Andrews University

Digital Commons @ Andrews University

Dissertations

Graduate Research

2015

Diversity and Student Engagement in a Small Multi-ethnic Liberal Arts University in California

Yamileth Bazan

Andrews University, bazan@andrews.edu

Follow this and additional works at: <https://digitalcommons.andrews.edu/dissertations>

Part of the [Bilingual, Multilingual, and Multicultural Education Commons](#), and the [Higher Education Commons](#)

Recommended Citation

Bazan, Yamileth, "Diversity and Student Engagement in a Small Multi-ethnic Liberal Arts University in California" (2015). *Dissertations*. 1605.

<https://digitalcommons.andrews.edu/dissertations/1605>

<https://dx.doi.org/10.32597/dissertations/1605>

This Dissertation is brought to you for free and open access by the Graduate Research at Digital Commons @ Andrews University. It has been accepted for inclusion in Dissertations by an authorized administrator of Digital Commons @ Andrews University. For more information, please contact repository@andrews.edu.

ABSTRACT

DIVERSITY AND STUDENT ENGAGEMENT IN A SMALL
MULTI-ETHNIC LIBERAL ARTS UNIVERSITY
IN CALIFORNIA

by

Yamileth Bazan

Chair: Sylvia Gonzalez, Ph.D.

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: DIVERSITY AND STUDENT ENGAGEMENT IN A SMALL MULTI-ETHNIC LIBERAL ARTS UNIVERSITY IN CALIFORNIA

Name of researcher: Yamileth Bazan

Name and degree of faculty chair: Sylvia Gonzalez, Ph.D.

Date completed: May 2015

Problem

As the general population of minorities continues to increase nationwide, so has the number of underrepresented racial/ethnic groups qualified to enter higher education. While some public universities are responding to various diversity initiatives and changes, a number of institutions, especially small liberal arts colleges, have been less responsive to these changes in demographics. As liberal arts colleges begin to plan more effectively to respond to a more pluralistic student body, more understanding is needed about the student engagement patterns of these underrepresented groups. This study looks at the engagement patterns of a small liberal arts research university in Southern California that has experienced, within the last fifteen years a demographic shift in its community, faith constituency, and inadvertently its campus.

Research Design

La Sierra University was chosen as the designated campus for research due to its unique contributions to the literature, since it defines diversity to mean a multi-ethnic/racial student body comprised of Hispanics, Asians, White, Multiracial, African American, and Foreign students rather than the traditional definition of diversity meaning a White campus with a small percentage of Black student presence. The student population is structurally diverse in a non-Black and White context and with a diversity density index of .91, as calculated using Chang's formula.

This study uses secondary analysis of 2013 NSSE raw data from La Sierra University to examine Student Engagement and its relationship to gender, class standing, ethnicity, and Student Satisfaction. Descriptive statistics, *t*-test, analysis of variance (ANOVA), and regression analysis were used to analyze the data set. Using previous research, three of the Student Engagement variables (Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity) were designed to be used for this study and were tested for reliability.

Findings

The findings reveal that students at La Sierra University were engaged at various levels as measured by Academic Challenge, Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity. The results reveal gender and class standing differences as well as differences among the various ethnic groups as they relate to the Student Engagement variables. A relationship was found between the Student Engagement variables and the demographic variables of gender, class standing, and ethnicity. Students were most engaged in Cross-Racial Interaction Diversity and were

least engaged in the Academic Challenge's sub-section of Quantitative Reasoning. A correlation was found between Student Satisfaction and Curricular/Co-curricular Diversity and Character Development gains. An additional positive and surprising finding was that students in this multi-ethnic, non-Black and White diversity-dense liberal arts institution scored higher in all measured Student Engagement variables than the NSSE 2013 participants and their NSSE 2013 Seventh-day Adventist (SDA) college/university cohort.

Conclusions and Recommendations

The value of Structural Diversity as experienced in this small, multi-ethnic, liberal arts university was affirmed with students reporting high engagement patterns and statistically significant higher scores and gains than students in a less structurally diverse campus context. Recommendations for Practice focus on building institutional capacity to address the findings and support the student experience. Recommendations for Study focus on quantifying the educational merits of the findings from this study.

Andrews University

School of Education

THE RELATIONSHIP OF DIVERSITY AND STUDENT ENGAGEMENT
IN A SMALL MULTI-ETHNIC LIBERAL ARTS UNIVERSITY
IN CALIFORNIA

A Dissertation

Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by

Yamileth Bazan

April 2015

© Copyright by Yamileth Bazan 2015
All Rights Reserved

THE RELATIONSHIP OF DIVERSITY AND STUDENT ENGAGEMENT IN A
SMALL MULTI-ETHNIC LIBERAL ARTS UNIVERSITY
IN CALIFORNIA

A dissertation
presented in partial fulfillment
of the requirements for the degree
Doctor of Philosophy

by

Yamileth Bazan

APPROVAL BY THE COMMITTEE:

Chair: Sylvia Gonzalez

Dean, School of Education
James R. Jeffery

Member: Jimmy Kijai

Member: Lawrence Geraty

Member:

External:

Date approved

Dedication

This dissertation is dedicated to my son, Danny, who is the light of my life.

I dedicate this to you, my son, because it is a visual representation of how many lives, when lived purposefully, have the capacity to significantly change the life of one person—in this case—me. I gift you this final product for it is my hope for you and your life that God will profoundly use you in a similar way to serve those whom He places in your path. Never regret giving away that which you receive. Never grow weary of doing good. Never let go of your Creator's hand for you will find that the surprises He has for you are even better than those you have imagined for yourself. I love you son.

TABLE OF CONTENTS

LIST OF TABLES	vii
ACKNOWLEDGMENTS	ix
CHAPTER	
1. INTRODUCTION	1
Background of the Study	1
Problem Statement	3
Purpose of the Study	4
Research Questions	4
Rationale	4
Conceptual Framework	6
Significance	8
Limitations	11
Delimitations	12
Definitions of Terms	12
General Methodology	14
Organization of the Study	14
2. LITERATURE REVIEW	15
Introduction	15
Student Engagement	17
Theory	17
Practice	18
The NSSE Instrument	23
Variables	25
Academic Challenge	25
Character Development	27
Student Satisfaction	29
Student Engagement and Diversity	30
A Diversity Framework	32
Diversity and Higher Education	38
Forms of Diversity	45
Structural Diversity	46
Cross-Racial Interaction Diversity	47
Curricular/Co-curricular Diversity	49

Diversity and the Minority Student Experience.....	50
A Student Perspective	53
3. METHODOLOGY	56
Introduction.....	56
Research Questions	56
Research Design.....	57
Population and Sample Size.....	58
Instrumentation	59
Character Development	61
Cross-Racial Interaction Diversity.....	61
Curricular/Co-curricular Diversity.....	62
Student Satisfaction	62
Instrument Reliability	63
Data Collection Procedure	63
Data Analysis	64
Summary	65
4. RESULTS OF THE STUDY	66
Introduction.....	66
Description of Sample.....	67
Results.....	68
Levels of Student Engagement	68
Academic Challenge	68
Character Development	72
Cross-Racial Interaction.....	73
Curricular/Co-curricular Diversity.....	74
Student Engagement, Gender, Class Standing, and Ethnicity	75
Student Engagement and Gender.....	76
Student Engagement and Class Standing.....	76
Student Engagement and Ethnicity	78
Student Engagement and Student Satisfaction	81
Student Satisfaction and Ethnicity	83
Student Engagement and Student Satisfaction	85
Student Engagement and Student Satisfaction	87
Summary of Findings.....	88
5. SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS.....	92
Introduction.....	92
Summary of the Study	92
Statement of the Problem.....	94
Purpose.....	95

Research Design.....	95
Procedure	96
Findings	96
Student Engagement	97
Academic Challenge	97
Character Development	99
Cross-Racial Interaction Diversity and Class Standing	100
Cross-Racial Interaction and Ethnicity	102
Curricular/Co-curricular Diversity.....	105
Recommendations for Practice and Study	108
Student Satisfaction and Ethnicity	108
Recommendations for Study	109
Student Satisfaction and Character Development.....	109
Conclusion	110
Recommendations for Practice	112
Recommendations for Further Study	114
Appendix	
A. TABLE OF VARIABLES	117
B. SURVEY INSTRUMENT	121
C. ADDITIONAL TABLES	126
D. ANDREWS UNIVERSITY IRB APPROVAL	130
E. LA SIERRA IRB APPROVAL.....	132
REFERENCE LIST	134
VITA.....	143

LIST OF TABLES

1.	Descriptive La Sierra University Demographics Data for Fall 2013.....	7
2.	La Sierra University 2013 Descriptive NSSE Demographics Data	10
3.	Demographic Table: Freshman.....	10
4.	Demographic Table: Seniors.....	11
5.	National Survey of Student Engagement Instrument Reliability.....	63
6.	Student Engagement Variables: Mean, Standard Deviation, and Skewness	69
7.	Academic Challenge: Higher Order Learning	70
8.	Academic Challenge: Reflective and Integrative Learning	70
9.	Academic Challenge: Learning Strategies.....	71
10.	Academic Challenge: Quantitative Reasoning	71
11.	Student Engagement: Character Development	73
12.	Student Engagement: Cross-Racial Interaction Diversity	74
13.	Student Engagement: Curricular/Co-curricular Diversity	75
14.	Student Engagement and Gender.....	77
15.	Student Engagement and Class Standing.....	77
16.	Student Engagement and Ethnicity	79
17.	Analysis of Variance Results for Ethnicity.....	81
18.	Pairwise Comparison for Ethnicity (Character Development and Cross-Racial Interaction)	82

19.	Descriptive Statistics: Evaluation of Institutional Experience.....	83
20.	Descriptive Statistics: Choose Same Institution	83
21.	Ethnicity and Student Satisfaction: Means and Standard Deviation.....	84
22.	Correlation Matrix: Student Satisfaction, Demographic Variables, and Student Engagement	86
23.	Regression Analysis Results: Student Engagement and Student Satisfaction: Rated Educational Experience.....	87
24.	Regression Analysis Results: Choose Same Institution.....	88

ACKNOWLEDGEMENTS

The completion of this dissertation is a combination of familial affirmation, community support, and educational mentoring. The contributions that my extended family have made via their unwavering affirmation of my abilities to complete this goal cannot be measured. They have been my foundation and strength. Their unselfish love and affirming belief in my abilities, continually silenced the inner voice that many a times said this was an impossible task. I am eternally grateful to all of my cousins, but especially to Lissette who physically carried me, in the complexity of my family/work/pastoral life through her life of giving. I cannot say enough about my parents and siblings who never even doubted this would be my life-reality and expressed their joy for my accomplishments every single step of the way. Last but not least, I share this in grand part with my soul mate and husband, Daniel, whose unwavering, unselfish and understanding love gave me the space to pursue my life dream. I proudly stand today representing all of the values they imbedded in my life along the way and promise to use this accomplishment to serve with integrity.

I owe a ton of thanks to many in my community circle (cohort participants, the Daniel's family, friends, colleagues, church members, and leaders) who in their own way would find meaningful ways to encourage me on this long academic journey of self-development. God would use them in key moments to push me to take time off to write, call me, or text me that they were praying for me, to provide housing and meals (Daniels) for me while at Andrews, and the many who would simply pass me by and give me a hug and would remind me that they were proud of me. I have been especially blessed by my dear friend and sister, Lynda, whom I met at the beginning of this journey and who traveled hand-and-hand with me until the very end. I gratefully share this success with each of them.

So many educators shaped me through this experience and propelled me to reach this academic goal. In elementary school, Mrs. Escandon, was my first encounter with a teacher who reflected an outward joy in seeing me succeed. She redefined education for me and for the first time made me feel like I had something to contribute. Along the way, I met many others who saw in me what I often times could not see—potential—and found ways to mentor me to the next educational phase. Thank you to educational leaders such as: Dr. Wally Minder, Mr. Don Dudley, Dr. Lynn Mallery, Dr. Larry Geraty, Dean Sue Curtis, and Dr. Barbara Favorito for stepping into my life at such a critical points and giving me the opportunity to succeed while being mentored by your leadership. Most recently God placed in path through my Andrews University journey Dr. Loretta Johns, Dr. Robson Marinho, Dr. Jimmy Kijai, and Dr. Sylvia Gonzalez. Each of them has significantly invested their time and energies to help me succeed. They have intellectually pushed me to refine my thoughts and the academic value of this dissertation is in much part due to the time they invested in me. I am eternally grateful for their mentoring through this difficult intellectual process.

CHAPTER 1

INTRODUCTION

Background of the Study

The 2011 census report estimated that 32% of students in U.S. colleges/universities came from underrepresented (African-American, Latino/a, and Native American) backgrounds (U.S. Census Bureau, 2011). As the general population of minorities has increased nation-wide so has the number of underrepresented racial/ethnic groups qualified to enter higher education. Unfortunately, the proportion of students entering two- and four-year institutions remains disproportionately low compared to those who are qualified to enter and compared to their non-minority counterparts. Research also has shown that once these minority students enter college, a significant proportion do not progress to graduation (May & Chubin, 2003; Sharkness, Eagen, Hurtado, Figueroa, & Chang, 2010). Minority students from immigrant backgrounds are especially vulnerable during the college transition since it has been found that they are less prepared academically and also face the negative social stigma that comes from having a minority status (Huynh & Fuligni, 2011).

Universities have invested in improving minority matriculation and graduation, but have often struggled to figure out effective ways of doing this. Over a decade ago at an American Association of Colleges and Universities (AACU) gathering, George Kuh (2003), a leader in Student Engagement, noted an increase in underrepresented student groups in higher education and the need for more examination in order to understand the

engagement patterns of these underrepresented groups. This warning comes with a positive incentive: changes now facing higher education provide an opportunity for colleges and universities to create learning experiences that would better engage minority students and prepare all students for employment in an increasingly pluralistic society (Araujo & Anastasiou, 2009; Balon, 2004; Engberg, 2007; Hall & Okazaki, 2002; Kim, 2001; McEwen et al., 2002; Pike, Kuh, & Gonyea, 2007; Sue et al., 1998; Tatum, 1992; Watson, 2009; Wong & Buckner, 2008; Yeh & Huang, 1996; Yip, 2005).

Colleges and universities in California are especially well-positioned to take advantage of the new challenges related to creating campuses that capitalize on minority student populations and work to improve their matriculation, retention and graduation. It is estimated that about 60% of the student body in California post-secondary schools (U.S. Census Bureau, 2010) are from minority populations, thus creating the ideal environment to study and understand engagement patterns and the effects of various forms of diversity, specifically Structural Diversity, and its relationship to Student Engagement.

Structural Diversity refers to the numerical representation of students from different racial and ethnic groups within an organization, group or place (Chang, 1999; Jayakumar, 2008; Umbach & Kuh, 2006). Also called racially diverse environments, this form of diversity is one of three areas of diversity that have become the focus of those working with ethnically diverse student populations. The three forms of diversity are: Structural Diversity, which relates to student body racial composition; Curricular/Co-curricular Diversity referring to programmed events that expose students to race/ethnicity issues; and finally, interactional or Cross-Racial Diversity, also called cross-racial

contact, which refers to the interactions these diverse students have with peers from different racial/ethnic backgrounds (Chang, 2002; Denson & Chang, 2009; Jayakumar, 2008; Umbach & Kuh, 2006).

Universities can use diversity to improve student learning and thus their marketability by systematically attending to the three areas of diversity mentioned above. At a university, diversity can be attained intentionally by developing and implementing strategic initiatives to recruit minority students and/or unintentionally through a rapid demographic shift in the community, constituency and/or in the university campus (Pike et al., 2007).

While some public universities are responding to various diversity initiatives and changes, a number of institutions, especially small, liberal arts colleges, have been less responsive to these changes in demographics. This study looks at Academic Challenge, Character Development, and diversity measures—structural, curricular/co-curricular, and cross-racial interaction—within the construct of Student Engagement in a small liberal arts research university in Southern California that has experienced, within the last fifteen years a demographic shift in its community, faith constituency, and consequently its campus.

Problem Statement

With the rapid demographic shift faced by the United States, institutions have started to attend to racially/ethnically diverse student groups by focusing on three types of diversity measures—structural, Curricular/Co-curricular, and Cross-Racial Interaction diversity. As liberal arts colleges begin to plan more effectively to respond to a more pluralistic student body (Engberg, 2007), more understanding is needed about the

relationship between these three elements and its effects on Student Engagement. This research was conducted in a small multi-ethnic liberal arts research university in Southern California, currently facing a significant demographic shift.

Purpose of the Study

The purpose of this study was to examine (a) the relationship between Student Engagement (Academic Challenge, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular Diversity) and Structural Diversity at La Sierra University; (b) the extent to which Student Satisfaction is related to the student engagement patterns of freshman and seniors.

Research Questions

The research questions that guided this study were the following:

1. What is the level of Student Engagement as measured by Academic Challenge, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular Diversity, at La Sierra University?
2. To what extent is Student Engagement (Curricular/Co-curricular Diversity, Cross-Racial Interaction Diversity, Academic Challenge, and Character Development) related to ethnicity, gender, and class standing?
3. How is student overall satisfaction affected by Student Engagement (Curricular/Co-curricular Diversity, Cross-Racial Interaction Diversity, Academic Challenge, and Character Development)?

Rationale

Research on diversity makes several assumptions. First, diversity is occurring in a

predominantly White context (Chang, 1999; Umbach & Kuh, 2006). Second, diversity is designed by the institution to enhance Student Engagement and improve student learning. Third, when speaking of Structural Diversity, most of the literature refers to the Black and White phenomenon (Ortis & Santos, 2009). The literature is also silent in regards to unintentional shifts in a truly diverse and multi-ethnic campus setting.

La Sierra University has experienced unintentional shifts in its diversity within the past two decades due to the demographic changes that have impacted the state of California in the Southeastern region of the state and the denominational growth experienced in the North American Adventist church. Though the institution can boast on a long-standing institutional commitment: “From diversity, Community,” the demographic shifts are not attributed to institutional-designed diversity, but rather to regional- and constituency-led changes in demographics. These changes shaped the campus to have a high diversity index of .91. The Diversity Density Index was designed by Chang (1999) as a measure that would accurately capture the heterogeneity of a student body in a given institution. The variable, in effect, measures the variance across all included racial groups creating a measure that assesses an institution’s unique racial composition.

The Diversity Density Index is meant to accurately capture the amount of diversity on a given campus numerically (Umbach & Kuh, 2006). The Diversity Density Index can predict numerically the probability that a student will interact with a student of another race (Chang, 1999; Denson & Chang, 2009; Umbach & Kuh, 2006) and Student Engagement gains in diversity-related activities. The formula predictive model states, “If the percentages of the five racial/ethnic groups on a given campus is nearly equal

(e.g., 20%, 20%, 20%, 25%, 15%), then it is more likely that a student will interact with someone from a different race than on a campus where the percentages of the five groups varies greatly (e.g., 75%, 5%, 10%, 10%, 0%) (Umbach & Kuh, 2006, p.176).

La Sierra University is a faith-based institution and it is part of a larger Adventist missional system of higher education comprised of 13 accredited colleges and universities in North America (Adventist Higher Education, 2015). It is also the case in the literature for faith-based colleges and universities that none of the assumptions regarding diversity asserted above fit the norm, once again making this study an important contribution.

La Sierra University is atypical due to a majority minority student body, lack of institutional design for Structural Diversity, and a non-Black and White diversity context as indicated on Table 1. By evaluating the results of the National Survey of Student Engagement (NSSE) with a lens to diversity and Character Development, this study hopes to inform the current literature and create a template for best practices of a multi-ethnic liberal arts college attaining Student Satisfaction, in the context of Student Engagement. An additional point of interest is La Sierra University's unique opportunity as part of a sisterhood of universities and its diversity measures to position the institution to be able to create a model for the future success of the growing nation-wide and denominational-wide demographic shift.

Conceptual Framework

This research builds on two large bodies of research: diversity and National Survey of Student Engagement's (NSSE) student engagement model. First, it uses Smith's (2009) diversity framework, which establishes that the work of diversity is an

Table 1

Descriptive La Sierra University Undergraduate Demographics Data for Fall 2013

Variable		<i>f</i>	%
Gender	Male	892	42.38
	Female	1213	57.62
Class Standing	Freshman	804	38.19
	Sophomore	440	20.90
	Junior	418	19.86
	Senior	443	21.05
Ethnicity	African-American	152	7.22
	Asian	325	15.44
	Caucasian	339	16.10
	Hispanic	872	41.43
	Foreign	265	12.59
	Two or more races, non-Hispanic	91	4.32
	Other	11	.53
Total		1755	

intellectual imperative that must be addressed, supported, and further researched. Smith would argue that the academy is in need of developing what she terms as “institutional capacity for diversity” that places this imperative in the center of its institutional mission. The recent work of Sáenz (2010) affirms the framework developed by Smith (2009) and embraces the institutional capacity and further posits “a new discourse” which now includes “a discussion of the educational benefits of racial and ethnic diversity that is rooted in diversity’s capacity to *interrupt* and perhaps undo the pervasive perpetuation of increasingly segregated precollege environments” (pp. 31-32). Smith writes:

There is significant evidence that what happens in college can diminish the negative impact of lack of preparation. Whether it is using a pedagogy of high expectations or fully engaging students from all backgrounds, it is clear that good education matters, and that it can interrupt background factors that militate against success. (p. 209)

In her diversity framework, Smith (2009) asserts that we must move away from

thinking about designing or developing diversity programs and rather focus on building an “institutional culture” whereby the success of students is the responsibility of everyone in the institution creating “strong webs of support and connections” (Smith, 2009, p. 209).

Second, it uses Kuh’s (2001b, 2003) framework for interpreting diversity in the context of Student Engagement using the National Survey of Student Engagement to create an institutional benchmark for understanding the implications of student behavior. In the words of George Kuh (2001b), lead developer of the NSSE instrument, “The National Survey of Student Engagement (NSSE) is specifically designed to assess the extent to which students are engaged in empirically derived good educational practices and what they gain from their college experience” (p. 2).

Kuh (2003) goes on to say that NSSE is just “one compass” in understanding and determining if there is an alignment between student behavior and institutional practices. I used the data set derived from the NSSE instrument, which reveals La Sierra University students’ perceptions and engagement with Structural Diversity to find the relationship to Student Engagement using the following variables: Academic Achievement, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular Diversity, and Student Satisfaction (see Appendix A). Figure 1 is the conceptual model of the research.

Significance

This is an important study because it is the first of its kind to empirically analyze an ethnically diverse liberal arts university with a high (.91) Diversity Density Index. La Sierra University’s ethnic composition using the NSSE 2013 student demographics included six identified racial groups. The multi-ethnic diversity is contrasted with

Figure 1. Conceptual model of the relationship between Structural Diversity and Student Engagement.

NSSE's 2013 participant demographics, and the SDA cohort participant demographics as indicated on Tables 2-4. In comparison with La Sierra's (.91) index, the index for schools designated by NSSE as Far West was significantly lower (.81) as was also the index for the Adventist sisterhood of universities, with Andrews University (.74) being the most diverse, after La Sierra University. This once again affirmed the importance of this study.

This is the first study to focus on three Student Engagement patterns as they relate to racial/ethnic diversity:

1. Structural Diversity
2. Curricular/Co-curricular Diversity
3. Cross-Racial Interaction Diversity.

In addition, the studies conducted in the past decade define diversity to mean other than White students. In every case when diversity is mentioned, it applies to

Table 2

La Sierra University 2013 Descriptive NSSE Demographics Data (N=360)

Variable		<i>f</i>	%
Gender			
	Male	104	34.2
	Female	200	65.8
Class Standing			
	Freshman	146	47.7
	Senior	117	38.2
Ethnicity			
	Black	11	3.6
	Asian/Pacific Islander	53	17.3
	White	54	17.8
	Hispanic	89	29.4
	Foreign	27	8.9
	Multiracial	53	17
	Other/Prefer not to respond	17	5.7

Table 3

Demographic Table: Freshmen

Variable	La Sierra		SDA		NSSE 2013	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Freshmen	146	80	566	83	91,655	83
Gender						
Female	124	61	426	55	69,814	55
Male	56	39	257	45	36,794	45
Total	180	100	683	100	106,608	100
Racial or ethnic identification						
American Indian or Alaska Native	0	0	2	0	480	1
Asian	38	22	50	8	6,154	6
Black or African American	7	4	48	9	9,154	9
Hispanic or Latino	59	32	87	13	7,964	9
Native Hawaiian/Other Pac. Islander	4	2	7	1	286	0
White	26	14	285	46	69,184	62
Other	4	2	10	2	1,475	1
Multiracial	34	19	96	15	7,818	7
I prefer not to respond	9	5	29	5	4,166	4
Total	181	100	614	100	106,657	100

Table 4

Demographic Table: Seniors

Variable	LSU		SDA		NSSE 2013	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Senior	116	93	901	92	147,587	88
Gender						
Female	76	56	600	57	104,756	57
Male	48	44	384	43	60,854	43
Total	124	100	984	100	165,817	100
Racial or ethnic identification						
American Indian or Alaska Native	0	0	1	0	856	1
Asian	22	17	63	7	7,311	5
Black or African American	7	6	94	11	13,340	8
Hispanic or Latino	34	27	103	11	11,727	8
Native Hawaiian/Other Pac. Islander	2	1	9	1	472	0
White	33	27	485	54	112,031	65
Other	3	2	18	2	2,229	1
Multiracial	19	15	94	10	9,341	6
I prefer not to respond	4	4	37	5	8,427	5
Total	124	100	904	100	165,734	100

African-American students in a largely White institution. This study defines diversity to mean multi-ethnic/racial student body comprised of Hispanics, Asians, White, Multi-racial, African-American, and foreign students. This growing demographic shift in higher education is especially relevant for educators and administrators in California, Arizona, and Texas for whom minority students account for over 50% of their student population (U.S. Census, 2010).

Limitations

A limitation of this study was the self-reported survey design. Students received an invitation to complete the NSSE online survey in 2013. Findings for this research are

based on voluntary student self-reported responses from a single institution.

