw the student as a future faculty member. Furthermore, increased informal interaction is more effective than increased formal interaction again suggesting the importance of informal interaction (Endo & Harpel, 1982). The quality of the informal interaction is as important as the quantity of informal interactions (Pascarella, 1980).

Tinto (1993) suggests that when students are engaged in the classroom, they are more likely to look for out-of-class interaction with faculty. Yet students themselves often must initiate the interaction with faculty (Kuh, Schuh, & Whitt, 1991). Faculty can become
a student’s link to the academic life of the institution (Pascarella & Terenzini, 1977).

Therefore faculty should be aware of students in their classes who may feel alienated by the lecture style of large first-year student classes. These students are more likely to leave the institution (Tinto, 1993). Informal student-faculty interaction “...strengthens the personal bonds between the student and the institution” (Pascarella & Terenzini, 1991, p. 394). This increases students’ academic and social integration into the institution, which will increase the likelihood of persistence.

Increased informal student-faculty interaction does increase student persistence (Lamport, 1993; Terenzini & Pascarella, 1994). Terenzini and Pascarella (1977) found that students who persist have had more contacts with faculty and more positive perceptions of the academic programs of the institution than students who did not persist. Those students who do not experience informal student-faculty interaction may be bored in class and not perform as well, which could lead to voluntary withdrawal (Tinto, 1993). The more contact with faculty, the more students are satisfied with their institution, which leads to persistence (Astin, 1993b).

The research on informal student-faculty interaction is extremely persuasive which is why it is an integral component of learning communities. The small group nature of learning communities and the opportunity for faculty to be more involved in the teaching process inherently encourages student-faculty interaction. In many learning community models, faculty are able to move beyond their role as a knowledge-giver and actively participate in the learning process with students (Finley, 1990). In this capacity, faculty are viewed as facilitators of learning rather than as an authoritarian. Students also feel a greater
connection with faculty in learning communities (Tinto, Russo, & Kadel, 1994). For example, Dukes and Gaither (1984) found that learning community participants felt more comfortable speaking with faculty outside of class than those not participating in learning communities. Learning communities provide valuable opportunities for student-faculty interaction.

In learning communities, the interactions between students and faculty are more intellectual (Smith, 1991). This coincides with earlier statements that the most common and most beneficial type of student-faculty interactions are “those that focus on ideas or intellectual matters, thereby extending and reinforcing academic goals” (Terenzini & Pascarella, 1994, p. 31). Learning communities offer both informal and formal student-faculty interaction by encouraging students to become more involved in the learning process and with the higher education institution.

Peer Interaction

The most pervasive influence on the undergraduate experience is peer interaction (Astin, 1993a). Peer interaction is the informal contact between students as they are gaining friends and becoming socially involved with the higher education institution. It is part of the “...social system of the college [which] centers about the daily life and personal needs of the various members of the institution...” (Tinto, 1993, p. 106).

The quantity of peer interaction influences student satisfaction, “leadership development; overall academic development; and self-reported growth in problem solving skills, critical thinking skills, and cultural awareness” (Astin, 1993a, p. 7). Peer interaction which focuses on class work, rather than student-faculty interaction, has a strong impact on
“student perceptions of cognitive growth” (Franklin, 1995, p. 150). On the other hand, Pacarella and Terenzini (1991) found that peers have a “greater influence on change in attitudinal and psychosocial areas than in learning and cognitive ones,” which are more influenced by faculty (p. 621). Peer interaction is also related to gains in learning about oneself, which many students consider to be one of the most significant aspects of attending college (Springer et al., 1995). Women exhibit a more positive gain in their self-understanding through peer interaction than men (Springer et al.). Generally peer interaction is important, valuable, and impacts college student retention.

Peer group interaction can be discussed from a social influence perspective. Social influence is the attempt to alter others’ behavior and attitudes (Baron & Byrne, 1994). As new students gain friends and form peer groups, they are susceptible to peer influence. Men and women are usually most influenced by their same-gender peers because men and women most frequently interact with their same-gender peer group (Astin, 1993b).

There are two types of influences which impact persistence: normative and modeling. Normative social influence is changing behavior to meet the expectations of others by seeking approval or acceptance (Baron & Byrne). Modeling is gaining a new behavior based on observations of others’ actions (Baron & Byrne). Normative influence has a stronger influence on persistence than modeling (Bank, Slavings, & Biddle, 1990).

In addition, both internalized and direct influences affect persistence. Internalization is based on personal commitment or choice to take action and direct influence, such as compliance, is changing behavior because of a request (Bank, Slavings, & Biddle). Examining peer group influences increases understanding of the college student experience.
For example, peer group interaction, particularly when related to educational activities, has a powerful influence on student learning (Terenzini, Pascarella, & Blimling, 1996). College students also carefully consider others' expectations when they are making decisions and choosing behavioral goals; these goals are predictors of persistence. Therefore it may be important to develop retention programming which accounts for the influence of peers and other significant individuals in the lives of college students (Bank, Slavings, & Biddle).

The more college students interact with each other, the more likely they will feel integrated with the institution both socially and intellectually. This feeling of integration increases the likelihood that the students will stay in college (Tinto, 1993; Pascarella & Terenzini, 1991). Both the amount and quality of peer interactions are positively associated with retention (Pascarella & Terenzini, 1991). Although this section of the literature review explores social integration, Tinto (1993) suggests that social and academic integration are interrelated. The relationship is not necessarily symmetrical or asymmetrical, and one may directly or indirectly affect the other (Tinto, 1993).

Learning communities are designed to encourage both social and academic integration. "Participation in a collaborative learning group enables students to develop a supportive community of peers that helps bond students to the broader social life of the college while also engaging them more fully in the academic experience" (Tinto, Goodsell Love, & Russo, 1994, p. 17). Learning communities provide students with a network of peers with whom they can interact both socially and academically. When Tinto & Goodsell (1994) studied the freshman interest groups at the University of Washington, they found that most students participated to make friends and meet new people. The students wanted
a means by which to make a large university more manageable. Students participating in the Wakonese Residential Learning Community were able to cultivate friendships, gain a sense of membership and belonging, and appreciate the diversity of values and attitudes of their fellow participants (Shroeder & Hurst, 1996).

Additional reasons students join learning communities include wanting to know students in future classes (Tinto & Goodsell, 1994) and meeting other students who share the same academic interests (Tinto & Goodsell, 1993). The desire to meet other students in an academic setting is strong. Often college students, particularly those who attend an institution far away from home, sacrifice their academic pursuits for their desire to meet students (Tinto & Goodsell, 1994). Learning communities provide an opportunity for students to meet their social and academic needs without sacrificing one or the other (Aitken, 1982). The students in the academic major become a peer group with an academic base thus satisfying their needs (Terenzini & Wright, 1987).

Students also become more involved in their learning in a learning community. In fact, students say they are more likely to show up to class because of the responsibility to their learning community (Tinto & Goodsell, 1994). Learning community participants become acquainted with the other students in their classes and they notice if someone does not show up. In the freshman interest groups at the University of Washington, students indicated they spent more time on their class assignments because of the peer review process used in their writing class (Tinto & Goodsell, 1993). It was important to make a good impression on their peers and gain valuable feedback.
Learning communities are an opportunity for students to interact with the same group of students during a term. As the social networks develop, students are also more involved in their courses (Tinto & Goodsell, 1994). Furthermore, Tinto, Goodsell Love, & Russo (1994) found that many learning community members maintain their friendships into the following term. The students would still register for classes together or continue their study groups that were developed in the first term. The effects of learning communities are far reaching and valuable.

Campus Environment

The campus environment includes everything that affects the growth and development of college students (Kuh, Schuh, & Whitt, 1991). Theories relating to the interaction of the student and the campus environment are called person-environment interaction theories. Their premise is that students’ behavior is a result of their interaction with the environment (Rodgers, 1990). Therefore, it is important to examine the students’ perception of their environment as it relates to their satisfaction and retention (Pennington, Zvonkovic, & Wilson, 1989).

A study at a small liberal arts college for women found that student satisfaction increased when positive improvements, such as increasing the student activities staff and promoting retention issues, were intentionally made in the campus environment. The retention rates of the students also increased from 40% to 54% in four years (Earwood-Smith & Colbert, 1989). Although some studies have suggested that perception of the campus environment has little effect on persistence (Stark & Johnson, 1992; Whiston, 1989), most have found the opposite to be true. Students who are satisfied with their
experience in college are more likely to persist (Allen, 1984; Lincoln, Graham, & Lane, 1983; Terenzini & Pascarella, 1977).

Learning communities promote a positive perception of the campus environment. Lacy (1978) found that students in a living-learning community were more likely to describe their campus environment as a "...warm, friendly, cohesive atmosphere..." (p. 209) than students not participating in the learning community. In Tinto, Goodsell Love, and Russo's (1994) quantitative study of learning communities they found the most statistically significant differences between learning community participants and non-participants' perceptions of the campus environment. Learning community participants at Seattle Central Community College, University of Washington, and LaGuardia Community College all had a more positive perception of their classes and campus climate than non-participants. Freshman interest group participants at the University of Washington had a more positive perception of themselves than non-learning community participants. Seattle Central Community College and LaGuardia Community College learning community participants had more positive perceptions than non-participants of other students and faculty (Tinto & Goodsell Love, 1995). These studies indicate that participating in learning communities can increase students’ positive perceptions of the campus environment, which may increase their satisfaction and retention.

Grade Point Average

Grade point average is a conflicting variable in retention of college students. According to Tinto (1993), only 15-25% of all college students leave an institution due to academic dismissal. Yet, many researchers have suggested that academic performance has a
significant impact on retention (Aitken, 1982; Cabrera, Nora, & Castaneda, 1993; Johnson & Richardson, 1986; Pantages & Creedon, 1978). In addition, women earn higher high school and college grade point averages than men and are more likely to graduate with honors (Astin, 1993b). Even though men earn lower grade point averages, their academic experience has a greater direct impact on persistence than it does for women (Pascarella & Terenzini, 1983).

Grade point average is also significant in learning communities. Learning community participants have higher grade point averages than non-participants (Allen, 1984; Gablenick et al., 1990; MacGregor, 1991; McKinney & Graham-Buxton, 1993). Tinto, Goodsell-Love, and Russo (1993) found that participants in the University of Washington freshman interest groups had a combined grade point average of 3.14 on a 4.00 scale, while non-participants had a grade point average of 2.98 after their first year of college. After learning teams were initiated at Yakima Valley Community College, the percentage of students receiving a failing grade dropped from 9.2% to 2.4% (MacGregor, 1991).

