STUDENT PERCEPTIONS ON SELF-DEVELOPMENT VARIABLES IN SELECTED COMMUNITY COLLEGE STUDY ABROAD PROGRAMS: A QUANTITATIVE STUDY USING CHICKERING’S THEORY OF STUDENT DEVELOPMENT

By

DEVI S. DREXLER

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

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2006
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by

Devi S. Drexler
To my grandfather, Krishnanand Shookla for his love, support, and great wisdom-his loyal advocacy for the pursuit of education will forever remain in my heart and soul.
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Abstract of Dissertation Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

STUDENT PERCEPTIONS ON SELF-DEVELOPMENT VARIABLES IN SELECTED COMMUNITY COLLEGE STUDY ABROAD PROGRAMS: A QUANTITATIVE STUDY USING CHICKERING’S THEORY OF STUDENT DEVELOPMENT

By

Devi S. Drexler

December 2006

Chair: Dale F. Campbell
Major Department: Higher Education Administration

This research study explored how American undergraduate students perceive their own self-development changes before and after participation in their community college, or community college affiliated study abroad program. In order to achieve this purpose, the focus of this study was on Chickering’s Theory of Student Development and the environmental variables that undoubtedly influence student development abroad. The statistical analysis component addressed three research questions to substantiate the research hypothesis. Using a variety of processes, a test-retest method was used to validate both the reliability and validity of the research instrument. Furthermore, the internal
validity of the instrument was evaluated by way of a Biserial correlation analysis in order to determine the relationship between the student development vectors and the overall evaluation scale during the pre and post survey period. A Dependent Samples Paired T-Test was used to examine whether student development increased from pretest to posttest. In addition, a one-way Analysis of Variance (ANOVA) was employed to determine whether there was a relationship between any of the student demographic variables and the student development vectors. Next, the results section evaluated the methods described above, revealing the overall students’ response of their study abroad experience and subsequent data analysis. Finally, the conclusions section expanded upon all the areas presented in the previous chapters and culminated with various recommendations by the author.
CHAPTER 1
INTRODUCTION
Overview of Study Abroad Programs

Study abroad programs have been established as important components of undergraduate students academic learning and cultural awareness since the founding of some of the earliest institutions. Bolen (2001) suggested that “the first programs began in the late 1880s, with Indiana University sponsoring a summer study tour in 1882 and Princeton running a volunteer program in Asia in 1898” (p. 185).

Since then, there has been significant progress in study abroad programming initiatives not only in four-year institutions, but also in two-year institutions. However, the catastrophic events that launched the United States into war could have deterred study abroad students from traveling. On September 11, 2001, anti-American terrorists groups hijacked a plane and crashed into the Twin Towers in New York City. Shortly following, additional attacks targeted the Pentagon and other American sites. Allies of the United States, such as England, also found themselves under terrorist attacks on the tube station and many other areas.

Yet, despite these attacks, a report published by the Institute of International Education (2004), concluded that:

There was an 8.5% increase in U.S. students receiving credit for study abroad in academic year 2002/03, which represents significantly stronger growth than the previous year's 4.4 % increase. This increase remains a strong indicator of the tremendous interest in study abroad, both in spite of and in response to the changing geopolitical climate following 9/11. As study abroad opportunities have become more plentiful, varied and more affordable, the number of students taking advantage of an academic experience abroad has increased dramatically. Since
1991/92, the number of students studying abroad for credit has more than doubled (from 71,154 to 174,629, an increase of 145%).

With students continued interests in international education, it seems very likely that study abroad programs enhance the academic quality as well as social and cultural interaction among undergraduate students. These programs also enhance students awareness of racial, ethnic, and diverse populations in addition to textbook learning.

Johnston and Spalding (1997) suggested:

International education…fosters personal growth through reflection on assumptions, values, and moral choices. It may challenge students to confront the relativity of things, but also to make their own grounded judgments. It is often active and experiential, putting a premium on competence—on putting what one has learned into effective practice. It may be the best context in which to learn and appreciate the need for multidisciplinary—for looking at things comparatively, in context, and in their full complexity. (p. 418)

Therefore, since international education plays such an important role in student learning, it is important to examine whether academic disciplines with an international context or study abroad program learning have a greater impact on shaping students into global learners. Sheppard (2004) explained “the integration of international programming into all areas of the university or college community can meet the needs of both the individual and the institution” (p. 40).

Although many colleges and universities provide diversity components throughout their academic disciplines, it is important to offer such academic programs as well as study abroad opportunities to undergraduate students. Study abroad programs incorporate a multicultural component where students can explore the new environment and truly become surrounded by the new cultures and societies that may not necessarily be available in their domestic homelands.
Sheppard (2004) further explained “that international education offers students the opportunity to explore different countries, cultures, views, and ideals…international education offers students an experiential learning opportunity, where they can engage the factual knowledge they have about the world with a reality that may be different from their own. Students gain a sense of ownership over what they learn, because learning through experience fosters involvement and responsibility” (pp. 38-39).

Similarly, Kitsantas (2004) conducted a study on study abroad programs and global understanding. The author surveyed two hundred and thirty two students enrolled in study abroad courses offered in England, Italy, Greece, France, and Spain in 2002 and found that “study abroad programs significantly contribute to the preparation of students to function in a multicultural world and promote international understanding” (p. 443).

In addition, there are a number of advantageous points to make for students who wish to study abroad during their academic career either for spring break, summers, or semesters. The value of learning and encountering new cultures, races, religions, different academic and teaching styles, as well as the opportunity to visit various cities and countries not only broaden one’s view of the world and society in which one lives, but also adds to the intellectual competence and development of a student.

Floyd, Walker, and Hurd (2002) explained that “international education, and specifically study abroad programs, is an integral component of experience-based student learning. Study abroad programs have enormous potential for meaningful learning” (pp. 61-62). Therefore, study abroad programs have a major effect on students because such freedom to explore different countries, cultures, customs and religions provide them with a basis for study, communication, and interaction with different populations coupled
with a strong academic component. This alone is a valuable learning experience, but tutorials from international instructors native to the study abroad country can be a very powerful and interactive educational tool for students wishing to elevate themselves into global learners.

Sheppard (2004) stated “it should be clear from the beginning of the process that education abroad is not an experience that starts when a student leaves and ends when they get home” (p. 39). It is a life-changing experience, one that the student uses in all aspects of their life; such as conversations with family and friends, choosing coursework, applying for internships, and continue to have an educational and social impact long after graduation.

Dolby (2004) claimed that “study abroad’s significance lies not in its current numbers but in its growing popularity on American university and college campuses, and its symbolic place in many universities’ and colleges’ new commitments to preparing students for life in an increasingly globalized world” (pp. 152-153). Therefore, as educators and administrators, it is imperative to prepare students both academically and globally so they can interact and communicate with peoples of all nationalities and ethnicities. Study abroad programs are indeed a step in the right direction in creating a true “nation of learners” (Wingspread report, 1993).

**Purpose of Study**

While there is evidence to support successful student learning as a result of study abroad initiatives, there is very little research that explores how and why undergraduate students transform and redevelop their thinking into a global context as a result of study abroad participation. Therefore, the purpose of this study is to explore how American
undergraduate students perceive their own self-development changes via participation in their community college study abroad program. By surveying undergraduate students before and after the completion of their academic study abroad programs, this study will reveal the extent to which students gained increased levels of self-development, based on their international academic and social experiences.

Thus, this study employs Chickering’s seven vectors of student development to understand the changes in student development. Furthermore, the environmental variables incorporated in this study include academic environment, classroom learning environment, student housing and friendships, student support services and programs, field trips and excursions, cultural awareness and technology and were adapted from Chickering’s environmental variables.

**Research Hypothesis**

**H0**: Undergraduate students who participated in their community college study abroad program reported no difference in self-development as represented by Chickering’s Theory of Student Development

**H1**: Undergraduate students who participated in their community college study abroad program reported enhanced self-development as represented by Chickering’s Theory of Student Development

**Research Questions**

**RQ1**: To determine the relationship between the individual student development vectors and overall student development using a Biserial Correlation Analysis

**RQ2**: To determine whether student development increased as a result of study abroad participation by examining pretest and posttest results

**RQ3**: To determine whether specific socio-economic variables influenced student development among study abroad participants using an Analysis of Variance (ANOVA) method
Significance of Study

Although there are numerous student development theories, there are few theories dedicated to international student development or to the application of environmental factors on American undergraduate students pursuing study abroad interests in foreign countries. Therefore, this study uncovered the academic and social developmental changes experienced by study abroad college students due to various environmental factors as presented by Chickering’s Theory of Student Development. Such research endeavors have not been addressed in previous studies to date and is increasingly important to the growing population of study abroad participants worldwide. It is the hope that this study will further our understanding of how student development and the environmental factors affect American students within the context of international education in the community college system and provide a framework for future studies on study abroad student development theory.

University of Florida Study Abroad Program Evaluation

The University of Florida International Center (UFIC) maintains the UF Study Abroad Survey, of which was a modified version will be used as the major evaluation tool in this national study of community college study abroad programs. In addition, the UFIC houses various study abroad programs and offers students a variety of services that are available on the website at http://www.ufic.ufl.edu/oss/studyabroad.htm. (Other aspects of interest on the web site include health, safety, and travel information, study abroad applications and various forms, pre-departure information, financial aid and scholarship information, insurance and other resources).
Summary

This chapter provided a brief overview of the importance of study abroad participation and the need to expand students awareness of the different cultures around them. While there is evidence that courses with a diversity or international emphasis are beneficial to student development, these courses cannot compensate for practical knowledge and experience acquired abroad. It is for this purpose that students continue to travel abroad to study even in the midst of terrorist activity both in the homeland and abroad.

Thus, study abroad program participation is a major aspect of student learning, especially in community colleges where educational objectives target the varying levels of student educational and social needs. Chickering’s Seven Vectors of Student Development and the environmental variables was employed to measure the depth of student learning while abroad. Taken together, these vectors of student development and environmental variables illustrate the importance of cognitive, social, and international learning on collegiate student development and global education, overall.
CHAPTER 2  
REVIEW OF LITERATURE  
Chickering’s Theory of Student Development

This chapter examines Chickering’s Theory of Student Development and further research related to the theory, in order to explore how students can increase development by encountering and engaging in various environmental variables. The literature review examines the academic environment, classroom learning environment, student housing and friendships, student support services and programs, field trips and excursions, cultural awareness and technology. These variables, taken together, impact students while studying abroad and help students develop a variety of cognitive and social skills. A summary is provided at the end of the chapter.

There are numerous student development theories that hypothesize student developmental stages as explored by Komives and Woodard (1996), such as “Piaget’s cognitive-structural theory, Perry’s theory of Intellectual and Ethical Development, Kohlberg’s Theory of Moral Development, Gilligan’s Theory of Women’s Moral Development” (pp. 172-178). But, of utmost importance is the research conducted by Arthur Chickering “…between 1959 and 1965 while employed at Goddard College, that led him to formulate the seven vectors of student development theory” (pp. 36-37).

Chickering’s research reaches beyond traditional models because of his intricate analysis of the student intellect as well as certain factors, both academic and non-academic, that influence the student as they matriculate through their collegiate years. His research explored ways to:
• Incorporate findings from recent research on gender, race, and national origin

• Acknowledge the greater range of options students now have

• Adjust the theory to fit adult learners as well as traditional aged students

• Alter the definitions of several of the vectors to reflect changes in societal conditions and to acknowledge the work of other theorists. (p. 37)

Chickering’s Student Development theory is very applicable to undergraduate students as they matriculate through their college years. There are newer versions of the theory as well as other modified versions; however, this original version explicitly expounds the basic underlying themes of student development and the major factors that influence student development (Evans, Forney, and Guido-DiBrito, 1998).

These seven vectors include:

1. Developing competence (to include: intellectual competence, physical competence, and interpersonal competence)
2. Managing emotions
3. Moving through autonomy toward interdependence
4. Developing mature interpersonal relationships
5. Establishing identity
6. Developing purpose
7. Developing integrity

Furthermore, “Chickering argued that educational environments exert powerful influences on student development” (p. 40). Thus, these following environmental factors were crucial in examining student development changes, especially in study abroad programs.

1. Institutional objectives
2. Institutional size
3. Student-faculty relationships
4. Curriculum
5. Teaching
6. Friendships and student communities
7. Student development programs and services
8. Integration of work and learning
9. Recognition and respect for individual differences
10. Acknowledgement of the cyclical nature of learning and development.
   (pp 37-42)

**Student Development Theory: Definition of Vectors**

1. Intellectual competence: Acquisition of knowledge and skills related to particular subject matter. Physical Competence comes through athletic and recreational activities. Interpersonal Competence includes skills in communication, leadership, and working effectively with others

2. Managing emotions: Students develop the ability to recognize and accept emotions as well as to appropriately express and control them

3. Moving through autonomy toward interdependence: Result in increased emotional independence, which is defined as ‘freedom from continual and pressing needs for reassurance, affection, or approval from others’

4. Developing mature interpersonal relationships: Include development of intercultural and interpersonal tolerance and appreciation of differences, as well as the capacity for healthy and lasting intimate relationships with partners and close friends

5. Establishing identity: Acknowledgement of differences in identity development is based on gender, ethnic background, and sexual orientation

6. Developing purpose: Development of clear vocational goals, making meaningful commitments to specific personal interests and activities, and establishing strong interpersonal commitments

7. Developing Integrity: Includes three sequential but overlapping stages: humanizing values, personalizing values, and developing congruence

**Student Development Theory: Environmental Variables**

1. Institutional objectives: Clear and specific objectives to which personnel pay attention and use to guide the development of programs and services have a powerful impact

2. Institutional size: Significant participation in campus life and satisfaction with the college experience

3. Student-faculty relationships: Extensive and varied interaction among faculty and students
4. Curriculum: Relevant and sensitive to individual difference, offers diverse perspectives, and helps students make sense of what they are learning.

5. Teaching: Active learning, student-faculty interaction, timely feedback, high expectations, and respect for individual learning differences.

6. Friendships and student communities: Meaningful friendships and diverse student communities in which shared interests exist and significant interactions occur encourage development along all seven vectors.

7. Student development programs and services: Collaborative efforts by faculty and student affairs professionals are necessary to provide developmental programs and services.

8. Integration of work and learning: Collaborative relationships are needed between business, the community, and institutions of higher education that will maximize the development potential of work and volunteer experiences.

9. Recognition and respect for individual differences: Educators must be cognizant of the different backgrounds and needs of their students and adjust their interactions and interventions to address these differences.

10. Acknowledgement of the cyclical nature of learning and development: Learning involves periods of differentiation and integration, equilibrium and disequilibrium. New experiences and challenges provide opportunities for new perspectives and more complex understanding to occur.

Other researchers have similarly noted the importance of the environmental vectors in student development. Kodama, McEwen, Liang, and Lee (2002) explained that “a change in identity for a student may result in a change of purpose (or vice versa) and may subsequently cause changes to other areas of development such as competency, emotions, interdependence, relationships, and integrity…the circular pattern of these vectors represents their nonhierarchically and fluid nature, not assigning primacy to one over another” (pp. 48-49).

In addition, Strange (2004) noted “from a widely applied model of identity development, articulated by Chickering and Reisser (1993), comes an understanding of the role of interdependence, tolerance for differences, and a sense of competence in the
maturation of young adults” (p. 53). These are precisely the variables that will be examined in this research project, but taken to a higher level, a level that examines not only student development, but student development in the context of an international atmosphere. Thus, the seven vectors of student development were a main component of this research study because they directly impacted student development changes and were important in evaluating how students respond about their overall academic success of their study abroad program and ultimately on their individual progression.

**Application of Chickering’s Environmental Variables**

In order to measuring Chickering’s environmental variables as presented in his Theory of Student Development, it was necessary to adapt certain variables from the theory and incorporate them into the survey questions. These variables included academic environment, classroom learning environment, student housing and friendships, student support services and programs, field trips and excursions, cultural awareness, and technology. Since student development is not a linear process, the variables that were used to measure development also overlap within the context of Chickering’s environmental variables.

In other words, *academic environment* incorporated “institutional size and objective, and student-faculty relationships and teaching.” Similarly, *classroom learning environment* incorporated “student-faculty relationships, curriculum, teaching, and the integration of work and learning,” *student housing and friendships* incorporated “friendships and student communities, and recognition and respect for individual differences,” *student support services and programs* incorporated “student development programs and services,” *field trips and excursions* incorporated “integration of work and
learning,” cultural awareness incorporated “recognition and respect for individual differences and integration of work and learning,” and technology incorporated “student-faculty relationships, curriculum, teaching, as well as the integration of work and learning.” Taken together, each of the variables represented in this study either indirectly or directly influenced the students “acknowledgement of the cyclical nature of learning and development” which can be considered overall student development (Chickering’s Theory of Student Development).

Furthermore, it is important to note that while this study served to uncover student development changes before and after study abroad, such environmental variables may impact students indirectly or may have a greater impact long after the completion of their study abroad program.

Finally, what types of student development patterns emerged among student participants while studying abroad? In order to examine how student development changes occurred abroad, it is important to review these main environmental variables and view how they impacted student learning. The following environmental variables presented in this chapter will elucidate the importance of Chickering’s Theory of Student Development on community college undergraduate students. These include: community college student population, articulation and transfer, internationalization, globalization, and other important aspects that are important functions of the academic environment.

**Academic Environment**

**Community College Student Profile**

Although there is very little research on the profiles of undergraduate students in community college institutions, it is important to examine the varying student
characteristics in order to understand their student development. A report by the National Center for Educational Statistics (2003/2004) suggested that:

- Compared with students attending 4-year colleges and universities, community college students are more likely to be older, female, and from low-income families and are less like to be White.

- 47 percent of community college students were younger than 24, while those 30 or older, constituted 35 percent of community colleges (larger group than 4 year institutions).

- 63 percent of 4 year college students attended exclusive full-time, compared with 31 percent of community college students.

- 47 percent of community college students received some form of financial aid, primarily grants and were more likely to work part-time or full-time than 4 year college students.

- Undergraduates attending community colleges were more likely to be women (59 percent) compared to those attending four-year institutions (55 percent).

- 63 percent of all undergraduates were White, 14 percent Black, 13 percent Hispanic, and 5 percent were Asian.

- White dependent students were more likely to be from high-income families than Black dependent students. (pp. 9-80)

**Articulation and Transfer**

Cohen and Brawer (2003) explained that “articulation refers to the movement of students – or more precisely, the students academic credits – from one point to another. Articulation is not a linear sequencing or progression” (p. 212). Relative to study abroad programming, faculty and staff must make sure that student credits are valid and easily transferable by supporting important articulation agreements between the foreign institutions and American community colleges. Without proper authorization supporting students completion of course, credit transfer could become problematic not only abroad, but after the students return back to their home institutions.
Festervand and Tillery (2001) indicated “first and foremost, the program's requirements must meet (minimally) or exceed (as planned) university, college of business, graduate, and accreditation standards. Though each program must decide on the amount of time to be spent on academic versus personal pursuits, this program limits the latter, given temporal, academic, and financial parameters” (p. 108).

But what happens if there are no standard set of articulation or program guidelines? Marshall (2004) stated “the diploma is the traditional credential of the Canadian college (community), and as such, all public colleges are subject to government approval and accountability processes. But, by-in-large, there is no common national or even provincial standard regarding the substances or outcome of the diploma credential” (p. 74).

If study abroad programs have courses approved but lack academic standards, the result could be catastrophic for transfer and evaluation of credit. Therefore, in order for a program to be credible, it must maintain a stable academic standard, one that is accepted nationwide. Thus, international colleges and universities must pass the accreditation process and make sure that student credits are transferable between international and domestic colleges. In addition, there is a need for strong partnerships and articulations agreements between the US and Canada, and other foreign institutions to make sure that the credit transfer process is smooth and seamless, especially in study abroad programs.

Floyd, Walker, and Hurd (2002) suggested some excellent guidelines at both the policy level and the community college level in order to examine articulation and transfer policies in study abroad programs:
- Articulate broad transfer agreements that ensure senior colleges and universities will accept credits from students who enroll in courses that incorporate study abroad opportunities

- Encourage and support innovation and collaboration within and among community colleges

- Lead efforts to ensure that international educational experiences, including study abroad, are woven clearly into the academic mission and programs of the college. (pp.66-68)

Burn (2002) reflected that colleges “are giving students academic credit for study abroad, not counting the academic work for elective credit only, and are even approving courses taken abroad toward general education requirements” (p. 256). In addition, it is not uncommon to find that both community colleges and universities approve academic coursework toward their general education requirements as well as use other study abroad credits toward students major and minor degree requirements.

In further evaluation of academic programs, Weeks (2000) explained “during this era of rapid change in higher education, we realized the benchmarking project was timely if we were going to both improve our course and be involved in the international discussion about the accreditation of teaching in higher education” (p. 66). Faculty, administrators, staff, and students must be willing to discuss and implement guidelines on such aspects as academic program credit, course content, tuition, and ease of credit transfer back to home institution in order to be successful in academic programming for study abroad initiatives.

**Academic Program Quality**

In addition, study abroad academic programs should include a multicultural component to help students learn and embrace diversity abroad. Wagenaar and Subedi (1996) suggested that “curriculum analysts have focused increasingly on the need to
internationalize the curriculum and expose students to multiculturalism. Students need to become more familiar with, and more able to respond to, the increasing globalization of society. They also need to learn more about people of color and members of other cultures as the proportion of minorities in our society increases rapidly” (p. 272).

Besides academic credit transfer and multiculturalism, students look at the reputation of study abroad programs and tend to converse with other students, friends, and family about program satisfaction before committing to an overseas experience. Michael, Armstrong, and King (2003) noted that “…the main reason for choosing Australia as a destination for study was the quality of education and that students learnt this through word-of-mouth from friends. This choice was supported by information about course content and the cost” (p. 64). Along with the reputation of the program, administrators are also interested in the quality of the program.

Campbell (1999) explained that “in instructional programs and services, the top five issues [identified by leaders at the community college futures assembly] were (1) acquiring, training, and keeping qualified faculty, (2) increasing competition from other institutions and distance education, (3) commitment of funding for institutions, (4) maintaining the level of quality, and (5) articulation issues” (p. 23).

