Honors program learning community outcomes among first-year university students

Ellen H. Reames Auburn University

Obiora Anekwe Tuskegee University

Chih-hsuan Wang Auburn University

James E. Witte Auburn University

ABSTRACT

This article traces the background and role of learning communities in post secondary education. Establishing Tinto's model of institutional departure as a theoretical basis for the study, the researchers examined African-American persistence in relation to the freshman academic honors program at a Historically Black College and University (HBCU). Survey data were developed using the Beginning College Student Social Transition Scale. Further data were developed based on student communication and technology transition scores. Analysis of the data demonstrated that the Freshman Year is marked by a transition in what the student considers important at the beginning of the year to what is considered important at the end of the year. This transition (change of focus on important items) was found in all subscales of the study, except for communication which actually increased in importance throughout the year.

Keywords: Learning communities, school persistence, learning community, HBCU, social transition

INTRODUCTION

The earliest learning communities (LCs) can trace their roots to the 1920's Experimental College at the University of Wisconsin. Created by innovative educational theorist Alexander Meiklejohn, the residence-based program within the larger university offered a core curriculum in a rather radical format. Students lived in a residence hall, took classes together as a group and were allowed to follow expectations somewhat different from the traditional student (Smith, 2003). Today's higher education learning communities date back to the 1980's. Currently, there are about 250 learning communities listed in the Washington Center's National Learning Commons Directory (Evergreen University, 2008). Smith, Eby, Jeffers, Kjellman, Koestler, Olson, Smilkstein and Spear (2006) suggested over 600 educational institutions are engaged in a multitude of learning community formats and structures. Learning communities in higher education settings are continuing to gain popularity primarily because they are shown to be connected to student success (Pike, 2008; Tinto, 2002; Tinto & Russo, 1994).

Cross (1998) defined learning communities as "groups of people engaged in intellectual interaction for the purpose of learning" (p. 4). Tinto (2002) described them as "a kind of coregistration or block scheduling that enables students to take courses together, rather than apart" (p. 3). Typically, learning communities are aimed at college freshman students who are making a transition from high school to college level loads (Smith et al, 2006). Many freshman classes can be paired, or as Orgeron (1999) described, two to four courses are linked so that coherence and support can be given to the student. Writing can be paired with history or mathematics can be paired with science and in some cases more than two freshman courses can be taken as a block with a learning community.

Cross (1998) cites three reasons for an increased interest in learning communities. First, student learning outcomes, developmental research of college students and cognitive and motivational theory all appear closely aligned with learning communities. For example, Chickering's *Seven Principles of Good Practice in Undergraduate Education*, a seminal work of research findings concerning best practices in higher education has one key principle which is significantly descriptive of learning communities. The principle suggests students who have frequent contact with faculty members in and out of class during their college years are more satisfied, more likely to be retained and think they have learned more than students who do not have as much faculty contact (Chickering & Gamson, 1987; Cross, 1998).

Secondly, learning communities seem to correspond with a changing philosophy of knowledge and communication takes place on a global scale, such as in social contexts (Bandura, 1977; Lave & Wenger, 1991) and through collaborative learning patterns (Vygotsky, 1978). As global configurations become more important, these types of communication patterns are becoming more critical (Prensky, 2009; Reames, Witte & Howell, *in press*). As Schön (1973; 1983) suggested, members of society have challenged the scientific method as the only way to gain knowledge. Learning has become less of a hierarchical model with blurred lines to people working together at all levels to create and expand the existing body of knowledge. Cross (1998) and Treisman (1992) identified an important point in that we now know different groups of people e.g. women, ethnic minority groups etc. may learn in different ways.

Third, learning communities seem to work. In the practical world, learning communities may not cause student success but they do appear to create conditions which lead to student success (Pike, 2008; Tinto, 2002; Tinto & Russo, 1994). Cross (1998) added that the practical reality also includes a changing world that expects the workforce to operate independently of

standardization and supervision in a somewhat "quasi" defined environment. Learning communities, by nature, fit this description. In addition, learning communities foster democratic citizenship which has become ingrained in the mission of most college and universities (Cross, 1998; Pike, 2008; Tinto, 2002).

Others have suggested many additional advantages to learning communities in higher education settings. Inkelas, Brower, and Crawford (2007) concluded students in learning communities persisted through and beyond the first year at substantially higher rates than students in traditional curriculums and were more willing to be involved in extracurricular activities. Tinto (1993) concluded that there are academic, pedagogical and social returns. Students felt safe and developed a sense of belonging. Students developed peer group support systems and friendships that lasted for long periods of time. Students tended to form social affiliations away from the classroom. Students spent more time on task, spent more time on learning activities, and perceived themselves as learning more than their peers who were not in learning communities. Learning was more authentic, collaborative and richer for the participants. Additional research has suggested learning community members enjoyed learning more and had greater enjoyment of intellectual pursuits and had a greater sense of civic engagement (Inkelas, et al.).