Learning community participants receive higher grade point averages the term they participate regardless of pre-college characteristics. At Eastern Washington University, the freshman interest group participants had lower pre-college grade point averages than the control group. Their grade point average was higher after the first semester and remained higher after the second semester than non-participants (Gablenick et al., 1990). At LaGuardia Community College, learning community participants “outperformed” the non-participants even though the learning community participants had lower high school grade
point averages (Tinto & Goodsell Love, 1995). Students sense a higher quality of learning in learning communities and they feel their intellectual development is greater than non-participants (Tinto, Goodsell Love, & Russo, 1994).

Faculty members agree there is better student achievement in learning communities (Gablenick et al., 1990). Coordinated studies program participants increase their learning skills and ability to integrate their course work (Finley, 1990). The integration of course work also enhances critical thinking skills (Pascarella & Terenzini, 1991). Learning communities provide an opportunity to gain more from the college academic experience. This gain is easily quantified as grade point average, but is also a gain which can be visibly noticed by faculty and peers.

Persistence

Student persistence is a quantitative measure of whether or not college students return to their institutions for the subsequent term. Budget concerns at many higher education institutions have forced institutions to look at methods to increase enrollment and persistence. Typically retention programming is developed to increase persistence. Institutions can realistically expect an increase of 10-20% in persistence rates over a five year period (Tinto, 1990). It is important to realize that a 100% persistence rate is unreasonable. If institutions focus on only the persistence statistics, they are forgetting about individual student needs. Persistence rates are simply a gauge by which to judge student retention and are not the only means of evaluating programs.

Gender effects are one consideration to examine when looking at persistence rates. Women are more likely to graduate in four to six years than men (Astin, Korn, & Green,
One reason for the lower persistence rate of men is they are more likely to take time off from school and/or enroll in degree programs which take longer to complete (Astin, Korn, & Green, 1987). Women are more likely to leave institutions voluntarily, while men stay until they are academically dismissed (Tinto, 1993). This could signal a stronger interest in earning a degree in order to gain a better occupation for men. These gender differences in persistence rates could be useful when developing retention programs.

Learning communities are a retention program which has a positive impact on persistence rates. Nationally, learning community participants' persistence rates are an average of 10-20% higher after the first semester than non participants (Gablenick et al., 1990). There are many examples of these higher persistence rates: University of Washington freshman interest group participants had a 99.2% persistence rate compared to 95.8% for non participants returning to the second year (Tinto, Goodsell Love, & Russo, 1994), Seattle Central Community College coordinated studies program participants returned for the second semester at a rate of 83.8% compared to 80.9% (Tinto, Goodsell-Love, & Russo, 1993), LaGuardia Community College learning community participants were significantly more likely to transfer to a four-year institution than non-participants when future goals were examined (88.5% vs. 77.9%) (Tinto & Goodsell Love, 1995), California State University at Northridge cluster participants returned to the second year at a rate of 75% compared to 65% (Dukes & Gaither, 1984), and university learning community participants at the University of Wisconsin at Oshkosh had a persistence rate of 97% compared to the university average of 71% after two semesters (Stark & Johnson,
Learning communities create a sense of belonging to the institution which increases institutional commitment and retention.

Gender

Gender differences play a significant role in college student retention as well as student-faculty interaction, peer interaction, campus environment, and grade point average. The research on gender effects in learning communities is limited, but many of the findings which will be discussed can be applied to learning community participation.

Female high school graduates are more likely to enter college, complete a degree in six years, and graduate with honors than men (Astin, 1993b; Astin, Korn, & Green, 1987; Tinto, 1993). Men often take longer to graduate because they are enrolled in programs which take more time to complete or they may leave school for a period of time (Astin, Korn, & Green, 1987). Astin (1993b) found that women are more likely to persist in degree programs such as teaching, nursing, or psychology and drop out of degree programs in medicine, law, or engineering. Astin suggests that higher education institutions may be promoting stereotypical differences between the genders rather than diminishing them.

Women are more likely to experience external pressures which cause them to leave an institution (Tinto, 1993). Women more frequently depart from an institution voluntarily, rather than being dismissed due to academics. In addition, the reasons women leave higher education are usually due to social forces rather than lack of academic integration (Tinto, 1993). Social integration has a greater direct impact on the persistence of women, while academic integration is more prevalent in the persistence of men (Pascarella & Terenzini, 1983). Women also cite personal reasons such as marriage while men list curricular reasons
for their departure (Pantages & Creedon, 1978). Tinto (1993) found that marriage decreases a woman’s likelihood of graduation, but it increases a man’s likelihood of graduating. Both men and women agree that financial reasons play a prominent role in the departure decision (Kramer, Moss, Taylor, & Hendrix, 1985; Pantages & Creedon, 1978).

Additional gender differences were also mentioned early in this chapter and they will be reviewed. When interacting with faculty, women tend to discuss personal and campus issues and men usually want to gain information about course assignments or grades (Pascarella & Terenzini, 1979). Astin (1993b) found that female students usually interact with other female students and male students interact more commonly with other male students. This is encouraged by same-gender residence halls or social clubs. These students are then most influenced by their same-gender peers. The peer interaction is significant for women because it is the social integration which influences their persistence (Pascarella & Terenzini, 1983).

Men and women are affected by the campus environment, particularly same-gender environments. Women who attend women’s colleges tend to have higher educational aspirations and educational attainment than women at coeducational institutions. The career choices of men who attend men’s colleges are more likely to lead to professions such as business or law (Pascarella & Terenzini, 1991).

Finally, there are gender differences in grade point average and persistence. Although men earn higher scores than women on the Scholastic Aptitude Test, women earn better grades in college and are more likely to graduate in four years (Astin, 1993b, Astin, Korn, & Green, 1987). On the other hand, it is more common for men to stop-out from...
school and/or be enrolled in degree programs which take longer to complete (Astin, Korn, & Green). These gender differences are significant when developing retention programs. Recognizing the differences between students as well as their similar needs is vital to creating successful learning communities.

Summary

According to the literature, learning communities are a proven means of enhancing college student retention. Learning communities benefit student-faculty interaction, grade point average, peer interaction, perception of the campus environment, and persistence. Individually the benefits increase retention, but the ability to offer these combined benefits in one retention program is unsurpassed. Continued research and evaluation are necessary to maintain the effectiveness of the learning community programs.

Therefore, the purpose of this study is to determine the effectiveness of learning team participation. Specifically, this study will determine if learning team participants experience more student-faculty interaction, more peer interaction, a better perception of the campus environment, higher grade point averages, and higher persistence rates than non-participants when gender is considered. The research indicates these variables are significant to college student retention and learning communities and this study will test that assertion.
CHAPTER THREE

METHODS

This chapter will describe the sample population, instrument, data collection, hypotheses, and methods of data analysis used to study the experiences of pre-business first-year students who were either participating or not participating in learning teams.

Review of Methodology

Much of the research on learning communities has been qualitative because the researchers believe they are gaining a better picture of students’ experiences. “Quantitative measures provide a picture of student retention and intellectual growth, but they do not adequately show what happens to students in learning communities” (MacGregor, 1991). The studies which have used quantitative research methods will be discussed in this section to illustrate their significance.

Tinto, Goodsell Love, and Russo (1994) used both quantitative and qualitative measures in their national study of learning communities. They surveyed a representative sample of students at the beginning of the year and later in the school year. Tinto, Goodsell Love, and Russo (1994) used simple frequency and cross-tabular comparisons to look at student behaviors and outcomes. Multivariate discriminate and logistic regression analysis were used to examine the effect of learning community participation on persistence and learning outcomes.

Dukes and Gaither (1984) used quantitative measures in their study of the cluster program at the University of California at Northridge. They mailed surveys to all of the cluster participants and a control group after the experimental group had taken part in the
cluster program. Dukes and Gaither (1984) were studying the grade point average and persistence rates of matched groups of participants and non-participants. They used simple frequency comparisons as well as analysis of variance.

Licklider (1993) studied a Linkage program at the John Jay College of Criminal Justice. She gathered retention and grade point average data on the students. The experimental and control groups were also mailed a survey in the Spring to assess their satisfaction with the program and the institution in general. A one-tailed t-test of the mean and a test of variance were used in her study.

Stark and Johnson (1992) examined the University Learning Community project which was a three year, living learning community at the University of Wisconsin at Oshkosh. The study included 430 students with both an experimental and control group. Pre-college data were gathered and the College Student Experiences Questionnaire (CSEQ) was administered after the first year. A “nonparametric statistical examination of group differences and ... a factor-analytical exploration of responses on the CSEQ” (Stark & Johnson, 1992, p. 159) were used. All four of these studies indicated that learning communities are beneficial to college students and student retention.

Sample Population

The population surveyed for this study were pre-business first-year students (n=318) in the College of Business during the fall semester 1995 at a large, midwestern university. Forty-two and one half percent of these students participated in learning teams (n=135). This population was chosen because of its size and the extent of the learning team
participation. The learning teams were brand new and the researcher thought this would be an excellent opportunity to assess the effectiveness of learning teams.

The institution studied is a residential, land-grant university with a tripartite mission of education, research, and extension. To meet this mission, the institution provides 101 undergraduate majors, is a Research I institution, and has an extension office in each of the state's counties. There are nearly 25,000 students enrolled in nine colleges: Agriculture, Business, Design, Education, Engineering, Family and Consumer Sciences, Liberal Arts and Sciences, Veterinary Medicine, and the Graduate College. The majority of the student population are residents of the state and Caucasian, and the female to male ratio is 40:60. In addition, the institution was selected as an involving college in a study by Kuh, Schuh, and Whitt (1991) and there are over 500 student organizations on campus.

The College of Business separated from the College of Science and Humanities in 1984. The pre-business students continued to take their foundation courses in the College of Liberal Arts and Sciences (previously the College of Science and Humanities) until 1991 when they joined the College of Business. The college now has five undergraduate departments and six undergraduate majors: Accounting, Finance, Management, Management Information Systems, Marketing, and Transportation and Logistics. There are currently about 3,000 students enrolled in the college. Students are required to complete 60 semester credit hours with a 2.50 cumulative grade point average or a 2.50 grade point average in their pre-business foundation courses before they can officially enter their designated major.
One of the required courses the College of Business offers is a ten week long orientation course at the beginning of each semester for new students. This course provides an introduction to the university, the College of Business, and fellow business students. The topics covered include: College of Business requirements, General Education requirements, Skills for Productive Living, and managing stress.