All of these issues are profoundly important in maintaining strong, quality-based study abroad programs and choosing superior faculty to teach and support students while abroad. In addition, it is imperative to have strong alliances with international institutions, their faculty and institutional resources, and of course legitimate articulation agreements.
Identity Transformation and Internationalization

Joseph, Marginson, Yang (2005) stated “the openness of identities in education becomes more obvious when we consider cross-border aspects such as what happens to students who enroll in a foreign country, and what happens to the institutions that educate them…” (p. 3). There is an indeed a strong connection between student learning in study abroad programs and identity development. Only when leaders accept this key principle can they begin to evaluate how academics and cultural awareness impact student learning and development.

Joseph, Marginson, Yang (2005) further explained that “in contemporary educational settings, changes in personal identities and daily practices are manifest not just in international relationships per se but in intra-cultural and inter-cultural-and intra/inter class and gender-encounters 'international education'…education that is understood to be inflected by global flows and more fluid, changing identities” (pp. 4-6).

International relationships are very important in helping students develop new identities and stronger intellectual competencies by studying abroad. Even while abroad, the presence of a diverse classroom can greatly influence student cognitive skills. Furthermore, even short term study abroad programs have an impact on student cognition and global awareness as long as the student is open to learning new cultures, customs, language, and national differences.

In addition, Cudmore (2005) explained that

In 2000, there were 1.8 million international students enrolled in institutions of higher education around the world, and projected that this global demand for international higher education will exceed 7 million places by 2025. The ‘traditional’ view of internationalization includes the academic activities one could find under a catalogue heading of International Studies. These include a variety of interdisciplinary programs in languages, political science, cultural
anthropology, and sociology, which have as their goal the development of knowledge about other nations and cultures, and the ability to function well in the languages and customs of those cultures. (p. 42)

As long as students, faculty and staff acknowledge that international education and study abroad programming are truly important in student learning and development, the participation levels will continue to increase in the future as the world becomes more globalized. In addition to interdisciplinary programs offered in study abroad programming, there should also be areas of study that could be part of a student’s major or minor degree requirement, such as earth and biological sciences, math, literature, architecture, and other collegiate fields.

McCabe (2001) discussed that “internationalization is more oriented toward bilateral and/or multilateral processes involving knowledge of specific countries, which leads to the development of business, educational, social, and cultural relationships” (p. 141). Therefore, internationalization has an impact on student educational and cultural relationships, which foster growth in cognitive and social development.

Cudmore (2005) also explained, “a second view of internationalization include the range of activities that facilitate the interaction of domestic students with students and faculty from other nations to build a sense of global community” (p. 42). Interaction with nationals of the host country can create a powerful learning environment. For example, field trips, guest speakers, and site visits are excellent sources for communication with international hosts.

**Globalization**

Joseph, Marginson, Yang (2005) noted that “Globalisation in education involves not just transformations of economic and cultural circumstances but transformations in
people themselves” (p. 3). If study abroad programs are successful in internationalization and globalization, then the program participants will come away with a changed identity and a deeper understanding of the importance of culture, people, and nation as it relates to them and the world they live in.

McCabe (2001) also suggested that “specifically, globalization is seen to represent a worldwide process. In this case, it implies standardization across cultures that occurs as technology, migration, and education become dispersed around the globe” (p. 140). Taken together, internationalization and globalization are two major aspects of study abroad programming that must receive evaluation and cultivation from all faculty, staff, and administrators in order for programs to grow and be successful. To lack community college study abroad programming is to deny a core part of student learning and international education.

Dalton (1999) stated “more than ever before, college students are preparing themselves for a global future by combining international studies with a wide range of college majors” (p. 7). Therefore, study abroad program leaders must match educational degree majors and educational objectives with appropriate destinations in order for students to gain maximum learning. For example, an African literature course may well incorporate literary leaders in Africa to speak in the classroom, or a Spanish language course in Spain could help students gain increased language learning by interaction with native speakers.

Dalton (1999) further advised “we have much to learn about our own domestic diversity in particular by closer contact and communication with higher education institutions in Latin America, the Caribbean, Europe, Canada, and the Pacific Rim
countries. These regions have contributed so greatly to our multicultural society and are such an integral part of our own historical legacy that we can benefit greatly from greater contact and understanding of their cultures and traditions” (p. 11). This is important not only for students, but also for faculty and staff. Lifelong learning is an important concept that can be applied to all study abroad and international programs; thus, faculty, staff, and students can benefit from communication with international partners to learn about cultures, lifestyles, and traditions.

Sheppard (2004) emphasized that “in order to ensure students receive the value out of international education programs and choose to become global citizens and leaders, it is necessary that they are able to reflect on the experiences that they are able to have. Whether a student is returning from a study abroad program, learning about another culture in class, there should be the opportunity to take what is learned and incorporate the learned knowledge, skills, and attitudes into their life as a part of the campus community” (p. 39).

This is exactly how students can transform themselves into global leaders. For example, by taking what was learned abroad and using that knowledge in campus or community activities, students have the capacity to share, reflect, and emphasize to others how important study abroad programs can be in the microcosm of educational attainment and success.

**Key Stakeholders and Program Success**

Tseng and Newton (2002) recommended that “specifically, in the respondents’ view, a meaningful study-abroad life included a series of achievement outcomes, such as completing school work, planning for the future, achieving an individual career vision,
pursuing success in academic studies, seeking a development of professional knowledge, experiencing a different world, and increasing knowledge about the world” (p. 594). If the study abroad program meets or exceeds the goals set by students, faculty, and staff, then it is possible to assume students had a remarkable experience, one that fulfills their academic and international expectations.

International education can be a powerful tool in educating students and helping them understand the context of human nature and different civilizations. But, the student must be an active participant in the study abroad experience to acquire success. This brings up the question, who determines the success of the academic program? There are a variety of key players, such as students, instructors, administrators, and external constituents that determine the success of study abroad programs and international education.

First and foremost is the student, and only the student can decide whether he or she was truly involved in the study abroad experience and whether it was successful with the personal and academic goals they had initially set for themselves before travel. Grayson (2004) explained that “while there may be little relationship between professors' performance and GPA, it is clear that good teaching results in enhanced program satisfaction…and good grades result in increased program satisfaction” (p. 30). And increased program satisfaction leads to increased participation, expansion of the program to other international destinations, and overall increased program quality/reputation.

Furthermore, Tseng and Newton (2002) noted that “international students eight strategies for adjusting to study abroad life: 1) knowing self and others, 2) making friends and building relationships, 3) expanding individual worldview, 4) asking help and
handling problems, 5) establishing cultural and social contacts, 6) building relationships with advisors and instructors, 7) becoming proficient in the English language, 8) using the tactic of letting go” (p. 596). The authors’ strategies directly support Chickering’s theory and environmental factors, as discussed earlier. These strategies are prevalent and very important in student development and a powerful force in helping students acclimate to their new international climate.

Geelhoed, Abe, and Talbot (2003) also explained that “three related, but not necessarily sequential, attributes that affected a student’s ability to have a successful or positive experience in the IPP: the student’s (a) fulfilling or not fulfilling expectations of and motivation for participating in the program; (b) ability or inability to get past the initial discomfort associated with an intercultural interaction; and (c) having or not having the willingness and commitment to invest in the relationship” (p. 15). All of these are important in helping students acclimatize to study abroad destinations. Program officials must provide support for students during their period of adjustment and understand this adjustment period is paramount in having an enjoyable experience abroad.

Sheppard found that “on a micro level, or that of the individual, the success of international education programming comes down to personal outcomes. It is tied to impact on students, which is difficult to measure” (p. 34). Although it is difficult to measure exactly what impact international programming can have on students because of their varying and individual needs, it is possible to measure what students desire, what they want in international programs, where they travel, and what they want to achieve personally and academically.
If study abroad program officials view students as “consumers” they are much more likely to be successful in recruiting students and promoting study abroad initiatives. Levine and Cureton (1998) stated that students “want their colleges nearby and operating at the hours most useful to them, preferably around the clock. They want convenience: easy, accessible parking (in the classroom would not be at all bad); no lines; and polite, helpful and efficient staff service. They also want high-quality education but are eager for low costs….Their focus is on convenience, quality, service, and cost” (p. 50).

Like any service, students want to gain something from their program expense. In study abroad programs, most students want to gain academic or international education learning within a diverse social context. Therefore, study abroad program officials should market study abroad programs to students and parents in such a way that it is consumer-focused in order to be successful.

Sheppard (2004) suggested that “no one person starts at the same point or finishes with the same outcome. Not only is the impact of an international education experience different for each individual, both the length of the experience and the motivations for participating may differ as well. For many students one experience abroad, regardless of duration, can last a lifetime” (p. 35). Students who study abroad may elect a summer, a semester, or a year-long program, but it is those life-changing experiences of contact with new cultures, values, persons and society that ultimately influence students uniquely.

Second, the instructor is a key player in providing an academic learning environment similar to that in their home institutions and must evaluate their style of teaching and learning. To be successful, the instructor must heavily depend on their own goals set for the class, the class grades and expectations, and outcomes. In addition,
faculty must balance their goals of student success set for the course as well as the need to recruit, support, and increase enrollment in study abroad programming.

Third, the next key players are the administrators and collegiate representatives who may have initiated or helped fund the program. Success depends on how many students volunteered for the program, and if that number will double in subsequent years.

Finally, there a variety of external key players, from private foundations, grant and scholarship program leaders, community and civic organizations and many others. These external players may have helped launch and support the study abroad program, especially at the community college level where partnerships are crucial in successful programming.

Sheppard (2004) concluded that “on a macro level, success in international programming is determined by numbers: the number of study abroad programs, the percentage of international students of the student body, and the number of courses that contain international content” (p. 34). Taken together, students, faculty, administration and external constituents determine whether the study abroad program will be successful at present and in the future.

**Faculty Role in Student Learning**

In examining faculty and the roles they play in student learning, it is important to accommodate the different learning styles of unique learners. There are a variety of aspects of study abroad programming that can help teacher satisfaction and the role they play in student learning. Smith (2002) explained that “planning courses and teaching sessions with a range of learning styles in mind is a powerful way of responding to differences in students” (p. 69). Instructors should use visual aid tools, such as
blackboards, projectors, billboards and handouts in addition to traditional lecture based instruction to accommodate the unique learning styles of their student population, especially in study abroad programs.

Often times, students range in gender, age, background, culture and maturity, so instructors need to support their individual learning needs. Smith (2002) argued that in order to accommodate learning styles, instructors should “…be aware of the value judgments implicit in the learning style classifications they are using; their own preferences and the effect this is having on the way they teach; and their students individual preferences” (p. 69).

Even when abroad, instructors should hold “office hours” after classroom instruction to help those students who may need additional clarification on the topics taught, as they would normally do in their homeland. Additionally, instructors should understand the “learning styles” of their students by meeting them individually in the beginning and during the semester.

Stanitski and Fuellhart (2003) stated that:

It is incumbent upon the instructor to see that students develop an appropriate context for the trip. Each instructor’s recipe for grading will vary depending on the purpose of the course, length of travel, and the number of credits offered. An example of a syllabi should include the following components…course description, objective, course grading (to include citizenship or attitude, interaction, responsibility, willingness to share, enthusiasm, openness, and respect), research papers, journal entries, oral class report, students final assessment, group exercises, reading assignments, class lecture, field trips, research topics, participation, attendance, and guest lectures. (pp. 208-211)

If instructors are dedicated with helping their students overcome obstacles in global learning, they must include a variety of learning techniques with opportunities for students to integrate their academic environment with their host countries.
Furthermore, Osborne (2005) defended that “the fragility of student development is a strong argument for intentionality in setting goals and in designing assignments and other activities to further these goals. Certainly, students who have participated in debates do begin to think more critically about history…” (p. 49). Thus, another key component that instructors should incorporate in designing curricula include debate with other students and foreign nationals.

This is a good recipe for study abroad academic development and course purpose. Of course, each instructor has different goals and outcomes he or she wishes students to learn, but the end result is the same; that is, to provide a solid academic foundation where students will link study/research to practice/environment.

Stanitski and Fuellhart (2003) also suggested a guideline to help instructors prepare for study abroad programs and student concerns (pp. 205-206):

1. Set up course accounting system and accounts
2. Prepare two copies of syllabus/detailed itinerary (extra copies to parents)
3. Prepare readings for students (books, journal, newspapers) and develop field guide
4. Determine passport, visa, medical requirements
5. Discuss course goals and content, country/regions to be visited, registration guidelines, clear expectations for participation and grading, deadlines for papers/projects, behavior and appropriate dress
6. Encourage students to speak with past participants (set up a social event)
7. First Aid products, emergency numbers, consider renting an international cell phone
8. Revise syllabus based on experiences
Zhao, Kuh, Carini (2005) stated that “assuming institutions view these as legitimate concerns, faculty members could be encouraged to promote the mingling of Asian international students with students of different cultures or backgrounds in group study and collaborative projects” (p. 226). The purpose of intercultural “mingling” is a powerful tool in encouraging students to communicate and appreciate diversity. In addition, group work can promote tolerance and respect of individuality, especially in study abroad programs.

**Teaching Satisfaction**

Weeks (2000) explained the need to “improve current teaching practice or prepare teachers to cope with a changed and ever changing environment…we came to know our strengths and our weaknesses. We recognized the need to make our course more flexible and customer focused. We needed to take a practical and scholarly approach to teaching development” (pp. 65-66).

But in order to provide instructors with the right educational tools to help students achieve higher learning, the question is not which objective to use, rather how to use both objectives in satisfying the main goal of educational improvement for educators. Therefore, it is necessary to evaluate the instructor’s individual role and satisfaction. For example, the instructor should self-evaluate himself or herself, highlight both strength and weakness in the course success. Only then can teaching satisfaction be improved and emphasis placed on student learning and educational improvement.

Duke (2000) found that “as more universities become involved in study abroad programs, matching instructional activities with the style of study abroad tour will help professors to develop effective course delivery for various levels of learning activities”
This helps increase student cognitive development by incorporating educational practices in an international setting; therefore, instructors must be willing to explore new aspects of teaching and learning, such as site visits and excursions and relate external visits to classroom instruction.

Furthermore, by engaging instructors in professional development activities, they can then develop the necessary instructional goals and academic guidelines for classroom practice. In addition, Festervand and Tillery (2001) proposed that “one of the most direct professional development results sought and provided by a study abroad experience is the grounding of concept and theory in reality, an outcome directly transferable to both future teaching and research activities” (p. 109). Just as students need learning and development tools to help them succeed, instructors need strategies and tools to help them develop their necessary skills to support positive program outcomes.

Festervand and Tillery (2001) further advised that “the faculty members participation in a short-term international experience will result in the generation of significant intellectual growth. In some instances, new knowledge is acquired through overt, concerted efforts…and provide the basis for developing new and richer teaching and learning materials gleaned from direct visits with representatives of industry, education, and government in another country and participation in its daily activities” (pp. 109-111).

If instructors participate and collaborate with international partners (both academic and non-academic), the opportunities for cultural and international higher learning is very great. Faculty can enjoy meeting and connecting with international faculty and officials that help them develop strong curriculum and program components.
In addition, instructors who are able to adjust to the international academic setting are likely to bring a positive learning attitude to the classroom, in turn helping students understand the new culture.

Festervand and Tillery (2001) explained that “regretably, faculty often carry biases, sterotypical images, and misperceptions into their everyday activities. Awareness of such attitudes, inaccuracies, and behaviors is critical, as faculty may perpetuate these misrepresentations through the classroom. Specifically, in teaching and researching international subjects, faculty members must be mindful of how such biases may be transferred to their students and colleagues” (p. 110).

Although it is possible for some faculty to encounter negative situations abroad and may bring that negativity to the classroom, such bias can be reduced by preparing faculty ahead of the trip for cultural differences, providing professional development tools to help them cope with difficult situations, and providing counseling and other resources for faculty while abroad. For example, on-call advisors and program officials should be available to assist with faculty with concerns or problems.

Good instructor preparatory is necessary to ensure that highly qualified and trained individuals can lead and instruct educational programs abroad. Stachowski, Richardson, and Henderson (2003) recommended that before going abroad, instructors “are required to undergo extensive preparation (including seminars, readings, abstracts and papers, workshops, sessions with consultants from the host cultural groups) for the cultural values, beliefs, lifestyles, and educational practices in the placement sites they have selected” (p. 54). Although preparatory programs are important, is it possible to engage instructors in study abroad programming?
Stachowski, Richardson, and Henderson (2003) noted that “careful observation, reflective study, and cultural participation will allow teachers to gain knowledge, appreciation, and insights, moving them beyond stereotypes to a deeper understanding of the backgrounds, beliefs, and traditions of their pupils. Only then can they begin to teach in culturally relevant ways, incorporating their pupils' cultural values into classroom instruction at every level” (p. 62).

**Faculty Development**

In order to engage the instructor, program officials must provide avenues for teacher support, learning and participation opportunities, satisfaction and bonus incentives; in other words, to equip the instructor with the necessary intellectual and social competencies so that he or she can educate and help students learn in an international environment.

Floyd, Walker, and Hurd (2002) suggested that some ways to support faculty development could include the following:

- Create a policy that identifies international activity as a criterion for faculty advancement and support policies for encouraging faculty "first-hand experiences abroad"

- Support faculty who design and implement curricular options for experiential learning, including study abroad

- Provide administrative and staff assistance for faculty to encourage faculty to devote their time to focusing on learning and not simply on the technical aspects of planning details of a trip (pp. 66-68).

Gleazer (1998) explained “faculty and administrative personnel alike can benefit from utilization of job enrichment theory which will improve the quality of their participation by providing new approaches to establishing roles and the reorganization of institutional structures” (p. 168). In addition, Cohen and Brawer (2003) defended that
“compared with university faculty, community college instructors are more satisfied with their salary, the reputation of their department, and their institution….they are less satisfied with the quality of their students, teaching load, rigidity of their work schedule, and opportunities for scholarly pursuits and professional recognition” (p. 93).

College administrators and program officials must work with instructors and faculty boards to avoid dissatisfaction and “burnout” of faculty from overloaded teaching schedules. In addition, instructors must have course flexibility and administrative support to help them achieve student success while abroad and continue to have support when they return, including professional development opportunities.

**Classroom Learning Environment**

There are a variety of learning tools and techniques that instructors must incorporate into their study abroad classroom environment. Textbook assignments, host speakers, and interactive group sessions are all important parts of helping students be actively involved in the learning process and instructors must also take into account their unique backgrounds and unique styles of learning. But also important are learning models and techniques that suggest best practices.

**Learning Models**

The Wingspread Report (1993) raised three main issues and questions important to student learning:

1. Taking Values Seriously: In what ways do our institutional programs promote shared values among our students? How does our core curriculum of required courses respond to the needs of our students for a rigorous liberal education?

2. Putting Students Learning First: In what ways could we do a better job of helping our students attain higher levels of knowledge and skills?
3. Creating a Nation of Learners: In what ways have we organized our programs to develop and support a capacity for lifelong learning among students?

These three questions should also be evaluated in study abroad programming in order to provide effective student learning.

In viewing community college study abroad programs as a learning program, then it is possible to apply the learning college principles suggested by O’Banion and Cross (1997):

- The learning college creates substantial change in individual learners
- The learning college engages learners as full partners in the learning process, with learners assuming primary responsibility for their own choices
- The learning college creates and offers as many options for learning as possible
- The learning college assists learners to form and participate in collaborative learning activities
- The learning college defines the roles of learning facilitators by the needs of the learners
- The learning college and its learning facilitators succeed only when improved and expanded learning can be documented for its learners. (p. 47).

Simply put, most community college study abroad programs accomplish many of the above tasks by providing students excellent learning opportunities abroad, helping students make collaborative communication efforts with other students, allowing the instructor to be more of a guide and supporter of student learning, and of course helping students with their own choices and decision-making in their learning process.

De Vita (2001) proposed eight types of learning styles (table 4, p. 172):

- Active: group projects; brainstorming; learn-by-doing and problem-solving exercises
- Reflective statements: ‘functional pauses’ for reflection and evaluation
• Sensing case studies: examples and explicit links to the real world of business

• Intuitive theories and models: space for abstraction and conceptualization

• Visual trigger videos and visual organizers: such as charts, maps, Venn diagrams, etc.

• Verbal traditional lecture: oral presentation

• Sequential integrated progression of topics: breaking information down into smaller parts

• Global: a two-step approach combining specific-to-general and general-to-specific elements

These types of learning can be applied to different learner modes. For example, students may learn from typical oral presentations and lecture styles, but may find active, problem solving type material more interactive and more beneficial to suit their individual learning styles. In addition, Hung, Chee, Hedberg, and Seng (2005) proposed that “scaffolding envisages a learning structure and framework for a learner to gradually move along a continuum (figure 1)” (p. 163).

Hung, Chee, Hedberg, and Seng (2005) further explained that “the effort is to develop appropriate identities in learners. At each stage of the scaffolding process, an evolving process of interactions between students, instructors, problems, and the supports given must be a dynamically negotiated interaction” (pp. 166-175).

This addresses the concept of identity formation and participation. Furthermore, scaffolding can be used in creating a community of learners who are all responsible for
their own learning experiences in study abroad programs. This allows the learner to gain an academic foundation and social experience abroad, but with the support of the instructor, program officials, and other student participants.

In addition, Smith (2002) advocated that “there are positive benefits for all students in recognizing and valuing differences inside and outside the classroom, acknowledging how background and experience shape individual perceptions and attitudes, and how learning how to learn can be the most empowering learning of all” (p. 69). This is especially true in study abroad learning where students have the opportunity to really understand a country’s historical and social demographics and link classroom knowledge to practice outside of the classroom (i.e. language learning, visiting historical sites, etc).

Sheppard (2004) explained “in order to achieve the desired outcome of international education programming, and in order to get students to think outside their boxes, it only makes sense to start from inside the box” (p. 37). Most students would have likely taken courses at their home institution and experience “traditional” academic learning by way of lecture and examination. In order to get students to “think outside the box,” educators must engage them at a higher level; that is, help the student link theory (textbook learning) to practice (environment).