Delimitations

This study is delimited to one college campus and to NSSE data from that campus. Because NSSE is given to only freshman and senior classes, only data from 2013 freshman and seniors were used. The data used in this study were collected in the Spring quarter of 2013.

Definitions of Terms

Academic Challenge: A seventeen-question scale divided into four engagement indicators: Higher Order Learning (HO), Reflective/Integrative Learning (RI), Learning Strategies (LS), and Quantitative Reasoning (QR). This scale in NSSE reports time students spent preparing for class, the amount of reading and writing done, and expectations from the institution regarding academic performance (Pascarella, Seiffert, & Blaich, 2010). Also defined by Kuh (2003) to be the practices within an institution that promote high levels of student achievement such as time spent preparing for class, amount of reading and writing required by faculty, and institutional expectations for academic performance.

Character Development: As defined by Kuh, Kinzie, Buckley, Bridges, and Hayek (2006), “Character is a window into personality, a constellation of attitudes, values, ethical considerations, and behavioral patterns that represent what people believe and value, how they think, and what they do” (p. 37).

Cross-Racial Interaction Diversity: Defined by Denson and Chang (2009) as the cross-racial contact experienced between students. Also defined as the frequency intergroup interactions (diverse faculty and students) in and outside of the classroom

(Pike & Kuh, 2006; Sáenz, 2010). Student Engagement, in the context of Cross-Racial Diversity, is measured by NSSE by asking key questions that deal with contact with peers from different backgrounds, frequency of conversation with others of different races and religious backgrounds, and the inclusion of various perspectives in a classroom setting (Kuh, 2003).

Curricular/Co-curricular Diversity: Defined as an institutions' intentional programming in formal and informal environments (classrooms, curriculum, and events) to aid students in gaining experiences with diverse perspectives of ideas and peoples of other race and ethnicity (Denson & Chang, 2009; Pike & Kuh, 2006; Sáenz, 2010).

NSSE: The National Survey of Student Engagement (NSSE) is an empirical tool used to assess the behaviors and experiences of college students, which contribute to their learning and their personal development. NSSE measures students' participation in educationally purposeful activities (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008).

Structural Diversity: Structural Diversity is defined as the racial/ethnic numerical composition of a campus' student population (Chang, 1999; Kuh, 2003; Sáenz, 2010; Umbach & Kuh, 2006). I use Talbot's (2003) definition of ethnicity to mean racial or national characteristics determined by birth.

Student Engagement: Defined by the National Survey of Student Engagement (NSSE) as the time and energy students devote to educationally sound activities inside and outside the classroom, as well as the policies and practices implemented to support the engagement (Kuh, 2003).

Student Satisfaction: Defined by Astin (1993) to be the "students' subjective

experience during the college years and perceptions of the value of educational experience” (p. 273).

General Methodology

This study uses secondary analysis using NSSE raw data at La Sierra University to examine Student Engagement and its relationship to Academic Challenge, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular Diversity, Structural Diversity, and their relationship to Student Satisfaction. Quantitative analysis was conducted on the NSSE survey. As per Creswell (2009), “a survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population” (p. 145). Descriptive statistics, *t*-test, analysis of variance (ANOVA), and regression analysis were used to analyze the data set.

Organization of the Study

The organization of this study is as follows: Chapter 1 provides an overview of the study to include the problem statement, hypothesis, and conceptual framework. Chapter 2 reviews the Student Engagement and Diversity literature. Chapter 3 is dedicated to the methodology of the study, the research design, description of the population and the variables, instrumentation reliability and the statistical analysis conducted in this study. Chapter 4 analyzes the NSSE data and concluding thoughts are found in Chapter 5 with the implications, discussions, and recommendations for future research and practice.

CHAPTER 2

LITERATURE REVIEW

Introduction

This study focuses on Student Engagement as it relates to diversity at a faith-based, liberal arts institution in California. To inform the study this chapter reviews literature on Student Engagement and diversity in higher education institutions.

The U.S. Census Bureau (2009) found that minorities (Hispanic, African-American, and Asian) make up 49% of the children born in the U.S. Among the individual races, Hispanics grew by 3.1% to 48.4 million and Asians increased 2.5% to 13.7 million. If grouped, they now represent about 15.8% and 4.5% of the U.S. population, respectively. Blacks, who make up about 12.3% of the population, increased less than 1% last year to 37.7 million. By the middle of this century, it is estimated that the percentage of minorities is expected to double, amounting to almost 25% of the entire nation. It is further estimated that by the year 2050, minority groups will compose over 47.2% of the population, an increase of 23% from 1990.

The shift in the higher education's demographic has prompted minority higher education faculty and researchers to begin to ask the question: What is the future prospect for this growing population when it comes to higher education? The most recent census reports that today, an estimated 30% of students in our colleges/universities are coming from underrepresented (African American, Latino/a, Asian American, and Native

American) or disadvantaged backgrounds (U.S. Census Bureau, 2011). Statistics show that Black and Latino students are far behind Asian and White populations in graduating from both high school and college (Berg, 2010).

The increase of minority students entering higher education has created several fundamental challenges in the higher education arena. Ethnic minority students and those coming from immigrant backgrounds are especially vulnerable during the college transition they are less prepared academically and also face the negative social stigma that comes from having minority status (Huynh & Fuligni, 2011). According to Mueller and Pope (2003), the increase of students of color in academia has been the most common reason given by colleges and universities who have put forth an effort to raise awareness of multicultural issues.

The inability of faculty, staff, and practitioners to understand the minority student experience and their developmental needs can lead to ineffective responses to volatile race-related situations on campus (Evans, Forney, & Guido-DiBrito, 1998). The good intentions of faculty and administrators, when not properly trained in an environment that emphasizes cultural pluralism, reveal their ethnocentric tendencies and contribute to the disparity of minority students in higher education (Ponterotto & Casas, 1991).

Significant progress has been made in expanding access to college for underrepresented students. Yet students continue to experience differential retention rates and inequities in academic achievement. This achievement gap, especially since it spans across specific racial groups and across different economic levels, is interpreted as failure of the educational system to adjust and provide proper academic attention to socio groups other than White (Milem, Chang, & Antonio, 2005).

This review synthesizes a small portion of the existing empirical evidence regarding racial and ethnic diversity on college campuses and offers a practitioners' overview of key practices that help to maximize the benefits for students, faculty, and the personnel working with this defined student population.

Student Engagement

Theory

Researched extensively in the past two decades, Student Engagement has generally been defined as the time and energy students devote to educationally purposeful activities (Kuh 2003, 2007; Kuh, Cruce et al., 2008; Laird, Bridges, Morelon-Quainoo, Williams, & Holmes, 2007). The premise of Student Engagement is that students who are investing time and energy in their academic experience are developing long-term habits and practices to enhance their capacity for personal development (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006). It is posited that institutions can influence these practices and behaviors with programmatic interventions in curricular and co-curricular settings as well as with the continual assessment of the student engagement patterns (Kuh, 2003; Kuh, Cruce et al., 2008).

Engagement was born out of Involvement Theory which is a construct defined by Astin (1984) as “the amount of physical and psychosocial energy that the student devotes to the academic experience” (p. 298). Deriving from Freud’s earlier concept of cathexis or effort, student involvement is a behavioral-based student development theory focusing on what an individual does rather than what he/she thinks. As one of the key developers of the NSSE instruments, Astin believed that the “effectiveness of any educational practice is directly related to the capacity of that practice to increase student

involvement” (p. 519). The focus moving away from the theoretical, what an individual “thinks” to the practical, what an individual “does.” Simply stated, the more a student is involved in the learning, the greater the development.

Astin’s (1984) Student Involvement Theory had five basic postulates. First, the how of the involvement is measured by the physical and psychological energy a student gives to the academic experience. Second, the involvement occurs along a continuum such as: very involved, only partially involved, or not involved. Third, this involvement can be measured both in qualitative and quantitative ways. Fourth, there is a direct correlation between the amount of student learning and personal development with the quality and quantity of student involvement. Last, an educational policy or practice is labeled effective only if it can increase student involvement. An involved student is a successful student, which means it is an effective institutional policy or practice. Simply stated,

Administrators and faculty members must recognize that virtually every institutional policy and practice (e.g., class schedules, regulations on class attendance, academic probably, and participation in honors courses, policies on office hours for faculty, student orientation, and advising) can affect the way students spend their time and the amount of effort they devote to academic pursuits. (p. 523)

Furthermore,

the most important hypothesis of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement . . . all college personnel—counselors and student personnel workers as well as faculty and administrators—can assess their own activities in terms of their success in encouraging students to become more involved in the college experience. (p. 529)

Practice

The engagement premise is born out of Astin’s (1984) Student Involvement

Theory, which suggests that the more students study a subject, the more they learn about it. Student Engagement then is defined as the amount of time and effort students put into their studies, and into other activities that lead to the experiences and outcomes that constitute student success (Kuh, Kinzie, Buckley et al., 2006). When one speaks of an “engaged” student, one refers to a student who is actively involved in the life of the campus in curricular and co-curricular activities. Students who are involved in educationally productive activities in college are developing habits of the mind and heart that enlarge their capacity for continuous learning and personal development (Kuh, 2003). Further, “research on college student development shows that the time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development” (Kuh & Umbach, 2004, p. 1).

In studying 20 of the top DEEP (Documenting Effective Educational Practice) institutions, researchers Kuh, Kinzie, Schuh, and Whitt (2005a) concluded that Student Engagement is a key to student success. These institutions had higher than predicted NSSE scores as well as higher than predicted graduation rates. The study indicated that Student Engagement is often experienced via rituals and traditions that help students bond and connect with one another. These rituals help students better understand the workings of the institution and the learning priorities of the academic community. Institutional values of academic excellence can best be passed on via events, learning environments such as residential halls, and interior/exterior spaces that encourage participation in campus life and academic achievement. Students who have a strong sense of belonging with their peers and their institution have been found to also have higher levels of persistence and satisfaction. To accomplish the goal of engaged students,

institutional partnerships must be created between Student Affairs and Academic Affairs.

Simply stated, what students do in college and how the college supports the student learning has a direct correlation to student graduation and thus the success of their academic experience. Kuh (2003), stated it this way,

College is a potentially transforming experience, a once-in-a-lifetime opportunity to challenge students to examine their previous ways of knowing, thinking, and behaving. It is hard to imagine this happening to a meaningful degree if students don't devote the time and effort needed to develop the habits of the mind and heart characteristics of an educated person. (p. 27)

Academic preparation and motivation is undeniably still the best predictor for graduation, yet with the influx of students coming in to higher education with low-level of accessibility to pre-college experience, institutions need to develop support systems to enhance the student experience both academically and socially. Kuh et al. (2005a) found that students succeeded best in institutions that had environments, perceived by the students, to be inclusive, affirming, and with well communicated "reasonably high" levels of expectations for performance. These "environments" are created with the purpose of more fully engaging the student to the academic experience. Institutions' policies, allocation of resources, programs and practices are all created to "induce students to participate in and benefit from such activities" (p. 9). Kuh (2003) argued that one of the immediate steps an institution can take to improve their undergraduate education is to quickly identify who are the students that are disengaged. Once you've identified them, then the challenge becomes finding ways in which you can involve them in educationally purposeful activities.

President Lee Bollinger of the University of Michigan, one of the 20 DEEP schools, further affirmed the connection between institutional student success and institutional support of Student Engagement with these words,

It is my belief that the very health of a university, broadly speaking, is connected to how it cares for its students, and perhaps especially its undergraduate students because of their special vulnerability to being neglected . . . even the character and the degree to which we feel a desire to nurture, educationally, students into the life of the mind. (L. Bollinger, as cited in Kuh, Kinzie, Schuh, & Whitt, 2005b, p. 159)

The “life of the mind” in a university is supported via the curricular and co-curricular initiatives. The relationship between the student and the faculty inside and outside of the classroom, the commitment of the co-curricular to partner with academics to best support the student experience, and the peer-relationships developed early on by the students with one another. These are all ways in which an institution is committed to Student Engagement and subsequently, student success. In a study of first-year persistence conducted by Berger and Milem (1999) on a highly selective, private residential research university in the Southeast, they found that research conducted previously had underestimated the role of Student Engagement (or lack of) in a student’s ability to persist and matriculate. They further found a direct correlation between early Fall involvement, social and academic integration, and Spring involvement. The students who were not as engaged early in the Fall, perceived the institution and their peers as less supportive and thus resisted social and academic integration.

In a later study conducted by Kuh, Cruce et al. (2008) of 18 baccalaureate degree-granting colleges and universities which measured students’ participation in educationally purposeful activities, otherwise known as Student Engagement, they found that there are key student behaviors, institutional practices and conditions that influence student success. These effects “are even greater for lower ability students and students of color compared with White students” (p. 23). They also found that there are ways in which an institution can influence these behaviors via teaching practices, programmatic

interventions, first-year seminars, service learning, courses, and learning communities. Yet for an institution to best address and develop these interventions, it is key that they know and understand their student body and the academic preparation that they bring to the campus.

There are several tangible engagement factors that also contribute to student persistence, as per the literature. Among the top of these is living in a campus residence. It was found, among all types of students and all types of institutions that there was a positive correlation between retention and living on campus (Astin, 1984; Berger & Milem, 1999; Kuh, 2007). As stated by Sáenz, Marcoulides, Junn, and Young (1999),

In residential campuses, living in student dormitories is one primary way of making friends with fellow students (Tinto, 1975). On a commuter campus, there are fewer opportunities to form friendships. Consequently, such activities as eating at the campus food court or participating in study groups in the library are some of the activities that students may use to form friendships with peers. Social integration can also occur in the form of attending campus performances, whether of sports activities or fine arts events. These also constitute opportunities to become involved in campus life and to cultivate friendships with other students. (p. 200)

Another important factor in student retentions was student-faculty relationship. Kuh (2003) found that students who at least once in their college career worked with a faculty on a research project would consider this a “life-altering experience” (p. 29). In a later study, Kuh et al. (2005a) also found that these collaborations between faculty and students increased the level of Academic Challenge and enriched the students’ educational experience outside of the classroom by practicing what they are learning as well as developing personal leadership skills. Yet most students do not have the ability to engage with faculty in research, but other simple activities such as having out of class discussions with faculty regarding grades, assignments, or ideas, or simply getting

prompt feedback, also contributed to persistence and “the more frequent the contact, the better” (Kuh, 2003, p. 29).

The simple premise of Student Engagement is that engaged, not just involved, students have higher chances of matriculation because they have been invested into the fabric of learning through living on campus or simply having meaningful conversations with their peers, staff, and faculty. As we look toward the future of higher education this conversation becomes much more important and necessary and institutions need to continue to look for ways in which they can assess their success (or lack of) in developing engaged students. Collaboration between federal and state entities to develop policies that recognize the changing role of higher education and the challenges of the Student Engagement in the context of underrepresented students need to be fortified. In the words of Newman, Couturier, and Scurry (2010), in their textbook, *The Future of Higher Education: Rhetoric, Reality, and the Risks of the Market*, “The goal of state policy should be to generate the motivation for institutions to create a campus culture that focuses on defining, measuring, and improving learning—that is, creation of a learner-centered environment” (p. 147).

The NSSE Instrument

In 1998 the Pew Charitable Trust put together a group of leaders in the higher education area to discuss the rankings employed by publications such as the *U.S. News and World Report*. Dissatisfied with the quality of the information dispensed by such publications, and after much discussion, they concluded that instead of measuring the reputation of institutions, it would be more helpful if an instrument could be created that could measure institutional quality.

The development of the survey instrument quickly followed lead by a design team, which included student development giants such as Alexander Astin, Arthur Chickering, John Gardner, and a relative newcomer, George Kuh. Field tests were coordinated by two centers: The National Center for Higher Education Management System (NCHEMS) and the Center for Postsecondary Research and School of Education at Indiana University lead by George Kuh. The collection of undergraduate student data became known as the National Survey of Student Engagement. It was the desired outcome of the researchers that the conversation in higher education could begin to focus on “current quality debates around the right questions rather than falling back upon traditional reputational answers” (NSSE, 2013).

In the words of Kuh (2001b), the instrument was “designed to assess the extent to which students are engaged in empirically derived good educational practices” (p. 1). A pilot phase instrument was given out in the Spring of 1999. The instrument was tested for reliability and validity. The psychometric properties were found, for the most part, to exceed recommended measurement levels, and limitations have been addressed. The completion of the survey, by students themselves, was “consistent with effective educational practices” due to the required reflection necessary when responding to the questionnaire. The self-report, as termed, is a common practice used for assessment of undergraduate education.

The survey is administered in paper form or digital form, depending on the institution, during its Spring academic term. It surveys freshman and seniors only. It is administered during the Spring because they want to do an entrance and exit assessment of students who have had enough experience with the institution to effectively reflect.

NSSE is being administered annually since 2000 and approximately 4.5 million students have participated representing 1,574 colleges and universities.

It continues to be the premise of student development researchers, that what students do during their college experience, how they choose to spend their time and energy devoted to educationally purposeful activities, will be the single best predictor of their learning and their personal development (Kuh, 2001a) and thus NSSE continues to lead the way in providing meaningful and revealing outcomes for college/university faculty and administrators.

Variables

In this study of the relationship between Diversity and Student Engagement in a liberal arts university, a host of variables were chosen to best analyze the data and interpret these relationships. Ethnicity, gender, and class standing give a glimpse of our demographics on the campus and became the independent variables. Academic Challenge, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular diversity, and Student Satisfaction became our dependent variables.

Academic Challenge

Research on students who have early college aspiration confirms that academic preparation is the best predictor for student success and matriculation (McDonough & Fann, 2008). Yet often time, for minority students, their entrance into college is filled with anxiety, low self-esteem, low self-confidence, inefficiencies, and a lack of academic and social preparation, which make it difficult for them to achieve their objective of matriculation (Frost, 1991; King, 1993).

In their in-depth study of 20 institutions with diverse missions, size, location,

student characteristics and more, Kuh, Kinzie, Schuh, and Whitt (2010) found that although there is no one blueprint for success, there are a set of standards that colleges and universities can implement to enhance Academic Challenge across the curriculum and among all student groups.

In NSSE (2013), Academic Challenge represents

a range of activities from time spent studying to the nature of intellectual and academic task students are expected to perform at high levels of accomplishment. The activities and behaviors included on the NSSE survey are: amount of time and effort students devote to preparing for class, reading assigned and other books, writing reports and papers, the extent to which students engage in activities that require analyzing, synthesizing, applying theories, and making judgments, performance standards that compel students to work harder than they thought possible, and the degree to which the college environment emphasizes spending time on academic work. (p. 177)

Kuh et al. (2010) found that these 20 Documenting Effective Educational Practices (DEEP) institutions were able to promote high levels of Academic Challenge by setting high expectations for their students and holding them accountable to reaching those goals. These institutions simultaneously provide a high level of support for their students in a myriad of intentional ways. Socializing students into the values of academia was critical and often occurred by faculty and staff collaboration. DEEP schools also spent time and institutional resources creating programs, practices, policies and departmental support systems such as writing centers as a way of supporting students' efforts being engaged in educationally productive activities outside of the classroom. Their premise of Academic Challenge has been extensively researched for decades, but it is simple,

What students do during college counts more in terms of what they learn and whether they will persist in college than who they are or even where they go to college. That is, the voluminous research on college student development shows that the time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development. (p. 8)

It continues to be the imperative for colleges and universities, especially as they attend to the nation's demographic shift to find ways in which their institution can promote high levels of student achievement while developing a culture of Academic Challenge and support.

Character Development

As defined by Kuh, Kinzie, Buckley et al. (2006), "character is a window into personality, a constellation of attitudes, values, ethical considerations, and behavioral patterns that represent what people believe and value, how they think, and what they do" (p. 9). To be able to measure character, the mental and moral qualities distinctive to an individual (Character, 2012), one must be able to measure growth or gains. The activities associated with Character Development in the NSSE survey are: doing community service, working on a project in your community, being a volunteer, as well as engaging in conversations with peers from diverse ethnic backgrounds and faith-values. Four dimensions represented by nine self-reported items on the NSSE survey reveal student gain in the area of Character Development (Kuh, Kinzie, Buckley et al., 2006).

In a quest to find the conditions that contribute to Character Development, Kuh and Umbach (2004) analyzed a sample of seniors ($n=49,692$) representing 568 four-year institutions. Led by the "resurgence of interest" in American higher education to develop a more civic-minded student along with the long-standing historical understanding that what the undergraduate experience was created a primary goal of developing character among its students, researchers looked for ways to quantify the question, Are there educationally purposeful activities that can promote, shape, and influence Character Development? Their findings reveal that although no one program can significantly affect

Character Development, there are three institutional characteristics, which promoted Character Development effectively. The institutions tended to be small, intentional about engaging their students in value-driven activities in and outside of the classroom, and they were committed to assessment strategies which students were required to partake in. The Character Development activities ranged from community service, volunteering, diversity-related experiences with peers, to diversity conversations in the classroom with peers who had different: ethnicity, religion, and/or political aspirations.

As a faith-based liberal arts institution, La Sierra University has a long-commitment to the development of students' character formation. There are a variety of tangible ways in which an institution can make this a priority through its faith-based curriculum in and outside of the classroom. The spiritual formation element of Character Development is not covered in this study, due to NSSE's limited questionnaire. The focus in this research is rather assessing if, in the words of Kessler (2000), "we are educating for wholeness, for citizenship, and for leadership in a democracy" (p. 159).

Thomas (1990), in his chapter in *The Moral Dimensions of Teaching*, expressed that whether society accepts it or not, the reality remains that schools are a "moral enterprise because it is a social enterprise" (p. 267). Although this concept is affirmed by various contemporary writers, it is not a new thought. Defining the "moral meaning" of democracy, John Dewey (1957) wrote, "The supreme task of all political institutions . . . shall be the contribution they make to the all-round growth of every member of society" (p. 186). The development of the students' character in such a way that they will be meaningful contributors of society is no easy feat. Hoppe and Speck (2005) encourage institutions of higher education to take on the responsibility of developing lifelong

learners through a variety of applied real-life situations in and outside of the classroom. Silverman and Casazza (2000) further assert that in so doing educators now become innovators that go beyond the traditional lecture and include ways in which students can be engaged critically, physically, and collaboratively with the learning. One of the ways institutions of higher education have been able to do this is through the addition of service learning in the curriculum. Hoppe and Speck (2005) define service learning as,

a method students use to learn through organized community service to care for others while earning academic credit . . . the main difference between service learning and volunteering is that service learning involves earning credit and meeting specific educational objectives for the experience. (p. 77)

It is further stipulated by Hoppe and Speck (2005), that when universities include opportunities for this kind of specific educational objective, such as service learning projects, volunteer prospects, and community engagement options, they are simultaneously promoting the lifelong commitment of students toward civic and community engagement while developing their self esteem in an academic setting. Through this process of Character Development, students are also given a tool in which they can better address and understand the complexities of this diverse society. They soon come to find out that there is really no one correct way of serving others and “differences are resources for generation wisdom, solutions, and possibilities” (p. 79).

Student Satisfaction

Institutions, and especially the alumni association, like to pride themselves on being places whereby students are satisfied with their experience on campus. The National Survey of Student Engagement (NSSE) provides institutions with two important questions in their instrument to help determine Student Satisfaction. Institutions use Student Satisfaction levels to help inform their practices, their outcomes, and their

challenges (NSSE, 2014). Student Satisfaction is an important and sometime overlooked variable that determines retention, matriculation, and the quality of the educational experience (National Postsecondary Education Cooperative, 2006). Astin (1984) contends, “The student’s degree of satisfaction with the college experience proves to be much less dependent on entering characteristics . . . and more susceptible to influence from the college environment” (p. 277). The NSSE instrument has found that generally students who interact with their peers and faculty are overall more satisfied with their college experience. It is further asserted that the more the interaction the more the satisfaction (Kuh, 2003).

Student Engagement and Diversity

Students in a racially diverse campus benefit not just from the interaction, or engagement, with students from various ethnic groups and their knowledge acquisition, but also from being part of a campus that hosts students engaged in various forms of diversity, which increases their own capacity regardless of their own level of engagement (Denson & Chang, 2009; Kuh, 2003). This is the premise that guides the conversation and the research in the area of Student Engagement and diversity.

Diversity in the student engagement construct enhances the student experience by shaping the way they think about themselves in relationship to others who have different values, customs, and social realities. These interactions with their peers help them to think more critically and challenges students to respond in novel ways. It is argued by Umbach and Kuh (2006) that, “through engaging with people from different backgrounds and with different life experiences, students are adding to the foundation of skills and

dispositions that is essential for living a productive, satisfying life after college in an increasingly multicultural world” (p. 170).

In their study of the merits of Affirmative Action, a federal agenda initiated in the 1960s designed to counteract historic discrimination faced by ethnic minorities, women, and other underrepresented groups, researchers Pike et al. (2007) found a direct positive correlation between the diversity of the student body and the number of interactions with peers from diverse groups. Their findings also indicated that student body diversity is directly related to students’ understanding of peers from diverse ethnic backgrounds.

In a similar study, but this time looking at the relationship between Structural Diversity and the campus environment, Pike and Kuh (2006) found a direct correlation between the diversity of the student population and the frequency of interactions among students of different background. Their study also found that the effects of these interactions did not depend on the quantity of interaction but rather on the “nature and quality” (p. 445) of the interaction. In another words, a structurally diverse student body provides the opportunity for cross-racial peer interaction, which in turn enhances students’ understanding of what it means to be the “other.”

Yet institutions must be careful in their quest for diversity and Student Engagement to recognize that their educational experience will not simply be enriched because of the Structural Diversity, or merely the increased number of interactions of students from diverse backgrounds. “An erroneous assumption is often made that students will naturally learn about their peers simply by coming into contact with those who share different views, experiences, and identities” (Quaye & Harper, 2009, p. 7). The above researchers argue that the quality of the interaction and the intentionality of

the institution in mentoring this relationship will have positive diversity outcomes.