The College of Business implemented learning teams for pre-business first-year students during the fall 1995 semester. As new students notified the college that they would be attending summer orientation, the project leader for the learning teams reviewed the students' math and English placement. If the students met high school rank and ACT subscore criteria to be placed in English 104 or 105, Freshman Composition, and Math 150, Discrete Mathematics, the project leader placed the students in learning teams.

The project leader worked with the Associate Registrar to develop the learning teams which consisted of English 104 or 105, Math 150, Business Administration 100 (the orientation course), and an introductory sociology or psychology course. A sociology or psychology course was chosen as the fourth course because the majority of pre-business students take either a sociology or psychology course to fulfill their behavioral science requirement. The English, math, sociology, and/or psychology courses are not taught through the College of Business, which impacted the design of the learning teams. The College of Business did not have the power to influence the instructors of courses outside of the college.

When the students arrived for summer orientation, they were given their pre-set schedule and the advisor explained the learning team concept. The students were given the
option of not participating in the learning team, however most students chose to remain in the learning teams. According to the project leader, students were pleased to have their schedules already planned and the parents were interested in the learning team concept.

Originally two learning teams of twenty-six students each were set up. Students were assigned to a team based on residence hall assignment because the English class would be taught in the residence hall. The demand for learning teams was so high that they ended up with seven learning teams with 17-25 students each. There were teams for students living in each of the residence associations and one team for which the English section was taught on campus. The project leader further divided the learning groups into teams of six to eight students. These small groups were specifically designated as teams and any class assignments relating to learning groups were designed for the small teams.

For the most part, faculty who taught the English, math, sociology, and psychology classes were not involved in the development of the learning teams because they were not on the College of Business faculty. The Business Administration orientation course instructors, most of whom were academic advisors in the College of Business, did design at least one or two activities during the course which were intended to take advantage of the learning team concept. For example, students were asked to attend the College of Business and the College of Liberal Arts and Sciences Career Day with at least one other member from their team.

Instrument

After reviewing the literature, the instrument, the Business Administration 100 Freshman Questionnaire, was developed (Appendix C). The majority of the survey
contained questions developed by Tinto, Goodsell Love and Russo (1994), for their national study of learning communities. Permission was granted for the use of these questions (Appendix A & B). The questionnaire was intended to collect information about the pre-business first-year students’ perceptions of student-faculty interaction, peer interaction, and the campus environment. In addition, the researcher added demographic questions and an evaluation of the Business Administration 100 orientation course. The course evaluation was developed solely for the use of the course instructors.

The questionnaire had seven sections: demographic information, evaluation of the Business Administration 100 orientation course, informal student-faculty interaction, peer interaction, college environment, persistence questions, and a final section for learning team participants only. The demographic information consisted of six questions using multiple-choice and fill in the blank responses. The evaluation of the orientation course used a four-point Likert scale ranging from strongly disagree (1) to strongly agree (4). The perception of student-faculty interaction and peer interaction also used a four-point Likert scale and the ratings were between never (1) to very often (4). The perceptions of the campus environment used a larger, seven-point Likert scale which ranged from a negative perception (1) to a positive perception (7). Questions regarding persistence decisions utilized a multiple-choice format. Finally, the questions for learning team participants only were multiple-choice and open-ended qualitative response.

A small group of pre-business first-year learning team participants were selected to critique the instrument. These students were randomly selected from a list of all of the learning team participants. The instrument was revised based on their comments and
suggestions. The students agreed that the questions on the instrument were relevant and appropriate. There are no reliability or validity statistics for the instrument because none were provided by the author of the survey (Appendix B).

Data Collection

The questionnaire was reviewed by the Human Subjects Review Committee in October, 1995. The committee determined that the rights and welfare of the human subjects were adequately protected, modified informed consent was obtained, confidentiality of data was ensured, and no risks were involved (See Appendix D for the Human Subjects Review Form).

Once the instrument was approved, the questionnaire and cover letter (Appendix G) were administered on the last class day of the Business Administration 100 orientation course during the tenth week of the fall 1995 semester. Nelson, Scott, and Bryan (1984) suggest that by the eighth week of the semester, students are able to predict their plans for the following semester with some accuracy. The cover letter indicated that individual students would not be singled out for comparison; the data would be presented in group form only.

Of the 318 pre-business first-year students, 293 returned the survey. Of the surveys received, 38 were unusable because they were filled out by sophomores, juniors, or the respondents were not admitted as freshmen. The total usable surveys were 255, with a response rate of 82.3% from the original population of pre-business students. There were 126 surveys received from learning team participants and 129 surveys received from non learning team participants. One hundred twenty-seven surveys were received from females
and 126 from males (Table 1). Additional demographic data indicated that the majority of survey respondents were Caucasian (Table 2 and 3), lived on campus (Table 4 and 5), and their average age was 18.27 (Table 6).

**Null Hypotheses**

The following null hypotheses were developed after reviewing the literature and research questions.

1. Learning team participants will experience less informal student-faculty interaction than non-participants when gender is considered.

2. Learning team participants will experience less peer interaction than non-participants when gender is considered.

3. Learning team participants will experience a more negative perception of the campus environment than non-participants when gender is considered.

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Table 2. Ethnicity and learning team status of survey respondents

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<th>Asian American</th>
<th>Latina/o</th>
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(of those indicating ethnicity)

Table 3. Ethnicity and gender of survey respondents

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</table>

(of those indicating ethnicity)

Table 4. Residence and learning team status of survey respondents

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<th>Apartment</th>
<th>With Parents</th>
<th>Other</th>
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Table 5. Residence and gender of survey respondents

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</tr>
</tbody>
</table>
Table 6. Average age of survey respondents

<table>
<thead>
<tr>
<th>Leaning Team</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>18.37</td>
<td>18.42</td>
<td>18.40</td>
</tr>
<tr>
<td>No</td>
<td>18.12</td>
<td>18.18</td>
<td>18.15</td>
</tr>
<tr>
<td>Total</td>
<td>18.24</td>
<td>18.30</td>
<td>18.27</td>
</tr>
</tbody>
</table>

Data Analysis

The quantitative data collected from the surveys were compiled and analyzed using SPSS (1994) statistical computer software. The means of the persistence rates and grade point averages of the survey respondents were collected and compared for the research questions. A statistical test was not used for these data because the sample was not random and self-selection and pre-college attributes could have impacted the data.

For the hypotheses, the survey questions on the instrument were grouped into three categories: student-faculty interaction, peer interaction, and campus environment. The mean scores for each of the three grouped responses were determined. Independent t-tests were used to determine the significance of learning team participation and gender on student-faculty interaction, peer interaction, and the campus environment. The probability level was set at .05 because it is the most commonly used level for research studies of this type.

The survey instrument also included three open-ended qualitative questions regarding learning team participation. The responses to these questions were gathered and
common motifs concerning the learning team participants' impressions of the program were grouped.
CHAPTER FOUR

RESULTS

This chapter presents the results of the data analyses derived from the survey instrument. Both the quantitative and qualitative data will be discussed. The chapter is structured around the research questions from Chapter One and the resulting hypotheses from Chapter Three.

Research Question

The research question provided the frame for this study by questioning the effect of learning team participation on first-year pre-business college students. From this overarching question, two sub-questions were developed.

Research Question A

Research Question A asked, “Are the persistence rates for students participating in the learning teams higher than the persistence rates of students who do not participate?” The data to answer this question was gathered from the Office of the Registrar at the end of the second week of the Spring 1996 term. The means were computed by learning team participation and by gender. Those participating in learning teams persisted at a rate of 98.41% while those not participating in learning teams persisted at a rate of 90.70% (Table 7).

When persistence was examined by gender, the persistence rates were similar. Females participating in learning teams persisted at 98.46% and males participating in learning teams persisted at a rate of 98.36% (Table 8). The females not participating in learning teams enrolled in the second semester at a rate of 90.32% as compared to males
who had an enrollment rate of 91.04% (Table 9). This result indicates that learning team participants did have higher persistence rates than non-participants.

**Research Question B**

Research Question B asked, “Are the first semester grade point averages for students participating in the learning teams higher than the grade point average of students who do not participate?” These data were also collected at the end of the second week of the Spring 1996 semester from the Office of the Registrar. The means were determined for learning team participation, gender, and persistence (Table 10 and 11). The grade point averages were higher for all students persisting to the second semester.

Table 7. The persistence rates of respondents

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>N of Last Registered Fall 1995</th>
<th>N of Last Registered Spring 1996</th>
<th>% of Last Registered Spring 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2</td>
<td>124</td>
<td>98.41</td>
</tr>
<tr>
<td>No</td>
<td>12</td>
<td>117</td>
<td>90.70</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>241</td>
<td>94.51</td>
</tr>
</tbody>
</table>

Table 8. The persistence rates of learning team participants by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N of Last Registered Fall 1995</th>
<th>N of Last Registered Spring 1996</th>
<th>% of Last Registered Spring 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1</td>
<td>60</td>
<td>98.36</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>64</td>
<td>98.46</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>124</td>
<td>98.41</td>
</tr>
</tbody>
</table>
Table 9. The persistence rates of learning team non-participants by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N of Last Registered Fall 1995</th>
<th>N of Last Registered Spring 1996</th>
<th>% of Last Registered Spring 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>6</td>
<td>61</td>
<td>91.04</td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>56</td>
<td>90.32</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>117</td>
<td>90.70</td>
</tr>
</tbody>
</table>

Those participating in learning teams had a fall semester grade point average of 2.61 on a 4.00 scale while those not participating had a grade point average of 2.33. The male learning team participants had a slightly higher grade point average (2.64) than the female participants (2.59). In addition, the females (2.32) and males (2.35) not participating in learning teams had similar fall semester grade point averages.

There were only two students who participated in learning teams in the fall and did not enroll in the second semester; their grade point average was 2.00. The grade point average of the twelve students not participating in learning teams and not returning for the spring semester was 1.73. There were an equal number of males and females in this group and the males had a grade point average of 1.47, while the female non learning team participants had a grade point average of 1.99. The results indicate the learning team participants earned a higher first semester grade point average than the non-participants.
Table 10. Grade point average of persistors

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2.59</td>
<td>2.64</td>
<td>2.61</td>
</tr>
<tr>
<td>No</td>
<td>2.32</td>
<td>2.35</td>
<td>2.33</td>
</tr>
<tr>
<td>Total</td>
<td>2.46</td>
<td>2.49</td>
<td>2.48</td>
</tr>
</tbody>
</table>

Table 11. Grade point average of non-persistors

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2.33</td>
<td>1.67</td>
<td>2.00</td>
</tr>
<tr>
<td>No</td>
<td>1.99</td>
<td>1.47</td>
<td>1.73</td>
</tr>
<tr>
<td>Total</td>
<td>2.03</td>
<td>1.50</td>
<td>1.77</td>
</tr>
</tbody>
</table>

Null Hypotheses

The following hypotheses examine the effect of learning team participation and gender on student-faculty interaction, peer interaction, and campus environment.