Learning communities have strengthened campus tolerance for different cultural, ethnic, and gender groups. In these communities, students are required to work together in mutually positive ways within their classes. They must embrace students from backgrounds different from their own. Prejudices and stereotypes can be addressed in positive venues with the assistance of peers, faculty and staff. When college and university campuses support opportunities for faculty and students to gain appreciation for diverse groups, the entire community gains and is enriched (Tinto, 2002).

In reviewing learning communities trends, Smith, Eby, Jeffers, Kjellman, Koestler, Olson, Smilkstein and Spear (2006) recognized emerging trends which included: continued growth and development, a solid core of practices and principles of operation, a means of reforming undergraduate education, a "remaking of institutional roles and relationships" (p. 8). In addition, assessing the effectiveness of learning communities is becoming increasingly important. The authors suggested that as assessment in higher education becomes stronger our ways of supporting student learning and improving college and university performance will also advance. In terms of learning communities, assessment can answer questions concerning rate of return and whether the innovations provided by learning communities are achieving the results intended.

Most institutions are completing individual institution outcome assessments and while this is helpful for program development and improvement it is important to use information from national learning community trends. The National Survey of Student Engagement (NSSE) study has released findings that learning communities are positively related to all five of their engagement benchmarks: diversity experiences, gains in personal and social development, practical competence, general education, and overall satisfaction with their undergraduate experiences (Smith et al., 2006).

As we look at these trends, we also recognize developments surrounding issues of diversity and the growing nature of learning communities in Historically Black Colleges and Universities (HBCUs) settings. Dawkins (2006) suggested that by 2011, 30 percent of HBCUs will implement learning communities on their campuses. Sponsored by the Bush Foundation and the William and Flora Hewlett Foundation, learning communities became one of the many

projects undertaken by 23 of the participating black colleges. Johnson Smith University, Central University, North Carolina A&T State University, Benedict College, and Florida Memorial participated in the 2002 Learning Community summer institute sponsored by the HBCU Faculty Development Network. The summer institute included the ASPIRE learning community for 30 at-risk, incoming undeclared freshmen at North Carolina A & T as well as the university's learning community for engineering and technology programs. Other universities have begun learning community programs as well. For example, Johnson C. Smith University of Charlotte, North Carolina began offering linked courses at the freshman level and in majors, including links between health and physical education, management and accounting, criminal justice and sociology (Dawkins, 2006).

TINTO'S MODEL OF INSTITUTIONAL DEPARTURE

Tinto introduced the Model of Institutional Departure in 1987, which indicates that the student retention process is dependent upon the student's institutional process. Therefore, "students who are satisfied with the formal and informal academic and social systems in a college or university tend to stay in school" (Lau, 2003, p. 2). On the other hand, students who have negative experiences "tend to become disillusioned with college, withdraw from their peers and faculty members, and ultimately, the institution" (Lau, 2003, p. 2). Several institutional factors such as institutional administrators, faculty, and students themselves have an impact on the student's learning process, resulting in higher retention rates, and ultimately, the probability of a higher graduation rate (Lau, 2003).

Most students who withdraw from college do so voluntarily. In part, their departures represent low levels of academic and social integration (Tinto, 1987). As Tinto noted, "the more integrative their experiences at colleges, the more likely students will persist until degree completion. Less integration means a greater likelihood of withdrawal" (Malaney & Shively, 1995, p. 4). According to Tinto, two sources for the lack of integration include incongruence and isolation.

Incongruence occurs when "individuals perceive themselves as being substantially at odds with the institution ...therefore promoting a] mismatch or lack of fit between the needs, interests, and preferences of the individual and those of the institution" (Tinto, 1987, p. 53). Incongruence produces unpleasant interactions which decrease students' satisfaction with their college experiences. Some key factors that promote incongruence within the college experience include: a student's perception of not fitting into the institution, lack of adequate preparation, not being academically challenged, the perceived quality of campus life, lack of participation in appropriate extracurricular activities, being a nontraditional student, and being from a minority culture or ethnic background (Malaney & Shively, 1995). As Tinto (1987) concluded, "some degree of incongruence will be experienced by most students, but when it is too great and goes unchecked, departure from the institution is likely" (p. 57).

Contrary to incongruence, isolation is defined as "the absence of sufficient interactions whereby integration may be achieved" (Tinto, 1987, p. 53). In other words, students simply are not involved to any great extent with the campus community. Fewer interactions with other students and faculty members lead to a greater likelihood of voluntary departure (Tinto, 1987).