A very different study conducted by Antonio, Chang, Hakuta, Kenny, Levin, Milem (2004), attempting to examine cognitive outcomes in a small-group discussion of racial (Black, White) college students in three universities, found a correlation between the impact of racial diversity and complex thinking. The researchers further asserted “that the presence of a Black collaborator in a group of White participants generally led to greater perceived novelty of collaborator and greater levels of Integrative Complexity (complex thinking)” (p. 509). In previous research it had been found that the higher the Integrative Complexity level the higher the grades are for the college student, thus indicating that diversity not only impacts Student Engagement in the areas of interaction and relationships but also in cognitive development.

The relationship between Student Engagement with diverse peers and the correlation with post-college preparation for working in global or pluralistic society has only recently begun to be critically researched (Engberg, 2007; Kuh, 2003; Pike et al., 2007; Sáenz, 2010). Thus the benefits of diversity continue to be contested, especially in public universities, and so key proponents of diversity find it imperative that new frameworks and new research be in the forefront of the literature for the sake of shaping the student development curriculum of the future.

A Diversity Framework

Smith (2009) likens the diversity imperative of today to the technology imperative of ten years ago and she develops a framework for diversity that places it into the center of academia. She posits that if higher education institutions want to be successful in this ever emerging pluralistic society and if they want to contribute to the world-wide

conversation and challenge of diversity, academia then like technology, must build diversity into the center of an institution's strategic plan and mission. In so doing, the imperative will not only serve as an internal facilitator of institutional mission but also as an external contributor to the pluralistic interconnected society it wants to serve.

In addressing this diversity imperative, Smith (2009) creates four critical dimensions she calls the diversity framework. Her framework recognizes the current efforts in diversity to interrupt and change the patterns, practices and policies that exclude and devalue certain groups of students. Yet she calls higher education to move this conversation from interrupting to transforming. Diversity must be seen as an element that builds institutional capacity (intellectual, human, and financial resources) for educational excellence. Student success is not merely about helping them survive the college experience, but rather about creating a campus that allow them to thrive, which she defines as “achieving honors, graduating in science and math fields, or being generally engaged on campus” (p. 250).

The four dimensions of the diversity framework developed by Smith (2009) are: Institutional Viability and Vitality, Education and Scholarship Climate, Intergroup Relations, and Access and Success. The following paragraphs explore each of these dimensions in detailed form.

The first dimension, Institutional Viability and Vitality, calls the institutions to seriously look at how diversity is imbedded in the mission. Smith (2009) writes,

Thousands of faculty across the country have been involved in some level of curriculum-transformation work. Where they have been most successful, the approach has been linked to the academic mission of the institution, excellence in education, and building faculty capacity. (p. 58)

The centrality of diversity in an institution and challenges old paradigms of what

it means to succeed. The conversation shifts from *how* are we serving a particular people group, to *are* we fulfilling our mission? It is the conviction of Smith (2009) that diversity must remain central to an institution's core research and scholarly mission. Do faculty scholarship and graduate programs produce new knowledge that addresses the emerging issues of the day? A university not only leaves an academic imprint on its graduates but also (and some would say more importantly) it advances society and produces thoughtful knowledge leaders. The centrality removes the diversity imperative from the margins of academic conversations to the central core of what it means to educate this present society with intellectual capacity to engage its future reality. This develops institutional vitality and viability while shaping challenging academia to be reticent of the changing student culture. Smith (2009) posits in order for a campus to have diversity viability, it must have expertise or human capital, in faculty and staff, who can help the campus develop policies that are enriched by their own personal diverse perspectives.

The challenge for institutions of higher education "is to scrutinize the culture so as to understand what is core and should not be changed and what must be changed in order to ensure that people from diverse backgrounds can thrive" (Smith, 2009, p. 67). The conversation of culture is difficult because many biases are hidden, especially in academia. Smith finds that certain disciplines, like Math, that can become so codified in a culture, via the values and policies established in the past, that they can create patterns of failure and limit the ability of certain groups of students to succeed.

This leads us to Smith's (2009) second dimension of the diversity framework entitled, Education and Scholarship. In this second dimension, the key question for an institution in order to address the diversity imperative is "Does the campus have the

resources to give all students the experience of being educated to function effectively in a diverse society?” (p. 73). It is the assertion of this dimension, that in order to answer the effectiveness of the diversity centrality on a campus, data on students, faculty, staff must be collected regularly and indicators for student success must be analyzed. Smith (2009) writes,

Whereas many institutions gather data on their students, few consistently disaggregate such data or look at all survey questions in a disaggregated manner. The indicators for student success, for example, can include the National Survey of Student Engagement, GPA, time to degree, graduation rates, and success in STEM fields. Disaggregating these data will tell an important story about who is engaged on campus, who is succeeding, and for whom the institution is successful. (p. 245)

It was this paragraph that motivated me to look for institutional data already collected at La Sierra University, to assess its success in the diversity imperative in the context of Student Engagement. The National Survey of Student Engagement has been collected bi-annually since 2011 and it documented student perceptions and responses in relationship to their satisfaction with the institution, their diversity interaction patterns, and their perceptions on the academic rigor (Academic Challenge) as viewed from the diverse lens of students. Smith (2009) concludes the analysis of the Education and Scholarship dimension saying, “It has become clear that curriculum transformation and building faculty capacity have been among the most successful efforts on diversity across the country” (p. 74).

A third dimension of the Smith’s (2009) diversity framework focuses on the Climate and Intergroup Relations designed by the institution to build capacity (intellectual, human, and financial resources) for the diversity imperative. Opposing the often-used identity models that “recategorizes” smaller identity groups “into a single superordinate identity” or the models that eliminate students’ identities in favor of an

institutional identity, Smith recommends a new approach to intergroup relations. This approach builds on a model that encourages multiple group identities with a built in priority of developing meaningful participation within the groups and outside of the groups. Consistent with the literature that shows that complex thinking is facilitated by engaging with diversity, this model builds on the capacity of individuals and groups to “meaningfully engage the multiplicity of identities” (Smith, 2009, p. 185). College campuses collaboration and learning ethos positions them to facilitate intergroup relations. Conditions that enhance these experiences are “equal status, shared goals, cooperation, and institutional support” (p. 180). Key to this dimension is the notion that “meaningful participation, belonging, or mattering” enriches the institutional climate as well as the intergroup relations. The benefit of these relations will vary depending the individuals and the groups, for example, “individuals or groups who are in a distinct minority on campus will benefit from support functions in ways different from how majority groups benefit” (p. 213), as supported by the fundamental asymmetry of the model.

Last, but historically the “heart and soul of diversity” (Smith, 2009, p. 77) in the United States, is Access and Success. This fourth dimension, widely written about in the literature, focuses on student success and the characteristics of students who have succeeded and who have failed. It wrestles with the academic tension of aptitude versus effort. There is a misunderstanding that because students do not have access and thus aptitude they can’t be successful in academia. In a faculty meeting several years ago a frustrated faculty described unprepared students as “garbage in, garbage out.” Smith’s dimension is positing that it is not about “fixing these dumb students” as my faculty

member stated, but rather about making sure all students are successful. Diversity is about “building institutional capacity for education excellence” and the implications for our society are “enormous” (Smith, 2009, p. 79). College education has been proven to interrupt patterns of failure and “good educational practices” establish “environments that facilitate student success in general” (p. 199) disregarding where they are when they start, but rather focusing on where they need to be when they finish.

The key question becomes: what does access and success look like in institutions that have successfully addressed the relationship of diversity and student success? At the heart of the success story is an institutional ethos that conveys, in various forms, “a belief in students’ ability to succeed, excel, regardless of their background (Smith, 2009, p. 199). This ethos focuses the institution to think less about where students are lacking and focus instead on engaging the students in the learning. At every level of the institution, the assumption is clear that students can learn and as such are supported, encouraged, and prepared.

Researchers have also found that there is a shared responsibility, when it comes to learning, across all of the constituencies. Students have role models in faculty, staff, alumni and even board members who believe they (the students) can learn. They reiterate that learning is not an inherited aptitude but it is rather a flexible one associated with effort and engagement. Smith (2009) writes, “The power of such ethos is that it creates robust and strong webs of the support and connections that are so necessary for success” (p. 209).

These four dimensions of diversity described above: Institutional Viability and Vitality, Education and Scholarship, Climate and Intergroup Relations, and Access and

Success create an “interconnected, inclusive, and differentiated” (Smith, 2009, p. 78) diversity imperative. Ultimately, Smith’s framework hopes to provide an institutional map that helps navigate the diversity imperative. It allows the conversation to be less about focusing on student characteristics and more about linking diversity to the core indicators of excellence thus enhancing the potential that the organization will reexamine and reformulate its practices for institutional success. The centrality of this imperative will also contribute towards vertical and horizontal integration of information so the institution can achieve a collaborative understanding of the need for change.

Diversity and Higher Education

On today’s campuses, student affairs administrators manage people, facilities, and budgets; create and influence policy that profoundly affects all aspects of an institution; develop innovative programs; respond to campus crises; and interface with academic affairs in meaningful ways. Student affairs practitioners have also assumed, or been assigned, the responsibility for creating and sustaining multicultural communities on campus by shaping the student learning environment and working to make the campus a more inviting place for those who have been excluded from or ignored by higher education in the past (Pope, Reynolds, & Mueller, 2004).

The responsibility to make the campus more accessible is not limited to the student affairs practitioners. This must also be an academic initiative. In his research with faculty practices, Cole (2008) contends that the transformation of minority students from low achieving to high academic achievers requires that faculty be equipped to understand and to address the fundamental nature of students needs. Academic experiences of students of color and their racial and ethnic attitudes are shaped not so much by the

content of the classes they take, but rather by the values, beliefs, and instructional styles used by their teaching faculty (Evans, Foreny, Guido, Patton, & Renn, 2010).

The framework of diversity in higher education reveals that the most successful efforts when it comes to diversity involve curriculum transformation and building faculty capacity (Smith, 2009). The curriculum must become more reflective of the values and norms of a multi-cultural society. “Students, especially with minority group social identities, want and need to learn how to narrate their stories and experiences and to talk about their lived knowledge, struggles, and resistance in way that will be heard and richly respectfully understood” (Cantor, 2010, p. 19). The capacity of the faculty to recognize and give pedagogical space for these narratives helps increase student success and create inviting learning environments for students with diverse backgrounds (Smith, 2009).

A newly acknowledged rising urgency revealed in the recently released 15-year report (Carnevale & Strohl, 2013) analyzing enrollment trends of college campuses and diversity is the racial, ethnic, and social economic inequality found in the educational system. Among the many dismal findings for minority college students, specifically of African-American or Hispanic decent, was the reality that as a result of their race they are more likely to come from poorer neighborhoods, have less accessibility to good education, be less prepared for college, and though “more than 111,000 African Americans and Hispanics” will graduate from high school and be in the top half of their class, they will still not be able to achieve a two- or four-year degree within eight years.

In American society the conversation regarding diversity is continually evolving and with that evolution has come a number of theories to help explain the college developmental experience of various ethnic groups, student cultures, and the campus at

large. You find leaders being asked to rethink their long-held assumptions about diversity and make room for a new kind of student (Sandeen & Barr, 2006). And yet this concept of a “new student” is challenged by those who want to “preserve” these privileges of higher education for the few and elite students who demonstrate, via their high standardized scores and academic grades, their “particular potential to learn.” These critics urge universities to “not compromise their privileged status or quality of education by downgrading their curriculum with remedial education” (Chang, 2002, p. 133).

The rewards of student diversity are much discussed in the literature and in the public spheres of higher education. The conversation also includes the sociologists looking ahead at the future and recognizing the job-marketability of individuals who can work effectively with others from diverse backgrounds (Sandeen & Barr, 2006). Various studies conclude that students who attend institutions with a diverse population of students, faculty, and staff report greater learning, increases in various measures of interpersonal competencies, develop greater self-confidence, are less likely to hold irrational prejudices, make greater gains in critical thinking, and have greater involvement in civic and community service behaviors all of which adversely affect student achievement (Engberg, 2007; Talbot, 2003).

When looking at liberal arts colleges, Umbach and Kuh (2006) found that students who attended these smaller institutions reported greater gains in their understanding of people from diverse background due to their high engagement measures in diversity-related experiences. With a noticeable change in demographics and its outcomes on higher education, researchers are interested in knowing what effect this has on the educational experience of the student. Kuh, Kinzie, Buckley et al. (2006) suggest

that the educational experience is not only enhanced but students are also shaped by this diversity in such a way that they contribute more effectively post-college to the ever-growing global community. In earlier research, Kuh (2003) found that students who attended liberal arts colleges were across the board more engaged in effective educational purposeful activities than their counterparts in other higher educational institutions. Students in these liberal arts colleges were more likely to engage in meaningful conversations with peers from other racial and ethnic backgrounds outside of the classroom.

In summary, researchers have found that in liberal arts colleges, students of diverse backgrounds, report higher experiences with diversity, higher levels of Academic Challenge, participate more frequently in active and collaborative learning, report greater gains in personal and educational growth, and are more satisfied with their college experience (Umbach & Kuh, 2006). They also perceive that their campus environment more strongly supports their academic and social needs.

While the findings above collaborated with existing research, in that it showed the positive relationship between diversity and Student Satisfaction with college experience, the “pattern of results favoring liberal arts colleges in terms of diversity experiences” (Umbach & Kuh, 2006, p. 183) was surprising. The researchers noted the inconsistency between the diversity density data, which states that most liberal arts colleges do not have racially or socioeconomically diverse student body, and yet in this experiment they outscore other institutions with higher Structural Diversity.

Looking at studies by Hurtado, Milem, Clayton-Pedersen and Allen (1999) and Chang (1999) helped shed some light as to the discrepancy in the findings. “Structural

diversity in and of itself does not necessarily result in an environment supportive of diversity” (Umbach & Kuh, 2006, p. 184). Thus the number of students from different backgrounds reported by an institution does not necessarily correlate to positive experiences (benefits) in the area of diversity. More important the number of diverse students is the “quality of interactions across differences that the campus environment encourages and nurtures” (Umbach & Kuh, 2006, p. 184). A campus does this by presenting diverse perspectives in the classroom, communicating the value of diversity, and supporting academic and social needs of their students coming from different backgrounds.

Researchers have also found that across disciplinary contexts, students who are interacting with racially diverse peers in informal settings that are characterized by more honest, personal, and intellectual exchanges among students are developing stronger pluralistic orientations (LeSure-Lester & King, 2005). A leader in pluralistic orientation, Engberg (2007) conducted a longitudinal study that looked at 4,697 students in nine public universities through their freshman and sophomore school year. Engberg sought to know the elements of the educational process that developed students’ pluralistic orientation-defined as a specific outcome that captures students’ thinking and interaction skills in a diverse society. He found that while students are engaged in diversity experiences they are more likely to be motivated to explore their own and other’s social identity, they indirectly are also enhancing the development of their own pluralistic orientation.

These pluralistic orientations, in theory, use higher levels of complex thinking which enable students to manage controversial issues, engage in cooperative behaviors,

and develop a high regard for others' perspectives, beliefs, and backgrounds—all part of the skill-set sought after by an increasingly global employment community (Engberg & Hurtado, 2011).

As the number of students of color continues to increase, so must advance the research recognizing the various racial identity formation theories and practices (Pascarella & Terrenzini, 2005). The best way to learn and understand these nuances is to ask students and to develop a trusting relationship with them so that they can discuss these difficult choices (Torres, Howard-Hamilton, & Cooper, 2003).

With the changing demographics, the influx of underrepresented groups of students to higher education, their level of unpreparedness in regards to academic practices, a questions is now raised. What does it mean to be a diverse community of learners in the 21st century? What priorities change when one is aware of the implications that come from having a diverse student body?

Antonio (2001) demonstrated that attending a multicultural campus results in a more diverse friendship group, which in turn influences the frequency in which students interact with diverse peers outside of their friendship group. The campus environment represents a significant element of a student's sociocultural environment and influences a sense of self and engagement (Braskamp, Trautvetter, & Ward, 2006).

Yet the environment alone cannot produce change. Change must also come for the institutions' ability to transform its policies and practices to include a new paradigm of teaching and thinking (Smith, 2009). In a study involving close to 1,000 institutions and 900,000 freshman and senior students, researchers concluded that one of the most important questions that must be answered by a university "is not what are we going to

do next, but what should we stop doing now so there is time and energy to invest in promising new initiatives” (Kuh, 2005, p. 258).

One of the practices recommended and seen among the leading schools in the study above involved the University of Kansas who recognizing the need for excellent teaching as well the need to close the educational gap between underprepared students and others, assigned their highly skilled teachers to introductory courses to give students the best chance of success. They further developed multiple awards to recognize annually “outstanding teaching” (Kuh, 2005, p. 242).

It is important that academia recognize that certain groups have privilege and power while other groups, such as minority students, also known as underrepresented students, do not. Within the African American community, for example, students continue to report racial mistreatment and a sense that they do not belong, especially when asked to engage in White traditions (Torres et al., 2003). Latino students are challenged by the academic, financial burden and familial responsibilities as they attempt to develop their own ethnic identity (Longerbeam, Sedlacek, & Alatorre, 2004).

In a paper presented at the Annual Meeting of the Association for Study of Higher Education, researchers Laird et al. (2007) challenged the higher education community by presenting Student Engagement data for African American and Hispanic students in predominantly White institutions. Their findings revealed a simple truth: “African American and Hispanic students who advance to postsecondary institutions are often not as prepared academically as their White counterparts, making collegiate success more difficult” (p. 4).

A variety of reasons emerged from this study: pre-college experience (high

schools) in areas of poverty and segregation, they are first in their families to attend college, and less likely than their White counterparts to take advanced placement exams. Hispanic students in particular also face a host of fears (personal failure, asking questions, being perceived as ‘lazy’ or ‘stupid,’ cultural separation, others), which become real personal challenges as they attempt to integrate into the college life.

As I see it, the diversity imperative in higher education is affirmed in the literature as we both encounter our *present* crisis of an increase in underrepresented students eligible for college and face our *future* of a diverse and global society needing a workforce that understands how to relate to one another and develop new paradigms for existing in this new pluralistic society. Yet the diversity imperative hinges on informed and educated leadership. These individuals must be knowledgeable leaders who can read the patterns and have a commitment to building shared responsibility for student success (Heffernan, 2011; Kuh et al., 2005a).

I join the efforts of researcher Chang (2002) as he calls leaders in position within the higher education system to develop “a fuller understanding and appreciation of campus diversity” (p. 136) because their lack of involvement leads to affirmation of the short-sighted vision of those looking to preserve higher education for the elite and thus ultimately arrest the “democratic transformation of higher education” (p. 136).

Forms of Diversity

This study focuses on the relationship between Student Engagement and diversity in a liberal arts college. Adopting various empirically researched diversity frameworks, I support the understanding that racially and ethnically diverse environments enrich the educational experience for all students as well as it improves how students of all

backgrounds relate to one another (Hurtado, Dey, Gurin, & Gurin, 2003; Rothman, Lipset, & Nevitte, 2002; Sáenz, 2010; Smith, 2009).

For the purpose of this study, the terms minority students and students of color are used interchangeably referring to Hispanic, Asian, African-American, and other communities classified as non-White. The terms higher education, academia, and college were also used interchangeably to refer to the post-high school experience. Also a broad definition of diversity was used to refer to the inclusion of different types of people from various race and ethnicity.

Diversity is limited in this study to represent racial and ethnic diversity. I used Talbot's (2003) definition of ethnicity to mean racial or national characteristics determined by birth. On a college campus diversity is measured using three main forms or types: structural, interactional, and curricular.

Structural Diversity

For the purpose of this study, Structural Diversity is defined as the racial/ethnic numerical composition of a campus' student population (Chang, 1999; Kuh, 2003; Sáenz, 2010; Umbach & Kuh, 2006). In another words, it is the diversity of the student body (Pike & Kuh, 2006). Structural Diversity can be achieved intentionally, by recruiting a specific group of students, or it can occur accidentally, such as the rapid shift of a community's demographic. Structural Diversity in a college campus has been linked to positive perceptions of the campus environment (Kuh, 2003; Umbach & Kuh, 2006), intellectual development (Antonio, 2001; Umbach & Kuh, 2006), gains in personal and social development (Chang, 1999), frequency of interactions among diverse peers, greater understanding of different racial and ethnic groups (Pike et al., 2007), and most

recently discovered, diversity's capacity to disrupt the cycle of segregation (Sáenz, 2010). Some would go as far as to argue that Structural Diversity exerts "an indirect effect on student learning" (Pike & Kuh, 2006, p. 427). This information was based on a single self-reported question on the NSSE survey that asked for the students' racial and ethnic identification.

Cross-Racial Interaction Diversity

Cross-Racial Interaction Diversity is defined by Chang (2009) as the cross-racial contact experienced between students of diverse ethnic/racial backgrounds. It is also defined as informal interactions with peers, as well as the frequency of intergroup interactions (diverse faculty and students) in and outside of the classroom (Pike & Kuh, 2006; Sáenz, 2010). In a rapidly emerging global environment, the art of understanding and working effectively with people from various backgrounds has become a coveted competency for graduating students (Engberg, 2007; Kuh, 2003). Researchers have found a correlation between students' exposure to diversity, via interactions with students, faculty and staff, of diverse backgrounds, and satisfaction with the college experience (Kuh, 2003).

Interactions with students of diverse backgrounds assist in the social integration of students to the academic environment. An important aspect of social integration is positive interaction with other students via informal circles, which help students connect to campus (Sáenz et al., 1999). When these circles are diverse and include a myriad of global voices, their pluralistic worldview is enhanced and their diverse life-stories are affirmed. The authors further stipulated,

friendships with students from different backgrounds or countries on a highly diverse campus provide exposure to a variety of values and perspectives as well

as ensuring that students do not confine their acquaintanceships to a limited and homogeneous circle of friends. (Sáenz et al., 1999, p. 202)

This was the case in a panel study in Middlebury College (*Diversity*, 2009) of first-year students addressing diversity, whereby students were asked to define diversity and its effects. One student responded, “I think diversity is the presence of a range of experiences” (p. 4). Another responded to the question of what are its effects,

I think one of the nicest things is like talking about what your life was like before you came to [my college] because we all sort of have, not the same life, but we all have this like common experience now that we sort of all get. But some of my favorite conversations with my friends have been about what, who were before you came here. (p. 6)

This concept of Cross-Racial Interaction is especially pertinent as we recognize our nation’s growing diversity matrix. Victor Sáenz (2010) further articulates that, “racial and ethnic compositional diversity can create richer and more complex social and learning environments than racially homogeneous ones, which subsequently can serve as an educational tool to promote all students’ learning and development” (p. 3).

A number of empirical evidence also suggests that interaction among students of diverse backgrounds leads to greater openness and understanding of diverse people (Kuh, 2003; Pike et al., 2007). Using the words of one of the students on the Middlebury first-year panel, “...I think stuff like that really kind of changes your perspective little bit . . . it’s (*diversity*) definitely been enriching” (*Diversity*, 2009, p. 5).

Smith (2009) made this observation, “The question is not whether we want diversity, or whether we should accommodate diversity, for diversity is clearly our present and our future” (p. 3). As a practitioner and researcher, I find that the question must now shift to: How do we do this well so as to preserve and pass on the values of our

nation while maintaining and affirming the positive cultural values of the incoming people groups?

Curricular/Co-curricular Diversity

Curricular/Co-curricular diversity is defined as an institutions' intentional programming in formal and informal environments (classrooms, curriculum, and events) to aid students in gaining experiences with diverse perspectives of ideas and peoples of other race and ethnicity (Denson & Chang, 2009; Sáenz, 2010). This diversity experience focuses on how information regarding diverse groups of people is incorporated into the curriculum (Pike & Kuh, 2006) as well as how out of classroom experiences encourage interactions among various ethnic groups.

In the area of curriculum, faculty can sometimes assume that students have a respect and tolerance for worldviews other than theirs or understand learning styles that different from theirs, yet research suggests otherwise (Anderson, 1999). It is often the case that minority students actually feel "victimized by inequities in the classroom" (p. 70) which affect their academic performance and their relationship with their peers.

Halpern (1994) challenges the academy and specially faculty to recognize and teach, what he calls "the new" student groups in academia, "the capacity to value and respect all peoples" (p. 187). He further stipulates, "Whether students are consciously aware of it or not, each brings into the classroom a wealth of unique or personal cultural knowledge that can be tapped as a rich learning resource" (p. 130). In order to prepare students to become citizens of the global community, Halpern argues that the curriculum needs to reflect the variety of voices and knowledge-based contributions made by these individuals. It also helps the minority students better understand themselves and the

aptitudes they bring to the education process.

The co-curricular also plays an important role in helping underrepresented students assimilate to the rigors of higher education. Smith and Wolf-Wendel (2005) assert,

While poor academic preparation and socioeconomic status may be a barrier to matriculation, evidence is growing that the poor quality of minority students' life on campus and their sense of isolation, alienation, and lack of support are more serious factors in attrition. (p. 15)

In a report made by the American Association of State Colleges and Universities (AASCU, 2007) on Hispanic Student Success, they noted that the preparation that must happen for Hispanic students in order for them to be able to prepare and manage “the literal and emotional distance from home” (p. 19). If students are not prepared before coming to college/university, isolation, homesickness, and alienation can begin to creep into their psyche. The literature is filled with ways in which a campus can promote diversity in its co-curricular whether it is through event planning, or intentionality in their creation of student spaces. Silverman and Cassaza (2000) encourage campuses to develop ways in which students are able to get together and interact with each other in open and inviting spaces since doing so influences their learning and gives them social outlets that allow them to feel like they belong. Of course this interaction also fosters an exchange of ideas, which is a critical element in engaging in co-curricular diversity.

Diversity and the Minority Student Experience

Much work still needs to be done to better academically integrate students of color in to the rigor of college. In a recent study conducted in the mid-Atlantic region at a private liberal arts college, with a sample group of 568 undergraduate women, the researchers were astonished to find that the first-generational White students out

performed academically the continuing-generation minority students. They also discovered no significant differences between first-generational minority and continuing-generation minority students (Housel & Harvey, 2009). This finding confirms the challenge minority students continue to face as they attempt to be academically successful.