Null Hypothesis One

Null Hypothesis One stated, "Learning team participants will experience less informal student-faculty interaction than non-participants when gender is considered." The respondents answered nine questions regarding their frequency and type of informal interaction with faculty. The questions were structured in a 4-point Likert Scale with 1 equal to Never and 4 equal to Very Often. The means from the nine questions were tested using an independent t-test. There was only one significant difference found at the p ≤ .05 level, therefore the null hypothesis was not rejected.
The male learning team participants experienced significantly more informal student-faculty interaction than the female learning team participants at the $p \leq .05$ level (Table 15). In addition, the male learning team participants experienced slightly more interaction than the male non-participants at the $p \leq .10$ level (Table 14). There were no significant differences between the experiences of learning team participants and non-participants or female learning team participants and female non-participants (Table 12 and 13).

Table 12. Mean scores of respondents’ experience of informal student-faculty interaction

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>126</td>
<td>1.7474</td>
<td>0.514</td>
</tr>
<tr>
<td>No</td>
<td>129</td>
<td>1.6755</td>
<td>0.455</td>
</tr>
</tbody>
</table>

$p \leq .05$, $t = 1.18$

Table 13. Mean scores of female respondents’ experience of informal student-faculty interaction

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>65</td>
<td>1.6684</td>
<td>0.369</td>
</tr>
<tr>
<td>No</td>
<td>62</td>
<td>1.6418</td>
<td>0.463</td>
</tr>
</tbody>
</table>

$p \leq .05$, $t = 1.77$

Table 14. Mean scores of male respondents’ experience of informal student-faculty interaction

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>61</td>
<td>1.8315</td>
<td>0.625</td>
</tr>
<tr>
<td>No</td>
<td>67</td>
<td>1.7067</td>
<td>0.448</td>
</tr>
</tbody>
</table>

$p \leq .05$, $t = 1.77$
Table 15. Mean scores of learning team participants’ experience of informal student-faculty interaction by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>65</td>
<td>1.6684</td>
<td>0.369</td>
</tr>
<tr>
<td>Male</td>
<td>61</td>
<td>1.8315</td>
<td>0.625</td>
</tr>
</tbody>
</table>

*p ≤ .05*, t = 1.77

**Null Hypothesis Two**

Null Hypothesis Two stated, "Learning team participants will experience less peer interaction than non-participants when gender is considered." The respondents answered seven questions concerning their frequency and type of interaction with their classmates. The questions were on a 4-point Likert Scale with 1 equal to Never and 4 equal to Very Often. The mean from the seven questions was tested using an independent t-test. Three of the four tests were found to have statistical significance at the *p ≤ .05* level and the null hypothesis was rejected.

Overall the learning team participants had a significantly higher mean experience of peer interactions with their classmates than non-participants (Table 16). The female and male learning team participants also experienced significantly more peer interaction than the female and male non-participants (Table 17 and 18). Finally, the female learning team participants experienced slightly more interaction (*p ≤ .10*) with their classmates than the male learning team participants (Table 19).

The significant difference of learning team participants’ experience of peer interaction indicates the students were able to achieve social integration. The frequency and
type of peer interaction are associated with retention, which may account for the higher persistence rates of learning team participation (Pascarella & Terenzini, 1991).

Null Hypothesis Three

Null Hypothesis Three stated, “Learning team participants will experience a more negative perception of the campus environment than non-participants when gender is

Table 16. Mean scores of respondents’ experience of peer interaction

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>126</td>
<td>2.7959</td>
<td>0.695</td>
</tr>
<tr>
<td>No</td>
<td>129</td>
<td>2.3797</td>
<td>0.621</td>
</tr>
</tbody>
</table>

\[ p \leq .05^*, t = 5.04 \]

Table 17. Mean scores of female respondents’ experience of peer interaction

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>65</td>
<td>2.8835</td>
<td>0.645</td>
</tr>
<tr>
<td>No</td>
<td>62</td>
<td>2.4631</td>
<td>0.649</td>
</tr>
</tbody>
</table>

\[ p \leq .05^*, t = 3.66 \]

Table 18. Mean scores of male respondents’ experience of peer interaction

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>61</td>
<td>2.7026</td>
<td>0.739</td>
</tr>
<tr>
<td>No</td>
<td>67</td>
<td>2.3024</td>
<td>0.589</td>
</tr>
</tbody>
</table>

\[ p \leq .05^*, t = 1.77 \]
Table 19. Mean scores of learning team participants’ experience of peer interaction by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>65</td>
<td>2.8835</td>
<td>0.645</td>
</tr>
<tr>
<td>Male</td>
<td>61</td>
<td>2.7026</td>
<td>0.739</td>
</tr>
</tbody>
</table>

p ≤ .05, t = -1.47

considered.” The respondents answered eight questions about their perception of the campus environment. These questions used a 7-point Likert Scale with 1 being a negative perception and 7 being a positive perception of the campus environment. The means for the eight questions were used in an independent t-test to test significance. There was only one significant differences found at the p ≤ .05 level, therefore the null hypothesis was not rejected.

The female learning team participants’ perception of the campus environment was significantly more positive at the p ≤ .05 level than the female non-participants perception (Table 21). In addition, the learning team participants’ perception of the campus environment was slightly more significant than the learning team non-participants (p ≤ .10) (Table 20). There were no significant differences between the male learning team participants and male non-participants or the female learning team participants compared to the male learning team participants (Table 22 and 23).
### Table 20. Mean scores of respondents’ perception of the campus environment

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>126</td>
<td>5.1332</td>
<td>0.685</td>
</tr>
<tr>
<td>No</td>
<td>129</td>
<td>5.0121</td>
<td>0.762</td>
</tr>
</tbody>
</table>

\( p \leq .05, t = 1.33 \)

### Table 21. Mean scores of female respondents’ perception of the campus environment

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>65</td>
<td>5.2025</td>
<td>0.671</td>
</tr>
<tr>
<td>No</td>
<td>62</td>
<td>4.9872</td>
<td>0.775</td>
</tr>
</tbody>
</table>

\( p \leq .05^*, t = 1.68 \)

### Table 22. Mean scores of male respondents’ perception of the campus environment

<table>
<thead>
<tr>
<th>Learning Team</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>61</td>
<td>5.0594</td>
<td>0.698</td>
</tr>
<tr>
<td>No</td>
<td>67</td>
<td>5.0352</td>
<td>0.754</td>
</tr>
</tbody>
</table>

\( p \leq .05, t = 0.19 \)

### Table 23. Mean scores of learning team participants’ perception of the campus environment by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>65</td>
<td>5.2025</td>
<td>0.671</td>
</tr>
<tr>
<td>Male</td>
<td>61</td>
<td>5.0594</td>
<td>0.698</td>
</tr>
</tbody>
</table>

\( p \leq .05, t = -1.17 \)
Qualitative Responses

There were many written responses, both positive and negative, to the open-ended questions on the survey instrument (Appendix H, I, & J). The three open-ended questions which were only answered by the learning team participants were: 1) How has your participation in the learning team changed your opinions of college life?, 2) Would you recommend learning teams to a friend? Why or why not?, and 3) Is there anything else about the learning teams you would like to tell us about?

The majority of positive comments focused on the ability to meet people and make new friends in the learning teams. “It’s nice seeing a friendly face in all my classes.” “It was so nice to make friends and have the same classes with them.” “I think I’ve made friends for life. Not just in school, but as true friends.” Many students also commented on the benefits of knowing other students in their classes so they could get help or discuss class assignments. “They are a good idea because they help you meet people who are in the same classes so you can ask for help or for a missed assignment.” “They give you someone in each class who can help you and who you can help.” “You are with other students who are going through the same thing as you and have the same questions. It’s very helpful.”

The learning teams created a sense of belonging and helped to manage the large classes. “Feel like you’re more involved in a group.” “It gave me a chance to know people instead of being a number.” “I really enjoyed being in one and it made me feel more comfortable in my big lecture classes. It helps to get to know people the first day of class and the learning team made that possible.” Several students appreciated the opportunity to
interact with so many different students. They were able to compare their values and experiences. “Helped relate to other people - learned new ideas - how to work together.” “It helped me understand how others perceive college life and it helped me to adapt.” “Not so apt to make as many generalizations. Get to know people better so it’s easier to talk to them about college.”

There were also constructive, negative comments. Perhaps the most frequently written concern was that the learning teams never met together or were unorganized. “Not very helpful, didn’t do anything.” “We never got together.” “Follow through with it, it was non-existent!” “They were never organized - disappointing.” One concern among the learning team participants was the lack of choices in their class schedule. “I didn’t gain anything and it forced me to have a 8:00am class.” “Class times are forced, no choice in some classes.” “Didn’t like not having as much choice in what to take when.” The set class times are one reason students might choose to not participate in learning teams.

Several respondents suggested that learning teams should have a preliminary meeting where the process is explained and the learning team participants are introduced to each other. “They should maybe make a first meeting of a learning team mandatory so the people on the team could get to know each other.” “We haven’t had any meetings. We should have started off with a ‘Hi, how are you, my name is ---’, meeting. But we have pretty much figured out who is who.” “Possibly need to do more things together, give each person a list of exactly who’s on the team, phone numbers, etc.” Students seemed disappointed that the learning teams were not what they had expected. This may suggest
that the interest in learning teams exists if they can become more involving. “Well, if mine
met I would consider it because it seems as if it would really help a person out having
people you know in your classes who could help.” “For me nothing happened in the
learning team, but others may benefit more.” The qualitative responses provided a
supplement to the quantitative data which was useful in better understanding the students’
experiences.
CHAPTER FIVE

SUMMARY, RECOMMENDATIONS, AND IMPLICATIONS

The purpose of this chapter is to summarize the results from Chapter Four, provide recommendations for future research, and discuss the implications to higher education.

Nationally, there is a declining trend in college student enrollment. These lower enrollments directly affect higher education institutions' budgets. Colleges and universities are looking beyond merely recruiting more students to exploring methods of increasing college student retention. One method of enhancing college student success is the implementation of learning communities, which encourage social and academic integration in a higher education institution.

