Copyright

By

Maryellen Temple Mills

2009

The Dissertation Committee for Maryellen Temple Mills certifies that this is the approved version of the following dissertation:

THE RELATIONSHIP BETWEEN STUDENT SUCCESS COURSE PARTICIPATION AND ENGAGEMENT IN COMMUNITY COLLEGES

Committee.
Patricia Somers, Supervisor
John E. Roueche
Walter G. Bumphus
Thomas Darwin
Kay McClenney

THE RELATIONSHIP BETWEEN STUDENT SUCCESS COURSE PARTICIPATION AND ENGAGEMENT IN COMMUNITY COLLEGES

by

Maryellen Temple Mills, B.A., M.A.Ed., M.A.

Dissertation

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

The University of Texas at Austin

May 2009

DEDICATION

To my children,

Nathan Marcus Mills

and

Stephanie Elizabeth Mills.

What a road we

have traveled!

And you have been my inspiration

and my joy

every step of the way.

ACKNOWLEDGMENTS

The path to dreams may be mapped in solitude but is rarely traveled alone. One could not ask for a better company of fellow travelers than my colleagues of the Community College Leadership Program Block 62. To Maggie and Melissa, Val and Lisa, I owe special thanks for their inspiration, their encouragement, and their friendship. To mi hermana, Oralia, I owe all those thanks plus another: Thanks for reminding me how important it is in life to dance a happy dance.

One could not be more fortunate in the guidance and support of a doctoral committee than I. Dr. Patricia Somers has opened up so many ideas and opportunities for me, always challenging me to grow the skills of scholarship that have been vital to completing this study. In the visionary and broad-ranging work of my mentor and advisor, Dr. John Roueche, I have been inspired to look beyond the assumptions of the past and practice of the present to possibilities for the future. The advocacy and advice of Dr. Walter Bumphus, a leader for whom I have the deepest respect, has enriched and enabled this project in ways great and small. Dr. Tommy Darwin's work in community engagement helped me situate the construct of student engagement in a larger discourse of social life and how people engage in the world around them. Finally, the active support and incisive intellect of Dr. Kay McClenney have shaped this research in countless ways. Kay McClenney is engagement personified, and her ready feedback and thoughtful critique have been sources of rich learning and invaluable guidance.

The generous support of the Paul P. Fidler Research Grant from the National Resource Center for the First-Year Experience and Students in Transition has been invaluable in accomplishing the data collection and analysis required for this study. I am sincerely grateful for the Center's support of my research and my continuing development as a scholar.

To Dr. Nathan Marti of the UT Division of Statistics and Scientific Computation I extend warmest thanks. His own work on the original CCSSE validation synthesis was a major reference for this study and his kind guidance in developing the analysis of CCSSE data for the study was invaluable.

I am also indebted to the leadership of St. Philip's College, San Antonio College, Palo Alto College, and Northwest Vista College for their support for this research, as well as their practical assistance with getting the job of data collection done. My sincere thanks go to colleagues in the counseling departments of these colleges as well as the English departments of Palo Alto and Northwest Vista for their invaluable assistance with recruiting focus groups. To Dr. Jo-Carol Fabianke of the Alamo Colleges I owe a special debt of gratitude for her continuing advocacy and well-placed advice throughout this project. Special thanks is also owed to Dr. Thomas Cleary, whose support in navigating district information channels was critical to timely completion of the data collection phase of the project.

Along the path to this dream there have been many cheering from the sidelines.

A treasured advocate, Dr. Angela Oriano-Darnall has been an unending source of encouragement, sound advice, and get-the-spirit-girl pep talks. To Dr. Danette Toone,

stellar roommate and APA goddess, I owe many thanks for sharing late-night walks, coffee pot duty, and the unshakable belief that we would realize our goals. I am grateful too, to the other women in my life who have shared and encouraged me in my doctoral aspirations: my cousin, Judy, and my dear friends, Dava, Marci, Kim, and Iwona. Their faith in me and their patience with my unending preoccupation with school have sustained me through this long journey.