Carnevale and Strohl (2013), looking at African American and Hispanic students, found them to be especially vulnerable in the areas of class and race. They found that “minorities are disproportionately harmed by increasing income inequality because they are often trapped in jobless enclaves and lower-wage job sectors that make them vulnerable . . . leading them to isolation” (p. 37). The situation becomes even more bleak as their findings reveal the inequality that their minority status places upon their accessibility to higher education.

Since 1995, 82 percent of new white enrollments have gone to the 468 most selective colleges, while 72 percent of new Hispanic enrollment and 68 percent of new African-American enrollment have gone to the two-year and four-year open access schools. (Carnevale & Strohl, 2013, p. 9)

With the matriculation rate at selective schools being at 82% and the open access colleges being at 49% the grim future begins to unravel for minority students as they must overcome not just their own race and class status, plus now the over crowdedness and underfunded realities of open access education.

Another minority group, not considered underrepresented in the higher education arena, but facing challenges of their own as they encounter cultural disconnects are the Asian students. The recent census results found that 37% of U.S. immigrants are of Asian descent, with the bulk coming from Vietnam, the Philippines, China, and India (Evans et al., 2010). It is expected that by the middle of this century, Latinos and Asian Americans,

otherwise known as the racial middle constitute about 35% of the U.S. population, forcing many experts to question whether such a status quo can be maintained, given these massive population shifts.

This racial middle is expected to exhibit interesting characteristics that are not completely reducible to the patterns typical of Whites or Blacks. For example, this study found that Asian American families earn incomes and attain educational levels that are equal to and sometimes even higher than Whites; not so the case for the Latino population placed in the same category. Yet both groups continue to earn lower returns on their education than similarly educated Whites, facing glass-ceiling barriers to promotion in their occupations.

Commonalities among the racial middle include sharing a warm feeling toward Whites and thus have higher intermarriage rates with Whites. Also as a group they are less likely to support race-related policies like affirmative action, and less likely to vote Democratic, and find themselves severely underrepresented politically (O'Brien, 2008). This lack of engagement in politics and confrontation with the majority ethnic group unfortunately has adverse consequences when it comes to better understanding their particular needs and finding ways in which to appropriately support their success in the public arena and in psychosocial context of their lives.

The minority student experience is filled with complexity, diversity, and a continual search to better integrate into the college experience. The following section explores one student's plight at attempting to navigate her culture, her new setting, the inherited ethnic stigma and perceived discrimination faced by those of non-White status

(Huynh & Fuligni, 2011). This exploration of self, also called identity formation, is an ongoing process that continues throughout the human life cycle (Mann, 2006).

A Student Perspective

Rebecca Hossain, a minority graduate student, when asked to put into words her experience navigating college life as someone other than the majority, wrote a poem entitled, “Where I Am From.”

I am not from one place.
I am from Texas, Brazil, and France.
I am from Bangladesh and Puerto Rico.
I am from America
I am from a place that stresses a singular identity; a place that always labels me a foreigner.
I am from the rich White suburbs all over the world.
I am from a place where I am taught that to be accepted I must deny the many cultures that make me, me.
I am from a place where the question, “are you Saddam Hussein’s daughter?” never goes without a laugh.
I am from a place where the values I was taught at home conflict with those of mainstream society.
I am from a place where women stay at home and men are breadwinners;
A place where my dad prays five times a day and my friends compliment the “pretty rugs” that he kneels upon.
I am from a place where racism thrives because putting “them” down brings “us” up.
But I . . . am from a place that stresses love and happiness.
I am from a family that teaches and supports me; a family that, regardless of our many identities, is incredibly unified.
I am from the world; a place that encompasses both good and bad, and a place that forces you to pave your own path. (Borrego & Manning, 2007, p. 24-25)

Rebecca is not alone; the art of integrating into a new community with all of its traditions, expectations, and new language can be a daunting experience for students of color. In her poem you hear angst as she recognizes her misplacement, her disconnect to mainstream value systems (family and religion), and yet you also hear her pride in her culture and upbringing, and her hopefulness as she recognizes her connection to the

world-at-large. Ortis and Santos (2009) contend that the past decades' focus on race and ethnicity, as well as the understood task of college to establish one's identity, largely contribute to students gravitating toward the notion of their ethnicity in developing their identity. Rebecca articulates well the experience of minority students as they encounter academia and in it both find themselves, via the identity development process, and face the socially constructed challenges inherent in higher education.

Lesure-Lester and King (2005), while researching two colleges in the Southeast to tabulate the racial-ethnic differences in social anxiety among college students, found social anxiety is culturally related, thus affecting minority students (especially Hispanics and Asians) in their college experience. In a qualitative study with 24 participants, Morley (2004) concluded that social and academic integration of minority students into campus life continues to be challenged by the pervasiveness of White culture in academia.

It is critical for campus officials to be sympathetic of the issues concerning race and identity. They must be able to look for ways in which to engage members of the campus community in meaningful dialogue in regards to this topic (Kellogg & Niskode, 2008; Smith, 2009). Students must also be given the tools to know how to interact across race, rather than leaving the experience to chance. Without providing students with the skills to communicate effectively across differences, practitioners can potentially diminish how secure students feel in their pluralistic abilities (Engberg, 2007). The campuses must provide students with meaningful experiences and strategies to interact with and learn from the diverse population so they may glean the benefits of being part of a learning community. The solutions must be grounded in the experience of the students'

unique backgrounds and interests (Engberg, 2007; Mmje, Newman, Kramer, & Pearson, 2009).

Student affairs practitioners, called to oversee the needs of students, need to be intentional about the programs they design so as to keep in mind the diverse student needs and the various ways in which they can make the campus welcoming and inclusive (Closson & Henry, 2008).

CHAPTER 3

METHODOLOGY

Introduction

This study focuses on the Student Engagement patterns of a diverse faith-based, liberal arts university in Southern California. It is my position, supported by Smith's (2009) diversity framework, and various other researchers, that racially and ethnically diverse environments not only provide excellence in higher education, but more importantly they enrich the educational experience for all students and improve how students of all backgrounds relate to one another (Hurtado, Dey et al., 2003; Rothman et al., 2002; Sáenz, 2010; Smith, 2009).

This chapter: (1) reveals the research questions, (2) describes the research design, (3) gives a clear description of the research sample, (4) describes the instrument used to collect the data, its reliability and validity, (5) identifies the limitations and delimitations of the collection procedure, and (6) provides a brief explanation of the variables created and rationale to help the reader accept the conclusions that follow.

Research Questions

The research questions that guided this study were as follows:

1. What is the level of Student Engagement as measured by Academic Challenge, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular Diversity, at La Sierra University?

2. To what extent is Student Engagement (Academic Challenge, Character Development, Cross-Racial Interaction Diversity, and Curricular/Co-curricular Diversity) related to ethnicity, gender, and class standing?

3. How is overall Student Satisfaction related to Student Engagement (Academic Challenge, Character Development, Cross-Racial Interaction Diversity, and Curricular/Co-curricular Diversity)?

Research Design

This research is an empirical, quantitative study performed using secondary data analysis. This secondary data was used to do correlation study. The rationale for using secondary analysis was two-fold. The primary reason was that due to the topic of my dissertation—Student Engagement, the NSSE instrument was considered one of the most used tools to help understand institutional patterns of engagement for its students. Once the primary reason was established, it came to my attention that the university had been collecting this data since 1999 but had not been actively assessing the data, thus it allowed me to use an existing resource (NSSE) more effectively for the benefit of the institution.

The secondary analysis of 2013 NSSE raw data at La Sierra University to examine Student Engagement, defined it as: Academic Challenge, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular Diversity, Structural Diversity, and its relationship to gender, class standing, ethnicity, and Student Satisfaction. Descriptive statistics, *t*-test, analysis of variance (ANOVA), and regression analysis were used to analyze the data set.

This *ex post facto* comparison study used archival data to explore relationships

among Student Engagement measures, demographic characteristics, and Student Satisfaction. The data were disaggregated by gender, class standing, and ethnicity.

Population and Sample Size

La Sierra University was chosen as the designated campus to research due to its unique contributions to the literature since its population is structurally diverse, meaning there is a high numerical representation of students from different racial and ethnic groups. The demographics of the institution reflect a non-Black and White context and categorized as a high diversity-density (index of .91) institution, as calculated using Chang's (1999) formula. As stated in Chapter 1, the Diversity Density Index was designed by Chang (1999) as a measure that would accurately capture the heterogeneity of a student body in a given institution. The variable, in effect, measures the variance across all included racial groups creating a measure that assesses an institution's unique racial composition. The index also measures the probability of students interacting with students of another race. With minority majority student population comprised of Hispanics (29.4%), White (17.8%), Asian/Pacific Islander (17.3%) Multiracial (17%), Foreign (8.9%) and Black (3.6%) the institution's high diversity-density index asserts a high probability of student interactions with peers of different ethnic backgrounds (see Table 2).

La Sierra University is a small, faith-based, liberal arts university (est. 1922) in Southern California. The student population is comprised of 93% California residents with only 25% of the students choosing to live on-campus. The university has experienced a non-designed diverse constituency in the past 15 years. The university

willingly granted permission to use their 2013 NSSE data to examine the Student Engagement variables of this study.

The data were disaggregated by ethnicity, age, and class standing. The demographic variables were used to measure the relationship of these variables to student engagement patterns, defined as Academic Challenge, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular Diversity, and Student Satisfaction.

The population for this survey was degree-seeking freshman and senior students in the 2013 Spring quarter. All freshman and seniors who completed the NSSE in 2013 ($N=360$) were included in this current study. This formed the sample for my study.

Instrumentation

Many colleges and universities use the NSSE benchmarks (NSSE, 2013) to better understand their student body engagement patterns. The instrument measures effective educational practice in five broad categories or benchmarks: Level of Academic Challenge (LAC), Active and Collaborative Learning (ACL), Student-Faculty Interaction (SFI), Supportive Campus Environment (SCE), and Enriching Educational Experiences (EEE) (Pascarella et al., 2010).

The National Survey of Student Engagement (NSSE) is an empirical tool used to assess the behaviors and experiences of college students, which contribute to their learning and their personal development (NSSE, 2013). The survey consists of 85 items, plus demographic information. Out of those 85 items, 42 items are used to measure five categories, also called benchmarks. The five benchmarks capture with empirical data the various ways in which colleges and universities support good student engagement practices, which are predicted to enhance cognitive development. The benchmarks,

defined below, are as follows: Level of Academic Challenge (LAC); Active and Collaborative Learning (ACL); Student-Faculty Interaction (SFI); Supportive Campus Environments (SCE); and Enriching Educational Experiences (EEE).

The framework for NSSE (Kuh, 2003) is based on the work of C. Robert Pace in the mid 1970s. Pace developed a college student experience questionnaire to assess the quality of student effort. In 1984 Astin further “fleshed” out and “popularized the concept with his theory of involvement” (p. 3).

In this study, three major categories of variables were researched: demographic characteristics (gender, class standing, and ethnicity), student engagement patterns or benchmarks (Academic Challenge, Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity), and Student Satisfaction. The demographic characteristics allow me to disaggregate the data to better interpret the student engagement patterns and diversity interactions as they relate to the designated groups (gender, class standing, and ethnicity) of the student body. Using previous research, three of the Student Engagement variables (Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity) were specifically designed to be used for this study and were tested for reliability.

Using Umbach and Kuh’s (2006) template for Character Development, a construct was created using a scale. The scale was represented by six items from the self-reported gains section. An instrument reliability score of .91 was achieved. Another construct developed using Pike et al.’s (2007) work was Cross-Racial Interaction Diversity. A scale made up of five diversity-related questions assessing the amount of interaction among diverse groups and the perceived gains from those interactions. An

instrument reliability score of .89 was achieved.

Finally the Curricular/Co-curricular Diversity construct was created with a scale made up of four questions that assessed programmed events/conversations (in and outside the classroom) that expose students to race/ethnicity and diverse beliefs. An instrument reliability score of .82 was achieved.

Character Development

Character Development is represented by nine items from the self-reported gains (value added outcomes) section on the NSSE survey that reflects four related dimensions of Character Development (Kuh, 2003): Knowledge of Self (understanding self, understanding people of other racial and ethnic backgrounds, and working effectively with others), Ethical Development and Problem Solving (developing a personal code of ethics and solving complex real-world problems), Civic Responsibility (voting in local, state, and national elections, and contributing to the welfare of one's community), and General Knowledge (acquiring a broad general education and learning effectively on one's own).

Cross-Racial Interaction Diversity

The two measures of interaction diversity were based on five questions from the NSSE survey. The *amount* of interaction among diverse groups included four questions about how often students had serious conversations with students with different religious beliefs, political opinions, or personal values; and the extent to which the institution encouraged contact among students from different groups. The measure of *understanding* diverse people was based on a single question: To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in

understanding people of other racial and ethnic background (Pascarella et al., 2010; Pike et al., 2007).

Curricular/Co-curricular Diversity

Tabulated using four questions from the NSSE survey, this construct attempted to codify the institution's intentional formal and informal programming to help students in the development of diverse perspectives of ideas and peoples. Two of the questions focused on the in-class (curricular) diversity pedagogy. These two questions were: In your experience at your institution during the current year, about how often have you done each of the following: Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in course discussions or writing assignments and How much does your institution: Encourage contact among students from different backgrounds (social, racial/ethnic, religious, etc.). The two co-curricular (out-of-classroom) measures were based on the responses of two questions: How much does your institution emphasize the following: Attending campus activities and events (performing arts, athletic events, etc.) and Attending events that address important social, economic, or political issues.

Student Satisfaction

Student Satisfaction is assessed by NSSE's two items:

1. Question #18, using a four-point scale (1=poor, 2=fair, 3=good, 4=excellent) the student was asked: "How would you evaluate your entire experience at this institution?"
2. Question #19, using a four-point scale (1=definitely no, 2=probably no, 3=probably yes, 4=definitely yes), the student was asked: "If you could start over again,

would you go to the same institution you are now attending?”

Instrument Reliability

In the calculations of the Cronbach Alpha, 360 respondents were analyzed for each of the variables. The obtained alpha scores are listed in Table 5. Character Development received the highest alpha score (.91) with Curricular Diversity receiving the lowest reliability score (.82). In the Academic Challenge benchmark, the highest alpha score (.88) was Quantitative Reasoning with the lowest score (.73) being/Learning Strategies.

Table 5

National Survey of Student Engagement (NSSE, 2013) Instrument Reliability

Variable	NSSE Items	Reliability
Co-curricular Diversity	Question #14 d, h, i	0.824
Cross-Racial Interaction Diversity	Question #8 a-d	0.892
Character Development	Question #17 c, f-j	0.908
Academic Challenge	Questions	
	Higher Order Learning #4 (a-c)	0.872
	Reflective/Integrative Learning #5 (a-c)	0.874
	Learning Strategies #6 (a-c)	0.730
	Quantitative Reasoning #7 (a-c)	0.875
Student Satisfaction	Questions	
	#18	
	#19	

Data Collection Procedure

An online survey was sent to all students. Degree-seeking freshman and senior students in the 2013 Spring Quarter were selected to participate in an institutional NSSE

questionnaire. The web-only survey mode was offered to students. All contacts were made by e-mail and students completed the survey online. The total number of freshman and senior students participating were 360.

I was able to obtain this data collected by the institution following various institutional protocols. First, a formal request for the NSSE data was written to the Office of the Provost. The Provost approved the request and forwarded my request and his approval to the Office of Institutional Research. The Office of Institutional Research then sent a written request to NSSE for access to raw NSSE data for La Sierra University. Upon receiving the data, the Office of Institutional Research forwarded the entire data set to me. A subsequent request was submitted to Andrews University for IRB approval for research. Approval from Andrews was received and research began.

Data Analysis

The research questions were analyzed as follows:

1. What is the level of Student Engagement as measured by Academic Challenge, Character Development, Cross-Racial Interaction Diversity, and Curricular/Co-curricular Diversity, at La Sierra University? Descriptive statistics, such as frequency of distribution, means, and standard deviation were used.
2. To what extent is Student Engagement (Academic Challenge, Character Development, Cross-Racial Interaction Diversity, and Curricular/Co-curricular Diversity) related to ethnicity, gender, and class standing? Independent samples *t*-tests were used for gender and class standing. Analysis of variance was also used in evaluating ethnic differences. Both *t*-test and analysis of variance are statistical tests designed to look at group differences. For all statistical tests the level of significance was set at .05.

3. How is overall Student Satisfaction related to Student Engagement (Academic Challenge, Character Development, Cross-Racial Interaction Diversity, and Curricular/Co-curricular Diversity)? Pearson's r and multiple regression analysis were used. Regression analysis is designed to look at relationship between a criterion variable and set of predictors. Statistical significance was set at 0.05.

Summary

Chapter 3 began with the research questions that guided this study. A description of the research design, population, sample size, and rationale for the population followed. An analysis of the NSSE instrument and the created scales with instrument reliability was reviewed. The procedures for data collection and data analysis were addressed in the closing of the chapter. The following chapter presents the results of the statistical analysis with Chapter 5 concluding with the implications and discusses recommendations for future research and practice.

CHAPTER 4

RESULTS OF THE STUDY

Introduction

This study focuses on the student engagement patterns of a diverse faith-based, liberal arts university. Student engagement patterns were measured using the National Survey of Student Engagement (NSSE, 2013). Adopting Smith's (2009) diversity framework that asserts that diversity must be in the center of an institution's missional imperatives, I support the understanding that racially and ethnically diverse environments enrich the educational experience for all students and promote educational equity (Hurtado, 2003; Rothman et al., 2002; Sáenz, 2010; Smith, 2009).

The purpose of this study was to examine:

1. The extent to which students at La Sierra University were engaged in Academic Challenge (measured by four engagement indicators: Higher Order Learning, Reflective and Integrative Learning, Learning Strategies, and Quantitative Reasoning), Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity.
2. The relationship between Student Engagement (Academic Challenge, Character Development, Cross-Racial Interaction Diversity, and Curricular/Co-curricular Diversity) and the following demographic characteristics: gender, class standing, and ethnicity; and

3. The extent to which Student Satisfaction in a structurally diverse campus is related to Student Engagement.

The research questions that guided this study were as follows:

1. What is the level of Student Engagement as measured by Academic Challenge, Character Development, Cross-Racial Interaction Diversity, and Curricular/Co-curricular Diversity at La Sierra University?
2. To what extent is Student Engagement related to Structural Diversity, gender, and class standing?
3. To what extent is Student Engagement in a structurally diverse context related to overall Student Satisfaction?

Description of the Sample

The population for this survey was degree-seeking freshman and senior students in the 2013 Spring quarter at La Sierra University, a small liberal arts university in southern California. The total number of freshman and senior students participating was 360. This sample represented 20% of the freshmen and 34% of the seniors enrolled at La Sierra University during the Spring quarter of 2013.

For the purpose of this study, the ethnicity variable was recoded. Pacific Islanders were combined with Asians to create one separate student group classified as Asian/Pacific Islander. Students born out of the U.S., whom we call international students, were also recoded and a Foreign Student group classification was created to acknowledge their significant (8.9%) presence on campus. Participants were primarily female (65.8%) and mostly freshman (47.7%). Hispanics (29.4%) were the largest ethnic group followed by Whites (17.8%) and Asians (17.3%). See Table 2.

Results

In this study, each Student Engagement variable is measured along a 60-point scale (NSSE, 2013) where 0=Never/Very Little, 20=Sometime/Some, 40=Often/Quite a Bit and 60=Very Often/Very Much. For the purpose of interpreting level of engagement in this study, the following range of scores will be used: 0-15=Never/Very Little, 16-30=Sometime/Some, 31-45=Often/Quite a Bit and 46-60=Very Often/Very Much.

Levels of Student Engagement

Research Question 1: What is the level of Student Engagement in Academic Challenge, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular Diversity, and Student Satisfaction at La Sierra University in 2013?

Table 6 reports means and standard deviations as well as skewness statistics for each Student Engagement variable. Students are most highly engaged in Cross-Racial Interaction Diversity ($M=46.33$, $SD=14.73$) followed by Higher Order Learning ($M=41.13$, $SD=13.92$), Learning Strategies ($M=39.92$, $SD=13.94$) and Character Development ($M=39.01$, $SD=15.49$). Students were least engaged in Quantitative Reasoning ($M=27.64$, $SD=16.46$).

A broad view of Student Engagement as shown in Table 6 reveals that students in this study were most engaged, signified by “Often” and “Very Often,” in Cross-Racial Interaction Diversity ($M=46.33$, $SD=14.73$) and least engaged, signified by “Sometimes,” in Quantitative Reasoning ($M=27.64$, $SD=16.46$).

Academic Challenge

Academic Challenge is measured by four engagement indicators: Higher Order Learning, Reflective and Integrative Learning, Learning Strategies, and Quantitative

Table 6

Student Engagement Variables: Mean, Standard Deviation, and Skewness

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	Skewness	
				Statistic	<i>SE</i>
Academic Challenge					
Higher Order Learning	343	41.13	13.92	-.328	.132
Reflective/Integrative Learning	345	37.50	12.74	.026	.131
Learning Strategies	323	39.92	13.94	-.127	.136
Quantitative Reasoning	346	27.64	16.46	.348	.131
Character Development	302	39.01	15.49	-.397	.140
Cross-Racial Interaction	327	46.33	14.73	-1.057	.135
Curricular/Co-curricular Diversity	307	33.96	17.34	-.124	.139

Reasoning. The results indicate Higher Order Learning ($M=41.13$, $SD=13.92$) as the highest engagement indicator followed by Reflective and Integrative Learning ($M=37.50$, $SD=12.74$), Learning Strategies ($M=39.92$, $SD=13.94$), and Quantitative Reasoning ($M=27.64$, $SD=16.46$). Each indicator consists of a series of questions. See Tables 7-10.

In Higher Order (HO) Learning, in all four questions students responded they were on the average “Quite a Bit” engaged. Students were most engaged in “Analyzing an idea, experience, or line of reasoning in depth by examining its parts ($M=42.04$, $SD=16.59$) least engaged in “Forming a new idea or understanding from various pieces of information” parts ($M=39.65$, $SD=16.96$). It is interesting to note that over 76% of the students were engaged in three out of the four questions in Higher Order Learning.

In the area of Reflective and Integrative (RI) Learning, although students responded they were “Quite a Bit” engaged to the seven questions, much range appeared in the responses from the lowest Student Engagement coming from “Combined ideas

Table 7

Academic Challenge: Higher Order Learning (HO)

Statement	<i>N</i>	<i>M</i>	<i>SD</i>	% Quite a Bit & Very Much
Applying facts, theories or methods to practical problems or new situations	341	41.82	16.24	76.0
Analyzing an idea, experience, or line of reasoning in depth by examining its parts	343	42.04	16.59	76.1
Evaluating a point of view, decision, or information source	341	41.00	15.72	76.8
Forming a new idea or understanding from various pieces of information	343	39.65	16.96	70.3

Note. 0-15=Very Little, 16-30=Some, 31-45=Quite a Bit, and 46-60=Very Much.

Table 8

Academic Challenge: Reflective and Integrative Learning (RI)

Statement	<i>N</i>	<i>M</i>	<i>SD</i>	% Quite a Bit & Very Much
Combining ideas from different courses when completing assignments	343	33.82	17.14	54.2
Connecting your learning to societal problems or issues	340	34.35	17.21	56.8
Including diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	341	35.19	17.23	59.8
Examining the strengths and weaknesses of your own views on a topic or issue	342	37.25	16.01	66.7
Trying to better understand someone else views by imagining how an issue looks from his or her perspective	343	39.88	16.40	70.3
Learning something that changed the way you understand an issue or concept	343	39.07	16.45	69.7
Connecting ideas from your courses to your prior experiences and knowledge	341	42.64	15.23	78.6

Note. 0-15=Very Little, 16-30=Some, 31-45=Quite a Bit, and 46-60=Very Much.

Table 9

Academic Challenge: Learning Strategies (LS)

Statement	<i>N</i>	<i>M</i>	<i>SD</i>	% Quite a Bit & Very Much
Identifying key information from reading assignments	323	44.64	14.853	83.9
Reviewing your notes after class	321	38.13	18.547	65.8
Summarizing what you learned in class or from course materials	318	36.92	18.094	60.3

Note. 0-15=Very Little, 16-30=Some, 31-45=Quite a Bit, and 46-60=Very Much.

Table 10

Academic Challenge: Quantitative Reasoning (QR)

Statement	<i>N</i>	<i>M</i>	<i>SD</i>	% Quite a Bit & Very Much
Reaching conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	345	31.13	18.40	49.0
Using numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	343	25.77	18.49	36.1
Evaluating what others have concluded from numerical information	343	26.01	18.48	36.4

Note. 0-15=Very Little, 16-30=Some, 31-45=Quite a Bit, and 46-60=Very Much.

from different courses when completing assignments” ($M=33.82$, $SD=17.14$), with the highest and over 78% of the students indicating “Quite a Bit” engaged in practical application of the learning, “Connected ideas from your courses to prior experiences and knowledge” ($M=42.64$, $SD=15.226$).

In the indicator of Learning Strategies 83.9% of the students were most engaged in identifying “Key information from reading assignments” ($M=44.64$, $SD=14.85$). They were least engaged in summarizing “What you learned in class or from course

materials” ($M=36.92$, $SD=18.09$). Students responded they were “Quite a Bit” engaged in all three items.

As mentioned above, the lowest scoring indicator for Academic Challenge was Quantitative Reasoning with less than 50% of the students being engaged and their response score being “Very Little” or “Some.” The lowest scoring was the question, “Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)” ($M=25.77$, $SD=18.48$).

Character Development

A construct made up of six items from self-reported gains, which relate to Character Development, was used to obtain a Character Development engagement score. A 60-point scale was used with low levels of engagement receiving 0 to 30 while high levels scoring 46 or above. High-level gains (measured growth) in Character Development are defined by being “Very Much” engaged.