Summary

The purpose of this study was to determine the impact of learning team participation on pre-business first-year college students. The dependent variables were student-faculty interaction, peer interaction, and campus environment. The independent variables were learning team participation and the gender of the respondents. This study was conducted in the College of Business at a large, midwestern university. The respondents selected were the population of first-year pre-business students. The majority of the subjects were Caucasian (95.04%), 18 (74.51%), and lived on campus (81.96%). Gender was evenly divided between females (49.80%) and males (50.19%).

The survey instrument utilized in this study was developed by modifying a survey instrument designed by Tinto, Goodsell Love, and Russo (1994) for their national study of learning communities. The questionnaire sought to determine pre-business students'
experiences of student-faculty interaction, peer interaction, and the campus environment. Additional open-ended questions regarding learning team participation were also included.

The questionnaire was administered to pre-business first-year students on the last day of their Business Administration 100 orientation course. Participation was voluntary and within the guidelines approved by the Human Subjects Review Committee. Two hundred and fifty-five usable surveys were included in the study with an overall return rate of 255 out of 318 or 82.3%. The quantitative data were analyzed by calculating the mean scores and using independent t-tests. The qualitative data from the open-ended response questions on the survey were reviewed for common themes.

Research questions A and B asked if learning team participants would have higher persistence rates and grade point averages than learning team non-participants. The data to answer these questions were provided by the Office of the Registrar. The students participating in learning teams did have a higher persistence rate, 98.41%, and grade point average, 2.61 on a 4.00 scale, than the students not participating in learning teams whose persistence rate was 90.70% and grade point average was 2.33. This finding is consistent with the findings discussed in Chapter Two; learning team participation does appear to increase persistence and grade point average.

One explanation for the higher persistence rates and grade point averages of the learning team participants may be due to the selection of the learning team participants. None of the learning team participants needed academic assistance in their classes, therefore these students may have had a pre-disposition to succeed. On the other hand, a study at Eastern Washington University indicated that learning community participants with low pre-
college characteristics were more successful than non-participants with higher pre-college attributes (Gablenick et al, 1990). Therefore learning communities may balance any differences in pre-college attributes.

Of the non-persistors, an equal number of women and men and an unequal number of learning team participants and non-participants did not return for the Spring semester. One of the goals of implementing learning teams was to increase persistence. According to this data, persistence was better for learning team participants, but the true test will occur when learning teams are open to all pre-business first-year students regardless of their pre-college characteristics.

The grade point averages of the non-persistors, on the other hand, were more dissimilar. Overall, the females and the learning team participants had a higher first semester grade point average than the males and the learning team non-participants. Several studies have indicated that grade point average has a significant impact on persistence (Aitken, 1982; Allen, 1984; Cabrera, Nora, & Castaneda, 1993; Johnson & Richardson, 1986). The lower grade point averages of the non-persistors would validate these studies. If learning teams can encourage academic success thus encouraging persistence, then they are a valuable tool for creating opportunities for college student success.

The main significant finding in this study was that the learning team participants experienced significantly more peer interaction than the non-learning team participants. This finding was true overall and when broken down by gender. Astin (1993a) suggests that peer interaction is one of the most important influences on the undergraduate
educational experience. In addition, a recurring theme of why students join learning communities is to meet new people (Tinto & Goodsell, 1994). This result suggests that learning team participants were able to meet people in their classes and it was important to their experience.

The qualitative responses on the survey instrument also support the quantitative results. The most commonly written comments focused on the benefits of meeting people and getting to know fellow students who could offer support and academic help. The students also enjoyed working with their classmates and understanding their differences and similarities. Many of the learning team participants lived near each other in the residence halls, which may have encouraged peer interaction beyond the classroom. These findings indicate the learning teams served their purpose of promoting academic peer relationships.

The perception of student-faculty interaction and the campus environment, while not proven, suggested that learning teams could be effective. Learning team participants experienced slightly more student-faculty interaction than those not participating. Specifically, male learning team participants experienced more student-faculty interaction than male non-participants, significant at a lower level. In addition, male learning team participants had a significantly higher rating of student-faculty interaction than female learning team participants. Male students usually interact with faculty to fulfill instrumental needs such as gaining information about course assignments or grades (Pascarella & Terenzini, 1979). Perhaps those types of interactions were more encouraged than meeting with faculty to discuss personal or campus issues, which are typically associated with female students' interactions with faculty.
Finally, those students that participated in learning teams did have a slightly better perception of their campus environment than those students not participating in learning teams, significant at a lower level. In fact, female learning team participants had a significantly better perception of their campus environment than the female non-participants. Perception of the campus environment is linked to student satisfaction which has a direct link to persistence (Astin, Korn, & Green, 1987). Tinto, Goodsell Love, and Russo (1994) found that learning community participation increases student’s perception of their campus environment. Although only one of the hypotheses was proven, as the learning teams become more established, further research may be more conclusive.

Recommendations for Further Study

The results of this study indicate that learning team participants generally have a more positive experience than those students not participating in learning teams. Continued evaluation of the learning team program is necessary to determine its effectiveness. The learning teams used in this study were in a developmental stage, which may explain the limited significant findings. As the learning team design improves, the benefits of implementing learning teams may become increasingly evident.

The sample used in this study was limited in age, ethnicity, and place of residence. The majority of the students were 18 years old, Caucasian, and lived on campus and the gender was evenly split. The changing demographics in higher education require that diversity is considered in retention programming. Further study needs to be conducted which examines the effects of learning team participation as determined by age, ethnicity, and place of residence.
The sample used in this study was not randomly assigned to learning teams, which impacted the data analysis. Future study of a randomly assigned sample could increase significance, however this may cause a question of ethics. Is it right to deny students the opportunity to participate in learning teams for the cause of an experiment? If students are allowed to choose to participate, concerns of self-selection as a confounding variable arise. One suggestion would be to allow all students to participate in a learning team and use the data from previous year students as the control group.

Pre-college characteristics such as high school rank, high school grades, and Scholastic Aptitude Test or American College Test scores were not considered for this study. High school grades and Scholastic Aptitude Test or American College Test entrance exam scores are considered to be strong predictors of persistence (Astin, Korn, & Green, 1987). Future research should compare the learning team participation of students with differing pre-college attributes. Are learning teams helpful to students needing academic assistance? If learning communities can truly be effective for all types of students, then there would be no reason not to implement them.

The survey instrument used in this study was administered ten weeks into the semester. Future research should survey the students prior to their first term, at the end of their first term, and during their second and third terms. This would provide an indication of the students’ goals prior to entering college and determine if the students were reaching their goals. The surveys in the second and third terms would indicate if the learning community experience created lasting effects.
The students in this study and future studies should be tracked as they progress through the institution. A longitudinal study would add to the limited research on the long term effects of learning team participation. Do students who participate in learning teams as first-year students have a higher graduation rate? Do they graduate in 4, 5, or 6 years? As the long term benefits are discovered, perhaps the use of learning teams will become more widespread.

In addition to a longitudinal study, it would be interesting to experiment with learning communities for the first two years of college. If the general education requirements were similar across majors, the learning communities would provide an excellent means of integrating the course work. Students are often taking a wide variety of courses outside of their major and learning communities would help them understand why general education courses are important and valuable. Future research should determine if learning communities would be beneficial to first- and second-year students as they take their general education courses.

A general education learning community is an example of one of the many variations of learning community models. Another example is the learning team design used in this study which was a basic model with little faculty involvement and curriculum alteration. Further study should compare the effectiveness of different learning community designs at a variety of institutions. This research should provide information about the most beneficial learning communities based on student goals and institution type.

The use of technology to create community or assist with learning community design is emerging as a unique learning community variation. Computers can be used to
create a connection between students, advisors, and faculty by increasing the channels of communication. Further study needs to be initiated to determine the impact of technology on learning communities. Do computers enhance the level of community or do they lessen it by decreasing interpersonal interaction? As the use of computer technology, such as electronic mail and the internet, increases, its application to learning community design must be investigated.

Finally, it will be important to create more involving learning teams in the future, which will require institutional commitment. More areas of the institution need to be involved in designing and implementing the learning teams; particularly the faculty (Kluepfel, 1994). Higher education institutions across the nation are facing similar concerns including declining enrollment. As the push to increase persistence statistics increases, the students should not be forgotten. Learning communities provide an excellent opportunity to increase retention and assist college students. As their impact becomes increasingly apparent, learning communities will continue to help college students achieve their goals.

Implications

This study is significant to the current literature on college student retention and learning communities because it adds to the limited quantitative studies of learning communities. The findings indicated the learning team participants experienced significantly more peer interaction than the learning team non-participants. This is a valuable result because social integration has a significant impact on college student retention. In addition, the students were able to describe learning teams from their own perspective, thus providing the College of Business with a better understanding of the experience.
This study also revealed some concerns about learning community design. Learning communities will be more effective if they are involving, there is institutional commitment, and education is the priority (Tinto, 1990). The findings indicated that these learning teams provided social integration; interaction with peers was significantly greater for learning team participants. Yet, academic integration, including student-faculty interaction and grade point average, is as important as social integration. Although the grade point averages were higher for learning team participants, there were minimal significant differences in student-faculty interaction.

The College of Business must encourage faculty to get involved in designing learning teams and providing opportunities for informal student-faculty interaction. Specifically faculty who teach outside of the college offering the learning team need to be made aware they are teaching a learning team. The English composition course is often the class in which learning community interaction is facilitated in many of the learning community models (Gablenick et al., 1990). Therefore, it is imperative that the English instructors are given the opportunity to participate in the design or at least in the maintenance of the learning teams. The students should experience integration in all of their courses, not just in their Business Administration orientation course.

It is also necessary that the learning teams create a sense of belonging and membership (Tinto, 1990). Although many of the learning team participants commented on the benefits of knowing students in their classes, there were many students who did not know who their fellow learning team participants were. A component which encourages peer interaction should be included in the learning team design. One of the learning team
participants suggested a meeting at the beginning of the semester during which they are introduced to each other. Other suggestions might be creating group projects or assigning students to attend a cultural event together. The more the learning community participants work and socialize together, the more integrated into the institution they should feel.

Institutional commitment is another important consideration in retention programming. Enrollment concerns are abundant on this campus and retention theories are being explored, but the question remains, is there institutional commitment to retention? Many of the colleges and departments on this campus implemented learning communities this fall, but there is little consistency among the programs. If the institution is truly committed to using learning communities, then they should be implemented university-wide. There should be consistency among the programs so all of the students have an enhanced experience.