For example, if an instructor teaches a subject on Greek mythology in Greece, the student should be encouraged to visit the architectural ruins or mythological statues to link the pages in the textbook to actual reality. Only then can the student begin to have a deeper understanding and greater value of the course material being taught and the culture.
Teaching and Learning Strategies

Stanitski and Fuellhart (2003) advised that “it is also likely that that some specific topics may be best covered through independent projects, presentations, or labs in the field, while others are…engaged using guest lecture/guided tour format—either by faculty or guest speakers from the area or study or simply by observation” (p. 204).

Depending on the type of models the instructor wishes to use in student learning, students learn in very different capacities, and should have a variety of learning options to choose from to meet their course goals. Instructors who meet the needs of their students will most likely see a positive educational outcome reflected in their grades and course evaluations.

Duke (2000) explained “often, experiential learning methods use the concepts of collaborative learning activities that typically involve students working in groups to solve problems or understand meanings” (p. 157). This allows students to learn and work with other students who may have a completely different way of thinking and learning. But at the same time, instructors using these methods of learning must take the necessary steps to ensure that all students have an “equal” stake in the group project and that no one student in the group is left to finish the project.

Classroom lectures coupled with guest speakers, interactive group work, and technology can provide different types of learning for all types of students. Duke (2000) noted that “lectures are perhaps the most familiar technique for a professor leading a tour and for the students who are participating. Adjusting lectures to use the international setting for special examples is common and advisable” (p. 157). Thus, for those students
that may not learn as readily from lectures then have other options to successfully complete the course in a fun and new environment.

Depending on the course, open book exams may be a possibility, but study abroad programs must be careful to maintain a strong level of academic quality as well as some flexibility. Duke (2000) found that “conventional test formats (multiple choice and closed-book exams) are less popular in study abroad tours apparently because other learning activities in the courses are so much more engaging. Students have suggested that, where possible, open exams (open book or open notes) with more integrative question styles are preferable in the study abroad setting” (p. 159). Therefore, instructors must be able to alter course content using a variety of test formats and suiting individual learner styles as necessary.

In addition, Duke (2000) indicated that “journal writing has been suggested for many different applications in education. Observations, analysis, and insights are communicated through active involvement by finding examples, integrating concepts, increasing cultural awareness, and encouraging discussion of global marketing issues” (p. 159). Student journals can be an excellent source of enrichment and personal reflection without the stress of deadlines. Students often enjoy the chance to reflect on daily activities or aspects of the program and instructors should encourage this type of participation, whether for grading, extra credit, or other assignment.

Henning (2005) noted that “perhaps most important, professors show they care by valuing student thinking-by listening closely, by regularly crediting and referring to student answers, and by incorporating student thinking into their own” (p. 93). If the
instructor is willing to help students understand and learn by giving them constructive feedback, students can then feel responsible for their own learning and development.

Henning (2005) further explained that “students need to feel comfortable with each other, as well as with the professor. Working together in groups gives them a chance to build relationships, to hear different perspectives, and to try out risky ideas” (p. 93). In addition, language learning can be truly successful with group discussions as well as allows students to develop friendships and peer relationships within the classroom.

Duke (2000) suggested a number of ways to engage faculty and students in effective teaching and learning strategies:

- As with conventional domestic courses, tests may be varied in style. With single locations and longer tours, students have more opportunity to prepare for exams
- Traveling between multiple locations reduces study time available and increases the diversions
- Conventional test formats (multiple choice and closed-book exams) are less popular in study abroad tours apparently because other learning activities in the courses are so much more engaging. Students have suggested that, where possible, open exams (open book or open notes) with more integrative question styles are preferable in the study abroad setting
- Journal writing has been suggested for many different applications in education
- Observations, analysis, and insights are communicated through active involvement by finding examples, integrating concepts, increasing cultural awareness, and encouraging discussion of global marketing issues
- Group projects offer the opportunity for interactive learning from peers and challenge all group members to be fully engaged in the process
- Smaller individual projects can be used to cover specific topics in a course.
- Conventional comprehensive group projects may be used to integrate many topics across the entire length of the course. (pp. 159-163)

Besides structuring the academic program to meet the needs of students and faculty members, another interesting point that can be raised is whether courses should be graded
on a pass/fail or letter grade basis. Mervin (2003) found that “if the grading policy of study-abroad programs is on a pass/fail basis and this is found to have a significant affect on study effort, then students may be systematically underachieving academically in these programs” (p. 150).

Pass/fail could also reduce the amount of stress of achieving grades while abroad in appropriate classes. Given the variety of courses, a reasonable assessment would be for major courses to be letter grades, while leisure or general education courses are available as pass/fail or letter grade, giving the students the opportunity to be responsible for their own learning and development.

Terenzini et al. (2001) researched “claims about the educational benefits of racially or ethnically diverse classrooms. Level of classroom diversity was related at small – but statistically significant – levels to students reported gains in both their problem-solving and their group skills” (p. 527). Therefore, student learning is impacted by diversity, and at a higher level, international education can play a vital role in identity development and global awareness.

**Language Learning**

McKeown (2003) stated that “the percentage [of students] answering that they became interested in study abroad because "I wanted to learn another language" increased from 22.73% to 41.56%” (p. 90). One learning tool in language learning that instructors can force students to “think outside the box” is to encourage students to exchange conversations in class with other class members and with a native learner from the host country. After the student is confident in language learning, he or she can begin to explore their newly learned language with the native population. Language attainment
and immersion in foreign language acquisition are two of the most common reasons study abroad, but not the only reasons.

Astin (1993) found that “participation in a study-abroad program has its strongest effect on self-reported growth in foreign language skills (Beta = .23). It also has weak, but significant positive effects on most satisfaction outcomes and on self-reported growth in Cultural Awareness” (p. 380). Therefore, study abroad programs do increase competencies in language learning and cultural awareness. Study abroad programs should encourage and promote advanced foreign language learning and assessment of credits based on level of competency.

For example, Lambert (2001) explained that “a number of college and university language departments discount high school language instruction, putting students back to the beginning level as they enter collegiate language instruction, or they allow very limited credit” (p. 349). This can illustrate the importance of study abroad programming; that is, students not only learn in the classroom, but as an added incentive, they have the opportunity to practice language conversations with nationals of the host country.

Lambert (2001) further proposed that “if we are to nurture the cumulative growth of language competence in individuals we will also need diagnostic instruments, that is, tests that will enable teachers and learners to determine how far the learner has come and which aspects of competency need to be rejuvenated or built upon” (p. 348). These tests or evaluation techniques are imperative in college-level courses. Study abroad programs could become innovative leaders in this type of evaluation since language learning abroad is very common and popular and can serve to correctly measure language proficiency.
Whereas language learning in the United States may be limited to mostly classroom instruction, students abroad will have the opportunity to converse with natives of the country and learn specific dialects of that region that may also help language proficiency. McCabe (2001) explained that “the exposure to another country, and the development of language skills, no doubt provides the student with a frame of reference, which allows him or her to consider experiences, thoughts, and ideas, outside the immediate framework of just two cultures (United States and France)” (p. 142). These experiences, thoughts, and ideas are important in helping students learn the new language and use that language while abroad.

Lambert (2001) also advised that “students returning from study abroad programs represent a similar resource. For students who have developed substantial FL [foreign language] competencies, new pedagogical strategies beyond the study of literature should be developed to enable them to reach truly high levels of proficiency” (p. 351).

Therefore, students must be able to apply there newly learned languages in their US home institutions by way of student programs and services. Without the adequate support services in place, student language learning will suffer due to lack of usage; thus, study abroad programs must provide meetings, socials, and other program events so students can reconnect and form friendships that will enable them to continue to practice language skills.

Lambert (2001) suggested “in truth, if students will ever need to use a FL [foreign language] as adults, the chances are great that it will be different from the language they studied its school” (p. 360). So clearly, there is an advantage of study abroad programs in
the areas of foreign language learning because students have the opportunities to practice their languages in conversations with native speakers.

**Student Learning Process**

Kozma (2003) explained that “constructivism envisions a learning process in which students set their own goals, plan their learning activities, and monitor their current levels of mastery and understanding in preparation for lifelong learning” (p. 2). Therefore, bridging qualitative thought with modern reality can be applied to various student activities, such as sharing group work, understanding and critiquing class work, embarking on tours, fulfilling extra credit assignments, exchanging journals with other classmates, and allowing classmates to comment and analyze the work which in totality forces the student in a more responsible role.

If educators and staff give students the specific tools they needs to gain the necessary skills and understanding of diversity and different values, can they truly become successful global citizens. Levine and Cureton (1998) found specific elements that undergraduate students need in their curriculum include: “communication and thinking skills…critical thinking, continuous learning, and creativity. They need to comprehend how values function in our society and in their lives: the changing nature of values over time, how values fit into cultures, the place of values in an individual’s life, and what happens to minority values in a society” (pp.161-165).

In addition, Gleazer (1998) emphasized that “the overall mission of the community college is to encourage and facilitate lifelong learning, with community as a process and product. In addition to the learning requirements imposed by changing culture and environment, changes in the maturation of the individual will affect
educational needs” (pp. 16-18). Lifelong learning is the key ingredient in study abroad programming. As the student participant reaches out to learn and understand new cultures and people, they grow and begin to develop a more global identity.

Northedge (2003) stated that “students need practice at participating both vicariously, as listeners and readers, and generatively, as speakers and writers, so that they can develop identities as members of the knowledge community and move from peripheral forums to more active, competent engagement with the community’s central debates” (p. 31). Therefore, active learning and curriculum that engages the learner are key concepts to build a strong knowledge base and facilitate lifelong learning.

**Curriculum**

Smith (2002) explained that “there has been a shift towards a more vocationally relevant higher education, towards a broader curriculum allowing more student choice, and towards helping students learn how to learn. Students are coming into further and higher education from a more varied range of backgrounds, and responding to their individual strengths and needs is rightly a concern for teachers” (p. 63).

For example, in programs that emphasize cultural, ethnic, and global differences, such as study abroad programs, the need for teachers to be sensitive to and apply different learning techniques in the classroom is paramount for higher student learning, especially in a foreign environment. The instructor must be aware of not only the individual student needs, but must be able to provide proper resources that help link their classroom learning to their new environment.

Smith (2002) also noted that “courses with a strong element of practical and individual project work are more likely to draw on the full range of these learning styles”
Depending on the individual student learner needs, a variety of academic work, such as traditional tests, oral communication, group and individual work, external site visits and journal writing would give learners a variety of tools to not only receive a successful grade in the course, but to also gain valuable learning experiences.

McKeown (2003) found in his research study that “students who responded, ‘it was good for my major’ increased from 38.64% to 57.14% (Z=1.96, P=.050)” (p. 91). Clearly, students are concerned with attaining a well rounded academic experience as well as pursuing a global understanding.

In addition, the course goals and class material must meet or exceed the expectations set by both instructor and program officials in order for students to gain a well rounded academic and cultural experience. Stanitski and Fuellhart (2003) explained that “a critical and related pedagogical concern that must be addressed is precisely how the various goals of the course will be met and the types of activities that will be undertaken to support those goals… key issues revolve around prerequisites, course content, location, the learning goals of the trip, and of course, cost” (pp. 204-207). Instructors should dedicate a portion of class time to explain how the course goals are related to certain class activities, such as tours, excursions, or other external trips as well as provide a breakdown of additional costs before the trip.

Weeks (2000) suggested that “benchmarking, can in fact, be applied to whole courses or to the processes involved in the development and implementation of a course” (p. 64). This is important because administrators can benchmark community college study abroad programs to see if this in fact will help instructors apply various tools and techniques to improve classroom instruction and student learning.
Furthermore, allowing students to be in control of their own learning and development is crucially important in helping them not only adjust to the study abroad program, but also in evaluating their own academic progress and awareness of cultural and ethnic differences.

Emes and Cleveland-Innes (2003) described eight core competencies that can be very important in assessing student progress in academic courses while abroad:

- Critical and creative thinking
- Analysis of problems
- Effective oral and written communication
- Gathering and organizing information
- Logical calculation, mathematical ability
- Abstract reasoning and its applications
- Insight and intuition in generating knowledge
- Interpretative and assessment skills. (pp. 57-58)

The authors further explained that:

Learner-centered curriculum will allow students to participate more fully in the arrangement of their own learning experiences, such that they can continue to do so for a life-time. This is a role adjustment for students that will require a complementary role adjustment in expectations of faculty…while faculty set boundaries around the sequence in which courses will be delivered, the knowledge outcomes, and the standards of assessment. (pp. 62-63)

Thus, faculty and program coordinators must recognize that innovative curriculum changes will impact both student and instructor. Lifelong learning will play an important role in helping students mature and develop strong global identities, and at the same time allow faculty to assess student performance and course success.
Wagenaar and Subedi (1996) noted that “the program…includes five central elements: language, lectures, a field excursion, a family experience, and independent research and writing” (p. 275). It is also very important that the courses and overall curriculum be appropriately assessed by all academic institutions, the faculty/staff and their departments, as well as internal and external committees that can have an impact on the structure and transfer of the course. But equally important is the relationship between faculty and students when abroad.

**Student Housing and Friendships**

In evaluating housing and accommodations for students in study abroad programs, it is important for student affairs professionals to provide information about location and proximity to classrooms, roommate matching, study areas, and recreating areas. Equally important are laundry facilities, computer areas, restrooms, and dining areas that must be addressed before students embark on study abroad programs and should be included when addressing housing options. Festervand and Tillery (2001) stated “as in other developed countries, Japan offers a number of lodging alternatives including university dormitories, hotels, hostels, and home-stay options” (p. 108).

Study abroad student affairs coordinators and instructors must be included in helping students become acclimated to their new surroundings, including housing facilities and social areas. Hill (2004) explained that “administrators were especially eager to introduce a new residential prototype, even if it meant that density had to be reduced. They worked closely with student groups to find a balance between academic life and social interaction that is so critical to the life of the school” (p. 28).
In addition, students should be consulted about types of housing and facilities they need in order to be successful. Often times, students will socialize, make friendships, and study in their residence housing, so study abroad programmers should consider these aspects in the planning stages. Hill (2004) also proposed that “…the benefits of on-campus housing can be measured and marketed: access, convenience, security, and support. To maintain current rates of occupancy, however, new facilities must be able to accommodate the types of services and living conditions that students want and need” (p. 34).

If program officials expect students to be successful in study abroad programs, then they must provide easy access to classroom and housing options, convenient locations of housing and services, good security systems, especially for students taking night classes, and of course student support services, such as dining and laundry facilities and resident advisors and/or counselors.

Hill (2004) further recommended “many colleges are grouping students in residential suites to facilitate better communication to foster social exchange…the "living and learning" policies that are fast becoming the educational standard” (p. 35). Thus, housing facilities abroad must have clean and inviting living conditions, especially if students elect roommate options. It is logical that cramped, unclean quarters would not be conducive to a healthy living environment nor a student learning environment. In addition, study abroad programs must carefully consider the “living and learning” idea to accommodate student needs.

The authors of the International Association of Student Affairs and Services Professionals (IASAS) manual explained that “student housing must provide a safe,
comfortable, well-maintained and supportive on-campus accommodation for students; integrate student accommodation goals with those of the academic programme of the institution; and create opportunities for students to get involved in leadership and governance opportunities in residence life, organizations, and activities” (p. 47).

For example, study abroad program officials should implement such activities like welcome socials and group functions so American students can meet other students from around the world. Also of great importance is for students to elect a group leader, have choices in excursion and field trip options, and create friendship circles that ultimately will impact their international experience. Without a social network, feelings of isolation and loneliness could become problematic; thus, student affairs professionals must carefully plan the program structure and activities for students starting with the first day abroad.

In addition, research conducted by the Australian Department of Employment, Education, and Training (1993) discovered that “Australian institutions provide a range of student services...include catering, retail facilities, sporting facilities, social, and cultural activities, and political representation and advocacy” (p. 21).

Therefore, student affairs personnel must try to meet the demands and needs of the students by providing such services that would help them adjust to life abroad. For example, simple excursions to shopping centers and cultural events (representative of the host country) are bound to peak the interests of students wishing to learn more about that culture. In addition, food services and other approved venues near the foreign institutions are much more interesting and appealing for students to try new tastes and delicacies. Simply providing residence hall foods that try to cater to American tastes, such as
“burgers and fries” do not allow the student to really explore the tastes and differences of their new environment.

Macintyre (2003) explained that “housing that acts to group students close to the teaching areas gives a coherence and unity to the broader student population” (p. 111). For example, students enrolled in a German language course abroad will have course content and language learning in common and can communicate and socialize with one another in their “living and learning” housing area. Similarly, students enrolled in a literature course could form study groups in the housing area to study class materials.

Macintyre (2003) further suggested that “it is clearly in the interests of universities to encourage high quality student housing, since this will act to attract new students and it will act to encourage strong links between universities and their surrounding localities” (p. 117). But, universities are not the only institutions that should provide quality housing. Community colleges should form partnerships with other colleges and universities abroad when examining acceptable living accommodations for American students. However, partnerships with the local communities abroad will allow students to interact with the host countries people and cultures.

Kaya and Weber (2003) noted that “the results showed that students who feel crowded in their residence hall rooms tend to have poorer social and personal adjustment…housing administrators might consider implementing programs to assist student's transition to a college environment. These developmental programs could be formed to enhance social contact or avoid unwanted social interaction in their residential settings” (pp. 88-89). Study abroad officials must make sure that overcrowding in housing does not occur in the destination country and must ensure that living quarters are
clean and spacious. Students may often return to their rooms after an early class to study or other activities.

Kaya and Weber (2003) further explained “programs that assist students with adjustment to campus life and interpersonal relationships could also benefit residential life staff by reducing the number of roommate conflicts and increasing university retention” (p. 89). Thus, a brochure with roommate checklist could be developed to eliminate roommate tensions and set a schedule to ensure respect for each other.

An excellent suggestion to alleviate constant roommate problems or tension could be for program officials to intervene. For example, Dusselier et al. (2005) suggested “residence hall staff who wish to ease the stress caused by roommates may wish to consider roommate matching when doing roommate assignments…and provide a series of questions for roommates to discuss with one another, such as preferences for room temperature, lighting, sleeping schedules, and rules for invited guests” (p. 22). Study abroad program coordinators must try to alleviate unnecessary stress factors for students while abroad. One source is to promote roommate matching, perhaps allow the students to converse with each other before the program and get to know one another better.

Dusselier et al. (2005) also found that “residence hall environment factors played a prominent role in the amount of students self-reported stress. Students who were unable to study in the residence halls experienced higher levels of stress, probably because most students living in residence halls prefer to study in the residence halls when they are engaged in study outside of class” (p. 22). Study abroad officials must have adequate facilities for students to be able to study in the residence halls, whether that is an actual designated “study area” or library, or a desk and chair in each dormitory room, officials
must support student academic success as the primary goal.

**Student Support Services and Programs**

Sheppard (2004) stated that “international education takes a commitment to working with individual students to use international education opportunities to foster personal growth and meet individual educational and career goals” (p. 40). Student services and student support staff must be willing to work with individual students, academically, and personally, so they can achieve their goals.

In addition, students must also have access to various aspects of student services, like housing, meal options, travel opportunities within the host country and many other student service necessities while abroad. Student support staff must make sure that students are well prepared for their travel abroad and even designate a student support staff member to accompany students abroad.

Festervand and Tillery (2001) explained that “faculty members, administration, and the university as a whole must accept and satisfy the responsibility for preparing students, as well as faculty, for the challenges and opportunities increasingly found in the global marketplace” (p. 106). Along with specific program components, faculty and program officials must set time aside to discuss course content, culture, and the environment they will be living in as well as providing ample resources for student recruitment in study abroad programs.

Floyd, Walker, and Hurd (2002) suggested the following strategies:

- Engage stakeholders such as faculty, student affairs staff, students, trustees, community members, and support staff in meaningful ways to address the educational benefits, issues, and obstacles of study abroad programs
- Implement student orientation programs prior to every study abroad event
- Collaborate with similar community colleges to form meaningful alliances. (pp. 66-68)

The manual that was developed from the UNESCO world conference is a wonderful and useful tool in guiding programs and services in student affairs. The authors suggested “...that higher education plays in the improvement of the social, cultural, political, economic, and environmental aspects of the global society” (p. 1).

**Types of Support Services**

There are a variety of services that are not only important to domestic students, but also students who travel abroad. Some of these services include: “academic advising, counseling, admission process, bookstore services, community service learning, dining and food services, disability services, health services, orientation services, sports and recreational services, disciplinary conduct, registration, and housing options” (pp. 25-48).

Each of these areas should be examined when assessing student support services in study abroad programs. In addition, Cohen and Brawer (2003) suggested some other areas for evaluation: “students need to be managed for the sake of institutional order, a rationale underlying not only the counseling of students into proper programs, but also registration, student activities, orientation, student government, and record keeping functions” (p. 197).

All of these areas are especially important in student abroad programming. Students must be able to have a variety of services that meet their needs while at the same time keeps the program function organized and well planned. Such activities like orientation and registration must take place in pre-departure and post-departure workshops and socials, so that the student has ample time to become familiar with
important travel and study abroad aspects ranging from course curriculum and content to field excursions.

**Safety and Security**

McKeown (2003) stated that “like many Americans, many study abroad students and their parents have expressed an increased concern about air travel safety and heightened awareness of U.S. interests being targets for terrorism abroad” (p. 85). However, with good support service departments at the university or college coupled with informative support staff, parents and students should be ready to ask questions and have concerns about safety abroad. Support staff should be able to address questions about political problems, monetary theft, or violence against Americans as well as typical pre-departure advisement.

Hoye (2003) advised that:

Some colleges give each program participant a small booklet containing emergency information, including: what to do and where to go in the event of an emergency; names and local telephone numbers of all faculty members and administrators for the program; 24-hour contact information for the home campus; the telephone numbers and addresses of the local hospital, the U.S. Embassy, and embassies of governments friendly to the United States; and local addresses and telephone numbers for each student. (pp. 14 -15)

In addition, law enforcement and other agencies can also be excellent resources for study abroad students that are unsure of who to contact in an emergency.