When all else is done, what we are left with is the love and support of those who are closest to use. So it is with acknowledging those whose support has made this work possible. To my amazing family, I offer my deepest love and gratitude for their enduring loyalty and unwavering support for my dream of earning a doctorate. With Bryon, my husband, my friend, my anchor, I've traveled through more than a dozen moves over three continents. This journey has in many ways been the most rigorous; yet once again we made it through together. Stephanie, my hard-rock geologist and fellow UT student, has traveled her own student path but always near enough so we could steady each other and laugh together. In the eyes of my son, Nathan, computer guy and new dad, the Mom I see reflected is always taller, thinner, and smarter than the one I see in the mirror. How lucky I am to have all of you. I am so proud of you! I am so proud of us!

THE RELATIONSHIP BETWEEN

STUDENT SUCCESS COURSE PARTICIPATION

AND ENGAGEMENT IN COMMUNITY COLLEGES

Publication No.

Maryellen Temple Mills, Ph.D.

The University of Texas at Austin, 2009

Supervisor: Patricia Somers

Research on student success courses indicates they contribute to successful

college transitions for four-year students. However, diverse demographics and

enrollment patterns among two-year students suggest that success courses may not

influence all students similarly. This mixed methods exploratory study examined success

courses in case studies of four large community colleges. CCSSE and focus group

assessments of engagement among course-takers and non-takers were compared for both

part-time and full-time students. Analysis of key college documents provided an

environmental overview as an interpretive context. Findings suggest that underprepared

students and older students respond differently to success courses than well-prepared

viii

traditional-aged students. Institutional commitment, instructor selection, and an active learning format are indicated as key elements for effective success courses.

TABLE OF CONTENTS

LIST OF TABLES	xviii
CHAPTER ONE	1
Introduction	1
THE HISTORICAL CONTEXT OF STUDENT SUCCESS PROGRAMS	3
The Development of Student Success Courses	5
From the Four-year University to the Community College	5
STATEMENT OF THE PROBLEM	8
Research Design	10
RESEARCH QUESTIONS	11
DEFINITION OF KEY TERMS	12
Assumptions	16
Limitations	18
SIGNIFICANCE OF THE STUDY	19
ORGANIZATION OF THE STUDY	20
CHAPTER TWO: REVIEW OF LITERATURE	22
THE COMMUNITY COLLEGE IN THE NEW MILLENNIUM	22
HISTORICAL AND CULTURAL CONTEXTS OF STUDENT SUCCESS IN COMMUNITY	
Colleges	24
Open Admission	25
Comprehensive Mission	26
Opportunity or Oppression?	28
Deficit Position	29
IDENTITY CRISIS IN THE COMMUNITY COLLEGE	31
Cultural Dominance of the Baccalaureate Model	31
Perspectives from Organizational Theory	32
Image and Economics in Postsecondary Education	35
Baccalaureate Assumptions and Cultural Reproduction	37

Institutional Differences and Questions of Alignment	38
Differences in Student Populations	40
Relative Definitions of Success	41
The Impact of How Success is Defined	43
Persistence and Engagement	44
Theories and Constructs of Engagement	46
Theoretical Alignment with Community Colleges	50
Patterns of College-Going as Mediating Influences on Engagement	52
Environment and Engagement	54
MOVING FROM THEORY TO PRACTICE: STUDENT SUCCESS COURSES	56
The Evolution of Student Success Courses	56
Description of Student Success Courses	58
Issues with Success Course Implementation	62
Success Courses in the Persistence Literature	63
Success Course Research in Community Colleges	66
Conclusion	74
CHAPTER THREE: METHODOLOGY	76
Chapter Overview	76
THE RESEARCH PROBLEM	77
RESEARCH GOALS AND QUESTIONS	79
THE CONCEPTUAL FRAMEWORK	80
RESEARCH SITE SELECTION	81
PARTICIPANT SELECTION	84
CCSSE Sampling Process	84
Focus Group Participant Selection	87
THE RESEARCH DESIGN	89
Data Collection	90
Instrumentation	91
Student Focus Group Data	93