One option is to create a central office on campus which provides learning community resources to the departments and colleges. There is a vast amount of literature and research available on learning communities and this office could summarize or make it more manageable. This central office could also coordinate the evaluation or assessment processes for the departments and colleges. Annual reports could be published and distributed to the colleges and departments so they could learn what others are doing and what works. Currently, when individuals want information about learning teams on this campus, it tends to be a time-consuming and redundant search and a central office would remedy that.
In addition, more of the campus should be involved in designing and implementing the learning communities. Student affairs, academic affairs, and faculty must collaborate to create a positive retention tool, rather than a disjointed experiment (Kuh, 1996). Input from faculty is invaluable because they are the most experienced higher education professionals in the classroom and may have suggestions of useful teaching methodologies. Accomplished faculty are a significant resource to student affairs professionals. Student affairs professionals who have never taught in the classroom can gain insight from the veteran faculty member. Faculty will also learn from student affairs practitioners because they may be well-versed in student development theory and they facilitate the students’ extracurricular experiences. Collaboration between student affairs and academic affairs will create a more enriched student experience in learning communities.

The learning teams in this study were implemented in a short amount of time and were not highly involving. The students often mentioned their concerns about the lack of organization of the learning teams in their qualitative responses. The learning teams rarely met formally and many of the faculty were not involved in the implementation. These concerns are why institutional commitment is so important. As the institution realizes the value of learning communities, hopefully the commitment to create effective learning communities will prevail. Learning teams are being implemented again this fall and it will be imperative for the colleges and departments to review the data and findings from last fall as they redesign the teams. This is the only way learning teams will become truly effective at this institution.
Education of students is one of the most important considerations in retention programs (Tinto, 1990). It is difficult to analyze whether students are being educated. The students in learning teams did have higher grade point averages. They also appreciated getting to know other students in their classes so they could get help or talk about their classes together. These two findings may suggest students are being educated, but how will we know unless we ask the students? The student must not be forgotten or lost among the theory and statistics. We must listen to the students to better understand their needs, goals, and challenges. This will allow for better retention programming, better service to students, and maybe a new definition of retention which acknowledges the students’ goals as well as the institutions’ goals.

The most valuable point to consider is that educating the student is more important than any persistence statistic. Higher education institutions which encourage students to succeed rather than focusing on only persistence statistics will retain the most students (Kluepfel, 1994). Therefore, when an institution commits to implementing learning communities, a commitment must be made to create the best possible learning community for the students. At a minimum, the learning community design should include meetings or some type of introduction of group members, faculty involvement, classroom activities which promote community or collaboration, and integration of courses.

It is vital that the learning community members are know their cohort so they can gain a sense of belonging to a group. The learning community members also need to feel comfortable with their professors. An informal meeting should be scheduled at the
beginning of the term which provides an opportunity for the group members and faculty to interact. This will promote student-faculty interaction from the beginning.

As mentioned earlier, it is imperative that faculty are involved in the learning community design, implementation, maintenance, and assessment. Faculty must be informed that they are teaching a learning community section. They need to be given the opportunity to experiment with various teaching pedagogies. Learning communities can create a sense of community in which not only are the students learning from the professor, but the professor is learning from the students. Faculty can also learn from each other as they experiment with teaching methods. When classes are team taught, experienced faculty can serve as mentors to younger faculty. In addition, a committed institution will reorganize the reward system to encourage tenure-track faculty to get involved with learning communities.

Finally, the classes need to be designed to encourage interaction among the students and integration between the courses. Group projects which encourage learning community members to work together as a team need be developed. The syllabi for the classes need to be reviewed and restructured to create integrated courses. For example, students could write a proposal for a psychology experiment in their English class and complete the project in their psychology class. Involving students and faculty and creating collaboration and integration are the minimum considerations when implementing learning communities.

The ultimate goal is to develop learning communities far beyond the minimum expectations. Learning communities could ultimately change the way education is viewed.
We could move beyond traditional curricula and organization in the educational system toward completely integrated course work and a more enriching educational approach. Changes in the current structure are already being explored such as using portfolios rather than grades and report cards. The changes learning communities can instigate should not be limited to higher education. If we rethink the United States educational system, we may be able to create an entirely new and exciting approach to educating all students. Until then, we should continue to explore the options learning communities offer and challenge higher education institutions across the country to commit to educating students and providing a more successful experience.
References


APPENDIX A.

LETTER REQUESTING USE OF SURVEY INSTRUMENT
12 October 1995

Dr. Vincent Tinto
National Center on Postsecondary Teaching, Learning, and Assessment
School of Education
350 Huntington Hall
Syracuse University
Syracuse, New York 13244-2340

Dear Dr. Tinto:

As a follow up to our electronic mail conversations, I’m writing to request permission to use questions from the National Center on Postsecondary Teaching, Learning, and Assessment’s 1994 Student Learning Project questionnaire for my Master’s Degree research on the effects of learning team participation on pre-business freshman students at Iowa State University.

The variables I will be studying are informal student-faculty interaction, peer interaction, campus climate, grade point average, and persistence. The sections of the questionnaire which would be most useful to me are faculty experiences, college environment, outcomes, and the questions specific to learning team participants.

I would also be interested in receiving any validity and reliability statistics you might have for the questionnaire.

I appreciate the input and suggestions which you have generously shared with me. Thank you for your assistance with my research study.

Sincerely,

Lynnae P. Dietenbach
Master’s Degree Candidate
APPENDIX B.

LETTER AUTHORIZING USE OF SURVEY INSTRUMENT
October 26, 1995

Laynnae P. Diefenbach  
College of Education  
Professional Studies  
N243 Lagomarcino Hall  
Ames, IA 50011-3190

Dear Ms. Diefenbach:

I would be happy to grant you permission to use questions from the National Center on Postsecondary Teaching, Learning, and Assessment’s 1994 Student Learning Project questionnaire for my Master’s Degree research on the effects of learning team participation on pre-business freshman students at Iowa State University.

Please note that I have no validity and reliability statistics for the questionnaire.

Sincerely,

Signature redacted for privacy

Vincent Tinto
APPENDIX C.

SURVEY INSTRUMENT
BUSAD 100 FRESHMAN QUESTIONNAIRE

DIRECTIONS: IN THE QUESTIONS BELOW, CIRCLE THE BOLDFACE NUMBER OR WRITE IN THE ANSWER THAT INDICATES YOUR RESPONSE.

Demographic Information

1. The last four digits of your Student Identification Number: X X X - X X - __ __ __

2. What is your year in school? (Circle one)
   1 Freshman
   2 Sophomore
   3 Junior
   4 Senior

3. What is your current age?
   _______ years

4. What is your gender? (Circle one)
   1 Female
   2 Male

5. Where do you live?
   1 Residence Hall
   2 Fraternity or Sorority
   3 Apartment
   4 With Parents
   5 Other - please specify ________________

6. If you have chosen a major, which have you chosen?
   ________________________

Evaluation of BusAd 100 Orientation course

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. The BusAd 100 course met expectations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I understand what the College of Business expects of me as a student.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. The topics covered in class were useful</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I felt comfortable asking questions in class</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I would have liked to spend more time on some topics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. The assignments were valuable to me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. I felt comfortable talking with my instructor about any questions I had</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
DIRECTIONS: IN YOUR EXPERIENCE AT IOWA STATE UNIVERSITY DURING THE CURRENT SEMESTER, ABOUT HOW OFTEN HAVE YOU DONE EACH OF THE FOLLOWING? INDICATE YOUR RESPONSES BY CIRCLING ONE OF THE CHOICES AT THE RIGHT OF EACH ACTIVITY.

### Faculty

14. Asked an instructor for information about grades, make-up work assignments, etc. .................................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

15. Talked briefly with an instructor after class about course content ..............................................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

16. Made an appointment to meet with an instructor in his/her office ..................................................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

17. Discussed items for a term paper or other class project with an instructor .................................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

18. Discussed your career and/or educational plans, interests, and ambitions with an instructor ........................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

19. Discussed with an instructor comments made on a test paper or paper you wrote ...........................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

20. Talked informally with an instructor about current events, campus activities, or other common interests ......................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

21. Discussed your school performance, personal problems, or difficulties with an instructor ............................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

22. Contacted an instructor by telephone or electronic mail ...............................................................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

### Student Acquaintances

23. Studied with students in any of your classes ..............................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

24. Contacted students in any of your classes by telephone or electronic mail to discuss class assignments or tests ................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

25. Got together with students in any of your classes for social activities ...........................................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

26. Felt comfortable working on a group project with students in any of your classes ......................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

27. Walked to class with students in any of your classes ........................................................................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

28. Made friends with students in any of your classes .............................................................................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |

29. Had serious discussions with students in any of your classes ..........................................................................................
   | Never | Occasionally | Often | Very Often |
   | 1     | 2            | 3     | 4          |
DIRECTIONS: PLEASE CIRCLE THE NUMBER ON THE SCALE THAT BEST LOCATES YOUR FEELING ABOUT THE COLLEGE COMMUNITY, INCLUDING OTHER PEOPLE AND YOURSELF BASED ON YOUR EXPERIENCE THUS FAR AT IOWA STATE UNIVERSITY.

College Environment

30. CLASSES

Boring Dull Stimulating
Involving

1 2 3 4 5 6 7

31. OTHER STUDENTS

Unfriendly, Unsupportive Friendly, Supportive
Unwelcoming Welcoming

1 2 3 4 5 6 7

32. FACULTY:

Unapproachable, Unsupportive Approachable, Supportive
Discouraging Encouraging

1 2 3 4 5 6 7

33. COUNSELORS: (Academic Advisors)

Unapproachable, Unsupportive Approachable, Supportive
Discouraging Encouraging

1 2 3 4 5 6 7

34. ADMINISTRATORS:

Unapproachable, Unsupportive Approachable, Supportive
Discouraging Encouraging

1 2 3 4 5 6 7

35. OFFICE STAFF:

Unhelpful, Inconsiderate Helpful, Considerate
Impersonal Personal

1 2 3 4 5 6 7

36. CAMPUS CLIMATE:

Unfriendly, Uncomfortable Friendly, Comfortable

1 2 3 4 5 6 7

37. YOURSELF:

Alienated, Bored Involved, Excited

1 2 3 4 5 6 7
DIRECTIONS: THE FOLLOWING QUESTIONS ASK ABOUT YOUR EXPERIENCES AT IOWA STATE UNIVERSITY. PLEASE INDICATE YOUR RESPONSE BY CIRCLING YOUR ANSWER.