Furthermore, McKeown (2003) concluded that “these results suggest that since September 11, more students consider study abroad an experience that will enhance their academic and professional careers” (p. 94). Students are concerned with safety, but will not allow the threats of terrorism and political conflict sway them from studying abroad because they want to discover the benefits of academic and global learning.
Thus, safety and communication must be important components of study abroad programming, so that students and faculty are safe while abroad and have adequate resources and communication with program officials if problems should arise. Cudmore (2005) explained that “Ontario and Canada have a well-deserved reputation for safety, tolerance, and the strong support for multiculturalism that make it a desirable destination for international students” (p. 55).

Scharman (2002) suggested that “to adapt an at-home policy appropriately to a new setting, it is vital to have accurate information about the host country and city, current political situation, laws, transportation, and other pertinent issues” (p. 70). It is important for study abroad officials to present accurate and specific information about the international host country and this information should not only be presented to the students, but also to their parents so that everyone is properly educated about possible risks abroad.

**Student Orientation and Workshops**

Just as students must understand the risks and threats abroad, they must also be aware of the culture, lifestyle, and language of the host country. Many students underestimate what a study abroad experience might entail, and for outgoing students willing to learn and explore, the possibilities abroad are endless! For other students that may be reserved, quiet, and recluse, study abroad programs may be the source of homesickness and unhappiness for them. Thus, pre-departure orientation workshops are essential for providing information for students, allowing students to get to know one another and form friendships, and determine whether a study abroad program will fit their needs.
Kitsantas (2004) noted that “it may be suggested that cross-cultural training programs take into consideration the critical role that goals play on student's development of cross-cultural skills and devise pre departure workshops to (a) assist study abroad students establish goals for their international experience, which primarily include aspiration to learn more about the culture and people in the country in which they will study; (b) reinforce students goals to become more cross-culturally sensitive and knowledgeable and (c) change students social goals into goals which focus on gaining cross-cultural sensitivity and understanding” (p. 448).

This allows students to be well prepared before leaving their home institutions while allowing students to ask questions in a comfortable setting and allowing students to socialize, a vital part of the educational experience.

Dolby (2004) described “the first challenge to their idea of an American identity came early, at the mandatory orientation meeting for all students traveling to Australia the following semester. As is customary at these meetings, nationals of the host country and former American study abroad participants are invited to briefly address the students on what to expect from their stay” (p. 163). For example, students and parents can have one-on-one discussions with participants and can determine whether that particular study abroad program is right for them and gives them an understanding of what it would be like abroad.

Stanitski and Fuellhart (2003) explained “all students should be advised to take at least one credit card, to purchase the International Student Identity Card (ISIC), for discounts and limited travel insurance coverage, to make sure that their health insurance policies apply when abroad, and to be sure that they have obtained (or renewed) their
passport and all necessary visas…and photocopies of all important documents be left with appropriate personnel at the university in case of emergency” (p. 201).

Therefore, students should make sure they have an item checklist of necessary items to take abroad such as Student ID, clothing and toiletries, shoes, first aid kit and other items. Staff and administrative personnel must make sure that parents and students are advised of appropriate personal items to take abroad in addition to course materials, such as textbooks, pens, and a backpack.

Wagenaar and Subedi (1996) stated that they “held several formal and informal orientation meetings to show slides and to lecture on special requirements of Nepali social life” (p. 277). Hosting only one workshop prior to departure is inadequate in preparing students for study abroad. Prior participants, program officials, instructors, and others affiliated with the program must be available to answer both student and parent questions in both workshops, seminars, one-on-one panels all prior to studying abroad.

Yet there must be an emphasis on responsibility, maturity, attitude, and behavior of student participants while abroad. These areas should be discussed along with the actual components of the program, academic, support services, student life, and any other areas that pertain to the study abroad program. Wagenaar and Subedi (1996) explained “we also meet with students and their parents in groups and/or one to one and identify all the concerns…housing, sufficient money, extracurricular travel, coursework, language, local transportation, meeting people and making friends, unfamiliar currency, adjusting to new customs, local food, health, homesickness, and climate…what behaviors, clothes, and the like are acceptable and unacceptable in Nepali society” (p. 278).
In addition, Zhao, Kuh, Carini (2005) explained that “student affairs personnel might focus on designing programs and activities to bring Asian students into contact with students from other backgrounds. Most campuses, for example, sponsor celebrations of different cultures” (p. 226). Program leaders can plan and implement special celebrations abroad. For example, if the study abroad program takes place over the 4th of July, a special picnic or barbeque celebration could provide a wonderful social event for interaction among international students and American students.

It is necessary to address certain aspects of study abroad, such as culture shock, daily activities, and many other functions in pre-study abroad workshops or mandatory meetings before students engage on study abroad trips. Scharman (2002) suggested that “some still underestimate the magnitude of adjustments required during an extended period of time away from home: exposure to a new culture, new customs, climate, monetary system, routines, food, living arrangements, and roommates- all in the absence of familiar support systems…feelings of homesickness, loneliness, and anxiety are not unusual and should be expected” (p. 71).

Equally important is student behavior abroad and understanding different customs and rituals before studying abroad. Scharman (2002) further discussed the important of understanding “communicating” abroad:

It is important to avoid offensive behaviors such as inappropriate dress as determined by local customs; greetings that may be misunderstood; lack of observance of quiet times or religious days; and disrespect for shrines, special markers, or sacred sites. Students should be aware that certain hand gestures, phrases, tones or levels of voice, and general deportment may convey unintended messages. Being respectful of restrictions regarding photography and off-limits areas, using neutral language when possible, and being open-minded can be helpful. (p. 73)
These topics should be addressed in pre-seminars. In order for colleges to accurately prepare their students for the cultural differences abroad, they must prepare their students, and even have their students read a brief program that should include cultural, religious, and ethnic differences.

**Medical and Emergency Concerns**

Going abroad is educational and exciting, but returning healthy and energized is just as critical. Knowing where to go and who to contact in a medical emergency should be discussed in both pre-departure and mid-departure workshops as well as having adequate health and medical coverage while abroad. Some programs will require that students have vaccination shots required for travel to foreign countries, such as India.

Hoye (2003) noted that “colleges should also ask students and faculty members-to verify that they will have adequate health insurance during the time while they are abroad. Some health-insurance policies do not provide such coverage outside the country, so institutions should advise everyone participating in overseas programs that they may need to purchase additional coverage on their own” (p. 17).

And lastly, students should be aware of their own common ailments, such as a flu or common cold, and should bring medications that they are used to taking rather than depending on the international country for supplies. Scharman (2002) suggested that “students should be encouraged to focus on eating a balanced diet, drinking plenty of water, getting adequate rest, maintaining hygiene routines, and bringing personal supplies (contact lenses, bug spray, Band-Aids, sun block, antiseptic, nail clippers) that may be hard to find on the trip…and keep medications in the original drugstore containers [with prescription copies]” (p. 75).
Kitsantas (2004) recommended “as businesses globalize and the demand for employees prepared for international assignments steadily increases, training programs designed to enhance and support students goals to develop their cross-cultural skills may be useful in maximizing these skills” (p. 448). This is important for support services to allow students continued educational growth by introducing more interactive internship opportunities while abroad to help support the study abroad experience. By interactive learning, students are more likely to gain a deeper understanding of the host culture than textbook learning alone.

**Field Trips and Excursions**

Schroth and McCormack (2000) explored that “study abroad students high scores on the Experience Seeking subscale suggest that their needs consist of seeking new experiences through the mind and senses by traveling abroad” (p. 534).

Whether these experience are exploring different regions, exploring new customs and cultures, or tasting a variety of delectable foods from different countries, the need for exploration (both from personal field trips and academic related excursions) is to be expected from students traveling abroad. In addition, it is each individual and unique experiences of students that will help them expand their mind and external boundaries to other aspects of their lives.

Schroth and McCormack (2000) also noted that “the present data also provide inferences with which to speculate about the cognitive processes that may explain different ways that individuals respond to cross-cultural situations” (p. 535).

That is, each student learns and encounters new experiences differently, but service learning (i.e., volunteer work, or specialized activities) during study abroad
programs can be important in allowing students to explore, learn, and work side-by-side culturally different people. Only then will students begin to understand and respond to “cross cultural situations” with a fresh glimpse into different civilizations, thus unknowingly transforming themselves into global citizens.

In order for students to have access to travel, it is imperative that program officials examine all travel possibilities, such as train, subway system, bus, taxi and suggest the most cost effective solution for students to get around in their new surroundings. Festervand and Tillery (2001) explained that “for groups of up to 15 students, such as our class, the use of public transportation is recommended. In planning ground transportation, both long-haul and local transport must be considered. As an option, unlimited mileage rail passes may be purchased” (p. 108).

In addition, there are other means of travel, such as multilocation tours that should be included in the study abroad program. Duke (2000) explained that “multilocation tours move from one location, city, or country to another during the academic session and attract students who are interested in seeing several different cultural areas” (p. 155). This is very important because it allows students the opportunity to view, learn, and participate in different regions, cultures, and meet with different citizens. But tours should remain only a portion of the study abroad program, the academic component must be the main focus of the program.

Furthermore, Langley and Breese (2005) proposed that “for students studying abroad to have a fully enriching cultural experience, they should live and study with students of the host culture. Study-abroad programs should include opportunities for both directed and serendipitous travel” (p. 320). Travel should be included as part of the
curriculum because the opportunities for students to explore and visit new areas, gives them tremendous confidence and control over their own learning and development.

Duke (2000) also noted “when arranging a company visit, it is advisable for the professor to provide the company with a discussion guide to ensure that the discussion focuses on the issues that are relevant to the course. By attempting to manage the presentation, the professor is more likely to have successful visits that maximize the course objectives” (p. 159). In addition, students should also have an overview of the company or international institution so they can prepare educated questions and discussion items for the guest speaker. It is this ability to seek out and investigate new environments, whether travel or visiting a company, that plays a vital role in their cognitive and intellectual development.

**Cultural Awareness**

How do program officials begin to assess elevated levels of cultural awareness and ethnic sensitivity in students that go on study abroad programs? How can they assess what that student has learned from the course and whether that student has connected what is learned in the classroom to actual reality? And how do they know if the study abroad program is successful?

Sheppard (2004) noted that “while different factors drive internationalization on individual campuses, there seems to be a common acknowledgement that the goal is to create an environment where students can become interculturally effective people and global citizens. International education offers students the opportunity to explore different countries, cultures, views, and ideals” (p. 34). And it is this interaction and
cultural awareness of the student about their surroundings that allows them to begin to understand their own benchmarks and goals of the program.

**Applications of Classroom Learning**

With proper instructional techniques and exploration of the country, the student can then begin to take what is learned in the classroom and apply it to the real-life situations. Whether it is language acquisition, archeological/historical knowledge, or cultural awareness of the destination country, the ability for students to make the connection between classroom academics and worldly comprehension and at the same time understand their own personal and academic objectives, is priceless. This is exactly what study abroad programs set out to accomplish, to empower the learner to be self-sufficient and responsible for their own learning.

There is a level of success that study abroad programs need to achieve in addition to the student, faculty, and administrative individual goals. Sheppard (2004) questioned whether study abroad programs “make students global citizens? What role does international education play in developing global citizens? Who determines if international education programs are a success?” (p. 34).

Wagenaar and Subedi (1996) suggested that “students also visit sites such as temples or monasteries, museums, hospitals, marketplaces, cremation grounds, and government offices to increase their exposure to and their understanding of Nepali social life and social structure” (p. 275). Instructors must help educate students about the link between what is learned in the classroom and actual sites so they can truly gain a deeper understanding of the culture and lifestyle of the international country.
In addition, Hellman, Hoppes, and Ellison (2006) suggested that “service learning moves students and faculty from the classroom into the community to work with underserved populations; resulting in enhanced critical reasoning, personal and interpersonal development, understanding the application of core knowledge, reflective practice, and citizenship for the student…” (p. 30). Instructors could incorporate such service learning credit as part of the curriculum, which allows the student full immersion with host nationals.

Geelhoed, Abe, and Talbot (2003) found that “encouraging intercultural interaction significantly influenced the level of intercultural acceptance and cross-cultural knowledge and openness of the Australian students. These students were also more likely to interact with other cultural groups within the larger campus community” (p. 5). Students who study abroad are more likely to be interested in learning new cultures and talking with native students. Instructors can encourage and support intercultural communication by assigning specific coursework to cultural awareness and group work.

**Cultural Competence**

De Vita (2001) explained that “the importance of cultural background in the development of individual learning style finds further support in the influence that culture-based educational experiences have in predisposing individuals to certain ways of learning” (p. 167). Thus, faculty must identify different learner techniques and target student needs.

Caffrey, Neander, Markle, and Stewart (2005) proposed that:

Cultural competence, then, is an ongoing process requiring more than formal knowledge. Values and attitudes are the foundation for a commitment to providing culturally competent care, and their development requires experiences with culturally diverse individuals and communities…an immersion clinical
experience in another country can result in dramatic affective changes in students values and attitudes, which affect their cultural competence. (pp. 234-240).

Students are more likely to adjust their values and attitudes based on encountering of different people and cultures; therefore, participation in study abroad programs directly influence changes in student identity development. Thus, cultural competence is a major part of identity development and the formation of new levels of global understanding.

Of most significance is students respect of new cultures and persons. Kitsantas (2004) advocated that “study abroad programs significantly, contribute to the preparation of students to function in a multicultural world and promote international understanding” (p. 447). But program officials must also take into consideration that students who are truly interested in learning the new host culture will dedicate a greater amount of time and energy than students who are not as interested. Therefore, to function in a multicultural world is to have a universal respect of internationalism.

**Cultural Identity**

Dolby (2004) argued that students “national identity shifts from a passive to an active identity in the global context” (p. 162). This suggests that as students encounter their new environment, they begin to analyze their own national identity, whether subconsciously or not, students compare the new environment to their home environment and begin to modify their identity based on new learning.

Dolby (2004) also stated that “most significantly, all students encountered the multiple articulations of ‘America’ that exist around the globe and the disjuncture that exists between the United States and America” (p. 171). Therefore, students became familiar with how others perceive and understand “America” and the “American Culture” and how American pop culture (music, movies, clothing labels, etc) impact others around
the globe. And as students begin to see how others perceive them, they start to evaluate their own biases and prejudices of other cultures, leading to a change in their intellectual development.

There is a very positive aspect between students living and learning in foreign countries that is evident in learning culture and language. Duke (2000) explained that “study abroad programs are accessible and allow students to experience different places and cultures” (p. 155). And it is this exposure to cultural that allows students to practice their language skills in a relaxed environment. For students that go abroad to practice and improve their foreign language skills, the impact is obviously greater to speak with citizens in their native environment.

Wagenaar and Subedi (1996) indicated that “because the culture is so different from their own, study in a developing country provides American students with unique opportunities to learn about culture and society. In short, the experience enhances multiculturalism: the practice of emphasizing the contributions to modern society of diverse racial/ethnic, gender, class, and other groups and of other cultures” (p. 272).

Therefore, the major goal of study abroad programs is to provide academic learning within a new and exciting environment that will broaden students thinking not only about academics, but about the culture and society that they reside in. Merva (2003) explained that “study-abroad programs have among their goals to provide students with an intercultural experience enriching students understanding and personal growth in the context of continuing their academic studies” (p. 154). This “intercultural experience” is an added benefit that may not be readily available on domestic college campuses because students are comfortable and relaxed within their common environments.
Technology

In order to explore how technology can be infused into academic curricula, Surrey et al. (2005) explained the concept of the RIPPLES model is “resources (fiscal), infrastructure (network), people, policies, learning, evaluation, and support” are all major components of successful integration of instructional technology into higher education” (p. 328).

Without adequate financial support for new technologies, the infrastructure would be weak. Surrey et al. (2005) further advised that the “infrastructure refers to a college’s hardware, software, facilities, and network…” (p. 328). Therefore, providing computer labs, computers, and important programming coupled with other resources are necessary elements of creating a cohesive technological academic environment.

Arias and Clark (2004) stated that “issues of poor connectivity, lack of human capacity, scarcity of appropriate content and ever diminishing budgets are dealt with on a regular basis” (p. 52). These issues will continue to challenge the technology initiatives presently and in the future, but program leaders can help alleviate some of these problems by working with international representatives.

Leh and Kennedy (2004) found that “projects in developing countries often require partnerships with universities and medical health organizations because physicians and university professionals meet the prerequisites for literacy and basic technology skills” (p. 97). Partnerships among international colleges are extremely important in promoting and maintaining literacy and education in all fields, not only the medical field. In order to provide a strong educational foundation for students abroad, program leaders must also understand and help with poorer conditions in underdeveloped
countries. This is more important than a college mission; it must be a global priority for all colleges and universities, especially from technologically advanced nations, to support universal educational objectives.

Another issue concerns safety. Leh and Kennedy (2004) explained that “…school administrators hesitate to invest money in computers because of burglary and theft, a widespread problem in PNG [Papua, New Guinea]” (p. 98). Officials must support efforts to educate and protect valuable equipment in underdeveloped countries so that their citizens and our students have the best educational opportunities available to them.

But, school administrators who avoid technology because of theft concerns undermine the very essence and meaning of education. If officials expect to see great progress from our future generation of students, then they must provide the necessary technological tools with security features for them to be successful, or how can they expect to promote a “nation of learners”?

Arias and Clark (2004) indicated that “the developing world has indeed turned to instructional technology, whether it is through distance learning, training or classroom instruction, and all of these educational applications of technology are explicitly or implicitly being designed using the instructional systems design process” (p. 53). Study abroad programs can indeed be successful abroad and in distance learning initiatives with the appropriate technological tools.

**Technology Impact on Faculty**

Golden (2004) explained that “while these efforts will include resources and training for higher education faculty, the major focus of this initiative is to assist teacher candidates in implementing instructional technology effectively, as well as using student
data to assess and modify instruction” (p. 44). Program coordinators and administrators must take the necessary steps to training faculty on the technological software they will be using abroad and provide support and curriculum development options.

Owen and Demb (2004) stated that “the question of intellectual property is another tension-filled topic for faculty and administration. Faculty put countless hours into the development of online courses and programs for technology-enhanced classes, and the idea of just giving away these products is distressing” (p. 650). Faculty should not be forced to “give away” their technological class materials, so to ensure that it is not duplicated; collegiate leaders must make sure such materials are copyrighted to the institution where they are teaching.

Depending on the length of the study abroad program, the faculty’s tenure, and salary contract, administrators must take into consideration that the faculty member may serve additional roles, such as advisor and counselor. A discounted travel, program cost, and salary compensation must be negotiated and discussed with the instructor so that a satisfactory compromise is reached prior to travel. Owen and Demb (2004) further explained that “compensation is another central issue for faculty and relates to the amount of faculty time associated with learning technology, developing courses, working with the students, and updating programs” (p. 651).

Williams and Kingham (2003) found that “it is possible to conclude that there is still a lack of infusion of technology into the curriculum. In order for teachers to infuse teaching with technology, they need professional development opportunities to learn to use and implement technology in their classrooms” (p. 183). Study abroad programs can be a forerunner in the race for technology advances in the classroom. Instructors can
implement software in classroom activities and visit nearby host colleges to learn new
techniques and tools used in their classrooms.

In addition, instructors must be afforded the opportunities for professional
technological development opportunities before implementing programs abroad for the
first time. With new sites to explore, covering various educational aspects, and
acclimating students to their new countries, instructors must be able to rely on technology
and software programs that have previously been approved in other study abroad
programs.

Faculty, staff, and administrators must integrate policies to guide and structure the
uses of technology programs and must have adequate support services such as
“technological support, pedagogical support, and administrative leadership” to provide
technological learning for students. Thus, educators must examine how successful or
unsuccessful specific technological programs are for students academic learning process.

Kozma (2003) stated that “the interactivity of technologies is cited as a key
feature that enables students to receive feedback, on their performance, test and reflect on
their ideas, and revise their understanding” (p. 1). Study abroad instructors should have
already used such programs, for example, “blackboard” or other technological software
to provide academic feedback and test scores to students.

But such programs must be approved by both home and host institutions before
travel, and the instructor must have a good working knowledge of these programs in
order to help students use these programs abroad. Having these programs abroad can
prove to be vital, especially when students have a pre-approved itinerary merging
academics with excursions and may not be able to visit instructors during “office hours.”
Similarly, instructors using blackboard or other educational software to provide student feedback will have more time and opportunities to network with other academic professionals in their host country and attend seminars that can benefit their own professional development.

Duke (2000) explained that “simulations are well liked by students and allow the students to interact on a more personal level with the instructor outside of the classroom. The suitability of simulations for study abroad courses is dependent on the need for computers and other technology, which will likely have to be carried by the instructor. Simulations may not be appropriate when technology and facilities are limited” (p. 164).

To solve one of these problems, Golden (2004) suggested that “funded projects will use handheld computers to facilitate the creation of easily replicable models that support an inexpensive and versatile technology, as well as focus on innovative applications that directly impact student performance” (p. 42).

In poorer countries, there may not be adequate facilities to promote technology in the classroom, but the instructor can still provide resources for laptop assignments or other portable tech equipment available from their academic departments and community colleges. In addition, study abroad programmers, administrators, as well as local and state officials, must partner with disadvantaged countries to facilitate and promote technological support to students.

Kozma (2003) concluded that “when teachers go beyond these basic practices and use technology to also plan and prepare instruction and collaborate with outside actors, and when students also use technology to conduct research projects, analyze data, solve problems, design products, and assess their own work, students are more likely to
develop new ICT, problem solving, information management, collaboration, and
communication skills” (p. 13). If officials are to promote lifelong learning and allow
students to be responsible for their own learning and development, then instructors must
take on a supportive role to help them acclimate to technological assignments and
activities while abroad.

Arias and Clark (2004) proposed that “instructional technologies in varying forms
of delivery and formats such as radio, television, personal computers, the internet, print,
audio cassettes and CD-ROMs are being deployed throughout the developing world in an
effort to meet the critical educational problems of quantity, resources and quality at all
levels” (p. 53). These are some major uses of IT that can be beneficial both in the
classroom and out of the classroom to help student learning. Instructors should use many
of the available technological tools available to support individual learner needs.