Pattengale and Schreiner (2000) indicated that the sophomore year may be a time in which students disengage from academic life, thus creating an adverse effect on their grades. Tinto (1993) also suggested that the important issues for first-year students may not be important

issues for students at other stages in a college career. Tinto (1993) outlined a longitudinal model of institutional departure that suggests individual student attributes interact with experiences within the university environment that can foster integration into the social and academic context of the institution. This integration impacts students' academic goals, future plans, and commitment to the university (Graunke, 2005). Therefore, some negative experiences within the university, such as poor interactions with faculty or lack of involvement in campus activities, may cause the student to lessen their commitment to the university and leave the institution (Graunke, 2005).

Gardner (2000) found that sophomores were more likely than students in other classes to state that "confirming their major selection or deciding on an appropriate career was their biggest personal problem" (p. 72). Often, the second year in college is often a point at which institutions tend to provide the least amount of support to the students (Graunke, 2005). According to Pattengale and Schreiner (2000), institutions feel as if they have succeeded in retaining students after the first year, and that attention may then be directed to the next incoming cohort.

Because most sophomores have also not had opportunities for campus leadership and do not receive much programming or attention from student affairs they may be relatively isolated from meaningful contact with other faculty as well (Pattengale & Schreiner, 2000). "Thus, sophomores may become increasingly distant from the university community and more engaged in individual activities. Sophomores were less likely than students in other classes to be actively involved with their own learning or to see faculty as actively engaged in their personal and academic development"(Graunke, 2005, p. 2).

In addition, they spent less time than students at other levels engaged in academic activities and more time engaged in social activities (Gardner, 2000). Juillerat (2000) found that sophomores at private colleges rated factors such as a sense of belonging and approachable faculty as more important than students at other class levels. "Overall, the research suggests that sophomores may have needs that differ from students at other levels and those needs are being largely overlooked by institutions of higher education" (Graunke, 2005, p. 2).

Tinto (1993) suggested that "long-term retention efforts beyond the first year should focus on three major sources of student departure: academic difficulties, the inability of individuals to resolve their education and occupational goals, and their failure to become or remain incorporated in the intellectual and social life of the institution" (p. 176). Tinto also said that institutional commitment "arises from and is demonstrated in the everyday interaction among students, faculty and staff in the formal and informal domains of institutional life" (p. 201). Tinto's (1975) Theory of College Student Departure contends that students enter college with various individual characteristics that play a role in the college departure process (Bray, 1999). Student entry characteristics include family background characteristics, individual attributes, and precollege schooling experiences. "Such student entry characteristics directly influence students' initial commitments to the institution and to the goal of college graduation as well as the departure decision" (Bray, 1999, p. 1). In turn, initial commitment to the institution and commitment to the goal of graduation affect the student's degree of integration into the academic and social systems of the college or university (Bray, 1999).

According to Tinto's Model of College Student Departure, academic and social integration affect the formation of subsequent commitments to the institution and to the goal of college graduation (Bray, 1999). Specifically, the greater the student's level of academic integration, the greater the level of subsequent commitment to the goal of college graduation. Moreover, the greater the student's level of social integration, the greater the level of their

subsequent commitment to the focal college or university (Tinto, 1975). "Both subsequent commitments are also shaped by the student's initial level of commitments. The greater the levels of both subsequent institutional commitment and commitment to the goal of college graduation the greater the likelihood the individual will persist in college" (Bray, 1999, p. 2).

Tinto's (1993) Revised Model of College Departure identifies some factors that contribute to academic success and college completion. "Tinto posited that an institution's capacity to reach out and integrate students into college academic and social life is critical to student retention and drop-out prevention" (Hinderlie, 2002, p. 1). A substantive body of research supports Tinto's premise, indicating that on-campus support, including relationships with classmates and faculty, contribute to academic success, social satisfaction and college completion among African-American undergraduates (Jay & D'Augelli, 1991; Tinto, 1975; 1993; Tracey & Sedlacek, 1985).

The development of on-campus support networks can be difficult for Black students. In a review of 20 years of research of Black students on White campuses, Sedlacek (1999) noted that Black students typically had access to relatively few Black faculties for support or mentoring and often experienced difficulty forming relationships with White staff and faculty. "Sedlacek reported additionally that Black students often valued affiliation with a supportive community that offered advice in navigating the systems and process of the White institution. Because of difficulty in finding a relevant and sufficiently large on-campus community, Black students, more often than Whites sought community and advice off campus" (Hinderlie, 2002, p. 1).

Strong relationships with precollege family and community members, for example, are believed to facilitate adjustment and college retention (Tinto, 1993). On the other hand, if students feel torn by family obligations or experience feelings of disloyalty as they explore the college culture, family closeness might also impede adjustment (Arnold, 1993; London, 1989, 1992). If students are the first in their families to attend college, parents may be uncomfortable with the university culture and may not be able to provide specific guidance regarding the college experience (Kenny & Perez, 1996).