The La Sierra University student sample ($N=302$) had a mean score of 39.01 with a Standard Deviation of 15.49. The Character Development scale had the widest range among its engagement responses from students. Students responded “Some” to “Quite a Bit” to questions such as: “To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?” Answers to the six questions are displayed in Table 11.

The scores indicate the highest area of Student Engagement in Character Development occurring with 76.4% of the students showing gains in “Thinking critically and analytically” ($M=43.23$, $SD=17.408$) and 75.1% of students showing gains in “Understanding people of other background” ($M=42.06$, $SD=18.68$). The least gains

Table 11

Student Engagement: Character Development

Statement	<i>N</i>	<i>M</i>	<i>SD</i>	% Quite a Bit & Very Much
Thinking critically and analytically	297	43.23	17.41	76.4
Working effectively with others	301	39.87	17.89	70.4
Developing or clarifying a personal code of values and ethics	300	39.67	19.46	66.7
Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	301	42.06	18.68	75.1
Solving complex real-world problems	299	34.72	19.11	56.5
Being an informed and active citizen	300	34.80	19.07	59.0
Total	302	39.01	15.49	

Note. 0-15=Very Little, 16-30=Some, 31-45=Quite a Bit, and 46-60=Very Much.

were found in “Solving complex real-world problems” ($M=34.72$, $SD=19.11$).

Cross-Racial Interaction

A construct consisting of five diversity-related questions from the NSSE survey was used to create the Cross-Racial Interaction measurement (see Table 12). A 60-point scale was used with low levels of engagement receiving 0 to 30 while high levels of engagement responding “Very Much” receiving a score of 46 or above.

Students at La Sierra University reported high levels of Cross-Racial Interaction Diversity as indicated in the data. This is the highest measured Student Engagement area with over 87% of students indicating they “Had discussions with people of a race or ethnicity other than your own” ($M=49.63$, $SD= 15.90$) either “Often” or “Very Often.” It was closely followed with 84% of the students indicating they have “Very Often” ($M=46.91$, $SD= 16.28$) “Had discussions with people from an economic background other than your own.” It is also important to note that even the lowest scoring question

Table 12

Student Engagement: Cross-Racial Interaction Diversity

Statement	<i>N</i>	<i>M</i>	<i>SD</i>	% Often & Very Often
Had discussions with people of a race or ethnicity other than you own	326	49.63	15.90	87.7
Had discussions with people from an economic background other than your own	327	46.91	16.28	84.4
Had discussions with people with religious beliefs other than your own	324	45.62	17.51	78.8
Had discussions with people with political views other than your own	322	42.98	18.17	75.1
Perceived gains: Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	301	42.06	18.68	75.1

Note. 0-15=Very Little, 16-30=Some, 31-45=Quite a Bit, and 46-60=Very Much.

on the Cross-Racial Interaction Diversity reported that 75.1% of the students ($M=42.06$, $SD=18.68$) responding “Quite a Bit” to having an “Understanding of people of other backgrounds.”

Curricular/Co-curricular Diversity

A construct, which I called Curricular/Co-curricular Diversity (see Table 13), was made up of four questions from the NSSE related to diversity experienced in classroom assignments and out-of-classroom events. A 60-point scale was used with low levels of engagement receiving 0 to 30 while high levels scoring above 46. A high Curricular/Co-curricular engagement would respond “Very Often” to the survey questions. In Table 11, the La Sierra University students ($N=307$) had Curricular/Co-curricular engagement score ($M=33.96$, $SD=17.34$).

In the context of Student Engagement as measured in this research, at La Sierra University students are least engaged in Curricular/Co-curricular Diversity question,

Table 13

Student Engagement: Curricular/Co-curricular Diversity

Statement	<i>N</i>	<i>M</i>	<i>SD</i>	% Often & Very Often
Including diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	341	35.19	17.228	59.8
Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	303	38.94	19.160	67.3
Attending campus activities and events (performing arts, athletic events, etc.)	302	34.57	20.024	57.3
Attending events that address important social, economic, or political issues	304	28.55	21.261	46.1

Note. 0-15=Very Little, 16-30=Some, 31-45=Quite a Bit, and 46-60=Very Much.

that addressed students “Attending events that address important social, economic or political issues ($M=28.55$, $SD=21.26$) with only 46% of students responding that they “Often” and “Very Often” attend. The highest area of engagement in Curricular/Co-curricular Diversity was “Institutional emphasis: Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)” with a mean of 38.94 and a standard deviation of 19.16 indicating the institution “Often” emphasized contact among students of different backgrounds.

Research Question 2: To what extent is Student Engagement, defined by Academic Challenge, Character Development, Cross-Racial Interaction Diversity, and Curricular/Co-curricular Diversity, related to gender, class standing, and ethnicity?

Student Engagement, Gender, Class Standing, and Ethnicity

The findings are organized in three sections each representing a demographic variable (Gender, Class Standing, and Ethnicity) in relation to Student Engagement. A

t-test was used to examine the independent samples for gender and class standing and an analysis of variance (ANOVA) examined the differences in the level of Student Engagement and ethnicity.

All four Student Engagement measures use a 60-point scale: Academic Challenge, Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity. For the purpose of interpreting level of engagement in this study, the following range of scores will be used: 0-15=Never/Very Little, 16-30=Sometime/Some, 31-45=Often/Quite a Bit and 46-60=Very Often/Very Much.

Student Engagement and Gender

Table 14 displays the group means and standard deviation for the relationship between Student Engagement variables and gender. The only significant difference was found in Academic Challenge, Quantitative Reasoning ($p=.001$). The results reveal that both males and females measured “Sometimes” engaged, with males ($M=30.99$, $SD=16.55$) being significantly [$t(298)=10.58$, $p<.001$] more engaged than females ($M=25.74$, $SD=16.42$). The gender differences in Quantitative Reasoning was quite large indicated by Cohen’s $d=1.28$. The Levene’s test ($F=.247$, $p<0.05$) indicated that the assumption of homogeneity of variance was satisfied.

Student Engagement and Class Standing

Table 15 reflects the group mean and standard deviation for the relationship between Student Engagement variables and Class Standing. In the area of Academic Challenge, both Reflective/Integrative Learning ($t(297)=7.69$, $p<.006$) with a large Cohen’s $d = 0.846$ and Quantitative Reasoning ($t(298)=4.58$, $p<.033$) with a medium strength Cohen’s $d = 0.503$ showed significant difference between classes. In

Table 14

Student Engagement and Gender

Variable	Group	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>t</i>	<i>P</i>	<i>ES (d)</i>
Academic Challenge							
Higher Order Learning	Male	103	40.78	14.91	0.429	.513	0.052
	Female	197	41.15	13.56			
Reflective/Integrative Learning	Male	103	39.28	13.41	0.945	.332	0.115
	Female	198	36.93	12.61			
Learning Strategies	Male	104	39.52	14.68	0.522	.470	0.063
	Female	197	39.93	14.00			
Quantitative Reasoning	Male	104	30.99	16.55	10.581	.001	1.280
	Female	199	25.75	16.41			
Character Development	Male	103	38.64	16.62	0.065	.800	0.008
	Female	197	39.11	14.92			
Cross-Racial Interaction	Male	104	45.19	15.86	1.812	.179	0.219
	Female	198	47.14	13.72			
Curricular/Co-curricular Diversity	Male	103	33.01	16.63	0.210	.647	0.026
	Female	196	34.34	17.75			

Significance Levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 15

Student Engagement and Class Standing

Variable	Class Standing	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>t</i>	<i>p</i>	<i>ES(d)</i>
Academic Challenge							
Higher Order Learning	Freshman	208	40.42	13.83	1.426	.233	0.158
	Senior	135	42.22	14.05			
Reflective/Integrative Learning	Freshmen	208	35.97	12.55	7.686	.006	.0.846
	Senior	137	39.81	12.73			
Learning Strategies	Freshmen	194	40.00	13.75	.087	.768	0.010
	Senior	129	39.79	14.26			
Quantitative Reasoning	Freshmen	209	26.16	16.17	4.578	.033	0.503
	Senior	137	29.90	16.69			
Character Development	Freshmen	180	38.23	15.59	1.119	.291	0.131
	Senior	122	40.16	15.34			
Cross-Racial Interaction	Freshmen	197	45.10	15.16	3.473	.063	0.392
	Senior	130	48.19	13.91			
Curricular/Co-curricular Diversity	Freshmen	181	34.53	16.92	.471	.493	0.055
	Senior	126	33.15	17.97			

Significance Levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Reflective/Integrative Learning freshman ($M=35.97$, $SD=12.55$) and seniors ($M=39.81$, $SD=12.73$) reported they were “Somewhat” engaged, with freshmen scoring significantly lower than seniors. In Quantitative Reasoning, freshmen once again scored significantly lower ($M=26.16$, $SD=16.17$) than their senior counterparts ($M=29.90$, $SD=16.69$). No significant differences between freshman and seniors were found for Higher Order Learning, Learning Strategies, Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity. Homogeneity of variance assumption was met for all four variables except for Cross-Racial Interaction ($p=.025$).

Student Engagement and Ethnicity

Table 16 reflects the group mean and standard deviation for the relationship between Student Engagement variables and Ethnicity. The results reveal that in the area of Academic Challenge, low levels of engagement exist across ethnic groups for Reflective/Integrative Learning and Quantitative Reasoning. In Reflective/Integrative Learning engagement was lowest among Black ($M=32.86$, $SD=9.55$) and International students ($M=35.40$, $SD=10.57$).

Among the three top middle groups: Asian/Pacific Islanders ($M=36.68$, $SD=14.19$); White ($M=38.99$, $SD=14.03$); and Multiracial ($M=38.62$, $SD=12.96$), an equal engagement level of low, “Very Little,” or “Some” was revealed. Quantitative Reasoning engagement reveals the lowest total engagement scores across the ethnic groups ($M=27.16$, $SD=16.60$).

Character Development finds a higher engaged pattern of response, “Quite a Bit,” “Very Much,” for Hispanic ($M=42.65$, $SD=13.95$) and White ($M=40.42$, $SD=16.40$) ethnic communities with two large ethnic communities feeling the least

Table 16

Student Engagement and Ethnicity

Variable	Group	<i>N</i>	<i>Mean</i>	<i>SD</i>
Academic Challenge	Asian/Pacific Islander	51	41.27	15.55
	Black	10	44.50	10.66
	Hispanic	88	42.67	13.35
	White	54	39.35	15.78
	Multiracial	53	40.28	13.81
	International	26	36.35	10.73
	<i>Total</i>	282	40.82	14.08
Reflective/Integrative Learning	Asian/Pacific Islander	51	36.68	14.19
	Black	10	32.86	09.55
	Hispanic	89	37.19	12.65
	White	54	38.99	14.03
	Multiracial	52	38.62	12.96
	International	27	35.40	10.57
	<i>Total</i>	283	37.38	12.97
Learning Strategies	Asian/Pacific Islander	52	40.77	13.95
	Black	10	43.33	15.79
	Hispanic	87	39.23	14.02
	White	54	39.51	15.48
	Multiracial	53	41.70	13.33
	International	27	33.58	13.77
	<i>Total</i>	283	39.63	14.26
Quantitative Reasoning	Asian/Pacific Islander	52	26.92	16.49
	Black	10	26.00	16.47
	Hispanic	89	26.63	15.49
	White	54	26.11	18.22
	Multiracial	53	29.18	17.60
	International	27	27.90	16.12
	<i>Total</i>	285	27.16	16.60
Character Development	Asian/Pacific Islander	51	37.31	15.39
	Black	10	37.33	16.61
	Hispanic	88	42.65	13.95
	White	54	40.42	16.40
	Multiracial	52	36.09	17.35
	International	27	33.09	14.85
	<i>Total</i>	282	38.94	15.72
Cross-Racial Interaction	Asian/Pacific Islander	52	43.56	15.45
	Black	10	43.00	18.14
	Hispanic	88	45.72	13.77
	White	54	48.61	14.09
	Multiracial	53	51.51	9.69
	International	27	40.00	17.97
	<i>Total</i>	284	46.31	14.41
Curricular/Co-curricular Diversity	Asian/Pacific Islander	52	34.62	18.58
	Black	9	31.11	18.56
	Hispanic	88	35.68	18.77
	White	54	34.81	16.11
	Multiracial	52	32.95	16.35
	International	27	31.11	16.43
	<i>Total</i>	282	34.23	17.51

engaged responding at a “Some” level being Asian/Pacific Islander ($M=37.31$, $SD=15.39$) and Multiracial ($M=36.09$, $SD=17.35$).

In the area of Cross-Racial Interaction, the Multiracial student group ($M=51.51$, $SD=9.69$) engaged at higher levels with others of different backgrounds with the smallest deviation among the students while International ($M=40.00$, $SD=17.97$) students scored the lowest in this matrix. A continued look at the Curricular/Co-curricular scores for all ethnic groups reveal across the board a low “Sometimes” score, affirming the need for more to be done in emphasizing events, activities, and classroom projects that include diverse perspectives.

Table 17 shows the analysis of variance result for ethnic group differences on the Student Engagement variables. The two engagement variables that reveal ethnic group differences are Character Development ($F_{(5,276)}=2.354$, $p<0.05$, $\eta^2 < 0.05$) with a weak *eta* effect size and Cross-Racial Interaction ($F_{(5, 278)}=3.338$, $p<.001$, $\eta^2 < 0.006$) with a moderate *eta* effect size.

Table 18 reveals the results of the pairwise comparison for Ethnicity. In Character Development, Hispanic ($M=42.65$, $SD=13.95$) students were significantly more engaged in Character Development activities than were Multiracial ($M=36.09$, $SD=17.35$) or International students ($M=30.09$, $SD=14.85$). White ($M=40.42$, $SD=16.40$) students were more engaged in Character Development than were International students. In Cross-Racial Interaction, Multiracial ($M=51.51$, $SD=9.69$) students were more engaged than were Hispanics ($M=45.72$, $SD=13.77$), Asian ($M=43.56$, $SD=15.45$), or International ($M=40.00$, $SD=17.97$) students. Whites ($M=48.61$, $SD=14.09$) were also more engaged in Cross-Racial Interaction than were International ($M=40.00$, $SD=17.97$)

Table 17

Analysis of Variance Results for Ethnicity

Variable	Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2
Academic Challenge	Between	1099.36	5	219.87	1.111	.355	0.020
	Within	54613.05	276	197.87			
	Total	55712.411	281				
Higher Order Learning	Between	559.78	5	111.96	0.662	.653	0.012
	Within	46858.53	277	169.16			
	Total	47418.31	282				
Reflective/Integrative Learning	Between	1433.99	5	286.80	1.420	.217	0.025
	Within	55939.39	277	201.95			
	Total	57373.38	282				
Learning Strategies	Between	332.47	5	66.50	.238	.945	0.004
	Within	77887.652	279	279.17			
	Total	78220.12	284				
Quantitative Reasoning	Between	2839.84	5	567.97	2.354	.041	0.040
	Within	66594.14	276	241.28			
	Total	69433.98	281				
Character Development	Between	3327.91	5	665.58	3.338	.006	0.057
	Within	55425.77	278	199.37			
	Total	589753.68	283				
Cross-Racial Interaction	Between	647.231	5	129.45	.418	.836	0.007
	Within	85502.97	276	309.79			
	Total	86150.20	281				

*Significance Levels: * $p < .05$, ** $p < .01$, *** $p < .001$.*

students. No differences were found among Multiracial, White, and Black students.

Homogeneity of variance was performed for all variables using Levene's Statistics and only Cross-Racial Interaction failed to meet homogeneity ($F=.003$) confirming that among ethnic groups there is a non-equal variance in their interaction with peers of different racial backgrounds.

Research Question 3: To what extent is Student Engagement in a structurally diverse context related to overall Student Satisfaction?

Student Engagement and Student Satisfaction

Student Satisfaction responses are measured in relationship to Academic

Table 18

Pairwise Comparison for Ethnicity (Character Development and Cross-Racial Interaction)

		Group				
Group: Student Engagement	Mean	2	3	4	5	6
Character Development						
1. Hispanic	42.65				*	
2. White	40.42					*
3. Black	37.33					
4. Asian	37.31					*
5. Multiracial	36.09					
6. International	30.09					
Cross-Racial Interaction						
1. Multiracial	51.51		*	*		
2. White	48.61					*
3. Hispanic	45.72					
4. Asian	43.56					*
5. Black	43.00					
6. International	40.00					

* $p < 0.05$.

Challenge, Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity and disaggregated by gender, class standing, and ethnicity. Two questions make up the Student Satisfaction construct: How would you evaluate your entire Educational Experience at this institution? The results are indicated in Table 19.

In Table 20, we find the responses to the second Student Satisfaction question: If you could start over again, would you go to the same institution you are now attending? A 60-point scale was used. For the purpose of interpreting levels of engagement in this study, the following range of scores will be used: 0-15=Poor/Definitely No, 16-30=Fair/Probably No, 31-45=Good/Probably Yes, and 46-60=Excellent/Definitely Yes. High levels of Student Satisfaction are defined by “Excellent,” and “Definitely Yes.” The Student Engagement variable of Cross-Racial Interaction ($M=46.53$,

Table 19

Descriptive Statistics: Evaluation of Institutional Experience

Variable	<i>N</i>	Mean	<i>SD</i>
How would you evaluate your entire education experience at this institution?	293	3.08	.777
Academic Challenge			
Higher Order Learning	293	40.98	13.89
Reflective/Integrative Learning	293	37.49	12.97
Learning Strategies	293	39.54	14.28
Quantitative Reasoning	293	27.19	16.64
Character Development	293	38.78	15.56
Cross-racial Interaction	293	46.53	14.42
Curricular/Co-curricular	293	33.61	17.41

Note. 0-15=Very Little, 16-30=Some, 31-45=Quite a Bit, and 46-60=Very Much.

Table 20

Descriptive Statistics: Choose Same Institution

Variable	<i>N</i>	Mean	<i>SD</i>
If you could start over again, would you go to the same institution you are now attending?	293	2.99	.94
Academic Challenge			
Higher Order Learning	293	40.78	13.89
Reflective/Integrative Learning	293	37.49	12.97
Learning Strategies	293	39.55	14.28
Quantitative Reasoning	293	27.19	16.64
Character Development	293	38.78	15.56
Cross-Racial Interaction	293	46.53	14.42
Curricular/Co-curricular	293	33.61	17.42

Note. 0-15=Definitely No, 16-30=Probably No, 31-45=Probably Yes, 46-60=Definitely Yes.

SD=14.42) received the highest scores with Academic Challenge, Quantitative

Reasoning (*M*=27.19, *SD*=16.64) receiving the lowest.

Student Satisfaction and Ethnicity

The two items on the NSSE survey used to measure Student Satisfaction were:

1) How would you evaluate your entire educational experience at this institution (*Rated Educational Experience*)? And, 2) If you could start over again, would you go to the same institution you are now attending (*Choose Same Institution*)?

In response to the first question as revealed by Table 21, students' overall satisfaction with the educational experience was rated as "Good" to "Excellent" ($M=3.10$, $SD=0.78$). The majority of the students (80.9%) responded "Good" and "Excellent" with Hispanic/Latino students being the most satisfied ($M=3.21$, $SD=0.76$) and Black/Afro-American students being the least satisfied ($M=2.60$, $SD=0.84$) and rating their experience as "Fair" to "Good."

Table 21

Ethnicity and Student Satisfaction: Means and Standard Deviation

Variable	Ethnic Group	<i>N</i>	<i>Mean</i>	<i>SD</i>
How would you evaluate your entire educational experience at this institution? (Rated Educational Experience)	Asian/Pacific Islander	52	3.04	0.79
	Black/African American	10	2.60	0.84
	Hispanic or Latino	89	3.21	0.76
	International/Foreign students	27	2.93	0.78
	White	54	3.19	0.73
	Multiracial	52	3.04	0.82
	<i>Total</i>	284	3.10	0.78
If you could start over again, would you go to the same institution you are now attending? (Choose Same Institution)	Asian/Pacific Islander	52	2.90	0.93
	Black/African American	10	2.50	0.97
	Hispanic or Latino	89	3.16	0.98
	International/Foreign students	27	2.81	0.88
	White	54	3.09	0.88
	Multiracial	52	2.92	0.99
	<i>Total</i>	284	3.00	0.95

In response to the second question asking if they would choose the same institution, a majority (74%) of students ($N=304$) responded "Probably Yes" and "Definitely Yes" and rated their satisfaction as "Good" ($M=3.00$, $SD=0.95$). Hispanic

students were once again the most satisfied ($M=3.16$, $SD=0.98$) responding “Definitely Yes and “Probably Yes” and Black students being the least satisfied ($M=2.50$, $SD=0.97$) responding “Probably Yes” to “Probably No.”

The Student Satisfaction correlation matrix in Table 22 shows negligible relationship between Gender, Class Standing, and Student Satisfaction. Gender and Class Standing also have little or no correlation with Student Engagement. Correlation between Student Satisfaction as measured by rated experience and Student Engagement variables are negligible ($r=.10$ with Cross-Racial Interaction) to moderate ($r=.58$ with Character Development). Similarly, correlation between Student Satisfaction as measured by choosing the same institution and Student Engagement variables are negligible ($r=.10$ with Cross-Racial Interaction) to moderate ($r=.49$ with Character Development).

Student Engagement and Student Satisfaction

The results of the multiple linear regression shown in Table 23 suggests that the set of Student Engagement variables is a significant predictor of Student Satisfaction ($F_{(9,281)}=19.38$, $p<.00$, $R^2=0.383$). Approximately 38% of the variance in Student Satisfaction as measured by student-rated experiences can be explained by the set of four Student Engagement variables. Statistically significant predictors at $\alpha=0.05$ are Quantitative Reasoning ($p=0.028$), Character Development ($p<.001$) and Curricular/Co-curricular Diversity ($p=.005$). Further analysis indicate that these three variables explain approximately 36% of the variance ($R=.60$, $p<.001$). Character Development alone explains about 34% of the variance ($r=.58$, $p<.001$).

Table 23

Regression Analysis Results: Student Engagement and Student Satisfaction (Rated Educational Experience)

Variable	<i>B</i>	<i>SE</i>	<i>B</i>	<i>t</i>	<i>p</i>
(Constant)	1.765	0.154			
Gender	-0.148	0.079	-0.091	-1.887	.060
Class Standing	0.079	0.076	0.050	1.028	.305
Academic Challenge					
Higher Order Learning	0.002	0.004	0.042	0.637	.525
Reflective/Integrative Learning	0.006	0.004	0.096	1.412	.159
Learning Strategies	0.002	0.003	0.041	0.689	.491
Quantitative Reasoning	-0.006	0.003	-0.124	-2.206	.028
Character Development	0.022	0.003	0.434	6.784	<0.001
Cross-Racial Interaction	0.000	0.003	0.004	0.072	.942
Curricular/Co-curricular Diversity	0.007	0.003	0.161	2.839	.005

$R^2=0.383$, $F_{(9,281)}=19.38$, $p<.001$

The most important predictor in regard to their educational experience is Character Development ($\beta=0.43$) followed by Curricular/Co-curricular Diversity ($\beta=0.16$) and Quantitative Reasoning ($\beta=-0.12$). The result appears to suggest that higher levels of satisfaction with overall university experience are found among students who have higher levels of engagements in Character Development activities and Curricular/Co-curricular activities as indicated in Table 23.

Student Engagement and Student Satisfaction

The results of the multiple linear regression shown in Table 24 suggest that the set of Student Engagement variables is a significant predictor of Student Satisfaction in regard to choosing the same institution ($F_{(9,281)}=12.85$, $p<.00$, $R^2=0.292$). Approximately 29% of the variance in Student Satisfaction, as measured by choosing the same institution, can be explained by seven Student Engagement variables. Statistically significant predictors at $\alpha=0.05$ are Character Development ($p<.001$) and Curricular/Co-

Table 24

Regression Analysis Results: Choose Same Institution

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>P</i>
(Constant)	1.601	0.201			
Gender	-0.167	0.102	-0.084	-1.627	.105
Class Standing	0.051	0.100	0.026	0.507	.612
Academic Challenge					
Higher Order Learning	0.006	0.005	0.084	1.199	.232
Reflective/Integrative Learning	-0.003	0.005	-0.043	-0.589	.556
Learning Strategies	0.002	0.004	0.037	0.589	.556
Quantitative Reasoning	-0.003	0.003	-0.060	-1.001	.318
Character Development	0.022	0.004	0.364	5.303	<.001
Cross-Racial Interaction	0.002	0.004	0.029	0.493	.623
Curricular/Co-curricular Diversity	0.011	0.003	0.195	3.210	.001

$R^2=0.292$, $F_{(9,281)}=12.85$, $p<.001$.

curricular Diversity ($p=.001$). Further analysis indicate that these two variables explain about 27.4% of the variance ($R=.523$, $p<.001$). Character Development alone explains about 24.4% of the variance ($r=.494$, $p<.001$).

The most important predictor of Student Satisfaction in regards to choosing the same institution is Character Development ($\beta=0.36$) followed by Curricular/Co-curricular Diversity ($\beta=0.19$). The result appears to suggest that higher levels of satisfaction and willingness to choose the same institution again were found among students with higher levels of engagements in Character Development activities and higher levels of engagements in Curricular/Co-curricular activities.

Summary of Findings

This chapter analyzed the 2013 NSSE levels of Student Engagement (Academic Challenge, Character Development, Cross-Racial Interaction, and Curricular/Co-

curricular Diversity) of the La Sierra University student body. The research questions that guided this chapter were as follows:

1. What is the level of Student Engagement as measured by Academic Challenge, Character Development, Cross-Racial Interaction Diversity, and Curricular/Co-curricular Diversity at La Sierra University?
2. To what extent is Student Engagement related to Structural Diversity, gender, and class standing?
3. To what extent is Student Engagement in a structurally diverse context related to overall Student Satisfaction?