Zhang, Perris and Yeung (2005) explained that “individual practitioners should
examine what they want to do with online learning and how they intend to meet their
learning objectives.” (p. 802). In addition, Smyth (2005) noted “there is great potential
for broadband videoconferencing …to provide greater opportunities for teachers and
students to engage interactively in their disciplines…it similarly enables teachers to
engage in experimentation, collaboration, research, and reflection about potential
teaching techniques” (p. 816). For example, if simultaneous courses are occurring abroad
and at US community colleges, a panel of international speakers or corporate leaders
abroad could be a part of a videoconferencing initiative back to the home institution.
What better way to introduce diversity and internationalism into the classroom?
Technology Impact on Students

Smyth (2005) found that “the richness of the medium [videoconferencing] makes it possible for students to be involved in experiences extending from a traditional lecture to dialogue and virtual participation in practical work….In addition, it enhance the experiences of full-time students by providing them with opportunities to interact with peers or experts working professionally in the field” (pp. 810-817).

In study abroad programs, videoconferencing can be a strong tool in helping students abroad connect with other students in the classroom. In addition, a panel of experts or international students can be part of a group project that can discuss and collaborate on projects globally.

Liu and Lee (2005) advised that “a web-based learning system was presented to enable students to exchange their personal understandings of concepts regarding database design and applications, allowing them to adjust their personal perspectives” (p. 834). Therefore, the inclusion of web based technology and peer group work increased overall learning and helped them develop higher level thinking skills.

Williams and Kingham (2003) stated that “through the Internet, students have access to libraries, databases, museums, government offices, satellite data, and experts in the field…another powerful characteristic of the Internet is its timeliness: information is updated continually, and where textbooks become outdated quickly, the Internet is a source of real-time information” (p. 179).

It is imperative that students have access to the same types of technological services that they would have had at their home institutions. Study abroad program officials must decide whether to supply students with laptops abroad or whether the host
country has technological hardware and software that can support students learning initiatives. Even in foreign countries, access to the internet is very important for students to research and gather information to meet course objectives.

Zhang, Perris and Yeung (2005) found that “students were most comfortable, and found the most purpose for using computers and the Internet, for independent work such as submitting assignments, conducting searches, and retrieving course content” (p. 801). These are useful and necessary tools to help students not only keep track of assignments, but also help them adapt technology to their individual learning styles.

It is important for instructors to engage students with technology and building a web site can add a fun incentive to study abroad initiatives. Reber (2005) noted that “building a web site allowed working in accordance with the individual's interests, made the course more motivating, more fun and less boring than the traditional approach to teaching” (p. 95). Students can then upload photos, essays, even video slides of their favorite places, people, and experiences with new cultures.

Lambert (2001) recommended “the widespread availability of personal computers (PCs) for both teacher and learner has brought healthy experimentation in the use of computers in language teaching” (p. 359). Personal computers can be used in both language learning and regular course content. Interactive programs that help writing, reading, and language skills are vital in helping students develop their own learning objectives.

Windschitl (1998) stated that “classroom teachers are engaging in innovative practices using the Web either as an information resource or as a way of communicating with others, and these initiatives are almost certain to establish patterns for use of internet
technology in other classrooms” (p. 28). Coupled with classroom instruction and international and multicultural elements, web utilization in the classroom, especially in study abroad programs, can be a very powerful tool in student learning.

For study abroad purposes, computers can serve a variety of purposes, from helping students with mathematical analysis to assignment submission and grade accessibility. Windschitl (1998) explained that “instant access to information is one attractive feature of the WWW; another is its global domain. The novelty and excitement of accessing Web pages from places like France or Malaysia is stimulating for learners. Students in many classrooms routinely use email and news groups to communicate with students abroad for a variety of purposes” (p. 30).

But the opposite scenario is just as possible and exciting. For example, internet classroom activities and web assignments are help students learn and communicate with other students from their country. But, the internet can also serve as an abundant resource in relaying international panels and activities occurring in classrooms abroad back to other classrooms in the United States.

Windschitl (1998) indicated that “when students study abroad, parents and teachers hope that they return with more than an academic understanding of the host countries. A major purpose…is to cultivate a deep appreciation of other countries, their cultures, and their people” (p. 31). Therefore, study abroad classroom instruction must incorporate technology and international aspects that will help students gain a deeper understanding, and provide opportunities such as web based exercises with international students, faculty, officials, etc. while abroad.
Because of technological advancements, Kozma (2003) explained that “teams of students are engaged in solving complex, authentic problems that cross disciplinary boundaries. Instead of dispensing knowledge, teachers set up projects, arrange for access to appropriate resources, and create organizational structures and support that can help student succeed” (p. 2). Such strategies can be used in study abroad programming and allows for more student-teacher interaction as well as group work.

Zhao, Kuh, Carini (2005) advised that “it is also possible international students are more comfortable and confident using computer technology, for preparing class assignments as well as for communicating with their instructors and other students. Although technology may help ease the transition to the American college campus, it may also play a part in social isolation if it substitutes for face-to-face interaction” (p. 223).

Similarly, American students may also want to shy away from interaction with foreign natives by immersing themselves in technology, but this problem can be easily avoided as long as instructors use both technology and international interaction as part of the course objective. Instructors should also encourage friendship circles within classrooms especially abroad, to help minimize isolation.

**Summary**

In this chapter, Chickering’s Theory of Student Development along with the environmental variables was presented in order to examine study abroad student development. Study abroad programs, like many collegiate academic programs, must have a sound, legitimate academic program. Accreditation, along with articulation and transfer agreements between the host institution and the domestic institution must be
reliable and approved in order to have ease of transfer of credits and application of credits to either general education requirements, major, or minor requirements towards the degree. Similarly, student interest in the study abroad program is vital not only to boost internationalization and globalization, but also to promote increased interest and individual student development.

Other important factors that must be considered in study abroad programs are the faculty role, teaching, and student impact, curriculum and classroom learning environment, student housing and friendships, student support services and programs, field trips, cultural awareness, and technology. Of paramount interest is the faculty role in student learning, as well as faculty development. If program leaders expect faculty members to educate and promote student learning, then they must have the right educational tools to do so. Such tools can be obtained through professional development opportunities, and advanced teaching programs and services.

Similarly, faculty must be compensated appropriately and overload of courses must be avoided to prevent “burnout” and dissatisfaction. The faculty role in student learning is not simple, as each student is uniquely different and therefore each will learn differently. This brings us to the next main variable of classroom learning. Faculty have the responsibility of providing an academic learning experience while abroad, but at the same time, employ different methods of learning techniques. From traditional lecture methods to international panel members and group projects, students must the opportunity to be creative, learn, and understand the materials in a fun and interactive environment.
Such a mix of learning techniques can allow students to appreciate and learn all content areas, especially if technology is used in the classroom. Instructors can incorporate many aspects of technology that most likely are employed at their home institutions. For example, “blackboard” or some form of program that allows students to retrieve assignments and submit homework can be very beneficial to both student and instructor. In addition, the instructor can incorporate PowerPoint into lecture materials, and if the technology is advanced enough, can use video conferencing to talk with nationals or even students at their home institution.

Furthermore, the classroom can provide a great avenue for student to interact and learn from one another. Another aspect of promoting student communities and friendships is the living and learning environment of housing. Whether student elect to stay with a host family or prefer the approved residence halls, the interaction with new and different cultures and peoples are strong factors in student development. If colleges offer an approved housing option for students while abroad, they must ensure that the living quarters are clean, furnished, and allow for student interaction, whether that incorporated floor socials or study areas. These are important factors that also promote student learning and development.

Finally, student support programs must be incorporated into the study abroad program to allow students the opportunity to go on field trips and provide important aspects of academic life needed to support and encourage student learning. An on-site coordinator or counselor should be available to help with homesickness or loneliness. In addition, registration, book services, and extracurricular activities, such as field trips must be available to students to help them prepare for class and enjoy the study abroad
experience. Thus, having reviewed the research related to the major variables of the student development theory, it is important to evaluate the variety methods used in the collection and evaluation of data as presented in the next chapter.
CHAPTER 3
METHODOLOGY

This chapter contains the methods used in the evaluation of the research study. First, a review of the participants, and data collection process will be explained, along with the study methodologies. Next, the research hypothesis, research questions, and instrumentation will be examined. In addition, a variety of test-retest methods and a Biserial correlation analysis will be used to examine the research questions as well as a list of operational definitions is indicated at the end of the chapter.

Purpose

The purpose of this study explored how American undergraduate students perceive their self-development changes after participation in a community college study abroad program. This study reviewed the extent to which students gained increased levels of self-development based on their international academic and social experiences while studying abroad using Chickering’s Theory of Student Development.

Community College Study Abroad Programs

In order to conduct a national study of study abroad programs, a complete search of all community colleges (or colleges formerly known as community colleges) websites was conducted from the League for Innovation directory. In addition, emails and phone calls were made to follow up on recruited colleges. Some of the colleges emailed a “declined” response because they did not possess a study abroad program, while other programs responded favorably if they did possess a study abroad program and wanted to participate. It is also important to note that some college websites were inactive, while other schools provided a list of independent or private study abroad companies or study
abroad student organizations that did not maintain sufficient information to become a participant in this study.

Participants

The participants consisted of 46 undergraduate students whose host institutions were selected national community colleges and who decided to study abroad either for elective or major credit. The participants elected to participate in their study abroad program and were asked to complete the Study Abroad Student Development Survey. In addition, the study abroad coordinators and advisors also assisted with the research process by administering, proctoring, and recollection of the evaluation forms. Informed consent was acknowledged on each survey and was confirmed when each student completed the survey.

Data Collection

Colleges were selected based on sufficient evidence that their study abroad program was current and accepting student participants for the upcoming summer study abroad programs. The study abroad director, coordinator and/or instructors were contacted via email on the following dates: 1/17/06, 1/18/2006, 1/30/2006, and 2/20/2006 and asked to complete an information sheet and return to the researcher. After consent was received from the prospective colleges, the study was conducted via survey method before and after the students returned from their study abroad destinations.

A modified version of the University of Florida’s Study Abroad Questionnaire was administered to all students who completed their community college study abroad program by their respective study abroad coordinator or chief instructor. The length of time varied depending on what type of study abroad academic program they attended, but
mostly took place in the summer session. In general, data was collected from students who studied abroad from May 2006 to August 2006.

The main method of inquiry used in this research project was quantitative with a static pretest-posttest design. First, the overall hypothesis was formulated and then additional research questions were evaluated to test the main hypothesis and to determine whether the seven vectors of student development actually emerged and if those patterns had significant impact on the students identity development.

**Reliability**

According to Penfield (2003), “reliability concerns the extent to which a variable’s outcomes correspond to levels of the entity in a consistent and stable manner” (p. 34). Therefore, reliability is concerned with the data analysis and data measurements in duplication of the study. For example, how reliable will the study be if duplicated using the exact same measurement techniques?

There are a number of indicators that attest to the reliability of a study, such as sample size, effect size, and lack of confounding variables which will be discussed in the following chapter. Furthermore, the proportion of individuals that were sampled relative to the population of students studying abroad is high because the sample population is the total population of students studying abroad from that particular college. In other words, those students freely elected to participate in the program and all individuals in the program were surveyed, thus representing the entirety of the study abroad program. In addition, the examination of select attributes among the sample population, such as gender, race, major, and previous experience abroad will also be crucial in eliminating confounding variables between pretest and posttest comparisons.
Another direct proponent of reliability success is “measurement error because it causes the outcomes of a variable to become unstable, inconsistent, or unreliable” (p. 35). The goal of quantitative researchers is to minimize the amount of error by making sure that rating scales appropriately represent the subject being studied. Penfield (2003) further noted “the reliability of scores obtained from scales or tests are affected by two primary sources: (a) the degree to which all items measure the same general entity, and thus are interrelated; and (b) the number of items on the scale or test” (p. 47).

So how many questions or items being measured should the rating scale have to be reliable? Penfield suggested “typically, acceptable reliability of tests composed of multiple choice questions is obtained with approximately 30 or more items. For rating scales, however, acceptable reliability is often obtained with 10 or more items.” For our purposes, the rating scale measured 7 items with a total of 40 questions, all directly related to student development and interrelated in measuring the environmental variables, thus providing rich sources of reliability, please see “Instrumentation” section.

**Validity**

There are two main types of validity that must be addressed in this study, internal validity and external validity. Penfield (2003) explained that “internal validity of a research study is the degree to which the effects of all confounding variables have been controlled for and can be observed with the following two factors: (1) random variability in the sample means is due to the random nature of the selection of the samples, and (2) the effect of the independent variable (confounding variables)” (p. 299).

In this study, students who applied to their study abroad program also decided to participate in this study and can be considered a true representation of their home
institution population. Thus, it was necessary to eliminate some possible confounding variables, such as student selection variability, race, and gender biases by surveying the same group of students before and after (pretest-posttest) while examining their attributes and student development progression.

Second, external validity is just as important to review as internal validity. Penfield (2003) explained “external validity concerns the extent to which the findings of a study generalize to other intended settings and can be examined by two questions: (1) is the population from which the sample was drawn representative of the population of which the research question is asked? (2) Is the environment in which the study was conducted representative of the environment surrounding the research question in the real world?” (p. 300).

To address these concerns, the sample population was representative of the college campus, since the students who participated in the program attend their respective colleges. Participants were asked to name their home institution on the survey form, which was examined more completely in the next chapter. Furthermore, nationally recognized community colleges were asked to participate in the study to maximize student population and diversity. In addition, the environment is unique and representative of the “real world” since each program was located in a different region in the United States and offered their study abroad programs in different destinations around the world. Finally, the evaluations were administered before the students arrived at their destination and after they had completed the program, whether this took place in the host country or destination country.
Research Hypothesis

The overall research hypothesis examined whether undergraduate students who participated in their community college study abroad program reported enhanced self-development consistent with Chickering’s Theory of Student Development.

Research Questions

In order to answer the research hypothesis, three research questions were investigated:

**RQ1:** To determine the relationship between the individual student development vectors and overall student development using a Biserial Correlation Analysis

**RQ2:** To determine whether student development increased as a result of study abroad participation by examining pretest and posttest results

**RQ3:** To determine whether specific socio-economic variables influenced student development among study abroad participants using an Analysis of Variance (ANOVA) method

Instrumentation

Research Question #1

To answer the first research question, a number of methods were used to test the internal and external validity of the instrument. Penfield (2003) suggested four methods to test validity and explained that “…each source informs different aspects of validity” (p. 50):

1. Evidence based on item content
2. Evidence based on response process
3. Evidence based on how the variable’s outcomes relate to the outcomes of other variables, such as an established criterion.
4. Evidence based on the internal structure of the scale or test.
The first method used was evidence based on item content and was endorsed by an “expert panel.” An expert panel evaluated and approved the modified version of the program evaluation in order to confirm reliability of the instrument used in this study. The members consisted of a variety of student affairs leaders and have significant expertise in the area of student development and student learning.

The expert panel was led by Dr. Ken Osfield, University of Florida, and the members included Mr. Roger Ludeman, Chair, International Association of Student Affairs and Services Professionals (IASAS), Dr. Lisa Bardill, Associate Dean at Florida Atlantic University and Coordinator of the Semester at Sea program, Dr. Martha Sullivan, former Vice President of Student Affairs and currently Special Assistant to the President at Tulane University, Dr. Harold Holmes, Dean of Students and Associate Vice President of Student Affairs at Wake Forest, Dr. Sandy Hubler, Vice President of Student Affairs, at George Mason University and Dr. Howard, Wang, Vice President of Student Affairs, University of California, Fullerton.

The panel rated both the pretest and posttest surveys and noted how each question compared to the environmental variables of Chickering’s Theory of Student Development to determine whether each question accurately reflected the student development vector being measured. The panel used a Likert rating scale of 1-5, (with a 1 signifying strongly disagree and a 5 signifying strongly agree) to rate the validity of each environmental variable within the student development vector (Table 3-1 and 3-2).

The seven Student Developmental Vectors were defined as follows:

8. Intellectual competence: Acquisition of knowledge and skills related to particular subject matter. Physical Competence comes through athletic and recreational activities. Interpersonal Competence includes skills in communication, leadership, and working effectively with others.
9. Managing emotions: Students develop the ability to recognize and accept emotions as well as to appropriately express and control them.

10. Moving through autonomy toward interdependence: Result in increased emotional independence, which is defined as ‘freedom from continual and pressing needs for reassurance, affection, or approval from others.’

11. Developing mature interpersonal relationships: Include development of intercultural and interpersonal tolerance and appreciation of differences, as well as the capacity for healthy and lasting intimate relationships with partners and close friends.

12. Establishing identity: Acknowledgement of differences in identity development is based on gender, ethnic background, and sexual orientation.

13. Developing purpose: Development of clear vocational goals, making meaningful commitments to specific personal interests and activities, and establishing strong interpersonal commitments.

14. Developing Integrity: Includes three sequential but overlapping stages: humanizing values, personalizing values, and developing congruence.

In addition, the Environmental Variable Scale Items included:

- Academics
- Classroom learning environment
- Student housing/communities and friendships
- Student support services and programs
- Field trips and excursions
- Cultural awareness
- Technology satisfaction

Furthermore, an academic panel was created to also analyze the survey items in the same fashion as the expert panel. The academic panel members were also all program chairs and have significant expertise in the areas of study and of designing curriculum. The members of the panel included: Mrs. Ethel Guinyard, mathematics program chair
and instructor, Mrs. Laura Girtman, English and reading program chair and instructor, and Mrs. Gayle Fisher, student success program chair and instructor.

The second validation method of “response process” was confirmed by a student group who were selected at random to analyze the pretest and posttest survey questions. The student group was comprised of only undergraduate students who either had studied abroad or plan to study abroad in the future. A group discussion method was employed to review each item on the survey and substantiate whether each item was measuring its intended purpose.

The third method employed the University of Florida’s Study Abroad Evaluation form as the “established criterion.” This form has previously been used to record information about students prior experiences and satisfaction for their study abroad program. University of Florida program officials have previously administered the survey to examine program improvement. The survey evaluated the following components:

- Program information, participant data
- Instructor and course evaluation
- Extracurricular activities
- Major/career information
- On site services
- Teaching/computer facility
- Budget/travel
- Language studies
Therefore, the instrument was modified in order to reflect this particular research study and validate by administrators, faculty, staff, and students in order to examine Chickering’s Theory of Student Development.

The fourth and final method of validity examined the internal structure of the scale. Penfield noted that “the internal structure of a scale or test concerns the properties of the individual items, and how the items relate to one another…such that (a) the properties of the items are consistent with the intended properties, and (b) the relationships between the items match the constructs underlying the proposed interpretations of the obtained scores” (pp. 53-55).

Therefore, a statistical method was used to examine the interrelationships of the items on the research instrument by way of a Biserial correlation analysis in order to determine the relationship between the student development vectors and the overall evaluation scale during the pre and post survey period (SAS statistical software was used to perform the analysis).

Biserial correlation analysis is used in many behavioral research studies, especially when examining pretest and posttest survey items. The Biserial Correlation is a measure of correlation that estimates the degree of association between two variables: a single test item and total test score on the rating scale. Researchers generally use the data yielded by the Biserial correlation to examine the quality of particular items. In this research study, the single test item represented the student development vector and the total test score represented the overall student development.

The Biserial correlation should not be confused with the point-biserial correlation. That is, the Biserial correlation is used when an interval variable is correlated with a
dichotomous variable (or categorical variable) which reflects an underlying continuous variable (http://www.statisticssolutions.com).

Tate (1955) explained that “in 1909, Karl Pearson introduced the estimator ‘r’ (Biserial ‘r’) which can be expressed in the following form:

\[
 r^* = \frac{1}{n} \sum (X_i - \bar{X}) (Z_i - \bar{Z}) = \frac{1/n \sum (Z_i - \bar{Z})^2}{\lambda (T)} \cdot \frac{1/n \sum (X_i - \bar{X})^2}{\lambda (T)} \]  

(E 3-1)

Furthermore, Attali and Fraenkel (2000) discussed that “the measurement of item discrimination in the test or scale usually involves a dichotomous variable (performance on the item) and a continuous variable (performance on the criterion) which is extremely important in correlation analysis” (p. 77).

Therefore, the Biserial correlation analysis served to evaluate not only the students performance on the individual scale items (environmental variable items), but also examined whether the seven major vectors in the survey instrument were consistent with Chickering’s theory of Student Development.

Research Question #2

A Dependent Samples Paired T-Test was used to examine whether student development increased from pretest to posttest. Penfield (2003) noted that “when there are only two levels of the repeated variable, such as the case of a pretest-posttest design, a dependent samples t-test may be used instead of a repeated measures ANOVA to test if the mean of a quantitative variable is the same across all levels of an independent variable” (p. 434).

Penfield (2003) noted that “this design helps in proving causation by using the same individuals in every level of the independent variable, thereby reducing the chance of confounding variables differentially impacting the groups defined by the independent
variable. An additional advantage of this design is that by using the same individuals at every level of the independent variable, we are able to reduce the amount of error in the dependent variable by eliminating that part of the dependent variable variance due to the random differences between the individuals in the group” (p. 419).

In the case of a Pretest-Posttest design, the difference score is equal to the posttest score minus the pretest score (Posttest – Pretest). Next, the mean value was obtained as the difference in scores across the sample (D), as well as the standard deviation of the difference scores (S\(\text{d} \)). Thus, the sample t-statistic is obtained by:

\[
t_{\text{obs}} = \frac{D}{\frac{S_{\text{d}}}{\sqrt{n}}}
\]  

Where, the t-statistic follows a t-distribution with degrees of freedom equal to the sample size minus one (\(n – 1\)).

In addition, a % lift was calculated for each student development vector to examine the pre to post development and determine which vector was statistically significant in comparison to the results yielded from the Biserial correlation analysis. The formula used to calculate the percentage lift is listed below:

\[
\text{Percentage Lift*} = \frac{\text{Post Scores} - \text{Pre Scores}}{\text{Pre Scores}}
\]  

*Scores that did not yield statistically significant data was recorded as 0.00.