38. How important is it for you to complete a college degree?

<table>
<thead>
<tr>
<th></th>
<th>from ANY university</th>
<th>from THIS university</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Somewhat important</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Slightly important</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Not at all important</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

39. What is your best guess as to the chances that you will:

<table>
<thead>
<tr>
<th></th>
<th>Very Good Chance</th>
<th>Some Chance</th>
<th>Very Little Chance</th>
<th>No Chance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need more than four years to complete your degree requirements?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Drop out of this college temporarily?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Transfer to another college before graduating?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Make at least a “B” average?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

40. If you could start over again, would you enroll in Iowa State University? (Circle one)
   1. Yes  2. No

41. Do you plan to continue your college education next semester at Iowa State University? (Circle one)
   1. Yes  2. No  3. Not Sure

42. IF NO, do you intend to transfer to another college? (Circle one)
   1. Yes  2. No  3. Not Sure

THE FOLLOWING QUESTIONS ARE ONLY FOR STUDENTS CURRENTLY ENROLLED IN LEARNING TEAMS.

43. Have your perceptions of college life and Iowa State University changed since before you started college?
   1. Yes  2. No  3. Not Sure

44. IF YES, how much of the change in your perceptions of college life and Iowa State University would you attribute to your experiences in the learning team?
   1. All  2. Most  3. Some  4. None at all

45. How has your participation in the learning team changed your opinions of college life? (Please explain)

46. If you could start over again, would you enroll in a learning team?
   1. Yes  2. No  3. Maybe

47. Would you recommend learning teams to a friend?
   1. Yes  2. No  3. Maybe
48. Why or why not? (Please explain) ____________________________________________

__________________________________________

__________________________________________

49. Is there anything else about the learning teams you would like to tell us about? (Please explain)

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________
APPENDIX D.

HUMAN SUBJECTS REVIEW COMMITTEE FORM
Information for Review of Research Involving Human Subjects
Iowa State University
(Please type and use the attached instructions for completing this form)

1. Title of Project: The Effect of Learning Team Participation on Pre-Business Freshmen at Iowa State University.

2. I agree to provide the proper surveillance of this project to insure that the rights and welfare of the human subjects are protected. I will report any adverse reactions to the committee. Additions to or changes in research procedures after the project has been approved will be submitted to the committee for review. I agree to request renewal of approval for any project continuing more than one year.

Lynnae P. Diefenbach
Typed Name of Principal Investigator
Professional Studies (Hg Ed) 214 Alumni Hall
Department

294-4837
Phone Number to Report Results

9 October 1995
Date

3. Signatures of other investigators

Signature redacted for privacy
Date

Relationship to Principal Investigator
Signature redacted for privacy

4. Principal Investigator(s) (check all that apply)

☐ Faculty
☐ Staff
☒ Graduate Student
☐ Undergraduate Student

5. Project (check all that apply)

☐ Research
☒ Thesis or dissertation
☐ Class project
☐ Independent Study (490, 590, Honors project)

6. Number of subjects (complete all that apply)

☐ # Adults, non-students 385
☐ # ISU student
☐ # minors under 14
☐ # minors 14 - 17

7. Brief description of proposed research involving human subjects: (See instructions, Item 7. Use an additional page if needed.)

This project will examine the experiences of new pre-business freshmen students in the College of Business at Iowa State University. Specifically, the study will compare learning team participants and nonparticipants' experiences of student-faculty interaction, peer interaction, grade point average, and persistence rates. The questionnaire will be used to gather data from the pre-business freshmen students in several areas: demographic information, evaluation of BusAd 100, faculty experiences, student acquaintances, college environment, intent to persist, and learning team participation. The subjects will include 385 pre-business freshmen students who are either participating or not participating in learning teams this fall. The optional questionnaire will be distributed to students on the last day of their BusAd 100 class.

(Please do not send research, thesis, or dissertation proposals.)

8. Informed Consent:

☐ Signed informed consent will be obtained. (Attach a copy of your form.)

☐ Modified informed consent will be obtained. (See instructions, item 8.)
9. Confidentiality of Data: Describe below the methods to be used to ensure the confidentiality of data obtained. (See instructions, item 9.)

If subjects are willing, they may include their student identification number on the questionnaire. The student identification number will be used for follow-up purposes only. No student will be individually identified in the results; they will be in group summary form only. The student identification number will be removed from the questionnaire at the end of the study.

10. What risks or discomfort will be part of the study? Will subjects in the research be placed at risk or incur discomfort? Describe any risks to the subjects and precautions that will be taken to minimize them. (The concept of risk goes beyond physical risk and includes risks to subjects' dignity and self-respect as well as psychological or emotional risk. See instructions, item 10.)

No risk involved.

11. CHECK ALL of the following that apply to your research:

☐ A. Medical clearance necessary before subjects can participate
☐ B. Administration of substances (foods, drugs, etc.) to subjects
☐ C. Physical exercise or conditioning for subjects
☐ D. Samples (Blood, tissue, etc.) from subjects
☐ E. Administration of infectious agents or recombinant DNA
☐ F. Deception of subjects
☐ G. Subjects under 14 years of age and/or Subjects 14 - 17 years of age
☐ H. Subjects in institutions (nursing homes, prisons, etc.)
☐ I. Research must be approved by another institution or agency (Attach letters of approval)

If you checked any of the items in 11, please complete the following in the space below (include any attachments):

Items A–E Describe the procedures and note the proposed safety precautions being taken.

Items D–E The principal investigator should send a copy of this form to Environmental Health and Safety, 118 Agronomy Lab for review.

Item F Describe how subjects will be deceived; justify the deception; indicate the debriefing procedure, including the timing and information to be presented to subjects.

Item G For subjects under the age of 14, indicate how informed consent from parents or legally authorized representatives as well as from subjects will be obtained.

Items H–I Specify the agency or institution that must approve the project. If subjects in any outside agency or institution are involved, approval must be obtained prior to beginning the research, and the letter of approval should be filed.
Lynnae P. Diefenbach

Checklist for Attachments and Time Schedule

The following are attached (please check):

12. ☑ Letter or written statement to subjects indicating clearly:
   a) purpose of the research
   b) the use of any identifier codes (names, #'s), how they will be used, and when they will be
      removed (see Item 17)
   c) an estimate of time needed for participation in the research and the place
   d) if applicable, location of the research activity
   e) how you will ensure confidentiality
   f) in a longitudinal study, note when and how you will contact subjects later
   g) participation is voluntary; nonparticipation will not affect evaluations of the subject

13. ☐ Consent form (if applicable)

14. ☑ Letter of approval for research from cooperating organizations or institutions (if applicable)

15. ☑ Data-gathering instruments

16. Anticipated dates for contact with subjects:

   **First Contact**
   
<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/18/95</td>
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<td></td>
</tr>
</tbody>
</table>

   **Last Contact**
   
<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/15/95</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. If applicable: anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual tapes will be erased:

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/10/96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. Signature of Departmental/Executive Officer  Date

   Signature redacted for privacy  10/9/95  Department or Administrative Unit
   Signature redacted for privacy

19. Decision of the University Human Subjects Review Committee:

   ☑ Project Approved  ☐ Project Not Approved  ☐ No Action Required

   Signature redacted for privacy

   Name of Committee Chairperson  10/16/95  Signature of Committee Chairperson
APPENDIX E.

COLLEGE OF BUSINESS AUTHORIZATION
Interoffice Communication

To: Human Subjects Committee
From: Ann Coppernoll Farni
Coordinator, Undergraduate Programs
396 Carver Hall
College of Business

RE: Study of Learning Team membership

The College of Business is in knowledge of and is supportive of the study of Learning Teams by graduate student Lynnae Diefenbach.

Any questions may be directed to Ann Coppernoll Farni, at 294-8431.
APPENDIX F.

OFFICE OF THE REGISTRAR AUTHORIZATION
A graduate student may be provided information obtained from confidential permanent record files under the following conditions:

1. The written approval of his/her major professor must be obtained.

2. The written permission of each individual student who is a part of the sample must be obtained if the information compiled for release will identify the individual student. A copy of the release statements must be filed with the Office of the Registrar.

3. Any research involving human subjects must be approved by the Committee On The Use Of Human Subjects In Research and a copy of the approval must be filed with the Office of the Registrar.

4. In most situations, it will be necessary for an employee of the Office of the Registrar to collect the required data for the research. In such situations, the researcher must agree to reimburse the Office of the Registrar for the actual costs incurred in the collection of the data.

5. Every precaution must be taken to preserve the privacy of the individual students and the confidentiality of the data collected. The researcher must acknowledge his/her responsibility in this regard and agree to preserve the confidentiality of the data.

I have read the conditions listed above, I understand and accept the obligations listed above, and I accept the responsibility to preserve the confidentiality of the information.

[Signature redacted for privacy]

Signature of Researcher

19 February 1996

Date of Signature

[Signature redacted for privacy]

Approved - Major Professor

2/27/96

Date of Signature
APPENDIX G.

SAMPLE COVER LETTER
Dear Iowa State University Pre-Business Freshman:

The attached questionnaire is part of a study concerning the experiences of pre-business freshmen at Iowa State University. This study will specifically look at the differences in perceptions of pre-business freshmen who did and did not participate in learning teams this fall. The results of this study will be used to gain a better understanding of freshman year experiences and improve next year’s learning teams.

Your participation in this survey is voluntary, but we would appreciate it if you would take the time to fill it out. The questionnaire asks about your experiences at Iowa State University so far. There are no right or wrong answers, but please answer each question as best as you can.

All of the information you provide is entirely confidential. Results of the study will be reported in summary form only and in no case will individuals be singled out. At the end of the semester, performance data will be obtained from the Office of the Registrar for survey respondents. The performance data will be used for a comparison of those participating and those not participating in learning teams this fall.

The results of this survey should be ready by the spring of 1996. If you are interested in reading a copy of the final report, please contact Lynnae P. Diefenbach, College of Education, Professional Studies Department, N243 Lagomarcino Hall.

When you have completed the survey, please return it to your instructor.

Thank you for your time and cooperation!

Sincerely,

Ann Coppenroll Farni, Ph.D.
Coordinator, Undergraduate Programs
(515) 294-8430

Lynnae P. Diefenbach
Graduate Student
(515) 294-4837
APPENDIX H.