The results revealed that students were most engaged in Cross-Racial Interaction Diversity ($M=46.33$, $SD=14.73$) with 87.7% of the students indicating that they “had discussions with people of a race or ethnicity other than your own.” Students were least engaged in the Academic Challenge in the sub-section of Quantitative Reasoning ($M=27.64$, $SD=16.46$) with only 36.1% of the students responding “Quite a Bit” to “Very Much” engaged in “Using numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.).”

The second research question is: To what extent is Student Engagement related to Structural Diversity, gender, and class standing? The results revealed a significant difference between gender in Quantitative Reasoning ($p=.001$) with male students, with a high magnitude Cohen’s $d=1.28$, being significantly more engaged in this Academic Challenge variable than female students. A significant difference was also found between freshman and seniors in two of the Academic Challenge variables. Seniors were significantly more engaged in Quantitative Reasoning ($t(298)=4.58$, $p<.033$, $\eta^2<0.013$),

though the magnitude was weak and possibly negligible. Seniors were also significantly more engaged in Reflective/Integrative Learning ($t(297)=7.69, p<006, \eta^2 < 0.02$) with a moderate *eta* effect size.

The findings also reveal differences in all Student Engagement areas in relationship to the ethnic demographic variable. All ethnic groups revealed low levels of Academic Challenge engagement with Quantitative Reasoning ($M=27.16, SD=16.60$) having the lowest engagement score across all ethnic groups. The highest Student Engagement scores across all ethnic groups were found in Cross-Racial Interaction ($M=46.31, SD=14.41$). The Analysis of Variance revealed two engagement variables with ethnic group differences: Character Development and Cross-Racial Interaction. Character Development ($F_{(5,276)}=2.354, p<0.05, \eta^2 < 0.05$) with a weak *eta-squared* effect size and Cross-Racial Interaction ($F_{(5,278)}=3.338, p<.001, \eta^2 < 0.006$) with a moderate *eta-squared* effect size. Further post-hoc pairwise comparison found Character Development gains in Hispanic students ($M=42.65, SD=13.95$) who were found to have significantly higher gains than Multiracial ($M=36.09, SD=17.35$) or International ($M=30.09, SD=14.85$) students. White ($M=40.42, SD=16.40$) students had higher gains in Character Development than International students.

Finally this chapter analyzed the relationship between Student Satisfaction and the Student Engagement variables as indicated by Research Question 3: To what extent is Student Engagement in a structurally diverse context related to overall Student Satisfaction? In Student Engagement it was found that Cross-Racial Interaction ($M=46.53, SD=14.42$) received the highest satisfaction scores and Quantitative Reasoning ($M=27.19, SD=16.64$) received the lowest satisfaction scores. No correlations

were found between Student Satisfaction and gender, class standing, and ethnicity. This indicates there is no relationship between students' gender, class standing, and ethnicity to their satisfaction levels in a structurally diverse campus. However, it was found that a significant predictor of Student Satisfaction was found in the Student Engagement variable of Character Development with 34% of the variance ($R=.49$ to $R=.58$, $p<.001$) being explained by Character Development gains. It is the case that in both of the Student Satisfaction questions the results can be explained by the Student Engagement variable of Character Development with a small percentage being explained by Curricular/Co-curricular Diversity.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter provides a brief summary of the study, including a short review of the literature, statement of the problem, research design and procedures, and research hypothesis. This chapter also contains a summary of the findings, a discussion and conclusion from this research, and suggests possible recommendations for practice and further research.

Summary of the Study

As we look at the college of the future, organizations must not only recognize the special talents and desires of faculty, but they must also address the needs and development of an increasingly multicultural pool of students (Bailey, 2009). It is imperative that colleges and universities begin to take steps to develop institutional implementation plans that ensure the organizational structures support the needs of minority students (Smith, 2009). In so doing students of diverse ethnic backgrounds learn to better reflect on their heritage, their campus engagement, and the role they play in their campus community (Jayakumar, 2008; Laden, 2004). Institutions can enhance this Structural Diversity, defined as numerical representation of students from different racial and ethnic groups within an organization, group or place (Chang, 1999; Jayakumar, 2008;

Umbach & Kuh, 2006) by offering multicultural education for students and training for teachers, both which have been found to be the key factors to encourage cultural sensitivity toward student diversity (Leach, 2011). Maybe just taking simple steps such as providing ways, via programming or student clubs, whereby students can connect, cultural or emotionally, with others on campus to alleviate feelings of isolations and loneliness and to create a network of peer support (Laden, 2004).

A campus may have Structural Diversity but that does not mean it will automatically have a positive campus environment as measured by Student Engagement, and/or Student Satisfaction (Pike & Kuh, 2006). Those who care deeply for the integration of minority students into the academy need to address the concerns and needs of the ever-growing minority student community and one of the ways in which researchers have been able to document the effective educational practices of institutions, has been by understanding their student engagement patterns as measured by the National Survey of Student Engagement.

Understanding the student engagement patterns and diversity of demographics at La Sierra University, I assumed that there would be high Structural Diversity (multi-ethnic student body composition). The data were further desegregated by racial/ethnic group to see if I found statistical effect-size differences in how students of different races engage with the campus, each other, and the academic challenges of a university curriculum as well as how it correlated to the perceived satisfaction in each ethnic group.

An institution's capacity to effectively educate a diverse student body is influenced highly by its curriculum, pedagogy, faculty expertise, and other variables, which directly contribute to its academic core (Smith, 2009). It has been found that

experiences with diversity are more likely to occur as the heterogeneity of the student population increases (Pike, 2009; Pike & Kuh, 2006). I posited that the multi-ethnicity of the campus and the high campus diversity density (0.91) provided for positive cross-racial diversity experiences with different engagement patterns depending upon the ethnic group.

Using the results of the National Survey of Student Engagement (NSSE) taken in the Spring of 2013, this study attempted to understand the engagement patterns of a small, diverse, faith-based liberal arts university in California. It explored the relationship of diversity and Student Engagement in this multi-ethnic community. The heterogeneity of this university was asserted using Chang's (1999) diversity density measure giving the institution a .91 diversity density index. As stated earlier in this document, this diversity index calculates the probability that students would interact with students of another race. The higher the score the more equal the Structural Diversity, the higher the density, and the more likely that students will interact with others of another race/ethnicity.

Student Engagement in this study was defined as Academic Challenge, Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity.

Statement of the Problem

The U.S. Census (2011) confirms that American life continues to be shaped by race and ethnicity. These cultural forces also organize social relationships, and anchor personal as well as group identity, meaning making, and orientation (Adams, 2001). This rapid demographic shift faced by the United States, poses a challenge for institutions of higher education and some are starting to attend to racially/ethnically diverse student groups by focusing on three types of diversity measures—structural, Cross-Racial

Interaction, and Curricular/Co-curricular Diversity. The demographic shift also affects liberal arts colleges and universities as they begin to plan more effectively to respond to a more pluralistic student body (Engberg, 2007). To date, there is no research that looks at a multi-ethnic liberal arts university in regards to Student Engagement and Character Development, as measured by NSSE, and this study will contribute to that body of literature.

Purpose

The purpose of this study was to examine:

1. The extent to which students at La Sierra University were engaged in Academic Challenge, Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity.
2. The relationship between Student Engagement (Academic Challenge, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular Diversity) and the following demographic characteristics: gender, class standing, and ethnicity.
3. The extent to which Student Satisfaction in a structurally diverse campus is related to Student Engagement.

Research Design

This research is an empirical, quantitative study performed using secondary data analysis. The analysis of 2013 NSSE raw data at La Sierra University to examine Student Engagement defined it as: Academic Challenge, Character Development, Cross-Racial Interaction Diversity, Curricular/Co-curricular Diversity, Structural Diversity, and its relationship to gender, class standing, ethnicity, and Student Satisfaction. Descriptive

statistics, *t*-test, analysis of variance (ANOVA), and regression analysis were used to analyze the data set. The data were disaggregated by ethnicity, age, and class standing. I further measured their relationship to student engagement patterns.

Procedure

An online survey was sent to all students. Degree-seeking freshman and senior students in the 2013 Spring Quarter were selected to participate in an institutional NSSE questionnaire. Web-only survey mode was offered to students. All contacts were made by e-mail and students completed the survey online. The total number of participating freshman and senior students for the La Sierra University NSSE was 360. The 360 students indicated in demographics represented by 47.7% freshman and 38.2% seniors with a gender composition of 65.8% females and 34.2% males. The ethnic composition of the sample is reflected as Hispanics being the majority (29.4%) followed by Whites (17.8%), Multiracial (17.5%), and Asians (17.3%), with African Americans being the smallest minority (3.6%). An institutional 18% sample size was attained for the freshman class and a 27% sample size was attained for the senior class.

Findings

The findings reveal that students at La Sierra University were engaged at various levels as measured by Academic Challenge, Character Development, Cross-Racial Interaction, and Curricular/Co-curricular Diversity. A relationship was found between the Student Engagement variables and the demographic variables of gender, class standing, and ethnicity. A correlation was found between Student Satisfaction, Curricular/Co-curricular Diversity, and Character Development gains. The premise that guided this research in Student Engagement and Diversity was that students in a racially diverse

campus benefit not just from the interaction, or engagement, with students from various ethnic groups and their knowledge acquisition, but also from being part of a campus that hosts students engaged in various forms of diversity, which increases their own capacity regardless of their own level of engagement (Denson & Chang, 2009; Kuh, 2003). The findings in this study support this premise and further affirm Smith's (2009) diversity framework's implications for institutions of higher education.

The findings of this study outlined by the Student Engagement variables researched:

Student Engagement

In this study Student Engagement has been defined as: Academic Challenge (measured by Higher Order Learning, Reflective/Integrative Learning, Learning Strategies, and Quantitative Learning), Character Development, Cross-Racial Interaction Diversity, and Curricular/Co-curricular Diversity. In accordance with Smith's (2009) diversity framework, the second dimension—Education and Scholarship, the data were disaggregated in order to better conclude who is engaged on campus, what their engagement patterns reveal, and how does engagement contribute to their student success. Student Engagement variables were disaggregated using the demographic variables of gender, class standing, and ethnicity.

Academic Challenge

Academic Challenge was measured by four engagement indicators: Higher Order Learning, Reflective/Integrative Learning, Learning Strategies, and Quantitative Reasoning. The La Sierra University student ($N=339$) on a 60-point scale had a Mean of 36.55 with a Standard Deviation of 14.27 signifying students' self-indicated that they are

not as engaged in activities and behaviors that emphasize spending time on academic work. The area of Academic Challenge in which students showed the least amount of engagement was the Quantitative Reasoning indicator with students ($N=346$) having a mean of 27.64 and a standard deviation of 16.46. The gender differences in Quantitative Reasoning were quite large indicated by Cohen's $d=1.28$. Males were significantly more engaged than females. Freshmen scored significantly lower than their senior counterparts. In relation to ethnic student groups, it was the case that Quantitative Reasoning engagement was the lowest total engagement score across all the ethnic groups with no significant differences among groups.

La Sierra University's low level of engagement in Quantitative Reasoning was consistent across NSSE 2013 participants at large as well as the Adventist Cohort participants (see Appendix C for Tables 25 & 26). This Academic Challenge sub-category, Quantitative Reasoning, requires analysis of numerical information, examining real world problems or issues using numerical information, and or evaluating what others have concluded from numerical information.

Through the low level of involvement by our students in Academic Challenge activities, what story do these low engagement patterns in the Academic Challenge Student Engagement variable tell about our students at La Sierra University? How do we best promote high levels of Academic Challenge among our student body? In their study of the top 20 DEEP (Documenting Effective Educational Practice) institutions, researchers Kuh, Kinzie, Schuh, and Whitt (2005a) found the DEEP institutions provided high level of support in a variety of ways such as: socializing students into the values of academia, spending time and institutional resources in creating programs, practices,

policies, and educational spaces that support students in their efforts of being academically engaged. It was further found that critical to increasing the Academic Challenge and enriching the students' educational experience was the ongoing collaborations that occurred between faculty and students.

An interesting finding was that compared to their peers in Adventist schools who took the NSSE 2013, La Sierra University freshmen scored statistically ($p<.05$) higher than their Adventist peers in both Higher Order Learning and Quantitative Reasoning. No significance was found among seniors.

This finding is intriguing when you compare the demographics of La Sierra University students and those of NSSE 2013 participants and participants from sister Adventist schools. With a majority “minority” or underrepresented student base, the fact that academically freshman are more engaged than their peers is worth a deeper look to find how this engagement is enhancing their retention and/or academic experience. There is, however, no difference found between the La Sierra University senior and the NSSE 2013, which may be indicating a strong freshman integration program and a need for further study and implementation of integration programs in regard to the following years. See Recommendation for Study for future implications.

Character Development

A construct made up of six items from self-reported gains, which relate to Character Development, was used to obtain a Character Development engagement score. A 60-point scale was used with low levels of engagement receiving 0 to 30 while high levels included scores of 46 or above. High-level gains (measured growth) in Character Development are defined by being “Very Much” engaged.

The scores indicate the highest area of Student Engagement in Character Development occurred with 76.4% of the students showing gains in “Thinking critically and analytically” and 75.1% of students showing gains in “Understanding people of other background.” The least gains were found in “Solving complex real-world problems.”

The findings of this study support the previous work of Kuh and Umbach (2004) whereby they found that three institutional characteristics promoted Character Development effectively: small institution, intentionality in engaging students in value-driven activities in and outside of the classroom, and an institutional commitment to assessment. La Sierra’s size, faith-commitments, and assessment-driven practice affirm the Character Development of its student population. Furthermore, this finding supports La Sierra’s long-standing commitment and now nationally recognized Service Learning program closely integrated into the pedagogical practices of the institution.

In comparison with NSSE 2013 participants from the SDA cohort, the La Sierra student reported statistically significantly higher gains in four of the six questions. In relationship to overall NSSE 2013 participants once again reported statistically significant higher gains in two of the six questions. I posit that our high Character Development gains are a direct result, based on the questions, of our campus multi-ethnic diversity and the high Cross-Racial Interaction found among the student groups. This finding is exciting and affirming of the Structural Diversity. As such, future study should be given to quantify the relationship between the institutional commitment to service learning and the gains from simply being a diverse campus (see Appendix C, Table 27).

Cross-Racial Interaction Diversity and Class Standing

A construct consisting of five diversity-related questions from the NSSE survey

was used to create the Cross-Racial Interaction measurement. A 60-point scale was used with low levels of engagement receiving 0 to 30 while high levels of engagement responding “Very Much” received a score of 46 or above.

A non-statistical difference ($p=.063$) was found between freshmen and seniors in Cross-Racial Interaction Diversity. Seniors ($M=48.19$, $SD=13.92$) were found to be more often engaged in conversations with students of difference race, political, economic, or religious background than freshmen ($M=45.10$, $SD=15.16$). This might be because seniors have had more opportunity to adjust to the diverse campus culture. It may also be due to what Braddock (1980) termed an interruption of the cyclical effects of segregation, which basically means that though the students came from segregated high schools, by being exposed to diversity in college, they were able to reverse the effects of the previous segregation. When looking at the results of a longitudinal study of nine campuses ($N=13,520$) via a survey, Sáenz (2009) found, “that racially and ethnically diverse college settings, as well as students’ college diversity experiences, significantly mediate or interrupt these perpetuation effects. In spite of students’ segregated precollege environments and experiences, public universities that are more structurally diverse and that foster more diverse curricular and co-curricular activities, can positively affect students’ levels of interactions with diverse peers” (p. 30).

In comparison with NSSE 2013 participants, the La Sierra student reported equal or statistically significantly at a $p<.001$ and $p<.01$ scores in all of the five questions. In relationship to NSSE 2013 SDA cohort, La Sierra University students once again reported higher in all questions and statistically significant higher at a $p<.001$ scores in two of the five questions.

I posit that our high Cross-Racial Interaction scores are directly related to our Structural Diversity. The rewards of student diversity are much discussed in the literature and in the public spheres of higher education. It has been concluded by various researchers that students who attend institutions with a diverse population of students, faculty, and staff report greater learning, increases in various measures of interpersonal competencies, develop greater self-confidence, are less likely to hold irrational prejudices, make greater gains in critical thinking, and have greater involvement in civic and community service behaviors all of which adversely affect student achievement (Engberg, 2007; Talbot, 2003) (see Appendix C, Table 28).

Cross-Racial Interaction and Ethnicity

La Sierra University students were most engaged in Cross-Racial Interaction Diversity. A large majority, 75.1%, of the students responded “Quite a Bit” to having an “Understanding of people of other backgrounds.” This supports the work of various researchers (Hurtado, 2003; Rothman et al., 2002; Sáenz, 2010; Smith, 2009), which state that racially diverse environments provide excellence in higher education, enrich the educational experience for all students, and improve how students of all backgrounds relate to one another. The analysis of variance results reveal ethnic group differences in Cross-Racial Interaction ($F_{(5, 278)}=3.338, p<.001, \eta^2 < 0.006$) with a moderate *eta* effect size.

As stated in the literature review, in a rapidly emerging global environment, the art of understanding and working with people from various backgrounds has become a coveted competency for students entering the work force (Engberg, 2007; Kuh, 2003).

The NSSE 2013 data reveal two main differences found in the engagement

patterns of ethnic groups. First, the results reveal in the area of Cross-Racial Interaction that the Multiracial ($M=51.51$, $SD=9.69$) student is engaged at higher levels with others of different backgrounds. Second, the same data reveal that this is not the case for the International ($M=30.09$, $SD=14.85$) student whose engagement score reveals that they are the least likely to engage in conversation with peers of a different faith, social, and economic background. It can be stipulated that the Multiracial student having conversations with peers who come from different backgrounds is facilitated by their own Biracial experience (Riley, 2006). Renn (2008), when studying the identity development of Biracial and Multiracial students, found that their appearance and the inability of peers to recognize or label them as of a particular race, necessitates the students to “negotiate the campus racial landscape” (p. 18). In so doing, they might at first feel discomfort, but it might be the case that by their senior year, this skill has given them larger networks of friends and comfort in cross-racial interactions.

As opposed to the Multiracial student, I propose that the student who comes from abroad, the International student, has a much more difficult time integrating into the campus due to a potential barrier in language, culture, and overall understanding of higher education in America. Finding “affinity groups” that will accept them and offer social support is difficult (Zhao, Kuh, & Carini, 2008); thus, they stay closely connected to peers of like language and less Cross-Racial Interaction occurs among them. In a paper entitled, *A Comparison of International Student and American Student Engagement in Effective Educational Practices*, the researchers conclude that, “a campus cannot simply recruit a critical mass of international students; it must also intentionally arrange its resources so that international and American students benefit in desired ways from one

another's presence" (Zhao et al., 2008, p. 18). Further study is necessary and recommendations will follow below.

Another interesting finding in relationship to students' Cross-Racial Interaction was found among Asian student groups. When asked if they had discussions with people with religious beliefs other than your own, students who had labeled themselves as "Asian" had a strong correlation (0.032) with having less of these discussions. For example, out of a total of 302 respondents, only nine students reported *never* having conversations with people of religious beliefs other than their own. Of that nine, four (44.4%) of them were of Asian origin. When asked if there were perceived gains (*pgdiverse*) in understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.), again Asian students (vs. non-Asian) indicated less gain (0.011). For example, out of the 300 total students who answered this question, 21 reported "Very Little" perceived gains. Of these 21, five were Asian (23.8% of those reporting Very Little). Of the 54 who reported only "Some" gains, 23 of them (42.6%) were Asian.

In contrast to the finding above, among White students, when asked if they had discussions with people of a race or ethnicity other than their own, over 75% of White students reported doing this "Very Often." When asked if they had discussions with people with religious beliefs other than their own, 39.9% of all students who reported doing this "Very Often" were classified as White. Additionally, when asked if they had discussions with people with political views other than their own, 41.6% of all students who reported doing this "Very Often" were White. Further research is needed in order to see if the findings in this study are valid on other campus environments.

The work of O'Brien (2008) established that as a group, Asian's are less likely to be involved in and support race-related policies, less likely to vote Democratic, and find themselves severely underrepresented politically. Unfortunately this lack of engagement, O'Brien concluded, has adverse consequences when it comes to better understanding their particular needs. It is argued by Engberg (2007) that students must be given the tools to know how to interact across race, rather than leaving the experience to chance. Thus further institutional research is necessary to understand the significance of this finding and if this finding is indicative of an institutional cultural pattern of behavior for our Asian student population.

Curricular/Co-curricular Diversity

A 60-point scale was used with low levels of engagement receiving 0 to 30 while high levels were scores above 46. A high Curricular/Co-curricular engagement would respond "Very Often" to the survey questions. The La Sierra University student ($N=307$) had a low Curricular/Co-curricular engagement score ($M=33.96$, $SD=17.34$).

In the context of Student Engagement as measured in this research, at La Sierra University students are least engaged in Curricular/Co-curricular Diversity question, that students "Attending events that address important social, economic or political issues" ($M=28.55$, $SD=21.26$) with only 46% of students responding that they "Often" and "Very Often" attend.

The Curriculum/Co-curriculum Diversity experience focuses on how information regarding diverse groups of people is incorporated into the curriculum (Pike & Kuh, 2006) and how class experiences encourage interactions among various ethnic groups. It was interesting, but not surprising to find that in comparison with NSSE 2013

participants, La Sierra University students scored higher at a $p<.001$ statistical significance and also scored higher than their peers in Adventist institutions ($p<.001$). The lowest co-curricular score ($M=28.55$, $SD=21.26$) was related to “Institutional emphasis on attending events that address important social, economic, or political issues.” La Sierra University students ($N=304$) had no statistically significant difference to their NSSE 2013 peers or Adventist higher education peers when responding to this question. I assert that La Sierra’s high Structural Diversity contributes to significantly higher scores (see Appendix C, Table 29) when compared to other more homogenous campuses.

The overall medium to low scores for Curriculum/Co-curriculum scores nationwide, as seen in NSSE 2013 and SDA cohort participants are concerning. I posit that the scores are indicative of a very critical missing piece in higher education: the integration of diversity into the curriculum. It is Smith’s (2009) assertion in her diversity framework, that the most successful efforts when it comes to diversity involve curriculum transformation and the building of faculty capacity to recognize and give pedagogical space for the diversity of student narratives so to create an inviting learning environment for all students. By so doing, the faculty are also simultaneously increasing student success and student self-confidence.

The mono-cultural White-centered worldviews experienced in the classroom have negative affects on students’ academic performance and their relationship to their peers (Anderson, 1999). Stated much more bluntly by Anderson, it is often the case for minority students that the lack of equity in the classroom makes them feel victimized. Cantor (2010) posited that students want to learn how to narrate their stories, experiences,

life-struggles, and lived knowledge and as such, faculty need to work on the development of a curriculum that reflects the values and norms of the multi-cultural society reflected in their classroom. Students who attend institutions whereby their narratives are valued, report greater learning, increases in various measures of interpersonal competencies, develop greater self-confidence, are less likely to hold irrational prejudices, and make greater gains in critical thinking (Engberg, 2007; Talbot, 2003).

I suggest that La Sierra University has always cared deeply about the theoretical basis for the value of diversity. However, the lack of institutional design and construct of the Structural Diversity it currently hosts has created a wonderful open campus environment that affirms the diverse worldviews of all of its students, but lacks the curriculum implementation and the pedagogical implications necessary when serving a minority student population. In the words of Chang, Denson, Sáenz, and Misa (2006),

We also know from the literature reviewed earlier that realizing the benefits of positive race relations requires deep and substantial institutional changes that address the learning opportunities offered by, the cultural norms of, and the social arrangements of institutions. Perhaps those campuses with higher peer CRI means have in place a curriculum that reflects the historical and contemporary experiences of people of color. (p. 450)

At the very least, an institutional commitment to diversity in the curriculum should be able to enhance our institutional educational effectiveness practices. In the words of Denson and Chang (2009), regardless of students' personal involvement, students who attended institutions where more students participated in workshops or classes that considered diversity issues tended to also report higher levels of general academic skills.

The importance of the co-curriculum must also be addressed. As stated by Smith (2005) though poor academic preparation and socioeconomic status have become barriers

to student matriculation, there is growing evidence that the “poor quality of minority students’ life on campus” along with their sense of isolation, alienation, and lack of support is actually a more serious factor in their attrition. In relation to La Sierra’s largest student group, the literature concludes that the co-curricular effects of isolation, homesickness, and alienation have detrimental affects on Hispanic Student Success (AASCU, 2007). A campus can strengthen and build its co-curricular capacity by developing ways in which students can interact with one another in open and inviting spaces, providing social outlets that allow students to feel like they belong, planning events that give them an opportunity to get together and exchange ideas and experiences (Sliverman and Cassaza, 2000).

Recommendations for Practice and Study

Student Satisfaction and Ethnicity

Another difference among the ethnic groups is found in their Student Satisfaction scores, with Hispanics being the most satisfied with their experience at La Sierra University and African American students being the least satisfied. This might be because they are the majority on the campus; however, further research is necessary to reach this conclusion. Hispanic students also had high levels of engagement when compared to their peers. Previous studies that looked at Student Satisfaction in liberal arts colleges (Umbach & Kuh, 2006) had been surprised by the positive diversity experiences found in student responses. Researchers had been surprised because liberal arts colleges tend to have the lowest diversity density index. It is my assertion that the multi-ethnic student demographic, the high diversity density index, and the status as a liberal arts university all contribute to our largest student population, Hispanics, high satisfaction

with the institution. Those of us in higher education are reminded that we must continue to examine the experience of Hispanic students, given that the future demographic trend indicates a continuously growing population in the United States (Laird et al., 2007).