**Research Question #3**

In order to determine whether specific socio-economic variables influenced development among students who participated in their study abroad programs, an ANOVA model was incorporated in this research study. A one-way ANOVA was run
based on Table 3-3. The present analysis used a model where the dependent variable was
coded as the continuous variable and the independent variable was coded as the
categorical variables.

Penfield (2003) explained that “a one-way ANOVA (Analysis of Variance)
method is used to answer the question of whether there are differences in a variable’s
mean between two or more populations when the populations are specified by a single
independent variable” (p. 316). Furthermore, there are three assumptions of the one-way
ANOVA to ensure purity in the data collection. The three assumptions include: (a)
Independence (each individual in the group are independent of one another) (b)
Normality (the values of the dependent variable should be normally distributed) and (c)
Homogeneity of Variance (the variance of the dependent variable is equal for each
population as defined by the levels of the independent variable).

In this research study, the one-way ANOVA model was examined on each student
demographic variable to see whether the demographic variable had an impact on overall
student development. Formally, the ANOVA model utilized in this study can be
expressed as follows:

\[
\begin{align*}
\text{SS}_T &= \sum d_i^2 = \sum (X_{ij} - \bar{X}_T)^2 \\
\text{SS}_B &= \sum d_n^2 = \sum (\bar{X}_j - \bar{X}_T)^2 \\
\text{SS}_W &= \sum d_w^2 = \sum (X_{ij} - \bar{X}_j)^2
\end{align*}
\]  

(E 3-4)

Where, the sum of squares associated with the total, between, and within
deviations are denoted \(\text{SS}_T, \text{SS}_B, \text{SS}_W\). Furthermore, the F-statistic tests whether each of
the populations has an equal mean for the dependent variable (i.e. whether the means are
statistically significant) and is computed as follows:
F = MSₙ / MSₜ

Where, the components MSₙ and MSₜ are called the mean squares between and the mean squares within. In addition, Spiess (2001) explained that “the coefficient of determination, usually denoted R², is used to assess the goodness of fit of univariate models in many applications…and pseudo-R² to assess general multivariate models with binary or ordered categorical responses” (p. 325). Therefore, R² will be computed to analyze power in the next chapter.

**Summary**

This chapter discussed the importance of validating the instrument along with numerous other techniques to ensure that the methods used in evaluating the research questions would be clearly defined. One of the most important tools is the use of the Biserial correlation analysis in evaluating the student development vectors and internal consistency of the research instrument.

In addition, the Dependent T-Test was used to answer the second research question in determining the effects of student development from pretest to posttest. In addition, an ANOVA model was used to answer the third research question as to whether specific socio-economic variables influenced student development among study abroad participants.

Furthermore, the reliability and validity of the research instrument is paramount in conducting this research study by use of a test-retest methodology. Various methods of internal and external validation techniques were employed, such as the use of Expert, Academic, and student panels to intrinsic tests using the statistical software programs, SAS. Finally, the reliability and validity of any study must be warranted and accurate so
that the results can be accurately assessed and evaluated. This chapter provided various methods of reliability and validity, substantiated by mathematical equations.

**Operational Definitions of Variables**

The variables were taken from the Study Abroad Student Development Survey before and after the students returned from their study abroad destinations. Each of the seven vectors of Chickering’s Theory of Student Development was measured using a Likert Scale type with 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, and 5=Strongly Agree. In addition, each student development vector indicated a set of questions that represented the environmental variables being measured ranging from five to seven questions per student development vector.
Table 3-1. Student development vector scale

<table>
<thead>
<tr>
<th>Main Response Item</th>
<th>1 (SA)</th>
<th>2 (A)</th>
<th>3 (U)</th>
<th>4 (A)</th>
<th>5 (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing competence</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Managing emotions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Moving through autonomy towards interdependence</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Developing mature interpersonal relationships</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Establishing identity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Developing purpose</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Developing integrity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 3-2. Environmental variable scale items

<table>
<thead>
<tr>
<th>Main Response Item</th>
<th>1 (SA)</th>
<th>2 (A)</th>
<th>3 (U)</th>
<th>4 (A)</th>
<th>5 (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Classroom learning environment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Housing (residence living/friendships)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Support services</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Field trips/excursions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Cultural awareness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Technology</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 3-3. ANOVA independent variables

<table>
<thead>
<tr>
<th>Student Development Vectors</th>
<th>Socio-Demographic Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing competence</td>
<td>Class level</td>
</tr>
<tr>
<td>Managing emotions</td>
<td>Major/minor</td>
</tr>
<tr>
<td>Moving through autonomy</td>
<td>Gender</td>
</tr>
<tr>
<td>towards interdependence</td>
<td></td>
</tr>
<tr>
<td>Developing mature</td>
<td>Previous experience abroad</td>
</tr>
<tr>
<td>interpersonal</td>
<td></td>
</tr>
<tr>
<td>relationships</td>
<td></td>
</tr>
<tr>
<td>Establishing identity</td>
<td>Ethnic background</td>
</tr>
<tr>
<td>Developing purpose</td>
<td></td>
</tr>
<tr>
<td>Developing integrity</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 4
RESULTS

This study explored how American undergraduate students perceive their self-development changes after participation in a community college study abroad program as represented by Chickering’s Theory of Student Development. This study also examined the extent to which students gained increased levels of self-development based on their international academic and social experiences while studying abroad. In other words, the overall research hypothesis examined whether undergraduate students who participated in their community college study abroad program reported enhanced self-development. Therefore, in order to answer the research hypothesis, three additional research questions were investigated:

**RQ1:** To determine the relationship between the individual student development vectors and overall student development using a Biserial Correlation Analysis

**RQ2:** To determine whether student development increased as a result of study abroad participation by examining pretest and posttest results

**RQ3:** To determine whether specific socio-economic variables influenced student development among study abroad participants using an Analysis of Variance (ANOVA) method

The investigation begins by examining the survey responses, followed by a complete review of the variables of interest used in the analysis of this research study.

**Survey Response**

The participating colleges were recruited from the League for Innovation website and were League for Innovation members. Once prospective college representatives
agreed to participate in the research study, they were sent a letter of participation, directions on how to administering the surveys, pretest and posttest surveys, and IRB approved informed consent in mid-April. Informed consent was acknowledged by students who agreed to participate and willingly filled out the surveys. Also located in the packets sent to the participating colleges was a self-addressed stamped envelope for all completed surveys as well as a deadline of August 8, 2006 was requested for all survey returns. A follow up email was sent to representatives of the participating colleges to confirm receipt of package and materials.

Overall, two hundred Student Development Study Abroad Surveys were sent out to prospective community colleges across the nation, with an anticipated return rate of one hundred surveys or 50%. McCormack (2006) found that “many universities based their decisions to cancel or continue their overseas programs partly or completely on travel warnings from the US State Department…In July, Michigan State University brought eight students studying in Jerusalem home early out of concern for violence spreading…” (Chronicle of Higher Education, 9/8/2006)

Therefore, due to political unrest and increased terrorist activities both in the United States, Europe, Middle East, and abroad, many programs cancelled or postponed their programs due to low or no enrollment and other international concerns. Two administrator/faculty members forgot to administer the test before the program, therefore the posttest results unfortunately were not used in the final statistical analysis. In addition, some survey responses that were illegible or missing responses were not calculated in the final results.
In general, out of the twenty-two colleges that agreed to participate, nine colleges returned participated in the research study (Table 4-1). Seventy surveys were returned of which, forty-six pretest and posttest survey responses were accurate, legible, and incorporated in the statistical analysis. This can be calculated as a 46% return rate compared to the anticipated survey returns of the number of students participating in the study abroad program.

**Research Question 1**

The first research question assessed the relationship between the individual student development vectors and overall student development using a Biserial Correlation Analysis; that is, whether Chickering’s Theory of Student Development is consistent with the Student Development Study Abroad Survey. This tested the validity of the research instrument, that indeed the survey instruments paralleled the seven vectors of student development in order to examine those same vectors within study abroad students.

The internal structure of a scale or test “concern the properties of the individual items, and how the items relate to one another, such that (a) the properties of the items are consistent with the intended properties, and (b) the relationships between the items match the constructs underlying the proposed interpretations of the obtained scores” (Penfield, 2003). Therefore, a Biserial correlation analysis was employed to determine the relationship between the student development vectors and the overall evaluation scale items during the pretest and posttest survey period and consistency of the research survey instrument.

In calculating the Biserial correlation for each vector, each individual student score for each student development vector was averaged and compared to the total
development score on the rating scale in order to determine the relationship between the student development vectors and the overall evaluation scale during the pretest and posttest survey period and a statistical significance was calculated for the internal consistency. In addition, the higher the correlation the greater the indication that the scale was internally consistent and therefore the items of the scale did in fact have a strong relationship or correlation with the additional items on the scale in measuring the environmental variables (see Table 4-2).

From the results, six out of the seven student development vectors had a positive correlation with the items on the scale being measured. The strongest posttest relationships existed with Developing Integrity (88%) and Developing Competence (87%) and the weakest item on the scale was Moving Through Autonomy Towards Interdependence (55%). Furthermore, the Biserial correlation for the Sum of Student Development Vectors (Overall Development) on the posttest survey scale indicated 98% item effectiveness. This is a strong indicator that taken together, the environmental items on the scale did effectively measure the seven vectors of Chickering’s Theory of Student Development when examined during the pretest and posttest periods (Figure 1).

Figure 4-1. Biserial correlation between the student development vectors and the overall study abroad student development during the pretest and posttest period
Research Question 2

The study abroad student participants were asked to rate each of the seven vectors of student development by responding to questions on the survey using a Likert scale of (1) to (5). A response of (1) = strongly disagreed, (2) = disagreed, (3) = undecided, (4) = agreed, and (5) = strongly agreed. The data analysis revealed that student development increased in all areas of the individual measured student development vectors. Furthermore, a paired t-test was conducted to examine the strongest and weakest student development vectors that will be discussed later in this chapter.

Individual Student Development Vector Results

In examining the individual student development vectors, students responded favorably on the Developing Competence vector from pretest (28%) to posttest (40%). That is, 28% strongly agreed that they had developed a level of intellectual, physical and emotional competence before study abroad, but after studying abroad, 40% strongly agreed that their development had increased within this competency after studying abroad. Only 1% strongly disagreed that this development competence was impacted by study abroad participation (Table 4-3).

In the second student development vector, the data revealed that 44% of students rated themselves as having a high level of managing emotions, but after studying abroad, 54% strongly agreed that this vector was much influenced by the international educational experience due to interactions with faculty, staff, and students while abroad. In other words, students were more likely to modify and change their emotions while abroad to adjust to their new surroundings. Furthermore, only 2% strongly disagreed that managing emotions was impacted by study abroad interactions (Table 4-4).
In Table 4-5, the data supports that 24% of students agreed they had a high level of interdependence before studying abroad, but afterwards, 35% of students strongly agreed that they had become more interdependent. Similarly, 24% of students had already formed mature interpersonal relationships with friends, family, faculty, and other persons, but after studying abroad, 45% had developed a greater appreciation of relationships with others than previously formed (Table 4-6).

The next three vectors, establishing identity, developing purpose, and developing integrity all exhibit similar characteristics that students responded highly favorably to both pretest and posttest survey questions. It is important to note that development did occur from pretest to posttest; that is, in all cases, the largest percentage amount represented a high level of student development. Therefore, students strongly agreed to having a high level of development in establishing identity (48%), developing purpose (54%), and developing integrity (56%), respectively (Tables 4-7, 4-8, 4-9).

**Dependent Samples Paired T-Test**

The second research question addressed whether student development increased as a result of study abroad participation by examining pretest and posttest results. In order to examine whether an increase occurred, a Dependent Samples Paired T-Test was used to compare the posttest survey responses to pretest survey results. Although it was possible to use a Repeated Measures ANOVA for more than two levels, this research study employed two levels, a pretest and posttest result, so a Dependent T-test was more effective in testing whether the mean of a quantitative variable was the same across all levels of the independent variable (Penfield, 2003).

Did development occur from pretest to posttest based on student responses’?
Specifically, student development did occur in three of the seven vectors, and student development did occur overall from pre to post, therefore the null hypothesis can be rejected that based on the evidence, undergraduate students who participated in their community college study abroad program reported enhanced levels of self-development. At alpha = .01, development did occur in three areas, Developing Competence, Developing Mature Interpersonal Relationships, and Overall Student Development (Table 4-10).

In order to examine the interrelationship between the responses to the items contained in the test or scale, the paired t-test results that showed statistical significance was evaluated and compared the percentage lift scores the Biserial correlation for those specific student development vectors. A strong posttest relationship on the Biserial correlation table existed with Developing Competence (87%), Developing Mature Interpersonal Relationships (84%) and that the Sum of Student Development Vectors (Overall Student Development) on the posttest survey scale indicated 98% item effectiveness.

To further validate the research finding, it is important to note that the percentage lift scores in Table 4-11 likewise indicated that at the .01 alpha level, Developing Mature Interpersonal Relationships showed the strongest change between pretest and posttest development (13.44%). In addition, Developing Competence was strongly associated with students development abroad (9.17). Furthermore, the Sum of Student Development Vectors highly indicated that overall development did occur from pretest to posttest due to study abroad participation (Figure 2).
Research Question 3

The third question examined whether specific socio-economic variables influenced student development among study abroad participants using an ANOVA method. These specific socio-economic variables are identified below.

Student Profile

Out of the 46 student participants, 45 responded with class level, major/minor degree information, and previous experience abroad. All 46 students responded on gender and ethnicity. The data showed that the largest group of students studying abroad were either undecided or did not have a major (27%). But, the second largest group of students that were studying abroad represented pre-professional majors such as medicine, law, dentistry, and other specialized areas (16%), followed by liberal arts and sciences, and business majors (13%).

It is also interesting to note that there were a higher percentage of women (61%) studying abroad than men (39%) and that the largest ethnic group was found to be
Caucasian in this research study. Furthermore, the second largest ethnic group studying abroad was Hispanic / Latino (17%).

From the one-way ANOVA data analysis, there was a strong correlation between previous experience abroad and the student development vectors (see Table 4-12). That in other words, individuals who had some experience abroad before studying abroad rated a higher student development than those individuals who had no prior experience abroad. The table below shows that there was a much higher correlation between overall student development and previous experience abroad (168.0) compared to no experience abroad (154.5).

Furthermore, the one-way ANOVA model, in respect to experience abroad revealed that the F-statistic = 5.95, p = .02, and $R^2 = .119$ with an alpha = .05 (Table 4-13). Therefore, the null hypothesis is rejected based on the evidence that students with some experience abroad before studying abroad had increased overall student development than those who had no experience abroad.

In addition, Penfield (2003) noted that effect size is one factor in evaluating the power of the research study and can be determined using the following guide: small effect = .010, medium effect = .09, large effect = .25 (p. 346). Thus, based on effect size, group size, and sample size, the power of this ANOVA model is greater than .995 or 99.5% (Power of ANOVA table, p. 442).

**Summary**

In this chapter, three research questions were examined in order to determine whether undergraduate students who participated in their community college study abroad program reported enhanced self-development as represented by Chickering’s
Theory of Student Development. First, the survey responses were analyzed and explanation was given to address the smaller sample size than expected.

Next, the three research questions were analyzed based on the data results using SAS statistical software. The internal consistency of the research instrument was examined using a Biserial correlation analysis to explain the interrelationships between the items on the scale and the student development vectors. Six of the seven vectors were proven statistically significant and measured the items on the scale as was intended. The overall sum of the vectors demonstrated 98% effectiveness, thus an excellent indicator of the survey instrument validity.

The second research question addressed the subject as to whether students perceived an increase in development from pretest to posttest as a result of study abroad participation. The data revealed that overall student development increased from pretest to posttest, while emphasis was placed on specific student development vectors that were statistically significant in this research study. These development vectors included: Developing Competence, Developing Mature Interpersonal Relationships, and Overall Student Development.

Lastly, the student demographic variables were examined and an ANOVA model was employed to address whether these variables had any significant impact on study abroad participation. It was found that out of the five socio-economic variables, previous experience abroad did in fact influence overall student development abroad based on the one-way ANOVA and power. A detailed description of the results and conclusion for all methods utilized in this study follows in the subsequent chapter.
Table 4-1. Community college participant table

<table>
<thead>
<tr>
<th>NAME OF COMMUNITY COLLEGE</th>
<th>EMAIL RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(COLLEGE / CAMPUS / STATE) (1/17-1/18, 1/30, 2/20/2006)</td>
<td>(YES)</td>
</tr>
<tr>
<td>Broward Community College, FL Yes</td>
<td></td>
</tr>
<tr>
<td>Central Piedmont Community College, NC Yes</td>
<td></td>
</tr>
<tr>
<td>Coastal Georgia Community College, GA Yes</td>
<td></td>
</tr>
<tr>
<td>Edison College, FL Yes</td>
<td></td>
</tr>
<tr>
<td>Grand Rapids Community College, MI Yes</td>
<td></td>
</tr>
<tr>
<td>Harrisburg Area Community College, PA Yes</td>
<td></td>
</tr>
<tr>
<td>Mesa Community College, AZ Yes</td>
<td></td>
</tr>
<tr>
<td>Santa Fe Community College, FL Yes</td>
<td></td>
</tr>
<tr>
<td>St. Petersburg College, FL Yes</td>
<td></td>
</tr>
</tbody>
</table>

Table 4-2. Biserial correlation between the student development vectors and the overall study abroad student development survey scale* during the pretest and posttest period

<table>
<thead>
<tr>
<th>Student Development Vector</th>
<th>Biserial Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
</tr>
<tr>
<td>Developing competence</td>
<td>0.62</td>
</tr>
<tr>
<td>Managing emotions</td>
<td>0.53</td>
</tr>
<tr>
<td>Moving through autonomy towards interdependence</td>
<td>0.27</td>
</tr>
<tr>
<td>Developing mature interpersonal relationships</td>
<td>0.57</td>
</tr>
<tr>
<td>Establishing identity</td>
<td>0.47</td>
</tr>
<tr>
<td>Developing purpose</td>
<td>0.49</td>
</tr>
<tr>
<td>Developing integrity</td>
<td>0.52</td>
</tr>
<tr>
<td>Sum of student development vectors</td>
<td>0.64</td>
</tr>
</tbody>
</table>

* Scale was restructured as dichotomous between responses with a 5 and the remaining responses during the posttest period.

Table 4-3. Study abroad students’ response to developing competence

<table>
<thead>
<tr>
<th>Response to Developing Competence</th>
<th>N (Pretest)</th>
<th>Percentage (%) (Pretest)</th>
<th>N (Posttest)</th>
<th>Percentage (%) (Posttest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree (least dev)</td>
<td>12</td>
<td>4.34</td>
<td>4</td>
<td>1.45</td>
</tr>
<tr>
<td>Disagree</td>
<td>28</td>
<td>10.14</td>
<td>12</td>
<td>4.35</td>
</tr>
<tr>
<td>Undecided</td>
<td>55</td>
<td>19.92</td>
<td>51</td>
<td>18.48</td>
</tr>
<tr>
<td>Agree</td>
<td>105</td>
<td>38.04</td>
<td>98</td>
<td>35.50</td>
</tr>
<tr>
<td>Strongly agree (high dev)</td>
<td>76</td>
<td>27.53</td>
<td>111</td>
<td>40.22</td>
</tr>
</tbody>
</table>
**Table 4-4. Study abroad students’ response to managing emotions**

<table>
<thead>
<tr>
<th>Response to Managing Emotions</th>
<th>N (Pretest)</th>
<th>Percentage (%) (Pretest)</th>
<th>N (Posttest)</th>
<th>Percentage (%) (Posttest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree (least dev)</td>
<td>9</td>
<td>3.26</td>
<td>6</td>
<td>2.17</td>
</tr>
<tr>
<td>Disagree</td>
<td>14</td>
<td>50.72</td>
<td>8</td>
<td>2.90</td>
</tr>
<tr>
<td>Undecided</td>
<td>23</td>
<td>8.33</td>
<td>30</td>
<td>10.87</td>
</tr>
<tr>
<td>Agree</td>
<td>109</td>
<td>39.49</td>
<td>81</td>
<td>29.35</td>
</tr>
<tr>
<td>Strongly agree (high dev)</td>
<td>121</td>
<td>43.84</td>
<td>151</td>
<td>54.71</td>
</tr>
</tbody>
</table>

**Table 4-5. Study abroad students’ response to moving through autonomy toward interdependence**

<table>
<thead>
<tr>
<th>Response to Moving Through Autonomy Toward Interdependence</th>
<th>N (Pretest)</th>
<th>Percentage (%) (Pretest)</th>
<th>N (Posttest)</th>
<th>Percentage (%) (Posttest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree (least dev)</td>
<td>28</td>
<td>12.17</td>
<td>24</td>
<td>10.43</td>
</tr>
<tr>
<td>Disagree</td>
<td>40</td>
<td>17.39</td>
<td>41</td>
<td>17.83</td>
</tr>
<tr>
<td>Undecided</td>
<td>46</td>
<td>20.00</td>
<td>40</td>
<td>17.39</td>
</tr>
<tr>
<td>Agree</td>
<td>60</td>
<td>26.09</td>
<td>45</td>
<td>19.57</td>
</tr>
<tr>
<td>Strongly agree (high dev)</td>
<td>56</td>
<td>24.35</td>
<td>80</td>
<td>34.78</td>
</tr>
</tbody>
</table>

**Table 4-6. Study abroad students’ response to developing mature interpersonal relationships**

<table>
<thead>
<tr>
<th>Response to Establishing Identity</th>
<th>N (Pretest)</th>
<th>Percentage (%) (Pretest)</th>
<th>N (Posttest)</th>
<th>Percentage (%) (Posttest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree (least dev)</td>
<td>15</td>
<td>6.52</td>
<td>5</td>
<td>2.17</td>
</tr>
<tr>
<td>Disagree</td>
<td>26</td>
<td>11.30</td>
<td>12</td>
<td>5.22</td>
</tr>
<tr>
<td>Undecided</td>
<td>44</td>
<td>19.13</td>
<td>38</td>
<td>16.52</td>
</tr>
<tr>
<td>Agree</td>
<td>89</td>
<td>38.70</td>
<td>71</td>
<td>30.87</td>
</tr>
<tr>
<td>Strongly agree (high dev)</td>
<td>56</td>
<td>24.35</td>
<td>104</td>
<td>45.22</td>
</tr>
</tbody>
</table>