Tinto's Model of Institutional Departure influences the level of satisfaction among African American students. When African American students experience positive aspects of this model, they tend to have higher levels of satisfaction. On the other hand, negative experiences with such a concept may produce lower levels of satisfaction in college.

METHODS, PARTICIPANTS AND DATA COLLECTION

The population of interest for this study was approximately 60 freshman undergraduate students enrolled in an honors program learning community at a private HBCU. All students who participated in the learning community study were of African American heritage. This higher education institution is located in a large urban area in the Southeastern United States. Urban University (a pseudo-name) was formed in 1988 with the consolidation of graduate degree school and a four-year undergraduate institution oriented in the liberal arts. Currently, the university is a four-year school, offering undergraduate, graduate, specialist and doctoral professional degrees as well as certificate programs. The undergraduate component consists of 3,800 students and 780 postgraduate students. The 2008 freshman class consisted of approximately 1000 students.

The Honors Program

Urban University's Honors Program used in this study was developed in order to enhance academic and social learning throughout a student's matriculation. The program was also formulated in order to recruit the best and brightest students to the University. Most students who are selected to be in the Honors Program are high academic and social achievers from their respective community and high school. The Honors Program serves as a nurturing environment that enriches the lives of its participants in a learning community setting. The student body is highly diverse with students representing various majors, geographical locations, ethnic populations, religious orientations, and career aspirations. Many graduates continue their educational study by earning masters, law, and doctoral degrees.

The Honors Program is supervised by the Associate Dean for Undergraduate Academic Services and alumnus of Urban University. The Associate Deans's leadership has spanned several decades as the Director of the Honors Program. The Associate Dean is known as a staunch advocate for her students who walks softly with a big stick. She, along with her staff, believes that a nurturing environment creates a holistic learner. Most students are on partial and/or full academic grants and scholarships from the University or they receive funding from various other sources related to their major discipline.

The program is a residential learning community in which students live in an honors living facility. Although the students live among other honors students, their academic majors, interests, and social background are diverse in nature. Before the Fall academic semester begins, Honors Program students attend a weekend retreat. Activities take place during the weekend where a close bond is developed among the students. First-year and upper class students are also provided the opportunity to form co-mentoring relationships during the retreat.

Once the semester begins, classes are structured in which first-year honors students are enrolled in First-Year Honors Orientation taught by the Associate Dean. In the course, students learn how to navigate throughout the learning environment. Alumni of the Honors Program and special guests are invited to speak to the student body throughout the seminar course. The lecturing and question and answer sessions with alumni provide students the opportunity to establish further mentoring relationships with graduates of the program and successful alumni.

Additionally, first-year students are required to attend lecture series, art exhibits, and plays that encourage them to learn more about African-American history and other ethnic heritages. Honors Program students take their core curriculum classes as honors courses such as Math, English, Science, and the Humanities. Their curriculum tends to be more academically challenging than the standard core curriculum courses. Usually, a guest scholar who has contributed to the arts nationally and internationally serves as the guest faculty lecturer for honors humanities courses.

Before graduating from the Honors Program, students must complete at least one summer internship in their respective field of study. Through the summer experiences, students gain a greater understanding of their chosen field of study. Many students even study abroad to gain further international experience in their career choice.

As a graduation requirement, Honors Program students must complete a senior research thesis or project. The senior research thesis or project must be presented to the director of the program in order to graduate with the diploma distinction as an Honors Program graduate. The requirement prepares students for further study in graduate school.

INSTRUMENTATION

To determine if there was a relationship between participation in learning communities and important areas of transition from high school to college, the researchers focused on six composite variables. For our work in learning communities we chose to create a survey based on a review of the literature, focus groups with faculty and students who are presently involved in various learning communities at several colleges and universities and outcomes that appear to be particularly important when measuring the effectiveness of learning communities at higher education institutions. A pilot survey instrument was distributed to a panel of experts for review of survey statements and to address concerns about the internal validity of the measure. After incorporating feedback from the panel the researchers derived a 45 item survey which focuses on entering college and university freshmen in the areas of: social transitions, diversity, communication skills and technology proficiency.

Beginning College Student Social Transition Scale

Social transition is important to the success of beginning college students. Research suggests the more engaged a student is in organization, specific interest groups, and formal and informal social groups, the more likely they are to persist to graduation. Students who are actively engaged in various social activities tend to be more connected and satisfied with college. The Beginning College Student Social Transition Scale was used to measure the participants' willingness to participate in social activities during their first year in college. It was a five-point Likert type scale with five items. Participants were instructed to respond the items from "never" (1) to "always" (5) with a possible total score range from 5 to 25. The higher scores represent a higher level of willingness to participant in social activities during the first year in college. The internal consistency Cronbach's alpha equaled to 0.75, indicating an acceptable reliability estimate.