The low satisfaction scores among our smallest group of students, African American, is concerning and needs further study as it relates to our campus. The literature is rich in regards to this student group's continual struggle in academia. African American students report racial mistreatment, a sense that they don't belong, and are challenged academically (Laird et al., 2007; Torres et al., 2003). Hurtado (2002) calls institutions of higher education to attend more carefully and intentionally to their historical legacy of exclusion and to student perceptions of racial tension or discrimination. I had hoped to find, in our multi-ethnic campus, that our high cross-racial interactions and lack of Black and White diversity would give me a different finding when in relation to the African-American student experience. The correlation found by researchers (Kuh, 2003) between satisfaction with college experience and student exposure to diversity via interactions with students, faculty, and staff of diverse backgrounds had given me reason to hope. Yet our finding continues to propel us to look at more effective ways in which we can support the African-American experience in a multi-ethnic student context.

Recommendations for Study

Student Satisfaction and Character Development

When Kuh and Umbach (2004) looked at Character Development and ethnicity they found, "Students of color report significantly greater gains than White students in Character Development. On every measure, African Americans, Native Americans, and

Latinos indicate greater gains than Whites” (Kuh & Umbach, 2004, p. 47). It was my expectation to find higher Character Development scores due to our structurally diverse campus. The surprise of the research was to find such a high correlation between Student Satisfaction and Character Development. The results of this study clearly indicated that satisfaction with the institution is significantly connected to the students’ Character Development engagement practices. The correlation of Character Development to Student Satisfaction is new in the literature and needs further research. Past research had found a correlation between Student Satisfaction and Cross-Racial Interaction, which my study did not support

I find it rather hopeful and affirming to those who have asserted in the past that as we become an increasingly secular-minded society, students’ values and ethical systems can still be accentuated and developed by inviting them to take part in a variety of educationally purposeful activities (Kuh & Umbach, 2004) that build their sense of community and civic responsibility. This small study further reveals that when an institution invests in Character Development educationally effective practices, as indicated above, they are also simultaneously ensuring students are satisfied with their institution. This is a new assertion and one that can have positive implications if further research can attest this finding is not an institutional anomaly.

Conclusion

Based on the findings of this study and the data analysis, four conclusions can be made.

1. La Sierra University students were most engaged in Cross-Racial Interaction Diversity. They reported high level of discussions with peers who had different ethnic,

religious, political and socio-economic background than their own. Students who indicated they were multiracial had the highest engagement scores with international students scoring significantly lower, revealing a non-equal variance among ethnic groups.

2. La Sierra University students were least engaged in the Academic Challenge subsection of Quantitative Reasoning with all three engagement questions scoring less than 50% of students responding “Quite a Bit” or “Very Much.” The lowest scoring was the question for students related to their use of numerical information to examine real world problems such as unemployment, climate change, or public health. The gender difference in Quantitative Reasoning was quite large indicated by Cohen’s $d=1.28$. Males were significantly more engaged than females. Freshmen scored significantly lower than their senior counterparts. In relation to ethnic student groups, it was the case that Quantitative Reasoning engagement was the lowest total engagement score across all the ethnic groups with no significant differences among groups.

3. La Sierra University students had the widest range among its engagement responses in the Character Development construct. Female students scored slightly higher than their male counterparts with freshmen scorings slightly higher than seniors. A significant difference was found between Hispanic students who had the highest gains in Character Development and International students who had the least gains. Interesting to note that a relationship was found in Student Satisfaction and Character Development. Students who were most satisfied with their college experience were those who had the highest gains in their Character Development.

4. La Sierra University students with higher levels of satisfaction with the overall university experience and who also indicated a willingness to choose the same

institution again were found to have higher levels of engagements in Character Development activities and Curricular/ Co-curricular activities. There was negligible relationship between Gender, Class Standing, Ethnicity, and Student Satisfaction.

5. La Sierra University students contributed to a new diversity literature finding. Diversity has been richly statistically supported in the literature in relationship to Black and White diversity, but brand new to the literature are the results of this study. The findings suggest that students in a multi-ethnic, non-Black and White diversity dense liberal arts institutions scored equal or higher in all measured Student Engagement variables than the NSSE 2013 participant and their NSSE 2013 Seventh-day Adventist college/university cohort.

Recommendations for Practice

The following are recommendations for practice based on the present study:

1. Academic Challenge: I recommend investing in the viability of the campus because in so doing, we can develop the institutional capacity. La Sierra has made grand efforts in the past seven years, via its Center for Academic Student Success, to bridge the academic gap for all incoming first year students. Following the models of the DEEP schools established by Kuh et al. (2005a), they have developed intentional collaborations between first-year students and faculty via the UNST classes, provided academic coaches, created writing centers, and designed extra-curricular workshops dealing with study habits and academic preparation. As indicated by this study, students' Academic Challenge patterns are still indicating low-level of engagement. In light of La Sierra University's high majority minority student population (83%) and their lack of academic preparation, inequities in academic achievement, low level of accessibility to pre-college

experiences, financial burdens, and low self-confidence (Frost, 1991; King, 2008), continual assessment of the success of the current programs is essential to enhance the institution's capacity for diversity. Using Smith's (2009) framework for diversity, which places it at the center of an institutions academic conversation, and following the call of the first dimension to develop institutional vitality and viability, it is critical for La Sierra University to understand and embrace the changing student culture. In so doing, it can begin to develop its human capital or expertise in faculty and staff who, enriched by their own personal diverse perspective, can assist in bringing light to the values and policies codified by the institutional culture that continue to create patterns of failure for minority students. Investing in the viability of the campus can simultaneously develop the institutional capacity that will ensure that students don't just "survive" but rather "thrive" academically.

2. Character Development: I recommend further institutional analysis of the Service Learning program. A study of the campus' commitment to Service Learning and the financial implications of that program should be assessed in light of this new finding to help quantify the relationship between the institutional commitment to Service Learning and the gains from simply being a diverse campus. A continual effort should be made to support the value-driven agenda of the liberal arts college. The key question becomes, should that effort be shaped differently as we more closely analyze the student needs and institutional financial capacity? How do we fortify, for example, our service learning to address our need for students to be more "civic minded" and equipped to deal with "complex real-world problems"?

3. Cross-Racial Interaction Diversity: I recommend institutional capacity be

analyzed as to the International Student experience. My findings in relationship to our international students helped me in affirming our Student Life Division-wide strategy to invest in better integrating our international students into campus life. The campus's Office of International Students will use these findings to help develop institutional capacity for supporting the international student experience on campus. Attention will be given to understanding the international student experience, in relationship to Student Engagement, and finding ways to address (and increase) their engagement patterns.

In relationship to the findings regarding Asian student Cross-Racial Interaction engagement, I recommend further institutional data be gathered and disaggregated with the purpose of understanding the institutional cultural pattern of behavior for our Asian student population and tangible ways in which we can develop their Cross-Racial Interaction scores.

4. Curricular/Co-curricular Diversity: I recommend Smith's (2009) diversity framework be explored with the goal of building institutional capacity (intellectual, human, and financial resources) specifically focusing on faculty and curriculum development. As asserted by Chang (1999), discussing racial issues increases the likelihood that a student will improve his or her intellectual self-confidence; it has a direct effect on intellectual self-concept, and an indirect effect on retention. The recommendation comes with the understanding that by building capacity in our selves we also build intellectual capacity among our students and directly affect retention.

Recommendations for Further Study

The following are recommendations for further study based on the findings of the present study:

1. Academic Challenge: In light of the finding in Academic Challenge, positing our minority students scored significantly higher than NSSE 2013 and their SDA cohort participants, it is my recommendation that more priority be given to understanding the strengths and challenges of our student demographics at La Sierra University. Does the supportive nature of the freshmen experience through the work of the Center for Academic Success contribute to the statistical difference found only in first year students and not on the seniors? Are the low levels of Academic Challenge engagement scores for freshmen nation-wide an indication of a poor prepared class significantly burdened their first year with remedial courses, which lack reflection, higher-order thinking practices, evaluation, etc.? A longitudinal look at Academic Challenge scores in the past 15 years (NSSE started collecting data 1999) is recommended. The study would aid in providing data-based interpretation of current low nation-wide scores in academia and the patterns of institutions whose scores in this area reflect a positive engagement trend.

2. Cross-Racial Interaction: It is my recommendation that an institutional self-analysis be conducted with the expected outcomes of helping the institution understanding how this finding can help strengthen student retention and success. How does the statistical significance of this finding serve to improve the multi-ethnic Structural Diversity found in this institution? This is but one of the many questions that should be asked, as the institution attempts to more thoughtfully serve its student population.

3. Curricular/Co-curricular Diversity and Hispanic Student Experience: It is interesting to note that in our La Sierra University NSSE 2013 data set, a large proportion (69%) of Hispanic/Latino students, as opposed to only 39% of White students, reported

being the first in their family to attend college. In addition, 43.5% of Hispanic students reported neither parent finished high school vs. 3.4% of White students, a significant difference between these ethnic groups, yet both have a high level of Student Engagement and satisfaction nonetheless. With Hispanic students being the largest student population, I find this to be a significant finding and recommend further study. As we consider implementing diverse narratives into the curriculum, this might be an important finding that allows us to support the student experience via valuable classroom pedagogy.

4. Student Satisfaction and the African-American Experience: A variety of hypothesis can be developed regarding the low Student Satisfaction of African-American students primarily that they are a very small minority on this multicultural campus, but future research is necessary to find out some of the ways in which the institution can assure a greater Student Satisfaction score for this community of learners.

5. Student Satisfaction and Character Development: The correlation found between Character Development and Student Satisfaction is an important finding and one that merits further study. Further research on the correlation between Student Satisfaction and retention can help support the value-driven agenda of student affair practitioners who see Character Development at the center of higher education.

APPENDIX A

TABLE OF VARIABLES

TABLE OF VARIABLES

Variable	Definition	Instrument Question	Operational Definition
Class Standing	Classification of college standing based on number of units completed	What is your current classification in college? Q #20	Freshman=1 Sophomore=2 Junior=3 Senior=4 Unclassified=5
Gender	Classification of Gender	What is your gender? Q #29	Female=0 Male=1
Structural Diversity	Student body racial composition Diversity density index (Chang, 1999)	What is your racial or ethnic identification? Q #32 Reclassified to: Ethnic3 Asian/Pacific Islander=1 Black=2 Hispanic=3 White=4 Multiracial=5 International=6	American Indian or Other Native American=1 Asian=2 Black/African American=3 Hispanic or Latino=4 Native Hawaiian or Other Pacific Islander=5 White=6 Other=7 Multiracial=8 I Prefer Not to Respond=9
Curricular and Co-curricular Diversity	Programmed events (in and outside the classroom) that expose students to race/ethnicity and diverse beliefs Modeled a construct called CurrDiv, creating a scale of four classroom (assignments) and out-of-classroom (events) diversity questions from the NSSE survey	Q #2 c In your experience at your institution during the current year, about how often have you done each of the following: Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments Q #14 d, h, i How much does your institution emphasize the following: Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.) Attending campus activities and events (performing arts, athletic events, etc.) Attending events that address important social, economic, or political issues.	Never=1 Sometimes=2 Often=3 Very Often=4 <i>NSSE 60-point scale</i> <i>0-15=Never</i> <i>16-30=Sometimes</i> <i>31-45=Often</i> <i>46-60=Very Often</i> Very Little=1 Some=2 Quite a Bit=3 Very Much=4 <i>NSSE 60-point scale</i> <i>0-15=Very Little</i> <i>16-30=Some</i> <i>31-45=Quite a Bit</i> <i>46-60=Very Much</i>
Cross-Racial Interaction Diversity	Cross-racial involvement with students of other ethnic backgrounds Modeled a construct called CRI by creating	Q #8 a-d DD During the current school year, about how often have you had discussions with people from the following groups:	Never=1 Sometimes=2 Often=3 Very Often=4

	a scale made up of five diversity-related questions from the NSSE survey. The amount of interaction among diverse groups and the perceived gains from those interactions (Pike et al., 2007)	Q #17h How much has your experience at this institution contributed to your knowledge, skill and personal development in the following areas: Perceived gains in understanding people of other race	<i>NSSE Scale (See above)</i> Very Little=1 Some=2 Quite a Bit=3 Very Much=4
Student Satisfaction	Satisfaction with the educational and institutional experience	Q #18 How would you evaluate your entire educational experience at this institution? Q #19 If you could start over again, would you go to the same institution you are now attending?	Excellent=4 Good=3 Fair=2 Poor=1 Definitely No=1 Probably No=2 Probably Yes=3 Definitely Yes = 4
Academic Challenge HO, RI, LS, QR	Academic Challenge theme composed of four engagement indicators: Higher Order Learning (HO), Reflective/Integrative Learning (RI), Learning Strategies (LS), and Quantitative Reasoning (QR) Each subset contributes to the Academic Challenge measure (NSSE, 2013)	Q #4 b-e: Higher Order Learning During the current school year, how much has your coursework emphasized the following? Applying facts, theories or methods to practical problems or new situations Analyzing an idea, experience, or line of reasoning in depth by examining its parts Evaluating a point of view, decision, or information source Forming a new idea or understanding from various pieces of information Q #5 a-e: Reflective/Integrative Learning During the current school year, to what extent have your instructors done the following? Combining ideas from different courses when completing assignments Connecting your learning to societal problems or issues Including diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments Examining the strengths and weaknesses of your own views on a topic or issue Trying to better understand someone else views by imaging how an issue looks from his or her perspective Learning something that changed the way you understand an issue or concept Connecting ideas from your courses to your prior experiences and knowledge	Very Little=1 Some=2 Quite a Bit=3 Very Much=4 <i>NSSE 60-point scale</i> 0-15=Very Little 16-30=Some 31-45=Quite a Bit 46-60=Very Much Never=1 Sometimes=2 Often=3 Very Often=4 <i>NSSE 60-point scale</i> 0-15=Never 16-30=Sometimes 31-45=Often 46-60=Very Often

		<p>Q #6 a-c: Learning Strategies</p> <p>During the current school year, about how often have you done the following?</p> <p>Identifying key information from reading assignments</p> <p>Reviewing your notes after class</p> <p>Summarizing what you learned in class or from course materials</p> <p>Q #7 a-c: Quantitative Reasoning</p> <p>During the current school year, about how many papers, reports, or other writing tasks of the following length have you been assigned? (Include those not yet completed.)</p> <p>Reaching conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)</p> <p>Using numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)</p> <p>Evaluating what others have concluded from numerical information</p>	
Character Development	Modeled a construct called CharDev, creating a scale represented by six items from the self-reported gains section, which relate to Character Development from the NSSE survey	<p>Q #17 c, f-j</p> <p>To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?</p> <p>c. Thinking critically</p> <p>f. Working effectively with others</p> <p>g. Developing a personal code of values and ethics</p> <p>h. Understanding people of other racial and ethnic backgrounds</p> <p>i. Solving complex real-world problems <i>pgprobsolve#100</i></p> <p>j. Being an informed and active citizen</p>	<p>Very Little=1</p> <p>Some=2</p> <p>Quite a Bit=3</p> <p>Very Much=4</p> <p><i>NSSE 60-point scale</i></p> <p><i>0-15=Very Little</i></p> <p><i>16-30=Some</i></p> <p><i>31-45=Quite a Bit</i></p> <p><i>46-60=Very Much</i></p>

APPENDIX B

SURVEY INSTRUMENT

National Survey of Student Engagement 2013

The College Student Report

This is a facsimile of the 2013 NSSE survey (available at nsse.iub.edu/links/surveys). The survey itself will be administered online.

1. During the current school year, about how often have you done the following?

Response options: Very often, Often, Sometimes, Never

- a. Asked questions or contributed to course discussions in other ways
- b. Prepared two or more drafts of a paper or assignment before turning it in
- c. Come to class without completing readings or assignments
- d. Attended an art exhibit, play or other arts performance (dance, music, etc.)
- e. Asked another student to help you understand course material
- f. Explained course material to one or more students
- g. Prepared for exams by discussing or working through course material with other students
- h. Worked with other students on course projects or assignments
- i. Gave a course presentation

2. During the current school year, about how often have you done the following?

Response options: Very often, Often, Sometimes, Never

- a. Combined ideas from different courses when completing assignments
- b. Connected your learning to societal problems or issues
- c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments
- d. Examined the strengths and weaknesses of your own views on a topic or issue
- e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
- f. Learned something that changed the way you understand an issue or concept
- g. Connected ideas from your courses to your prior experiences and knowledge

3. During the current school year, about how often have you done the following?

Response options: Very often, Often, Sometimes, Never

- a. Talked about career plans with a faculty member
- b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)
- c. Discussed course topics, ideas, or concepts with a faculty member outside of class
- d. Discussed your academic performance with a faculty member

4. During the current school year, how much has your coursework emphasized the following?

Response options: Very much, Quite a bit, Some, Very little

- a. Memorizing course material
- b. Applying facts, theories, or methods to practical problems or new situations
- c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts
- d. Evaluating a point of view, decision, or information source
- e. Forming a new idea or understanding from various pieces of information

5. During the current school year, to what extent have your instructors done the following?

Response options: Very much, Quite a bit, Some, Very little

- a. Clearly explained course goals and requirements
- b. Taught course sessions in an organized way
- c. Used examples or illustrations to explain difficult points
- d. Provided feedback on a draft or work in progress
- e. Provided prompt and detailed feedback on tests or completed assignments

6. During the current school year, about how often have you done the following?

Response options: Very often, Often, Sometimes, Never

- a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)
- b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)
- c. Evaluated what others have concluded from numerical information

National Survey of Student Engagement 2013

7. During the current school year, about how many papers, reports, or other writing tasks of the following length have you been assigned? (Include those not yet completed.)

Response options: None, 1-2, 3-5, 6-10, 11-15, 16-20, More than 20 papers

- a. Up to 5 pages
- b. Between 6 and 10 pages
- c. 11 pages or more

8. During the current school year, about how often have you had discussions with people from the following groups?

Response options: Very often, Often, Sometimes, Never

- a. People of a race or ethnicity other than your own
- b. People from an economic background other than your own
- c. People with religious beliefs other than your own
- d. People with political views other than your own

9. During the current school year, about how often have you done the following?

Response options: Very often, Often, Sometimes, Never

- a. Identified key information from reading assignments
- b. Reviewed your notes after class
- c. Summarized what you learned in class or from course materials

10. During the current school year, to what extent have your courses challenged you to do your best work?

Response options: 1=Not at all to 7=Very much

11. Which of the following have you done or do you plan to do before you graduate?

Response options: Done or in progress, Plan to do, Do not plan to do, Have not decided

- a. Participate in an internship, co-op, field experience, student teaching, or clinical placement
- b. Hold a formal leadership role in a student organization or group
- c. Participate in a learning community or some other formal program where groups of students take two or more classes together
- d. Participate in a study abroad program
- e. Work with a faculty member on a research project
- f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)

12. About how many of your courses at this institution have included a community-based project (service-learning)?

Response options: All, Most, Some, None

13. Indicate the quality of your interactions with the following people at your institution.

Response options: 1=Poor to 7=Excellent, Not Applicable

- a. Students
- b. Academic advisors
- c. Faculty
- d. Student services staff (career services, student activities, housing, etc.)
- e. Other administrative staff and offices (registrar, financial aid, etc.)

14. How much does your institution emphasize the following?

Response options: Very much, Quite a bit, Some, Very little

- a. Spending significant amounts of time studying and on academic work
- b. Providing support to help students succeed academically
- c. Using learning support services (tutoring services, writing center, etc.)
- d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)
- e. Providing opportunities to be involved socially
- f. Providing support for your overall well-being (recreation, health care, counseling, etc.)
- g. Helping you manage your non-academic responsibilities (work, family, etc.)
- h. Attending campus activities and events (performing arts, athletic events, etc.)
- i. Attending events that address important social, economic, or political issues

National Survey of Student Engagement 2013

15. About how many hours do you spend in a typical 7-day week doing the following?

Response options: 0, 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, More than 30 (Hours per week)

- a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
- b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)
- c. Working for pay **on campus**
- d. Working for pay **off campus**
- e. Doing community service or volunteer work
- f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)
- g. Providing care for dependents (children, parents, etc.)
- h. Commuting to campus (driving, walking, etc.)

16. Of the time you spend preparing for class in a typical 7-day week, about how many hours are on *assigned reading*?

Response options: 0, 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, More than 30 (Hours per week)

17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

Response options: Very much, Quite a bit, Some, Very little

- a. Writing clearly and effectively
- b. Speaking clearly and effectively
- c. Thinking critically and analytically
- d. Analyzing numerical and statistical information
- e. Acquiring job- or work-related knowledge and skills
- f. Working effectively with others
- g. Developing or clarifying a personal code of values and ethics
- h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)
- i. Solving complex real-world problems
- j. Being an informed and active citizen

18. How would you evaluate your entire educational experience at this institution?

Response options: Excellent, Good, Fair, Poor

19. If you could start over again, would you go to the *same institution* you are now attending?

Response options: Definitely yes, Probably yes, Probably no, Definitely no

20. What is your class level?

Response options: Freshman/first-year, Sophomore, Junior, Senior, Unclassified

21. Thinking about this current academic term, are you a full-time student?

Response options: Yes, No

22a. How many courses are you taking for credit this current academic term?

Response options: 0, 1, 2, 3, 4, 5, 6, 7 or more

22b. Of these, how many are *entirely online*?

Response options: 0, 1, 2, 3, 4, 5, 6, 7 or more

23a. How many majors do you plan to complete? (Do not count minors.)

Response options: One, More than one

23b. [If answered "One"] Please enter your major or expected major: [Text box]

[If answered "More than one"] **Please enter up to two majors or expected majors (do not enter minors):** [Text boxes]

24. What have most of your grades been up to now at this institution?

Response options: A, A-, B+, B, B-, C+, C, C- or lower

National Survey of Student Engagement 2013

-
- 25. Did you begin college at this institution or elsewhere?**
Response options: *Started here, Started elsewhere*
- 26. Since graduating from high school, which of the following types of schools have you attended *other than* the one you are now attending? (Select all that apply.)**
Response options: *Vocational or technical school, Community or junior college, 4-year college or university other than this one, None, Other*
- 27. What is the highest level of education you ever expect to complete?**
Response options: *Some college but less than a bachelor's degree, Bachelor's degree (B.A., B.S., etc.), Master's degree (M.A., M.S., etc.), Doctoral or professional degree (Ph.D., J.D., M.D., etc.)*
- 28. What is the highest level of education completed by either of your parents (or those who raised you)?**
Response options: *Did not finish high school, High school diploma or G.E.D., Attended college but did not complete degree, Associate's degree (A.A., A.S., etc.), Bachelor's degree (B.A., B.S., etc.), Master's degree (M.A., M.S., etc.), Doctoral or professional degree (Ph.D., J.D., M.D., etc.)*
- 29. What is your gender?**
Response options: *Male, Female*
- 30. Enter your year of birth (e.g., 1994):**
- 31. Are you an international student or foreign national?**
Response options: *Yes, No*
- 32. What is your racial or ethnic identification? (Select all that apply.)**
Response options: *American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, White, Other, I prefer not to respond*
- 33. Are you a member of a social fraternity or sorority?**
Response options: *Yes, No*
- 34. Which of the following best describes where you are living while attending college?**
Response options: *Dormitory or other campus housing (not fraternity or sorority house), Fraternity or sorority house, Residence (house, apartment, etc.) **within walking distance** to the institution, Residence (house, apartment, etc.) **farther than walking distance** to the institution, None of the above*
- 35. Are you a student-athlete on a team sponsored by your institution's athletics department?**
Response options: *Yes, No*
- 36. Are you a current or former member of the U.S. Armed Forces, Reserves, or National Guard?**
Response options: *Yes, No*
- 37a. Have you been diagnosed with any disability or impairment?**
Response options: *Yes, No, I prefer not to respond*
- 37b. [If answered "yes"] Which of the following have been diagnosed? (Mark all that apply)**
Response options: *A sensory impairment (vision or hearing), A mobility impairment, A learning disability (e.g., ADHD, dyslexia), A mental health disorder, A disability or impairment not listed above*
- 38. Which of the following best describes your sexual orientation? [Question administered per institution request.]**
Response options: *Heterosexual, Gay, Lesbian, Bisexual, Questioning or unsure, I prefer not to respond*
-

APPENDIX C

ADDITIONAL TABLES

ADDITIONAL TABLES

Table 25

Comparison Table Academic Challenge: Freshmen

Engagement Indicator	LSU Mean	SDA Mean	NSSE 2013 Mean
Higher Order Learning	40.0	37.1**	39.1
Reflective/Integrative Learning	35.9	33.7*	35.7
Learning Strategies	40.0	37.7	39.8
Quantitative Reasoning	26.4	23.3*	27.3

*Significance Levels: * $p < .05$, ** $p < .01$, *** $p < .001$.*

Table 26

Comparison Table Academic Challenge: Seniors

Engagement Indicator	LSU Mean	SDA Mean	NSSE 2013 Mean
Higher Order Learning	42.3	40.3	41.3
Reflective/Integrative Learning	39.7	37.7	38.9
Learning Strategies	39.6	38.7	40.7
Quantitative Reasoning	30.2	27.2	29.7

*Significance Levels: * $p < .05$, ** $p < .01$, *** $p < .001$.*

Table 27

Comparison Character Development (Detailed, NSSE Question #17c, f-j)

Statement	La Sierra		SDA		NSSE	
	<i>N</i>	<i>M</i>	<i>N</i>	<i>M</i>	<i>N</i>	<i>M</i>
Perceived gains: Thinking critically and analytically	178	3.1	671	3.1	106,658	3.1
Perceived gains: Working effectively with others	180	2.9	672	2.8*	106,448	2.8
Perceived gains: Developing or clarifying a personal code of values and ethics	179	2.9	672	2.8	106,534	2.7**
Perceived gains: Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	179	3.1	671	2.7***	106,642	2.7***
Perceived gains: Solving complex real-world problems	179	2.7	673	2.4**	106,514	2.6
Perceived gains: Being an informed and active citizen	179	2.7	667	2.4***	106,110	2.7

Significance Levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 28

Comparison Cross-Racial Interaction Diversity (Detailed, NSSE Question #8 a-d, #17h)

Statement	La Sierra		SDA		NSSE	
	<i>N</i>	<i>M</i>	<i>N</i>	<i>M</i>	<i>N</i>	<i>M</i>
Had discussions with people of a race or ethnicity other than your own	196	3.4	734	3.3	116,334	3.1***
Had discussions with people from an economic background other than your own	197	3.3	733	3.2	116,025	3.1***
Had discussions with people with religious beliefs other than your own	194	3.2	732	2.6***	115,768	3.0**
Had discussions with people with political view other than your own	194	3.0	729	2.9	115,438	3.0
Perceived gains: Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	179	3.1	671	2.7***	106,642	2.7***

Significance Levels: * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 29

Comparison Curricular/Co-curricular Diversity (Detailed, NSSE Question #2c, #14d, h, i

Statement	La Sierra		SDA		NSSE	
	N	M	N	M	N	M
Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	205	2.6	803	2.5	126,282	2.6
Institutional emphasis: Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	179	3.0	687	2.8**	107,586	2.7***
Institutional emphasis: Attending campus activities and events (Performing arts, athletic events, etc.)	177	2.8	677	2.9	106,657	2.9*
Institutional emphasis: Attending events that address important social, economic, or political issues	180	2.5	673	2.5	106,480	2.6

*Significance Levels: *p<.05, **p<.01, ***p<.001*

APPENDIX D

ANDREWS UNIVERSITY IRB APPROVAL

Andrews University

Office of Research & Creative Scholarship

October 1, 2014

Yami Bazan
Tel: (951) 315-2002
Email: ybazan@lasierra.edu

RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS IRB Protocol #:13-126 Application Type: Original Dept.: Leadership Review Category: Exempt Action Taken: Approved Advisor: Sylvia Gonzalez Title: Student engagement, satisfaction, and diversity in a small faith-based multi-ethnic, liberal arts university.