**Table 4-7. Study abroad students’ response to establishing identity**

<table>
<thead>
<tr>
<th>Response to Establishing Identity</th>
<th>N (Pretest)</th>
<th>Percentage (%) (Pretest)</th>
<th>N (Posttest)</th>
<th>Percentage (%) (Posttest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree (least dev)</td>
<td>6</td>
<td>2.61</td>
<td>2</td>
<td>0.87</td>
</tr>
<tr>
<td>Disagree</td>
<td>6</td>
<td>2.61</td>
<td>2</td>
<td>0.87</td>
</tr>
<tr>
<td>Undecided</td>
<td>40</td>
<td>17.39</td>
<td>33</td>
<td>14.35</td>
</tr>
<tr>
<td>Agree</td>
<td>80</td>
<td>34.78</td>
<td>82</td>
<td>35.65</td>
</tr>
<tr>
<td>Strongly agree (high dev)</td>
<td>98</td>
<td>42.61</td>
<td>111</td>
<td>48.26</td>
</tr>
</tbody>
</table>
Table 4-8. Study abroad students’ response to developing purpose

<table>
<thead>
<tr>
<th>Response to Developing Purpose</th>
<th>N (Pretest)</th>
<th>Percentage (%) (Pretest)</th>
<th>N (Posttest)</th>
<th>Percentage (%) (Posttest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree (least dev)</td>
<td>5</td>
<td>2.17</td>
<td>1</td>
<td>0.43</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>1.30</td>
<td>4</td>
<td>1.74</td>
</tr>
<tr>
<td>Undecided</td>
<td>24</td>
<td>10.43</td>
<td>20</td>
<td>8.70</td>
</tr>
<tr>
<td>Agree</td>
<td>95</td>
<td>41.30</td>
<td>81</td>
<td>35.22</td>
</tr>
<tr>
<td>Strongly agree (high dev)</td>
<td>103</td>
<td>44.78</td>
<td>124</td>
<td>53.91</td>
</tr>
</tbody>
</table>

Table 4-9. Study abroad students’ response to developing integrity

<table>
<thead>
<tr>
<th>Response to Developing Integrity</th>
<th>N (Pretest)</th>
<th>Percentage (%) (Pretest)</th>
<th>N (Posttest)</th>
<th>Percentage (%) (Posttest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree (least dev)</td>
<td>9</td>
<td>2.80</td>
<td>2</td>
<td>0.62</td>
</tr>
<tr>
<td>Disagree</td>
<td>6</td>
<td>1.86</td>
<td>4</td>
<td>1.24</td>
</tr>
<tr>
<td>Undecided</td>
<td>31</td>
<td>9.63</td>
<td>26</td>
<td>8.07</td>
</tr>
<tr>
<td>Agree</td>
<td>129</td>
<td>40.06</td>
<td>109</td>
<td>33.85</td>
</tr>
<tr>
<td>Strongly agree (high dev)</td>
<td>147</td>
<td>45.65</td>
<td>181</td>
<td>56.21</td>
</tr>
</tbody>
</table>

Table 4-10. Paired t-test results of responses to the student development vector and the overall study abroad student development survey scale during pre and post period

<table>
<thead>
<tr>
<th>Student Development Vector</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing competence</td>
<td>22.46</td>
<td>24.52</td>
<td>2.06**</td>
</tr>
<tr>
<td>Managing emotions</td>
<td>24.93</td>
<td>25.89</td>
<td>0.96</td>
</tr>
<tr>
<td>Moving through autonomy towards interdependence</td>
<td>16.65</td>
<td>17.52</td>
<td>0.87</td>
</tr>
<tr>
<td>Developing mature interpersonal relationships</td>
<td>18.15</td>
<td>20.59</td>
<td>2.44**</td>
</tr>
<tr>
<td>Establishing identity</td>
<td>20.61</td>
<td>21.48</td>
<td>0.87</td>
</tr>
<tr>
<td>Developing purpose</td>
<td>21.26</td>
<td>21.96</td>
<td>0.70</td>
</tr>
<tr>
<td>Developing integrity</td>
<td>29.67</td>
<td>31.07</td>
<td>1.39</td>
</tr>
<tr>
<td>Sum of student development vectors</td>
<td>4.00</td>
<td>4.46</td>
<td>0.46**</td>
</tr>
</tbody>
</table>

**Statistically significant at the .01 alpha level

Table 4-11. Percentage lift scores from paired t-test

<table>
<thead>
<tr>
<th>Student Development Vector</th>
<th>Posttest</th>
<th>Pretest</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing competence</td>
<td>24.52</td>
<td>22.46</td>
<td>9.17</td>
</tr>
<tr>
<td>Managing emotions</td>
<td>25.89</td>
<td>24.93</td>
<td>0.00</td>
</tr>
<tr>
<td>Moving through autonomy towards interdependence</td>
<td>17.52</td>
<td>16.65</td>
<td>5.22</td>
</tr>
<tr>
<td>Developing mature interpersonal relationships</td>
<td>20.59</td>
<td>18.15</td>
<td>13.44</td>
</tr>
<tr>
<td>Establishing identity</td>
<td>21.48</td>
<td>20.61</td>
<td>0.00</td>
</tr>
<tr>
<td>Developing purpose</td>
<td>21.96</td>
<td>21.26</td>
<td>0.00</td>
</tr>
<tr>
<td>Developing integrity</td>
<td>31.07</td>
<td>29.67</td>
<td>0.00</td>
</tr>
<tr>
<td>Sum of student development vectors</td>
<td>4.46</td>
<td>4.00</td>
<td>11.5</td>
</tr>
</tbody>
</table>
Table 4-12. Previous experience abroad

<table>
<thead>
<tr>
<th>Previous Experience Abroad</th>
<th>N</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>18</td>
<td>39</td>
</tr>
<tr>
<td>Travel</td>
<td>20</td>
<td>44</td>
</tr>
<tr>
<td>Study</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Travel and study</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Former resident</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Travel and former resident</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 4-13. One-way ANOVA: Relationship between sum of developmental vectors and previous experience abroad

<table>
<thead>
<tr>
<th>Student Demographic Variable</th>
<th>One-Way ANOVA Model</th>
<th>Average Post-Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Experience Abroad</td>
<td>F-Value = 5.95</td>
<td>154.5**</td>
</tr>
<tr>
<td>Some Experience Abroad</td>
<td>P = .02</td>
<td>168.0**</td>
</tr>
<tr>
<td></td>
<td>R² = .119</td>
<td></td>
</tr>
</tbody>
</table>

**Statistically significant at the .05 alpha level
CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study explored how American undergraduate students’ perceive their own self-development changes via participation in their community college study abroad program using Chickering’s seven vectors of student development; in other words, did students gain increased levels of self-development based on their international academic and social experiences? If so, which ones? Furthermore, did the underlying environmental variables present in the survey questions (academic environment, classroom learning environment, student housing and friendships, student support services and programs, field trips and excursions, cultural awareness and technology) impact student development?

Research Hypothesis

H0: Undergraduate students who participated in their community college study abroad program reported no difference in self-development as represented by Chickering’s Theory of Student Development

H1: Undergraduate students who participated in their community college study abroad program reported enhanced self-development as represented by Chickering’s Theory of Student Development

In order to answer these questions, three additional research questions were employed to provide a statistical framework in which to answer the main research questions. The three research questions were:

Research Questions

RQ1: To determine the relationship between the individual student development vectors and overall student development using a Biserial Correlation Analysis
**RQ2:** To determine whether student development increased as a result of study abroad participation by examining pretest and posttest results

**RQ3:** To determine whether specific socio-economic variables influenced student development among study abroad participants using an Analysis of Variance (ANOVA) method

Thus, a complete analysis of the three research questions was conducted to determine whether student development did occur before and after study abroad participation.

**Research Question 1**

First, four methods of validity was examined and included various statistical components to ensure that the items measured the functional areas correctly, namely student development vectors. The main statistical component used was a Biserial correlation analysis to determine the relationship between the student development vectors and the overall evaluation scale during the pretest and posttest survey period and internal consistency of the research survey instrument.

From the results, it is clear that six out of the seven student development vectors had a high correlation with the items on the scale being measured. Strong posttest relationships existed with Developing Integrity (88%) and also with Developing Competence (87%). Furthermore, the Biserial correlation for the Sum of Student Development Vectors on the posttest survey scale indicated 98% item effectiveness. This suggests that the student development vector items on the scale, taken together, effectively measured the seven vectors of Chickering’s Theory of Student Development. Furthermore, in each of the student development vector heading, the individual items effectively measured the environmental variables, which influenced student development.
Research Question 2

The second research question addressed whether student development increased as a result of study abroad participation by examining pretest and posttest results. A Dependent Samples Paired T-Test was used to compare the posttest survey responses to pretest survey results. Thus, did development occur from pretest to posttest based on student responses?

Student development was statistically significant in two out of the seven vectors, and student development did occur overall from pretest to posttest, therefore undergraduate students who participated in their community college study abroad program reported enhanced levels of self-development in specific development vectors and overall student development.

These vectors (Developing Competence, Developing Mature Interpersonal Relationships, and Overall Student Development) were statistically significant over the other vectors. To further validate the research findings, the student development vector that showed the greatest statistical significance on the paired t-test in comparison to the percentage lift scores from the Biserial correlation analysis was the Developing Competence vector (2.06 at $\alpha = .01$, 87%, respectively).

Developing Competence

According to Chickering’s Theory of Student Development, Developing Competence included three specific elements of competence: Intellectual, Physical, and Interpersonal Competence. All three work in overlapping capacities in gaining confidence and goal setting in student development. Noonan et al. (2005) explained that “community college students had the highest NCQ scores on self-concept, long-term
goals, and leadership” (p. 468). These three aspects must be considered in developing
competence and most likely influenced self-confidence and interpersonal confidence in
the Developing Competence vector.

Furthermore, intellectual competence involved the development of intellectual,
cultural, and aesthetic sophistication. Physical competence was acquired through athletic
and recreational activities, and interpersonal skills included communication, leadership
and working effectively with others (Chickering, 1993). In addition, the development of
intellectual competence in the context of ‘learning’ was influential especially when
abroad since the learning occurred both in academic and social environments. Student
cognition and learning often occurs in social contexts, such as classrooms, computer labs,
residence halls, and snack bars (King, 1996).

Miller et al. (2005) found that “community college students indicated that
balancing academic and personal life was a challenge” (p. 73). But in this research study,
community college students who studied abroad felt self-directed in their own goals,
leadership development, and worked effectively with other, and believed they had a high
level of communication and problem-solving abilities (including technology applications)
as evident in the development of interpersonal competence.

In this research study, six overlapping environmental themes were paramount in
measuring the Developing Competence vector as supported by a significance level of
2.06 (α = .01). These included increased specific knowledge in certain areas such as:
course material, country’s history, and foreign language, critical thinking and reasoning
ability, athletic and recreational activity, communication skills with diverse populations,
student contact, and technology skills. Thus, students’ had perceived an increase in all three aspects of developing competence by studying abroad.

**Developing Mature Interpersonal Relationships**

The next vector, Developing Mature Interpersonal Relationships explored the development of intercultural and interpersonal tolerance and appreciation of differences as well as the capacity to have long lasting relationships with partners and close friends as explained by Chickering’s Theory of Student Development.

Students in this research study adopted a “multicultural identity”; that is, continually learn about the new culture, communicate with people from different cultures, and adapt successfully to a variety of different cultural settings (Talbot, 1996).

In this vector, students were measured in the development of friendships and relationships with persons of other cultures, roommates and classmates, people they met through clubs, organizations, and their academic programs, as well as friends and family (sig. 2.44, \( \alpha = .01 \)).

Therefore, students who elected to study abroad had developed an appreciation for intercultural relationships, or desired to develop this appreciation and understanding of other unique persons and cultures as evident by the Developing Mature Interpersonal Relationships vector. Taken together, these two vectors, Developing Competence an Developing Mature Interpersonal Relationships showed that students had successfully formed friendships and lasting relationships in the study abroad program and abroad to effectively support their own academic, athletic, and interpersonal goals.

**Overall Student Development**

And lastly, the Overall Student Development vector was significant in both the
paired t-test analysis and Biserial correlation analysis. There was a strong posttest relationship on the Biserial correlation analysis for the Sum of Student Development Vectors on the posttest survey scale (98% item effectiveness).

Similarly, the paired t-test analysis proved that the Sum of Student Development Vectors exhibited a statistical significance of 0.46 ($\alpha = .01$). This indicated that not only did the student development scale items parallel that of Chickering’s Seven Vectors of Student Development accurately, but answered the second research question that overall student development did occur from pretest to posttest due to study abroad participation.

This suggested that students who studied abroad perceived that their own overall development had increased from before the program to after the program had ended. Therefore, students perceived that study abroad participation was a vital component in overall student development changes, but especially important in the development of competence and mature interpersonal relationships.

**Research Question 3**

**Trends and Patterns**

From the one-way ANOVA method, there were some patterns that emerged from the data analysis. For example, females were the greatest participants compared to males (61% versus 39%), which suggests that females represent a higher proportion of the general population in community colleges than males.

Also, Caucasian students represented the largest ethnic group studying abroad (74%). Furthermore, although the majority of students were undecided or did not have a major, the second largest group studying abroad included pre-professional students as
opposed to students majoring in language learning as consistent with other research studies (McKeown, 2003).

Ellis found that “white students lacked racial/ethnic identity development….and the combination of low self-esteem and low racial/ethnic identity development could impair students in achieving a well-rounded education” (p. 756). However, in this research study, the results proved otherwise.

Although Caucasian females represented the majority of students studying abroad, they also had developed an appreciation for cultural differences and interpersonal tolerance as reflected in the Developing Mature Interpersonal Relationships student development vector. Thus, by studying abroad, Caucasian female students recognized the needs to increase or improve their own intercultural relations with diverse populations and were satisfied after the completion of the program that this goal was satisfied.

**Previous Experience Abroad**

There was a strong correlation between previous experience abroad and the student development vectors (Table 4-12). Thus, students with some experience abroad (before studying abroad) had increased overall student development than those who had no experience abroad. This is an interesting paradox because in general, students with no experience abroad tend to have the same if not higher student development than students who do have prior experience abroad. Thus, in order to validate these findings, an examination of the power in ANOVA methods is discussed below.

**Power of ANOVA**

The power of a one-way ANOVA can be thought of as the chance that the sample data lead to a rejection of the null hypothesis when in fact not all population means are
equal (Penfield, 2003). In other words a Type I error such as the rejection of a null hypothesis, when in fact the null hypothesis was true (low power) or a Type II error whereby the accepted null hypothesis when in fact the null hypothesis was actually false (low power).

In this study, the power of the ANOVA model was greater than .995 for the measure of previous experience abroad/no experience abroad versus overall student development. Therefore, our findings are accurate in that students who had prior experience abroad (whether travel, previous study, or former resident) did have increased overall student development than those who had no experience abroad.

Thus, students perceived a change in their overall student development because they had already experienced international destinations in another capacity, such as, previous travel, study or former residence abroad. In addition, these students were more likely to have a reduced level of culture shock and homesickness (Scharman, 2002). They were also more likely to gain a deeper understanding of cultural differences and development of interpersonal and athletic goals because they had previous experience abroad and therefore a greater appreciation for learning and development.

**Biserial Correlation Analysis and Paired T-Test Comparisons**

Based on the evidence gathered from the Biserial correlation analysis and Paired Dependent Samples T-Test, the null hypothesis was rejected at alpha = .01 since students reported increased levels of self-development based on their international academic and social experiences as represented by Chickering’s Theory of Student Development. In examining the environmental variables, all variables presented in this study (academic environment, classroom learning environment, student housing and friendships, student
support services and programs, field trips and excursions, cultural awareness and technology) were interrelated and impacted student development abroad.

To what extent these variables impact student development is unknown because each individual and their learning process is unique. However, Developing Competence and the Overall Student Development were highly correlated and showed a strong statistical significance. This indicates that students felt that they had increased their abilities to develop academic, interpersonal, and athletic competencies as well as an overall development change due to study abroad participation.

**Summary**

Study abroad participation had an important impact on student development abroad from examination of the pretest and posttest results based on Chickering’s Theory of Student Development. From the Biserial Correlation analysis, six of the seven vectors of student development were highly correlated with the items on the scale. In other words, the data analysis showed that the seven vectors of student development did in fact measure what it was intended to measure and that the environmental variables accurately supported the measure of each student development vector.

The paired t-test data analysis, found a strong emergence of three of the seven student development vectors as being statistically significant in pretest to posttest comparisons: Developing Competence and Developing Mature Interpersonal Relationships, and Overall Student Development. In other words, students perceived a developmental change in academic, athletic, and interpersonal competence as well as the ability to respect and communicate with persons of different cultural backgrounds as a result of studying abroad. The data analysis also revealed the emergence of two major
student development vectors in both the Biserial item analysis and pretest to posttest development which included Developing Competence, 87%, and Overall Student Development, 98%.

The third research question examined various student demographic variables which suggested that there was a large number of female students in comparison to male student who elected to study abroad was 61% versus 39%. In addition, students who had previous study abroad experience had increased levels of student development than those without prior experience abroad.

Lastly, students perceived that study abroad participation was a vital component in overall student development changes, but especially important in the development of competence and mature interpersonal relationships. This suggests that by studying abroad, students believed they had both a cognitive and behavioral learning experience, overall.

**Limitations**

There were a number of limitations that must be addressed concerning this research study. Five main themes surfaced during the investigation and warrant further analysis in future studies.

**Environmental Variables**

The first theme applied to the discussion of environmental variables and the relationship to that of the student development vectors. In this study, the environmental variables represented many areas that contribute to or indirectly effect student development while abroad. Examining how great this effect was on student development
was a difficult task and cannot be quantitatively determined since each student experienced development in unique and different ways.

In addition, the title of the student development vector as the category heading on the study abroad student development survey could have been negatively associated with the questions to some students filling out the survey. Nevertheless, students overall rated themselves higher on the post-survey indicating that student development did occur and the environmental variables did in fact influence student development abroad as explained by the research instruments’ statistical measurement.

**Moving Through Autonomy Toward Interdependence**

The second theme that emerged was the Moving through Autonomy vector and its weaker correlation on the Biserial Correlation analysis. It can be discussed that this particular vector measured the “movement” of development; that is, development occurred in many development stages throughout one’s lifetime and therefore justification over a summer study abroad program would be difficult to quantitatively assess. Thus, further research is necessary to examine the Moving through Autonomy vector over longer periods of time.

**Sample Size**

The third theme addressed sample size. Although two hundred surveys were mailed and agreements from the participating college officials suggested that a response rate of 50% would be received, many programs cancelled programs at the last minute and could not participate. Political unrest, increased terrorism, and uncertainty were all major factors that influenced students, parents, faculty and administrators in deciding whether studying abroad would be a safe and positive experience during the summer of 2006.
There is no way to change the political climate at home and abroad, but there are safeguards that can be set in place to assure the security of students, such as cell phones and other communication mediums, embassy and military procedures, knowledge of safety and evacuation routes, etc.

To further account for the smaller sample size, the chosen environment of the research project is important to review. American community colleges or junior colleges generally have smaller populations than universities and other larger private colleges, and therefore a smaller sample size would be expected to represent the college environments. In addition, many community colleges did not maintain study abroad programs or did not partner with other colleges (such as state consortium or independent study abroad programs, such as AIFS), but planned to create such programs in the future. Nevertheless, those community college programs that were successful in maintaining effective study abroad programs and student development initiatives are equally important to that of four-year institutions and need to be recognized in student development research.

Furthermore, the small sample size may have limited the methods on assessing the dimensionality of the scale as well as further analysis on the demographic variables. Nevertheless, the sample size was sufficient to conduct the study based on the statistical methods used and yielded positive results based on Chickering’s Theory of Student Development.

**Participant Diversity**

The fourth theme examined diversity among student participants. The majority of student participants were mostly White/Caucasian, and female. Females almost doubled male participation in their study abroad programs according to this research study. This
suggested that the overall population in the United States from which the sample population was drawn is still predominantly Caucasian and mostly female, in general.

To balance internal and external validity is an intricate task. Although it was possible to have controlled the research study to limit female student participants, this could have indirectly added a gender-based confounding variable into the research project, which is always undesirable. Thus, no limitation was set for female participants, giving an accurate account of the general community college study abroad population.

**Other Demographic Variables**

The final limitation included other aspects of the student demographic variables that were not measured in this study. Such variables include financial aid, income level, and age. Given the important aspects of these variables and subsequent impact on study abroad, it would be beneficial for future studies to address these variables in detail in order to assess additional intrinsic impacts on student development.

**Implications**

There are a number of implications for higher education administrators and faculty members interested in study abroad programs and should consider the research examined in this study such as program cancellations, gender and race, previous experience abroad, and major. The first major aspect concerns key stakeholders in study abroad programming and cancellations of study abroad programs.

**Key Stakeholders**

Out of the twenty-two colleges that agreed to participate in the study, four community colleges from Colorado, Minnesota, Washington, Virginia, and Florida cancelled programs due to political unrest or heightened terrorist alert (personal
communication, 8/28/06). In addition, two community colleges in Georgia and New York did not effectively distribute or collect the surveys after the study abroad program was completed. Student, faculty, administrators, and external constituents should all participate in study abroad programming initiatives and devise plans for secondary international sites if there exists political and terrorist instability in first choice study abroad locations.

Thus, cancellations of study abroad programs should be the last choice in order to afford students both cognitive and social development experiences. However, if this is the only option, administrators should offer alternate travel or diversity programs to support cultural and diversity learning and development.

**Caucasian Female Population**

Second, the findings revealed that Caucasian females were the largest group studying abroad. Although the results indicated that this group represented the greater gender proportion on community college campuses, there is another important consideration: Wealth. The research shows that Caucasian students generally come from higher-income families than Black or Hispanic students; therefore, the number of students studying abroad could be highly influenced by Caucasian students having the funding to study abroad versus minority groups who cannot afford to study abroad.