Beginning College Student Diversity Transition Scale

College is meant to expose students to a larger world with many varying cultural, gender, race and ethnic groups. Previous research suggested that the learning community can have a positive effect on diversity issues within the university because of special attention to diversity within the learning community. The Beginning College Student Diversity Transition Scale was used to measure the participants' openness of diversity issues during their first year in college. It was a five-point Likert type scale with six items. Participants were instructed to respond the items from "never" (1) to "always" (5) with a possible total score range from 6 to 30. The higher scores represent a higher level of openness of diversity issues. The internal consistency Cronbach's alpha was 0.79, indicating an acceptable estimate of reliability.

Beginning College Student Communication Interaction Scale

The Beginning College Student Communication Interaction Transition Scale was designed to measure the degree of communication in college settings. Adolescents who move to adult world of higher education are managing their lives with less guidance from parents, teachers and others who helped guide them. As college students they must learn to communicate with peers, classroom instructors, college administrators in a host of face to face and distance forums. The scale was a five-point Likert type scale with three items. Participants were instructed to respond the items from "never" (1) to "always" (5) with a possible total score range from 3 to 15. The higher scores represent a higher level of willingness to communicate in college settings. The internal consistency Cronbach's alpha was 0.72, indicating an acceptable reliability estimate.

Beginning College Student Technology Transition Scale I

The Beginning College Student Technology Transition Scale I was designed to measure the frequency in using technology software, such as Microsoft Office package. Previous research suggested that technology preparedness in commonly used software is an important concern for entering college students. This scale was a five-point Likert type scale with five items. Participants were instructed to respond the items from "never" (1) to "always" (5) with a possible total score range from 5 to 25. The higher scores represent a higher frequency in using technology software. The internal consistency Cronbach's alpha was 0.65, indicating an acceptable estimate of reliability.

Beginning College Student Technology Transition Scale II

The Beginning College Student Technology Transition Scale II was designed to measure the frequency in using technology to communicate, such as e-mails. Previous research suggested that technology preparedness in commonly used technology for communication with friends, family and school related issues is an important concern for entering college students. This scale was a five-point Likert type scale with three items. Participants were instructed to respond the items from "never" (1) to "always" (5) with a possible total score range from 3 to 15. The higher scores represent a higher frequency in using technology communication. The internal consistency of Cronbach's alpha 0.78, indicated an acceptable reliability estimate.

RESULTS

The current study examined the difference before and after the first year in the Urban University's Honors Program in five dimensions: social transition, diversity transition, community interaction, and technology transition in software and technology communication.

Descriptive statistics for all variables are shown in Table 1 (Appendix). The results of Mauchly's sphericity test for the Scale main effect and the interaction effect (Time * Scales) were not statistically significant (p=0.071, p=0.142, respectively), indicating that the sphericity assumption was not violated. The ANOVA results indicated a statistically significant difference in pre- and post-test scores with large effect size ($F_{(1, 32)}$ =27.774, p<0.001, partial η^2 =0.465) and among different scale scores with large effect size ($F_{(4, 128)}$ =274.627, p<0.001, partial η^2 =0.896). In addition, the interaction between Time and Scales reached statistically significant with large effect size, indicating that the difference between pre- and post-test scores were different among these five scales ($F_{(4, 128)}$ =21.454, p<0.001, partial η^2 =0.401).

In order to answer the main research question, a follow-up test using a series of paired sample t-test was conducted to examine the significance in pre- and post-test scores among five different scales. Since there were five paired sample t tests, the Bonferroni Inequality was

applied and the significant level was set at 0.01 for each follow-up test. The results indicating that the post-test scores decreased statistically significantly in Diversity and Social ($t_{(32)}=3.295$, p=0.002; . $t_{(32)}=7.430$, p<0.002; respectively). The results are shown in Figure 1 (Appendix).

DISCUSSION

Students who participated in this learning community responded with a significant difference in all subscales. In most areas what was important at the beginning of the freshman year as a learning community student is apparently not as important at the end of the first year. In four of the five scales students responded significantly less strongly at the end of the freshman experience than in the beginning. In only one subscale, Communication did learning community students respond with a significant increase. This subscale taps the importance of communicating on a regular basis with friends, faculty and family. Communication appeared to become more important to learning community students at the end of the first year. Much of the present study's finding confirms prior research and the literature related to the freshman year of college and the transition to sophomore or 2nd year studies. During the first year of college students become accustomed to their surroundings, relationships become more established and students settle in to their new life as a college student.