Document Collection for Review	93
QUANTITATIVE METHODS	94
Explanation of Variables	95
Statistical Processes	96
QUALITATIVE METHODS	97
Data Analysis Process Summary	98
RELIABILITY AND VALIDITY	98
Quantitative Data	99
Qualitative Data	99
ETHICAL CONSIDERATIONS	100
Permissions	100
Confidentiality	101
Consent	101
Summary	101
CHAPTER FOUR: NORTHWEST VISTA COLLEGE	103
Introduction	103
THE COLLEGE	104
Demographic Profile	104
Student Development (SDEV) Course Background	106
Institutional Policy on SDEV	107
Course Iterations	108
Analysis of Primary Electronic Documents	109
Web Site Review	109
College Catalog Review	111
Document Analysis Summary	112
Quantitative Data	112
Sample	112
Notes on Statistical Procedures	115
Research Question 1	117

Analysis of Engagement Benchmarks	118
Analysis of Engagement Factors	121
Model Summary	123
Research Question 2	123
Analysis of Engagement Benchmarks	125
Analysis of Engagement Factors	128
Model Summary	131
Qualitative Data	131
Sample	133
Research Question 3	134
Student Perceptions of SDEV	134
Valued Learning in SDEV	137
Major Theme: Interactive Classes Work	139
Major Theme: Good Instructors Make Good SDEV Classes	141
Research Question 4	142
SUMMARY OF CASE	143
CHAPTER FIVE: PALO ALTO COLLEGE	147
Introduction	147
The College	147
Demographic Profile	148
Student Development Course Background	150
SDEV Policy and Practice	150
Course Iterations	151
Analysis of Primary Electronic Documents	153
Web Site Review	153
College Catalog Review	154
Document Analysis Summary	155
Quantitative Data	155
Sample	155

Notes on Statistical Procedures	157
Research Question 1	159
Analysis of Engagement Benchmarks	160
Analysis of Engagement Factors	161
Model Summary	163
Research Question 2	163
Analysis of Engagement Benchmarks	164
Analysis of Engagement Factors	167
Model Summary	169
Summary of Quantitative Findings	169
Qualitative Data	170
Sample	171
Research Question 3	174
Student Perceptions of Self as Learner	175
Student Perceptions of the Value of SDEV	178
Major Theme: Interactive Classes Work Preferred	179
Major Theme: Relationships Key to Success	180
Research Question 4	181
Summary of the Qualitative Findings	183
Summary of the Case	184
CHAPTER SIX: SAN ANTONIO COLLEGE	187
Introduction	187
THE COLLEGE	187
Demographic Profile	187
Student Development (SDEV) Background	189
SDEV Policy and Practice	189
Course Iterations	190
Analysis of Primary Electronic Documents	191
Web Site Review	192

College Catalog Review	194
Document Analysis Summary	194
Quantitative Data	196
Sample	196
Notes on Statistical Procedures	198
Research Question 1	200
Analysis of Engagement Benchmarks	200
Analysis of Engagement Factors	202
Model Summary	203
Research Question 2	203
Analysis of Engagement Benchmarks	204
Analysis of Engagement Factors	206
Model Summary	209
Summary of Quantitative Findings	209
Qualitative Data	210
Sample	211
Research Question 3	213
Perceptions of Self-as-Learner	216
Value of SDEV	216
Value of Self-Knowledge and Life Skills Gained in SDEV	217
Value of College Knowledge and Learning Skills Gained in SDEV	218
Major Theme: The Instructor's Style Matters—A Lot!	219
Major Theme: Interactive Classes Work	220
Research Question 4	220
Summary of the Qualitative Findings	221
SUMMARY OF CASE	221
CHAPTER SEVEN: ST. PHILIP'S COLLEGE	224
Introduction	224
THE COLLEGE	224

Demographic Profile	225
Student Development (SDEV) Background	226
Institutional Policy on SDEV	227
Course Iterations	228
Analysis of Primary Electronic Documents	228
Web Site Review	229
College Catalog Review	231
Summary of Document Analysis	232
Quantitative Data	233
Sample	233
Notes on Statistical Procedures	235
Research Question 1	237
Analysis of Engagement Factors	238
Model Summary	240
Research Question 2	240
Analysis of Engagement Benchmarks	241
Analysis of Engagement Factors	243
Model Summary	244
Qualitative Data	245
Sample	245
Research Question 3	246
The Value of SDEV	246
Aspects of SDEV that Were Not Useful	249
SDEV as a Required Class	251
Research Question 4	252
SUMMARY OF CASE.	253
CHAPTER EIGHT: CONCLUSIONS	258
STUDENT DEVELOPMENT POLICY IN THE ALAMO COLLEGES	259
Review of Document Analyses	260