Administrators, faculty, and external constituents must offer financial support to minority students who want to study abroad, especially at community colleges where the majority of students are working either part-time or full-time to support their educational endeavors (NCES, 2003/2004).
Previous Experience Abroad

From the data analysis, students who had prior experience abroad had a higher overall development than those who had not studied abroad. In other words, the political climate did not deter students from studying abroad; however, it is interesting that the majority of students who studied abroad had already traveled, studied, or had been a former resident abroad. It is possible that students who had never studied abroad decided not to travel this year because of political concerns, terrorism, and heightened security; and thus opted not to go this year because of fear and apprehension. Therefore, administrators must carefully consider this implication of future study abroad programming and keep in mind that a decrease in student support for study abroad initiatives would be detrimental to the need for cultural and diversity goals.

Degree Major

And lastly, choice of major was an interesting paradox. Research studies show that students who study abroad are more likely to be language majors since the opportunities for increased language skills are greater abroad than at home (Astin, 1993). Yet, the data analysis showed that the greatest number of students who studied abroad in the summer of 2006 had no degree major or was undecided. Therefore, students in community college programs had not decided on a course of study, which is interesting because many degree programs on community college campuses are highly specialized, such as computer technology, nursing, dental hygiene in addition to general liberal arts transfer programs.

Furthermore, the second largest major represented by students studying abroad included pre-professional areas, such as pre-medicine, pre-law, etc. This suggests that a
large number of students who studied abroad were more likely to transfer to four-year institutions to complete their chosen major. Similarly, students may have already been in a four-year community college that was previously a two-year community college (such as St. Petersburg College and Edison College) and therefore had already selected in pre-professional tracks.

Thus, students who were undecided in their majors or pre-professional majors were highly interested in study abroad and cultural learning; thus, administrators should carefully consider such academic areas in study abroad program planning.

**Recommendations for Further Research**

This research study applied Chickering’s Seven Vectors of Student Development Theory to students in various community college summer study abroad programs. In conducting the research, a number of topics surfaced that may support future research studies:

- A follow-up study* examining Individual Student Development Vectors as they pertain to Study Abroad Students using Chickering’s Theory of Student Development, Seven Vectors of Student Development. (*Note: a two to five year period is preferred to examine changes in student development behavior over a longer period of time)

- Study Abroad Administrators and Faculty: A thorough investigation of administrators, faculty, and students that elect to proctor study abroad students. Topics of interest could include salary compensation, ‘burnout’, engaging students abroad, conflict abroad, and other issues (Chickering’s Theory of Student Development, Student-Faculty Relationships)

- Budget and Fiscal Allocations: An investigation of statewide funds allocated to study abroad and/or international education in comparison to institutions abroad (Chickering’s Theory of Student Development, Institutional Objectives/Institutional Size)

- Student Development Comparisons between Community College Students and University Students in Study Abroad Programs (Chickering’s Theory of Student Development, Institutional Size)
• Examination of Student Internship, CO-OP, or Volunteerism Abroad as part of Academic Program (Chickering’s Theory of Student Development, Integration of Work and Learning)

• Emergence or Decline of Study Abroad Programs in the United States (Chickering’s Theory of Student Development, Student Development Programs and Services)

• Examination of Worldwide University Study Abroad Programs using Principle Component Analysis* and Logistic Regression

Note: *PCA is a dimensionality reduction technique (Narayanaswamy, 1991) and should be used in studies that yield a large sample size, such as 300-400 students
APPENDIX A
LETTER OF INVITATION (EXPERT PANEL)
January 10, 2006

Dear Potential Reviewer/s,

Thank you for considering my request to be a member on my expert panel for review of my research instrument.

My name is Devi S. Drexler and I am a doctoral student working on my PhD in Higher Education, Policy and Foundations at the University of Florida, FL. I am also currently working at Tallahassee Community College as the Assistant to the Dean, and have a background in both academic affairs and student affairs.

I have truly enjoyed my coursework and work experience, which has led me to write a dissertation on study abroad students and their development through participation in their elected community college study abroad programs.

I have requested the help of my former instructor, Dr. Ken Osfield, who really introduced me to the international aspect of higher education, and ultimately my interest in this topic. My chair, Dr. Dale Campbell has requested that I seek the advice of experts in the field to solidify my main research instrument (surveys) so that my study can meet the standards set by my committee, college, and university.

I am requesting your help to review the theory materials and provide any feedback and comments about my research instrument as part of the expert panel. Please email the Survey Evaluation Form to Dr. Ken Osfield by 5:00pm on Wednesday, March 1, 2006.

Again, thank you so much for your consideration,

Devi S. Drexler
drexlrd@tcc.fl.edu
Office: (850) 201-6094
Home: (850) 385-9861
APPENDIX B
LETTER OF INVITATION (ACADEMIC PANEL)
January 10, 2006

Dear Potential Reviewer/s,

Thank you for considering my request to be a member on my academic panel for review of my research instrument.

My name is Devi S. Drexler and I am a doctoral student working on my PhD in Higher Education, Policy and Foundations at the University of Florida, FL. I am also currently working at Tallahassee Community College as the Assistant to the Dean, and have a background in both academic affairs and student affairs.

I have truly enjoyed my coursework and work experience, which has led me to write a dissertation on study abroad students and their development through participation in their elected community college study abroad programs.

I have requested the help of my former instructor, Dr. Ken Osfield, who really introduced me to the international aspect of higher education, and ultimately my interest in this topic. My chair, Dr. Dale Campbell has requested that I seek the advice of academic experts in the field to solidify my main research instrument (surveys) so that my study can meet the standards set by my committee, college, and university.

I am requesting your help to review the theory materials and provide any feedback and comments about my research instrument as part of the expert panel. Please email me the Survey Evaluation Form by 5:00pm on Wednesday, March 1, 2006.

Again, thank you so much for your consideration,

Devi S. Drexler
drexlerd@tcc.fl.edu
Office: (850) 201-6094
Home: (850) 385-9861
Dear College Official,

Greetings from Tallahassee, Florida! My name is Devi Drexler and I am the Assistant to the Dean at Tallahassee Community College and also a doctoral candidate at the University of Florida. I am writing a dissertation on study abroad students and their development through participation in their selected community college study abroad programs.

I am requesting your assistance with my PhD program as I continue the process of working on a national study of community college study abroad programs (summer programs, 2006). My goal in this research project is to validate student development theory. Please note that if your study abroad program is new or improving, this will be a great opportunity for your college to be recognized along with major community college study abroad programs in various states. Whether your program has just a few or many students that participate, the student population will be evaluated as a whole when examining student development.

If you will be able to participate in this study, I will mail you the survey's and directions to administer to your summer study abroad students by the end of March. Your students information will not be revealed and the study will remain confidential beforehand, to be submitted before the doctoral committee, UF College of Education, and possible future publication.

Attached is an Information Sheet for you to fill out as the official representative from your community college. Please complete the form and return to me via email before February 20, 2006. Feel free to complete as many forms as you would like for each study abroad program offered! I would definitely like to recognize in my dissertation all administrators and instructors affiliated with your program and this study.

Again, this is a wonderful opportunity for our community colleges to be recognized for their outstanding student services and I hope you will be able to participate! If this email has reached you in error, please forward to the appropriate college official. If your community college does not currently offer a study abroad program, please email me with a response so I can keep it for my records.

Thank you once again for your help and consideration,
Devi S. Drexler
APPENDIX D
INVITATION LETTER (PARTICIPATING COLLEGE OFFICIALS)
April 17, 2006
Dear Administrator / Instructor,

This letter serves as an invitation to request your participation in a research study that evaluates study abroad students and student development variables before and after the study abroad program. We have invited selected nationwide community colleges that are members of the League for Innovation to take part in this research study and value your support and assistance with this project.

Please find enclosed the following documents:
- Directions for Administering the Study Abroad Student Development (SASD) Survey
- Informed Consent Forms
- The Study Abroad Student Development Survey (Pretest and Posttest)
- Self-Addressed Stamped Envelope

Please fill out and sign the bottom of the Directions for Administering the Study Abroad Student Development Survey and return along with the Study Abroad Student Development Survey (Pretest and Posttest) in the SASE provided by August 8, 2006. Please do not return the Informed Consent forms, these forms should be retained by the students.

The results of the research can add to the understanding of study abroad students and their academics and activities abroad. It can promote discussions and further research on study abroad initiatives and student development theory and research. If you would like a copy of the results of this study, please submit a request in writing to the address listed below. The data results will be used in partial fulfillment for the requirements of the Ph.D. degree in Higher Education.

Any questions pertaining to the rights of the research participant should be directed to the University of Florida, IRB office, P.O. Box 112250, Gainesville, FL 32611-2250. Phone (352) 392-0433.

Thank you in advance for your help with participating in this research study! Your timely response is truly appreciated!

Sincerely,
Devi S. Drexler       Dr. Dale F. Campbell
Principal Investigator       Supervisor/Committee Chair
APPENDIX E
DIRECTIONS FOR ADMINISTERING SURVEY
DIRECTIONS FOR ADMINISTERING
THE STUDY ABROAD STUDENT DEVELOPMENT SURVEY

BEFORE THE PROGRAM STARTS:

1. Please pass out the enclosed Informed Consent Form and the Study Abroad Student Development Survey (Pretest) to each student who will be participating in the study abroad program.

2. Please advise your students to answer **every question** on the survey.

3. **By answering the questions on the survey, the student has given consent.** In addition, no personal data (SS#, date of birth) will be obtained in this research project to protect participant identity. The only required information is student name to measure pre-post development and will not be revealed to the public.

4. When your students have completed the pretest survey, please collect and keep secure until the end of the program. The students keep the Informed Consent Form.

AFTER COMPLETION OF THE PROGRAM:

1. Please pass out the enclosed Study Abroad Student Development Survey (Posttest) to each student who has participated in the study abroad program.

2. Please advise your students to answer **every question** on the survey.

3. When your students have completed the posttest survey, **please place all surveys (pretest and posttest), including this form, in the SASE provided.**

PLEASE MAIL THIS FORM & THE PRETEST/POSTTEST SURVEYS IN THE SASE PROVIDED ON OR BEFORE: **AUGUST 8, 2006**

The information collected will be used in evaluating student development changes as a result of study abroad participation. In addition, the information collected will not be used to reflect individual college data; rather the information will be used as a whole to evaluate the student development variables. This is to protect smaller study abroad programs or programs that are new and/or affiliated with other colleges/universities.

By signing below, I am giving authorization for this survey to be administered and used by my students in this research project. I am also consenting that the principal investigator may publish my name and the names of my colleagues, and community college for research purposes, only.

Primary Administrator/Instructor (print) ___________________ Administrator/Instructor (sign) Date __________

Additional Administrator/Instructor (print) ___________________ Administrator/Instructor (print) __________

Name of Community College ___________________ Study Abroad Location ___________________

**Materials received after this deadline date may or may not be included in the research study due to college deadlines.**
STUDY ABROAD STUDENT
DEVELOPMENT SURVEY (PRETEST)

BY COMPLETING THIS SURVEY, YOU ARE GIVING INFORMED CONSENT THAT ALL
INFORMATION PROVIDED IS TRUTHFUL AND ACCURATE TO YOUR KNOWLEDGE.

Study Abroad Program Information:
(Please clearly print all information requested in each field listed below)

Program Name: ___________________________________ Program Term/Year: ______________________

International Location: __________________________ College Institution: __________________________

If participating from another college, Name of College/University: _________________________________

Student Information:
(Names will not be revealed in study, but is necessary to measure individual student progress before & after the
program)

Last Name: ____________________________ First Name: __________________________________

Class level:     Freshman    Sophomore         Junior    Senior    Grad. Student

Major (s) _______________________________  Minor (s) ________________________________

Sex:       Male     Female Previous experience abroad:     None     Travel     Study     Former Resident

Ethnic Background:    Native American     Hispanic/Latino           Caucasian

Black/African-American     Asian/Pacific Islander      Prefer not to answer

PLEASE USE THE FOLLOWING SCALE TO ANSWER THE SURVEY QUESTIONS:
1= STRONGLY DISAGREE  2= DISAGREE  3=UNDECIDED  4=AGREE  5= STRONGLY AGREE

DEVELOPING COMPETENCE
Before studying abroad…
I have a very strong knowledge of the course material, country’s history, or foreign language 1 2 3 4 5
I have a very strong level of critical thinking and reasoning ability 1 2 3 4 5
I am highly involved in athletic & recreational activities 1 2 3 4 5
I have a very high level of communication skills with persons of other races and cultures 1 2 3 4 5
I work very effectively with other students both in and out of class 1 2 3 4 5
I have a very high level of technology skills (email, blackboard, web, etc) 1 2 3 4 5

MANAGING EMOTIONS
Before studying abroad…
I have a very high level of recognizing and controlling my own emotions in class 1 2 3 4 5
I have a very high level of emotional control even when my roommates upset me 1 2 3 4 5
I never become frustrated when internet and email services do not work properly and always look
for viable solutions to solve the problem 1 2 3 4 5
I am very excited and eager to meet people from different cultures and races 1 2 3 4 5
I am very relaxed and calm before participating in group field trips and excursions 1 2 3 4 5
I greatly enjoy participating in clubs & organizations that allow me to express my opinions 1 2 3 4 5

MOVING THROUGH AUTONOMY TOWARDS INTERDEPENDENCE
Before studying abroad…
I am very self-directed in my academic pursuits 1 2 3 4 5
I have a high level of problem-solving abilities 1 2 3 4 5
I highly depend on my roommates for approval of personal and social activities 1 2 3 4 5
I highly depend on my classmates for approval of class work or projects 1 2 3 4 5
I highly use technology independently to structure my academic and non-academic activities 1 2 3 4 5

DEVELOPING MATUER INTERPERSONAL RELATIONSHIPS
Before studying abroad…
I have many friendships/relationships with persons of cultures other than my own 1 2 3 4 5
I have many friendships/relationships with my roommates and/or classmates 1 2 3 4 5
I have many friendships with people I have met through organizations and field trips 1 2 3 4 5
I have many friendships with other students throughout my academic program 1 2 3 4 5
I highly depend on connecting with friends and family through internet and email services 1 2 3 4 5

ESTABLISHING IDENTITY
Before studying abroad…
I am very comfortable with my own gender, race, and cultural identity 1 2 3 4 5
I highly value interacting with my peers and instructor in the classroom 1 2 3 4 5
I greatly enjoy socializing with roommates/other students in my residence hall 1 2 3 4 5
I am very comfortable in leading, organizing, & participating in organizations & field trips 1 2 3 4 5
I highly value interacting with friends and family through email and technology applications 1 2 3 4 5

DEVELOPING PURPOSE
Before studying abroad…
I have a high level of personal commitment to achieving my academic and/or athletic goals 1 2 3 4 5
I make very important, independent decisions without relying on my roommates for help 1 2 3 4 5
I have a very strong commitment to participating in classroom and group activities 1 2 3 4 5
I have a very strong commitment of experiencing different cultural activities 1 2 3 4 5
I am very deeply committed to exploring new areas and visiting new sites 1 2 3 4 5

DEVELOPING INTEGRITY
Before studying abroad…
My attitude & behavior indicate that I highly value the importance of academic success 1 2 3 4 5
My attitude & behavior indicate that I highly value the importance of cultural diversity 1 2 3 4 5
My attitude & behavior indicate that I highly respect the beliefs/opinions of my classmates 1 2 3 4 5
My attitude & behavior indicate that I highly respect the beliefs/opinions of my roommates 1 2 3 4 5
My attitude & behavior indicate that I highly value participating in clubs and organizations 1 2 3 4 5
My attitude & behavior indicate that I highly value participating in field trips and excursions 1 2 3 4 5
My attitude & behavior indicate that I highly value the use of technology in academic, social, and personal endeavors (t) 1 2 3 4 5

PLEASE RATE YOUR OVERALL STUDENT DEVELOPMENT (1= lowest, 5= highest) 1 2 3 4 5

Please return this evaluation to the designated instructor or program coordinator of your study abroad program.
Thank you for your participation in this survey!
STUDY ABROAD STUDENT DEVELOPMENT SURVEY (POSTTEST)

BY COMPLETING THIS SURVEY, YOU ARE GIVING INFORMED CONSENT THAT ALL INFORMATION PROVIDED IS TRUTHFUL AND ACCURATE TO YOUR KNOWLEDGE.

Study Abroad Program Information:
(Please clearly print all information requested in each field listed below)

Program Name: ________________________________ Program Term/Year: ____________________________

International Location: __________________________ College Institution: __________________________

If participating from another college, Name of College/University: _________________________________

Student Information:
(Names will not be revealed in study, but is necessary to measure individual student progress before & after the program)

Last Name: ____________________________ First Name: ____________________________________

Class level:     Freshman    Sophomore    Junior    Senior    Grad. Student

Major (s) _______________________________ Minor (s) ________________________________

Sex:       Male     Female Previous experience abroad:     None     Travel     Study     Former Resident

Ethnic Background:    Native American     Hispanic/Latino           Caucasian     Black/African-American     Asian/Pacific Islander    Prefer not to answer

PLEASE USE THE FOLLOWING SCALE TO ANSWER THE SURVEY QUESTIONS:
1= STRONGLY DISAGREE    2= DISAGREE    3=UNDECIDED    4=AGREE    5= STRONGLY AGREE

DEVELOPING COMPETENCE
After studying abroad:
I have a very strong knowledge of the course material, country’s history, or foreign language 1 2 3 4 5
I have a very strong level of critical thinking and reasoning ability 1 2 3 4 5
I am highly involved in athletic & recreational activities 1 2 3 4 5
I have a very high level of communication skills with persons of other races and cultures 1 2 3 4 5
I work very effectively with other students both in and out of class 1 2 3 4 5
I have a very high level of technology skills (email, blackboard, web, etc) 1 2 3 4 5

MANAGING EMOTIONS
After studying abroad:
I have a very high level of recognizing and controlling my own emotions in class 1 2 3 4 5
I have a very high level of emotional control even when my roommates upset me 1 2 3 4 5
I never become frustrated when internet and email services do not work properly and always look for viable solutions to solve the problem 1 2 3 4 5
I am very excited and eager to meet people from different cultures and races 1 2 3 4 5
**PLEASE USE THE FOLLOWING SCALE TO ANSWER THE SURVEY QUESTIONS:**

1 = STRONGLY DISAGREE  
2 = DISAGREE  
3 = UNDECIDED  
4 = AGREE  
5 = STRONGLY AGREE

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<thead>
<tr>
<th>Item</th>
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<tr>
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<tr>
<td>My attitude &amp; behavior indicate that I highly value the use of technology in academic, social, and personal endeavors (t)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>I have developed more intrinsic values and integrity by studying abroad</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td><strong>PLEASE RATE YOUR OVERALL STUDENT DEVELOPMENT (1= lowest, 5= highest)</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Please return this evaluation to the designated instructor or program coordinator of your study abroad program.  
Thank you for your participation in this survey! | 1 2 3 4 5 |
INFORMED CONSENT

TITLE OF PROTOCOL: An Examination of Student Perceptions on Self-Development Variables in Select Community College Study Abroad Programs: A Quantitative Study Using Chickering’s Theory of Student Development

PLEASE READ THIS CONSENT DOCUMENT CAREFULLY BEFORE YOU DECIDE TO PARTICIPATE IN THIS STUDY.

PURPOSE OF THE INVESTIGATION: To understand how student development theory impacts study abroad student participants as they undergo academic and environmental learning abroad.

PROCESS: You will be asked to complete the Study Abroad Student Development Survey (pretest and posttest) about your academics abroad and activities. Please answer every question on the survey.

TIME REQUIRED: 15 – 20 Minutes per test (pretest and posttest).

POTENTIAL BENEFITS AND ANTICIPATED RISK: No more than minimal risk. There is no direct benefit to the participant in this research. However, this research can add to the understanding of study abroad students and their academic and activities abroad. It can promote discussions and further research on study abroad initiatives and student development theory and research.

CONFIDENTIALITY: Your identity will remain anonymous and the final research will reveal only the statistical results from the survey compilation.

COMPENSATION: There is no compensation.

VOLUNTARY PARTICIPATION: Your participation in this study is completely voluntary. There is no penalty for not participating.

RIGHT TO WITHDRAW FROM STUDY: You have the right to withdraw from the study at any time without consequence.

CONTACTS

PRINCIPAL INVESTIGATOR: Devi S. Drexler, Doctoral Candidate, Tallahassee Community College, Academic Support Building, 444 Appleyard Drive, AP 261, Tallahassee, FL 32304-2895. Phone: 850-201-6094, Fax: 850-201-8245, Email: devi@ufl.edu

SUPERVISOR/CHAIR: Dr. Dale Campbell, University of Florida, College of Education, 229A Norman Hall, Gainesville, FL 32611. Phone: 352-392-2391 ext.281, Email: dfc@coe.ufl.edu

RIGHTS AS RESEARCH PARTICIPANT: University of Florida, IRB Office, Box 112250, Gainesville, FL 32611-2250. Phone: 352-392-0433

Disclosure: I have read the procedure outlined above. I voluntarily agree to participate in this study and have received a copy of this description. (You may keep this document. No signature is necessary)
LIST OF REFERENCES


Tate, R. F. (1955). The theory of correlation between two continuous variables when one is dichotomized. *Biometrika, 42*(1/2), 205-216.


BIOGRAPHICAL SKETCH

Devi S. Drexler was born and raised in Leicestershire, England and came to the United States in the 1980s. She obtained a Bachelor of Arts in English from the University of Florida and Master of Science in Higher Education from the Florida State University before completing her Doctor of Philosophy in Higher Education Administration from the University of Florida. She has worked in many areas of higher education at the University of Florida, Florida State University, Santa Fe Community College and currently at Tallahassee Community College.

She is an avid traveler and has enjoyed visits to many exotic and exciting places such as France, Belgium, Canada, Greece, Guyana, Trinidad and Tobago, Mexico, Aruba, and many other notable areas of the world. She has been and remains a strong advocate for global education and international awareness.