Learning Community Students and Diversity

There was a significant change in pre and post responses to diversity issues. At the beginning of the freshman year learning community participants seemed to respond more strongly to the questions and appeared to find this an important area as they began their first year of college. It was it interesting that as learning community students finished their freshman year, they appeared less strongly connected to cultural, gender, race and ethnic diversity issues. In follow-up focus groups learning community students openly suggested that diversity issues were important but not of primary importance. As one student said, "I think diversity issues are important. The university and the learning community have stressed those a lot this year. We know it [diversity] is important and we understand that but school is important too. If I don't do well it doesn't matter how diverse I am or how I see the world." Another student said, "yeah the world is what it is but we have to do well in school too. I just don't have to focus on that [diversity] at this school. We support each other and want each other to do well. We understand what diversity is and it's important to accept and cherish differences but it just isn't everything."

Although the university and the learning community curriculum stressed diversity in the beginning the students heightened sense of awareness waned during the year and other concerns such as academics took on a more important role. It may also be that the effects of HBCU attendance make diversity less of a priority. Students are comfortable within the confines of their racial, ethnic, cultural and gender roles because there is a less diverse group. It may also mean that as students transition from high school through the first year of college they become more comfortable and accepting of themselves and others as a result of the learning community or university attendance.

Learning Community Students and Social Transition

A significant change was also noticed with the Social Transition scale. At the beginning, learning community students felt a need to engage in and explore activities outside the classroom like recreational sports, religious organizations, cultural offerings, study groups and volunteer or service learning organizations. In examining the pre to post test change students appear less open to these activities. It may be that they have chosen particular interests or tried a number of different activities and have now settled in to what they enjoy most. A number of students suggested they were very close to other members of the learning community and their advisor and spent a great deal of time within this defined group. Learning community participants studied together, some roomed together, and they participated in weekend activities together. The learning community apparently influenced strong social ties for participants. As one student said, "We study together all the time. We depend on each other to get our work done. I help others in here and they help me." Another student added, "At Thanksgiving when most students went home for break many of us stayed here and studied together. We even cooked a Thanksgiving dinner together and just hung out." In addition, learning community students had joined fraternities and sororities and had become involved in volunteer and service activities and recreational activities through the Greek system.

Learning Community Students and Technology

The Technology Scale 1 dealt with how frequently learning community students used software products such as those supplied through Office i.e. Word, EXCEL and Power Point. According to Figure 1 there was a significant difference between pre and post test results. Students appeared to use software tools less as a result of their first year experience. In examining the focus group results researchers found that the learning community advisor provided instruction at the beginning of their first term in regards to these tools. In addition, many professors at the university required word processing and presentation software use. Again, students in focus groups suggested that what was once an important area to focus on was now part of their everyday life. Presentations, word processing and spreadsheet use was not something new.

In the Technology Scale 2 learning community students were asked to respond to how often they used email, text messaging and social networking with university faculty and staff, friends and family. Again the reported frequency of use diminished over the freshman year. Researchers do not suggest that students became less involved in technology use but rather that it became more ingrained in their everyday lives and therefore not something of focus.

Learning Community Students and Communication

The Communication Scale pre and post-test scores were also significantly different. Of the five scales this was the only scale which showed a significant upward trend. Perhaps part of college life and especially as a member of the learning community experience students began to understand the importance of communicating with professors and staff, family and friends. One of the important areas new college students must learn to do is to check in and communicate with those around them. In the past, this was not as important. Parents and high school teachers many times pursue communicating with the students. Now they must learn to communicate on their own.

The literature suggests major reason for having learning communities is to retain students and provide students with stronger satisfaction and engagement during the college years. Our research suggests this pattern is true. As learning community students progress during their first year of college their interests appear to change and possibly become more refined. When researchers asked what was important to them at the end of their freshman year, learning community participants replied with the following: grades and academic performance, their family and friends, their major or finding a major, what they were going to do after they graduated. These represent a healthy focus on the future and some of the outcomes learning community participation should encourage.

CONCLUSIONS

Learning communities are becoming an important trend in undergraduate studies across the nation. More and more colleges and universities are investing in the use of learning communities. At the same time, college administrators are demanding results from learning communities because they are an added expense to student services budgets. Accountability in times of shrinking monies means programs can be cut if they do not reap results. College and university faculty and administrators need not succumb to these pressures if evidence is provided. From this research project as well as others, learning communities need to determine important outcomes which will make a difference in students' lives. Grade point average is one but others are equally important. How students adjust to college life and transition from high school to young adulthood is certainly an important outcome of college life. Part of that transition is learning how to communicate effectively with others. Another important outcome of college should be acceptance of others and embracing those who are different from our own selves.