RESPONDENT COMMENTS REGARDING HOW PARTICIPATION IN LEARNING TEAMS HAS CHANGED THEIR OPINIONS OF COLLEGE LIFE
- Has changed much
- I got to know several people in my classes better.
- Met lots of friends
- It hasn’t really changed my perceptions of college, but it has been great to see familiar faces in classes and know I can ask them questions, etc.
- It has made classes easier and more fun.
- Not much, but it was a great way to meet many new friends. I recommend to keep using this.
- I like to hang out with them.
- Got to know people
- It gave me a chance to know people instead of being a #.
- It makes it more of an atmosphere that we are all in it together and we can rely upon each other. - It doesn’t make the campus as big.
- I’ve made more friends
- Knowing people is good - feel comfortable in class and approaching them
- It can be great
- Hearing other opinions
- Became friends with members of learning team and I had someone to talk to about classes because we had same classes
- Made it easier because I met people faster
- I am more aware of my school work now.
- Helped relate to other people - learned new ideas - how to work together
- Easier to know at least someone else!!
- It helped me make friends easier
- Makes it easier to meet people
- It helped me understand how the others perceive college life and it helped me adapt.
- Lot easier
- I learned what they were doing in other courses and in the same courses as me
- I became really good friends with my team members and I have someone to talk with if I need to about a class.
- I feel more comfortable and my learning team has helped me survive the tough times.
- Students are very friendly and helpful.
- Everyone was very friendly, made it easier the 1st days of school
- It helped me to get to know people who are also in other classes with me. Before I met with my learning team, I didn’t realize how many people were taking the same classes I’m taking.
- Everyone seems friendly and helpful
- Before school started I was uncomfortable about the fact that there were hundreds of kids in my classes rather than the 25 or so that I was used to, but having a familiar face in most of my classes made it easier.
- Not so apt to make as many generalizations. Get to know people better so it’s easier to talk to them about college.
The learning team has been very helpful in giving me someone I can talk to about anything - classes, life, etc.

- How other people think
- Not really - It's nice to be with people you know but sometimes it's nice to see fresh faces.
- Our learning teams really haven't been very noticeable, they help to recognize other people in my classes though.
- No - haven't really talked to any of them - did call one a couple of times for assignments
- Not really, it was nice to have people I had seen before in most of my classes, but we never really did much as a group.
- No, I see people in my learning team in class and little outside, but because I live in a fraternity the house has done more than the learning team.
- It hasn't changed my opinions because we did nothing as a learning team. It was nice though seeing familiar faces in every class.
- None at all - made a lot of friends
- They haven't done anything, but I guess, I did get to know some people better
- None - helped me study
- I guess. Studying is not that bad with other people.
- I never really participated in my learning team.
- It hasn't, I just made 1 friend.
- We never got real involved with the learning teams. Not a big effort.
- Didn't really anticipate having many classes in common with friends.
- Nobody's done anything. We haven't met.
- Learning teams never really did much good. We never met.
- I think people form groups that have no real purpose. Learning teams don't do anything.
- Never met outside of class with my team
- We never met outside classes. At first it was nice, now kind of sick of seeing the same people
- No, haven't met
- Participation minimal
- I was placed in a learning team during summer orientation, however, I have never been contacted or have I met with my team.
- We haven't done much with the learning teams so I don't know.
- Our learning teams did nothing at all. There was no attempt to get us together.
- No participation
- I was enrolled, but never contacted.
- My learning has never met up with each other.
- None 3
- We haven't done anything
- No, because the learning team has had little affect (sic) on my college life.
- We haven't done anything with them.
- There really hasn't been much participation in learning teams
- We have not got together very often at all so unable to determine impact of participation.
- Our learning team never really met. I talked with people in Bus Ad 100, but they weren’t in my learning team.
- I haven’t participated in a learning team. I may have enrolled in one, but we never once got together.
- I haven’t done anything with learning team.
- We never got a chance to do anything.
- I’m in a learning team, but no one goes. The time it’s set up for on our schedule is during another class. I don’t think anyone knows about it.
- It hasn’t
- We’ve never gotten together with learning teams
- Not at all
- No, we don’t meet at all
- Meet others and study with them
- Not really
- Not much
- I really didn’t get along with my learning team. One girl especially made me feel uncomfortable to say or do anything.
- No 3
- Not much at all. I learned most of it by myself and other friends
- None at all
- It hasn’t changed because of learning teams.
- It hasn’t changed anything
- My learning team never met formally. It was really no benefit at all.
APPENDIX I.

RESPONDENT COMMENTS REGARDING WHETHER PARTICIPANTS
WOULD RECOMMEND LEARNING TEAMS TO THEIR FRIENDS
- Maybe to meet people.
- Excellent resource, easy way to get to know others
- You know at least the phone #’s of someone who might know what’s going on
- The same as the above question - knowing someone in all your classes
- Get to know people (2)
- Good way to meet people
- Have many friends in all classes. Good friends, we can really talk and hang out. I get to see and talk to them lots.
- Very helpful. Fun!
- Gives you people you can talk to about questions, etc.
- Help meet people and study together with people with same classes.
- Meet people easy
- My team and I are now great friends.
- It’s a good way to get to know people in your classes
- Helps with classes
- Good to see familiar people
- Helps people fit in and feel more at home
- Meet new people
- It’s nice seeing a friendly face in all my classes
- Because it is a good idea, but it needs to be better organized
- Feel like you’re more involved in a group!
- Make new friends, help each other out
- I found it helpful
- Because a learning team helps you meet people that you are in class with and who are a lot like you.
- You meet people (2)
- Good chance to meet people
- Good way to meet people
- Met people and had people to talk to about classes
- They limit who you talk to but let you become more familiar with the people in your team
- You get to meet people
- I liked it
- Their (sic) good for help
- Very helpful
- Easy way to meet people and get new friends.
- Because working together helps you reach a common goal
- It helped me make friends easier. Comforting knowing that you had a friend in class to get notes from, etc.
- It was so nice to make friends and have the same classes with them.
- They are a good idea because they help you meet people who are in the same classes so you can ask for help or for a missed assignment.
- They are a fun way to meet people
-Because it is interesting to learn with others and see what they think about other issues.
-They give you something in each class who can help you and who you can help.
-Same people in classes/make friends and can help you out
-You get to interact with others and share experiences
-It is essential for the students to feel comfortable about their surroundings.
-Putting 10-15 people together in one classroom helps stimulate talk and friendships
-It helps because your in same classes.
-You are with other students who are going through the same thing as you and have the same questions. It's very helpful.
-Good way to meet people
-A person gets more familiar with people who live nearby, or has many of the same classes.
-It can't hurt anyone, it can only help them with studies and also getting to know people.
-Because it was great knowing that there was someone I knew in all of my classes and it helped me to meet some really supportive people that I might not have met otherwise.
-Lets you met and get used to people because you share the same classes. It also makes you feel a little better seeing someone you know and sitting with them than just sitting alone.
-Helpful and good way to meet friends
-It's nice to see same people in classes
-We haven't met often, but it was kind of fun.
-They are ok. I like studying alone.
-If he/she was going to live in the dorms than I would, but if they were going to join the Greek system I wouldn't
-You meet people but do nothing with it
-For me nothing happened in the learning team, but others may benefit more.
-I may recommend it to a friend because it may effect (sic) them differently
-I had a bad experience with one person, but I've heard other people say they had a good experience.
-I believe I could say more if I was further involved.
-It's pointless.
-Many times they were not very involved.
-It would depend on the friend and how independent or dependent they were on others
-Like I said, it didn't do much and I don't know if I would in the future
-They don't help that much
-I didn't gain anything and it forced me to have an 8:00 class
-We never have gotten together as a group and if we did, the people wouldn't stick to task (goof-offs)!
-I didn't meet with my team, so it didn't help me.
-Didn't like not having as much choice in what to take when
-Some people work better independently
-We didn’t do anything.
-Non-existent, never met
-Because we haven't done a darn thing.
-No, because we never used them. It's a good idea to have certain groups of students - freshman in the same classes because they will get to know each other quicker but don't do learning teams.
-I don't know much about them - haven't been active really.
-Because they don't mean anything
-They are a waste of my time!!!
-Cuz (sic) in my classes I found other friends to study with, such as other people on my floor.
-Well, if mine met I would consider it because it seem as if it would really help a person out having people you know in your classes could help.
-Classes too big to be effective
-I have never met with any members of my learning team.
-We haven't done anything.
-We never get together
-I have not done anything with learning team.
-They were never organized - disappointing
-We never met outside of class.
-Didn't really help.
-We didn't have a learning team.
-It was not organized
-We never met
-We never got together
-Class times are forced, no choice on some classes
-I didn't get much out of it except for the same people I see in every class
-We didn't really do too much
-It can help, but it also might be you doing all the work.
-There was no involvement or interest among members
-Didn't really do that much together
-Mine didn't help at all
APPENDIX J.

RESPONDENT COMMENTS REGARDING ADDITIONAL INFORMATION
-No, just keep them, at least for 1st year freshman, it helps them adjust...kind of a backup if things aren’t going so great. You feel like someone is in the same boat as you and will understand if you talk to them.
-They are very helpful in answering questions and helping with other class oriented things
-Excellent idea
-They’re a good way to meet people and get to know them better!
-Great! Meet a lot of people
-I think I’ve made friends for life. Not just in school, but as true friends.
-Good experience - should continue it!
-At the beginning of the semester I recognized people in my classes, but didn’t get to talk to them. Then I found that some of these people were in my learning team and I talk to them frequently when I see them.
-We’ve met probably twice formally to study. But a lot of times we just talk after or before classes.
-I really enjoyed being in one and it made me feel more comfortable in my big lecture classes. It helps to get to know people the first day of class and the learning team made that possible.
-In your freshman year, most of the classes are lecture style with a couple hundred students so you don’t have much of a chance to meet people because you rarely see people more than once. By being on a learning team, it gave people an opportunity to make some friends in their classes because they would see the same people in their classes and they became familiar with them.
-No - it was fun and I’m glad I had the opportunity to participate. I wish all students could be part of a learning team.
-No 15
-Nope
-Nothing, they’re worthless.
-We haven’t had any meetings. We should have started off the year with a “Hi, how are you, my name is --- ,” meeting. But we have pretty much figured out who is who.
-They should maybe make a first meeting of a learning team mandatory so the people on the team could get to know each other.
-Possibly need to do more things together, give each person a list of exactly who’s on the team, phone #’s, etc.
-Follow through with it, it was non-existent!
-I wasn’t really contacted about my learning team.
-What learning team?
-I wish I could, but I can’t, cuz (sic) I never got contacted.
-I never attended one
-They don’t work!
-Should get together more often.
-I don’t think you guys know we never were required to get together to “LEARN”
-Not very helpful didn’t do anything
- Explain things more. Get the same people in the residence halls.
- Besides being in the same classes, we never did anything with them
- I just didn't get to know everybody because I didn't live around the rest of them so maybe that is why I don't like them much. I just didn't get much out of it.
- Candy on the last day was nice. It should happen everyday!!!!
- I think there should be more explanation of them in the beginning. I had no idea I was part of one until I came to schedule and half of my classes were already chosen for me. I think you should be asked if you would like to be part of a learning team.