Your IRB application for approval of research involving human subjects entitled: "Student engagement, satisfaction, and diversity in a small faith-based, multi-ethnic, liberal arts university # 13-126 has been evaluated and determined exempt from IRB review. You may now proceed with your research.

Please note that any future changes made to the study design and/or informed consent form require prior approval from the IRB before such changes can be implemented. In case you need to make changes, please use the attached report form.

While there appears to be no more than minimum risks with your study, should an incidence occur that results in a research-related adverse reaction and/or physical injury, this must be reported immediately in writing to the IRB. Any research-related physical injury must also be reported immediately to the University Physician, Dr. Reichert, by calling (269) 473-2222.

We ask that you reference the protocol number in any future correspondence regarding this study for easy retrieval of information.

Best wishes in your research.

Sincerely,

Mordekai Ongo
Research Integrity & Compliance Officer

Institutional Review Board - 4150 Administration Dr Room 322 - Berrien Springs, MI 49104-0355
Tel: (269) 471-6361 Fax: (269) 471-6543 E-mail: irb@andrews.edu

APPENDIX E

LA SIERRA IRB APPROVAL

1, October, 2013

Yami Bazan
La Sierra University-Student Life
4500 Riverwalk Parkway
Riverside, CA 92515

Dear Ms. Bazan,

For your study titled, "Student engagement, satisfaction, and diversity in a small faith-based, multi-ethnic, liberal arts university," La Sierra IRB will allow Andrews University to serve as guarantor for the protocol and La Sierra University IRB is turning oversight over to Andrews University, pending on the clarification of the following:

- (1) On your protocol under "Time Frame" you mentioned this project started in the Spring of 2011. When you said this project, that sounded like your study project, especially when it started as a separate section of your protocol. You will need to have Andrews University IRB approval before you can use NSSE data collected at La Sierra University.
- (2) On the second page on your protocol, you said "confidentiality." If the survey results are not identifiable, please change confidentiality to anonymity. Although you don't record students' names on the survey, it is possible to be identifiable by identifiers and the data could be confidential. So if you meant the results would be anonymous, please specify that.

Allowance is for one year, October 1, 2013 – October 1, 2014, and your IRB protocol number is 1303. (You have your IRB number from Andrews University, and this number at La Sierra University is for the tracking purpose here, at La Sierra.)

You may begin data collection once you have made the changes above, and once you have an approval from Andrews University. Please do not hesitate to contact me if you have any questions, or if I may assist you in any way.

At the end of your research, please notify La Sierra IRB and send a copy of the results, article(s), and/or paper(s) to the our Office for inclusion with your file.

Thank you for your attention in this matter and please accept the IRB's best wishes for the success of your project.

Sincerely,

In-Kyeong Kim, Ph.D.
Professor of Psychology
Chair, Institutional Review Board

IK/tljf

REFERENCES

- Adams, M. (2001). Core processes of racial identity development. In C. L. Wijeyesinghe & B. W. Jackson, (Eds.), *New perspectives on racial identity development: A theoretical and practical anthology* (pp. 209-242). New York, NY: New York University Press.
- Adventist higher education*. (2015). Retrieved from adventistcolleges.org/colleges-and-universities
- Anderson, J. A. (1999, Spring). Faculty responsibility for promoting conflict-free college classrooms. *New Directions for Teaching & Learning*, 1999(77), 69-76.
- Antonio, A. L. (2001). The role of interracial interaction in the development of leadership skills and cultural knowledge and understanding. *Research of Higher Education*, 42(5), 593-617.
- Antonio, A. L., Chang, M. J., Hakuta, K., Kenny, D. A., Levin, S., & Miley, J. F. (2004). Effects of racial diversity on complex thinking in college students. *Psychological Science*, 15(8), 507-510.
- Araujo, A., & Anastasiou, A. (2009). The role of generational status, program affiliation, and cultural background in the performance of college students. In T. H. Housel & V. L. Harvey (Eds.), *The invisibility factor* (pp. 47-58). Boca Raton, FL: Brown Walker Press.
- Association of Adventist Colleges and Universities (AACU). (2015). About AACU. Silver Spring, MD:Retrieved from adventistcolleges.org/AboutAACU/
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297-308.
- Astin, A. W. (1993). *What matters in college: Four critical years revisited*. San Francisco, CA: Jossey-Bass.
- Bailey, D. (2009). Pioneering the college of the future: Building as we walk. In F. Hesselbein & M. Goldsmith (Eds.), *The organization of the future 2: Visions, strategies, and insights on managing in a new era* (pp. 228-241). San Francisco, CA: Jossey-Bass.
- Balon, D. G. (2004). *Racial, ethnic, and gender differences among entering college student attitudes toward leadership, culture, and leader self-identification: A focus on Asian Pacific Americans* (Unpublished doctoral dissertation). University of Maryland, College Park, MD.

- Berg, G. A. (2010). *Low-income students and the perpetuation of inequality: Higher education in America*. Burlington, VT: Ashgate.
- Berger, J. B., & Milem, J. F. (1999). The role of student involvement and perceptions of integration in a causal model of student persistence. *Research in Higher Education*, 40(6), 641-664.
- Borrego, S. E., & Manning, K. (2007). *Where I am from: Student affairs practice from the whole of student's lives*. Washington, DC: National Association of Student Personnel Administrators.
- Braddock Jr., J. H. (1980). The perpetuation of segregation across levels of education: A behavioral assessment of the contact hypothesis. *Sociology of Education*, 53(3), 178-186.
- Braskamp, L. A., Trautvetter, L. C., & Ward, K. (2006). *Putting students first: How colleges develop students purposefully*. Bolton, MA; Anker.
- Cantor, N. (2010). Universities and democratic culture. In D. Little & S. P. Mohanty (Eds.), *The future of diversity: Academic leaders reflect on American higher education* (pp. 19-40). New York, NY: Palgrave Macmillan.
- Carnevale, A. P., & Strohl, J. (2013). *Separate & unequal: How higher education reinforces the intergenerational reproduction of White racial privilege*. Washington, DC: Georgetown Public Policy Institute Center on Education & the workforce.
- Chang, M. J. (1999). Does racial diversity matter? The educational impact of a racially diverse undergraduate population. *Journal of College Student Development*, 40(4), 377-395.
- Chang, M. J. (2002). Preservation or transformation: Where's the real educational discourse on diversity? *Review of Higher Education*, 25(2), 125-140.
- Chang, M. J., Denson, N., Sáenz, V., & Misa, K. (2006). The educational benefits of sustaining cross-racial interaction among undergraduates. *Journal of Higher Education*, 77(3), 430-455.
- Character. 2012. In *Merriam-Webster.com*. Retrieved May 8, 2012, from <http://www.merriam-webster.com/dictionary/character>
- Closson, R. B., & Henry, W. J. (2008). The social adjustment of undergraduate White students in the minority on a historically Black college campus. *Journal of College Student Development*, 49(6), 517-533.
- Cole, D. (2008). Constructive criticism: The role of the student-faculty interactions on African-American and Hispanic students' educational gains. *Journal of College Student Development*, 49(6), 587-601.

- Creswell, W. J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Denson, N., & Chang, M. J. (2009). Racial diversity matters: The impact of diversity-related student engagement and institutional context. *American Educational Research Journal*, 46(2), 322-353.
- Dewey, J. (1957). *Reconstruction in philosophy*. New York, NY: Beacon Press.
- Diversity experiences of first year students: Findings of the NECASL panel study of the class of 2010*. (2009). A presentation at the annual meeting of the New England Association of School and Colleges, Boston, MA. Retrieved from neasc.org/downloads/annual_meeting/cihe_presentations/Diversity_Experiences_of_First_Year_Students_6-09_final2.pdf
- Engberg, M. E. (2007). Educating the workforce for the 21st century: A cross-disciplinary analysis of the impact of the undergraduate experience on students' development of pluralistic orientation. *Research in Higher Education*, 48(3), 283-317.
- Engberg, M. E., & Hurtado, S. (2011). Developing pluralistic skills and dispositions in college: Examining racial/ethnic group differences. *Journal of Higher Education*, 82(4), 416-443.
- Evans, N. J., Forney, D. S., Guido-DiBrito, F. (1998). *Student development in college: Theory, research and practice*. San Francisco, CA: Jossey-Bass.
- Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2010). *Student development in college: Theory, research, and practice* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Frost, S. H. (1991). *Academic advising for student success: A system of shared responsibility*. ASHE-ERIC Higher Education Report No. 3. Washington, DC: George Washington University.
- Hall, G. C. N., & Okazaki, S. (2002). *Asian American psychology: The science of lives in context*. Washington, DC: American Psychological Association.
- Halpern, D. F. (1994). *Changing college classrooms: New teaching and learning strategies for an increasingly complex world*. Jossey-Bass Higher and Adult Education Series. San Francisco, CA: Jossey-Bass.
- Heffernan, K. (2011). *Willful blindness*. New York, NY: Walker.
- Hoppe, S. L., & Speck, B. W. (2005). Searching for spirituality in higher education. New York: Peter Lang. *New Directions for Teaching & Learning*, 104. New York, NY: Jossey-Bass.

- Housel, T. H., & Harvey, V. L. (2009). *The invisibility factor: Administrators and faculty reach out to first-generation college students*. Boca Raton, FL: Brown Walker Press.
- Hurtado, S., Dey, E. L., Gurin, P. Y., & Gurin, G. (2003). College environments, diversity, and student learning. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 18, pp. 145-189). Dordrecht, Netherlands: Kluwer Academic.
- Hurtado, S., Milem, J., Clayton-Pedersen, A., & Allen, W. (1999). Enacting diverse learning environments: Improving the climate for racial/ethnic diversity in higher education. *ASHE-ERIC Higher Education Report*, 26(8), 1-140.
- Huynh, V. W., & Fuligni, A. J. (2011). Perceived ethnic stigma across the transition to college. *Journal of Youth & Adolescence*, 41(7), 817-830. doi:10.1007/s10964-011-9731-x
- Jayakumar, U. M. (2008). Can higher education meet the needs of an increasingly diverse and global society? Campus diversity and cross-cultural workforce competencies. *Harvard Educational Review*, 78(4), 615-651.
- Kellogg, A., & Niskode, A. S. (2008). Student affairs and higher education policy issues related to multiracial students. *New Directions for Student Services*, 2008(123), 93-102.
- Kessler, R. (2000). *The soul of education: Helping students find connection, compassion, and character at school*. Alexandria, VA: ASCD.
- Kim, J. (2001). Asian American identity development. In C. L. Wijeyesinghe & B. W. Jackson (Eds.), *New perspectives on racial identity development: A theoretical and practical anthology* (pp. 67-90). New York, NY: New York University Press.
- King, A. R. (2008). Student perspectives on multiracial identity. *New Directions for Student Services*, 2008(123), 33-41.
- King, M. C. (1993). Academic advising: Organizing and delivering services for student success. *New Directions for Community Colleges*, 82.
- Kuh, G. D. (2001a). Assessing what really matters to student learning: Inside the National Survey of Student Engagement. *Change*, 33(3), 10-17, 66.
- Kuh, G. D. (2001b). The National Survey of Student Engagement: Conceptual framework and overview of psychometric properties. *Bloomington, IN: Indiana University Center for Postsecondary Research*, 1-26.
- Kuh, G. D. (2003). What we are learning about student engagement from NSSE: Benchmarks for effective educational practices. *Change*, 35(2), 24-32.

- Kuh, G. D. (2007). Built to engage: Liberal arts colleges and effective educational practice. In F. Oakley (Ed.), *Liberal arts colleges in American higher education* (pp. 122-150). New York, NY: American Council of Learned Societies.
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *Journal of Higher Education*, 79(5), 540-563.
- Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006). What matters most to student success: A review of the literature. Washington, DC: National Postsecondary Education Cooperative.
- Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2005a). Never let it rest: Lessons about student success from high-performing colleges and universities. *Change*, 37(4), 44-51.
- Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2005b). *Student success in college: Creating conditions that matter*. San Francisco, CA: Jossey-Bass.
- Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2010). *Student success in college: Creating conditions that matter*. New York, NY: Wiley.
- Kuh, G. D., & Umbach, P. D. (2004). College and character: Insights from the National Survey of Student Engagement. *New Directions for Institutional Research*, 2004(122), 37-54.
- Laden, B. V. (2004). Serving emerging majority students. *New Directions for Community Colleges*, 2004(127), 5-20.
- Laird, T. F. N., Bridges, B. K., Morelon-Quainoo, C. L., Williams, J. M., & Holmes, M. S. (2007). African American and Hispanic student engagement at minority serving and predominantly White institutions. *Journal of College Student Development*, 48(1), 39-56.
- Leach, M. A. L. (2011). *Suburban teachers' attitudes toward multicultural education* (Unpublished doctoral dissertation). Dowling College, Oakdale, NY.
- Lesure-Lester, G. E., & King, N. (2005). Racial-ethnic differences in social anxiety among college students. *Journal of College Student Retention: Research, Theory & Practice*, 6(3), 359-367.
- Longerbeam, S. D., Sedlacek, W. E., & Alatorre, H. M. (2004). In their own voices: Latino student retention. *NASPA Journal*, 4(41), 538-550.
- May, G. S., & Chubin, D. E. (2003). A retrospective on undergraduate engineering success for underrepresented minority students. *Journal of Engineering Education*, 92(1) 27-39.

- McDonough, P. M., & Fann, A. J. (2008). The study of inequality. In P. Gumpert (Ed.), *Sociology of higher education: Contributions and their contexts* (pp. 53-93). Baltimore, MD: Johns Hopkins University Press.
- McEwen, M. K., Kodama, C. M., Alvarez, A. N., Lee, S., & Liang, C. T. H. (2002). Working with Asian American college students. *New Directions for Student Services*, 2002(97), 1-4. doi:10.1002/ss.33/abstract
- Milem, J. F., Chang, M. J., & Antonio, A. L. (2005). *Making diversity work on campus: A research-based perspective*. Washington, DC: American Association of Colleges & Universities.
- Mmje, K. K. C, Newman, C. B., Kramer, D. A., & Pearson, M. A. (2009). The changing landscape of higher education: Developmental approaches to engaging emerging populations. In S. R Harper & S. J. Quaye (Eds.), *Student engagement in higher education: Theoretical perspectives and practical approaches for diverse populations* (pp. 295-312). New York, NY: Routledge.
- Morley, K. M. (2004). Fitting in by race/ethnicity: The social and academic integration of diverse students at a large predominantly White university. *Journal of College Student Retention*, 5(2), 147-173.
- Mueller, J. A., & Pope, R. L. (2003). The relationship demographic and experience variables to White racial consciousness among student affairs practitioners. *NASPA Journal*, 40, 149-174.
- National Postsecondary Education Cooperative. (2006). *What matters to student success*. Commissioned Report for the National Symposium on Postsecondary Student Success: Spearheading a Dialog on Student Success. Retrieved from yorku.ca/retentn/rdata/whatmatterstostudentsuccess.pdf
- Newman, F., Couturier, L., & Scurry, J. (2010). *The future of higher education: Rhetoric, reality, and the risks of the market*. San Francisco, CA: Jossey-Bass.
- NSSE National Survey of Student Engagement: NSSE 2013 overview. (2013). Retrieved from nsse.iub.edu/2013_Resuls/pdf/NSSE_2013_Annual_Results.pdf
- NSSE National Survey of Student Engagement: Origins and Potential. (2014). Retrieved from <http://nsse.indiana.edu/html/origins.cfm>
- O'Brien, E. (2008). *The racial middle: Latinos and Asians living beyond the racial divide*. New York, NY: New York University Press.
- Ortis, A. M., & Santos, S. J. (2009). *Ethnicity in college: Advancing theory and improving diversity practices on campus*. Sterling, VA: Stylus.
- Pascarella, E. T., Seifert, T. A., & Blaich, C. (2010). How effective are the NSSE benchmarks in predicting important educational outcomes? *Change*, 42(1) 16-23.

- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (Vol. 2). San Francisco, CA: Jossey-Bass.
- Pike, G. R. (2009). The differential effects of on- and off-campus living arrangements on students' openness to diversity. *NASPA Journal*, 46(4), 629-645.
- Pike, G. R., & Kuh, G. D. (2006). Relationships among structural diversity, informal peer interactions, and perceptions of the campus environment. *Review of Higher Education*, 29(4), 425-450.
- Pike, G. R., Kuh, G. D., & Gonyea, R. M. (2007). Evaluating the rationale for affirmative action in college admissions: Direct and indirect relationships between campus diversity and gains in understanding diverse groups. *Journal of College Student Development*, 48(2), 166-182.
- Ponterotto, J., & Casas, M. (1991). *Handbook of radical/ethnic minority counseling research*. Springfield, IL: Thomas.
- Pope, R. L., Reynolds, A. L., & Mueller, J. A. (2004). *Multicultural competence in student affairs*. San Francisco, CA: Jossey-Bass.
- Quaye, S. J., & Harper, S. R. (Eds.). (2009). *Student engagement in higher education: Theoretical perspectives and practical approaches for diverse populations* (1st ed.). New York, NY: Routledge.
- Renn, K. A. (2008). Research on biracial and multiracial identity development: Overview and synthesis. *New Directions for Student Services*, 2008(123), 13-21.
- Riley, N. S. (2006). The risks of multiracial identification. *Chronicle of Higher Education*, 53(12), B5.
- Rothman, S., Lipset, S. M., & Nevitte, N. (2002). Does enrollment diversity improve university education? *International Journal of Public Opinion Research*, 15, 8-26.
- Sáenz, T., Marcoulides, G. A., Junn, E., & Young, R. (1999). The relationship between college experience and academic performance among minority students. *International Journal of Educational Management*, 13(4), 199-208.
- Sáenz, V. B. (2010). Breaking the segregation cycle: Examining students' pre-college racial environments and college diversity experiences. *Review of Higher Education*, 34(1), 1-37.
- Sandeen, A., & Barr, M. J. (2006). *Critical issues for student affairs: Challenges and opportunities*. San Francisco, CA: Jossey-Bass.

- Sharkness, J., Eagen, M. K., Hurtado, S., Figueroa, T., & Chang, M. J. (2010). *Academic achievement among STEM aspirants: Why do Black and Latino students earn lower grades than their White and Asian counterparts?* National Institute of General Medical Sciences, NIH Grant Numbers 1 R01 GMO71968-01 and R01 GMO71968-05, NSF Grant Number 0757076. Retrieved from heri.ucla.edu/nih/downloads/AIR_2011-Sharkness,_Eagan,_Hurtado,_Figueroa,_Chang-Academic_Achievement_among_STEM_Aspirants.pdf
- Silverman, S. L., & Casazza, M. E. (2000). *Learning and development: Making connections to enhance teaching*. Higher and adult education series. San Francisco, CA: Jossey-Bass.
- Smith, D. G. (2009). *Diversity's promise for higher education: Making it work*. Baltimore, MD: Johns Hopkins University Press.
- Smith, D. G., & Wolf-Wendel, L. E. (2005). *The challenge of diversity: Involvement or alienation in the academy*. *ASHE Higher Education Report* (Vol. 31). San Francisco, CA: Jossey-Bass.
- Sue, D. W., Carter, R. T., Casas, J. M., Fouad, N. A., Ivey, A. E., Jensen, M., ... & Vazquez-Nutall, E. (1998). Multicultural counseling competencies: Individual and organizational development. In P. B. Pedersen (Ed.), *Multicultural aspects of counseling and psychotherapy series, 11*. Thousand Oaks, CA: Sage. doi:10.4135/9781452232027.
- Talbot, D. M. (2003). Multiculturalism. In S. R. Komives, D. B. Woodard, & Associates (Eds.), *Student services: A handbook for the profession* (4th ed., pp. 423-443). San Francisco, CA: Jossey-Bass.
- Tatum, B. D. (1992). Talking about race, learning about racism: The application of racial identity development theory in the classroom. *Harvard Educational Review*, 62(1), 1-25.
- Thomas, B. R. (1990). The school as a moral learning community. In J. I. Goodlad, R. Soder, & K. A. Sirotnik (Eds.), *The moral dimensions of teaching* (pp. 266-295). San Francisco, CA: Jossey-Bass.
- Torres, V., Howard-Hamilton, M. F., & Cooper, D. L. (2003). Identity development of diverse populations: Implications for teaching and administration in higher education. *ASHE-ERIC Higher Education Report*, 29(6), 1-120.
- Umbach, P. D., & Kuh, G. D. (2006). Student experiences with diversity at liberal arts colleges: Another claim for distinctiveness. *Journal of Higher Education*, 77(1), 169-192.
- U.S. Census Bureau. (2010). *Population, population change, and estimated components of population change: 2000 to 2009*. Retrieved from census.gov/popest/national/files/NST_EST2009_ALLDATA.csv

- U.S. Census Bureau. (2011). *School Enrollment in the United States*. Retrieved from <https://www.census.gov/prod/2013pubs/p20-571.pdf>
- U.S. National Educational Statistics. (2011). *Digest of education statistics: Annual*. Retrieved from [census.gov/compendia/statab/2012/tables/12s0300.pdf](https://nces.gov/ipeds/data/2012/tables/12s0300.pdf)
- Watson, J. C. (2009). Native American racial identity development and college adjustment at two-year institutions. *Journal of College Counseling, 12*(2), 125-136.
- Wong, M. P. A., & Buckner, J. (2008). Multiracial student services come of age: The state of multiracial student services in higher education in the United States. *New Directions for Student Services, 123*, 43-51.
- Yeh, C. J., & Huang, K. (1996). The collectivistic nature of ethnic identity development among Asian American students. *Adolescence, 31*(123), 645-655.
- Yip, T. (2005). Sources of situational variation in ethnic identity and psychological well-being: A palm pilot study of Chinese American students. *Personality & Social Psychology Bulletin, 31*(12), 1603-1616.
- Zhao, C., Kuh, G. D., & Carini, R. M. (2005). A comparison of international student and American student engagement in effective educational practice. *Journal of Higher Education, 76*(2), 209-231.

VITA

VITA

Yamileth Bazan
11308 Bentley Street
Riverside, CA 92505
951-785-2950
ybazan@lasierra.edu

EDUCATION

Andrews University, Berrien Springs, MI	Ph.D. in Leadership (2015)
La Sierra University, Riverside, CA	M.A. Administration and Leadership (2002)
La Sierra University, Riverside, CA	B.A. Liberal Studies (1993)

EMPLOYMENT HISTORY

Vice President of Student Life, La Sierra University	4/07 to date
Administrator responsible for Student Service departments, all student co-curricular development, and student discipline	
Associate Youth Director, Southeastern California Conference of Adventists	5/99 to 4/07
Youth Specialist in charge of developing and overseeing all youth events in the conference region	
God's Road Rules Mission Trip, North America	8/98 – 5/99
Sponsored by Southeastern California Conference to live on the road for an academic school year, visiting/presenting weeks of prayer at 22 academies in 14 states	
Third Grade Teacher, Redlands School District	6/97 – 6/98
Sixth Grade Teacher, Mesa Grande Academy	6/93 – 6/97

PUBLICATIONS/BOOKS

Devotional Book Chapter: Cruz, M. (2011). *Changed Too: Youth Sharing Book*. Pacific Press
Devotional Book Chapter: Cruz, M. (2009). *Changed: Youth Sharing Book*. Pacific Press

PRESENTATIONS/LEADERSHIP COMMITMENTS

Leadership Riverside, Chamber of Commerce, Education Day Presenter	2015
Adventist Student Personnel Association (ASPA), President	2014
Southeastern California Conference, Education Summit, Devotional Speaker	2014
North American Division, Higher Education Summit on LGBT, Presenter	2014
Leadership Riverside Chamber of Commerce, Visions Day Presenter	2011, 2012
North American Division, Young Adult Changed College Tour, Keynote Speaker	2011
Pacific Union Conference, Education Summit, Keynote Speaker/Presenter	2009
Leadership Riverside Chamber of Commerce, Human Relations Day Organizer/Presenter	2007 – 2013
North American Division Youth Ministry Convention, Keynote Speaker/Presenter	2005

PROFESSIONAL AFFILIATIONS

• Minister, Pacific Union Conference of Seventh-day Adventists	2006 – Present
• Member, Leadership Riverside Chamber of Commerce
(Recognized by Mayor and State Senate for Leadership in her city)	2006 – Present
• Member, Adventist Student Personnel Association (ASPA)	2007 – Present
• Member, Riverside City Mayor Office, Human Relations Commissioner	2008 – 2010