HBCU's are an important part of our national college and university heritage. Learning communities are an underutilized resource for these institutions. At the time of this project a cursory review of websites throughout the Southeastern United States found almost no mention of learning communities. In fact, honors programs are one of the few examples in HBCU's. There is a tremendous amount of work left to do with HBCU's and learning communities. It is a strategy that would certainly prove useful for HBCU's in terms of retention and student satisfaction and engagement. Next steps might include a comparison group of non-learning community students or compare similar learning communities. These might reveal some interesting patterns.

While undergraduate face to face learning communities are a particular area of research interest others might include on-line learning communities and their development as well as graduate education. These two areas hold great potential for research in both HBCU's and Historically White Colleges and University (HWCU's) settings.

In closing, learning community students apparently change as the first year comes to closure. Much of the research that has been accomplished concerning learning communities and the students they serve has been accomplished during the first year as it is recognized as a tremendous time of transition but what about the sophomore year. Almost as many students leave college during their second year of school as the first. Some students become less engaged with time and actually become more dissatisfied with their college experience during the

sophomore year. Would learning community participation help these students? Research needs include tracking student learning community participation past the first year of college to determine if the learning community can help retain and satisfy students throughout their college life.

REFERENCES

- Arnold, K. D. (1993). The fulfillment of promise: Minority valedictorians and salutatorians. *Review of Higher Education, 16,* 257-283.
- Bandura, A. (1977). Social learning theory, Englewood Cliffs, NJ: Prentice Hall.
- Bray, N. J. (1999). The influence of stress-related coping strategies on college student departure decisions. *Journal of College Student Development*, 1-10.
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education, *AAHE Bulletin*, *39*(7), 3-7.
- Cross, K. (1998, July/August). Why LCs? Why now? About Campus, 4-8.
- Dawkins, P. W. (2006). Faculty development opportunities and learning communities. In N. Simpson and J. Layne (Eds.), *Student learning communities, faculty learning communities, and faculty development* (pp. 53-80). Stillwater, OK: New Forums Press.
- Evergreen University. (2008). Washington Center for Improving the Quality of Undergraduate Education. Retrieved from http://www.evergreen.edu/washcenter/lcfaq.htm
- Fleming, J. (1984). Blacks in college: A comparative study of students' success in black and white institutions. San Francisco: Jossey-Bass.
- Gardner, P. D. (2000). From drift to engagement: Finding purpose and making career connections in the sophomore year. In L.A. Schreiner & J. Pattengale (Eds.), *Visible solutions for invisible students: Helping sophomores succeed* (Monograph 31, pp. 67-77). Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Graunke, S. S. (2005). An exploration of the factors that affect the academic success of college sophomores. *College Student Journal*, 1-8.
- Hinderlie, H. H. (2002, May/June). Attachment, social support, and college adjustment among Black students at predominantly white universities. American School Counselor Association.
- Inkelas, K., Brower, A. & Crawford, S. (2007). Retrieved from http://www.livelearnstudy.net/images/2007_NSLLP_Final_Report.pdf
- Inkelas, K., Szelenyi, K., Soldner, M., Brower, A., & Crawford, S. (2007). Using national data to identify best practices in living-learning programs. *The National Study of Living Learning Programs*. Retrieved from http://www.livelearnstudy.net/images/2007 ACUHO Best Practices.pdf
- Jay, G., & D'Augelli, A. (1991). Social support and adjustment to university life: A comparison of African American and White freshman. *Journal of Community Psychology*, 19, 95-108.
- Juillerat, S. (2000). Assessing the expectations and satisfactions of sophomores. In L.A. Schreiner & J. Pattengale (Eds.), *Visible solutions for invisible students: Helping sophomores succeed* (Monograph 31, pp. 19-29). Columbia, SC: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.

- Kenny, M. E., & Perez, V. (1996). Attachment and psychological well-being among racially and ethnically diverse first-year college students. *Journal of College Student Development*, 37(5), 527-535.
- Lau, L. K. (2003, Fall). *Institutional factors affecting student retention*. Longwood University: College of Business and Economics.
- Lave, J., & Wenger, E. (1991). *Situated learning. Legitimate peripheral participation.* Cambridge, UK: University of Cambridge Press.
- Light, R. J. (1992). *The Harvard assessment seminars, second report*. Harvard University: Cambridge, MA.
- London, H. B. (1992). Transformations: Cultural challenges faced by first-generation college students. *New Directions for Community Colleges*, 20, 5-11.
- London, H. B. (1989). Breaking away: A study of first generation college students and their families. *American Journal of Education*, 97(1), 144-170.
- MacGregor, J., Smith, B., Matthews, R., & Gabelnick, F. (2002). *Learning community models*. Retrieved from http://www.evergreen.edu/washcenter/natlc/docs/LCmodels.ppt
- Malaney, G. D., & Shively, M. (1995). Academic and social expectations and experiences of first-year students of color. *NASPA Journal*, *33*(1), 3-18.
- Orgeron, J. P. (1999). Learning communities: A selective overview of academic library involvement. *Journal of Southern Academic and Special Librarianship: 01*. Retrieved from http://www.icaap.org/iuicode?62.01.02.02
- Pattengale, J., & Schreiner, L. A. (2000). What is the sophomore slump and why should we care? In L. A. Schreiner & J. Pattengale (Eds.), *Visible solutions for invisible students: Helping sophomores succeed* (Monograph 31, pp. v-viii). Columbia, SC: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Pike, G. R. (2008, November/December). Learning about learning communities: Consider the variables, *About Campus*. Wiley InterScience/Wiley Periodicals.
- Prensky, Marc. (2009, February/March). Digital natives, digital immigrants. *Innovate: Journal* of Online Education, 5(3). Retrieved from

http://innovateonline.info/pdf/vol5_issue3/H._Sapiens_Digital-__From_Digital_Immigrants_and_Digital_Natives_to_Digital_Wisdom.pdf

- Reames, E. H., Witte, M. M., & Howell, M. (in press). Engaging the adult learner through graduate learning communities. In Wang, V. (Ed.) *Encyclopedia of E-Leadership*, *Counseling and Training*. Hershey, PA: IGI Global.
- Schön, D. A. (1973). *Beyond the stable state. Public and private learning in a changing society*, Harmondsworth: Penguin.
- Schön, D. (1983). *The reflective practitioner. How professionals think in action*. London: Temple Smith.
- Sedlacek, W. E. (1999). Black students on White campuses: 20 years of research. *Journal of College Student Development*, 40(5), 538-550.
- Smith, B. L. (2003). Learning communities and liberal education. *Academe*. American Association of University Professors, Retrieved December 1, 2010 from http://www.aaup.org/AAUP/pubsres/academe/2003/JF/Feat/
- Smith, B. L., Eby, K., Jeffers, R., Kjellman, J., Koestler, G., Olson, T., Smilkstein, R. & Spear, K. (2006, Winter). *Emerging trends in learning community development*. Washington

Center for Improving the Quality of Undergraduate Education. The Evergreen State College Olympia, WA.

- Tinto, V. (2002, April 15). Taking student retention seriously: Rethinking the first year of college. A speech presented at the annual meeting of the American Association of Collegiate Registrars and Admission Officers: Minneapolis, Minnesota.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45, 89-125.
- Tinto, V., & Russo, P. (1994). Coordinated studies programs: Their effect on student involvement at a community college. *Community College Review*, 22 (2), 16-25.
- Tracey, T. J., & Sedlacek, W. E. (1985). The relationship of noncognitive variables to academic success: A longitudinal comparison by race. *Journal of College Student Personnel*, 26, 405-410.
- Treisman, P. U. (1992). Studying students studying calculus: A look at the lives of minority mathematics students in college. *College Math Journal*, *23*(5), 362-373.
- Treisman, U., & Garland, M. (1993, Spring). The mathematics workshop model: An interview with Uri Treisman. *Journal of Developmental Education*, 16 (3), 14-22.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.



APPENDIX

Table 1

| Descriptive Statistics | | | | |
|------------------------|----------|------|-----------|------|
| Scales | Pre-test | | Post-test | |
| | Mean | Std | Mean | Std |
| Diversity | 26.58 | 3.43 | 24.64 | 3.66 |
| Social | 21.15 | 3.19 | 15.52 | 4.52 |
| Communication | 23.24 | 4.20 | 24.00 | 3.05 |
| Technology I | 17.21 | 3.23 | 16.09 | 3.71 |
| Technology II | 4.09 | 2.14 | 3.67 | 1.34 |

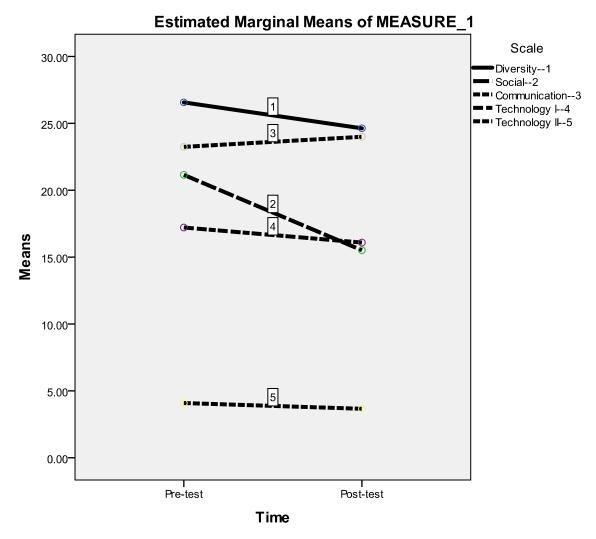


Figure 1. The results of pre- and post-test scores among five scales