Research Question 1	265
A Look at the Constructs	266
Research Question 2	268
Considerations in Understanding Data	270
Intent to Treat and Variable Definition	272
Research Question 3	273
Research Question 4	276
Conclusions	276
Key Findings	277
Instructional Commitment Is Not Optional	277
Instructors Make the Course	278
Active Learning Is Critical	279
Not Everyone Needs the Same Thing	279
Recommendations for Further Research	280
APPENDIX A	283
APPENDIX B	284
APPENDIX C	292
APPENDIX D	295
APPENDIX E	298
APPENDIX F	300
APPENDIX G	302
APPENDIX H	304
APPENDIX I	308
REFERENCES	309
VITA	326

LIST OF TABLES

Table 3.1: Total CCSSE Samples and Total Matched Case Samples	
by College and Year	85
Table 4.1: Summary of NVC Student Demographic Attributes	105
Table 4.2 NVC SDEV Enrollment by Year	113
Table 4.3: NVC Quantitative Sample Demographics	114
Table 4.4: Descriptive Statistics for Dependent Variables	
(CCSSE Benchmarks and Factors) for NVC	116
Table 4.5: Descriptive Statistics for SDEV Enrolled	118
Table 4.6: Summary of Linear Regression for all Engagement Benchmarks	s and Factors
by Success Course (SDEV) Enrollment	119
Table 4.7: Descriptive Statistics for Average Attempted Hours at NVC	124
Table 4.8: Summary of Multiple Regression Analysis of Engagement	
Benchmarks and Factors on SDEV Enrollment Status	
and Average Hours Attempted.	126
Table 4.9: NVC Focus Group Demographic Profile	132
Table 5.1: Summary of PAC Student Demographic Attributes	149
Table 5.2: PAC SDEV Enrollment by Course and Year	156
Table 5.3: PAC SDEV Enrollment by Course and Year	157
Table 5.4: Descriptive Statistics for Dependent Variables	
(CCSSE Benchmarks and Factors) for PAC	157
Table 5.5: Descriptive Statistics for SDEV Enrolled Independent	
Variable at PAC	159
Table 5.6: Summary of Linear Regression Statistics for all Engagement Be	enchmarks and
Factors by Success Course (SDEV)	
Enrollment at PAC	161

Table 5.7:	Descriptive Statistics for Average Attempted Hours Independent Variable	at
	PAC	164
Table 5.8:	Summary of Multiple Regression Analysis of Engagement	
	Benchmarks and Factors on SDEV Enrollment Status	
	and Average Hours Attempted.	165
Table 5.9:	PAC Focus Group Demographic Profile	173
Table 5.10	2: PAC Focus Group Response Summary (Number Preceding Response Eq	uals
	Number of Responses in Group)	176
Table 6.1:	Summary of SAC Student Demographic Attributes	188
Table 6.2:	SAC SDEV Enrollment by Course and Year	196
Table 6.3:	SAC Quantitative Sample Demographics	197
Table 6.4:	Descriptive Statistics for SDEV Enrolled Independent	
	Variable at SAC	198
Table 6.5:	Descriptive Statistics for Dependent Variables (CCSSE Benchmarks	
	and Factors) for SAC	199
Table 6.6:	Summary of Linear Regression Statistics for CCSSE Benchmarks and	
	Engagement Factors	201
Table 6.7:	Descriptive Statistics for Average Attempted Hours Independent Variable	at
	SAC	204
Table 6.8:	Summary of Multiple Regression Analysis of Engagement Benchmarks at	nd
	Factors on SDEV Enrollment Status and Average Hours Attempted at SA	C.
		.205
Table 6.9:	Demographic Summary for SAC Focus Group Sample	212
Table 6.10): SAC Focus Group Response Summary (Number Preceding Response Eq	ual
	Number of Responses in Group)	.214
Table 7.1:	Summary of SPC Student Demographic Attributes	.225
	SPC Quantitative Sample by SDEV Enrollment by Course and Year	
Table 7 3.	Demographic Summary for SPC Quantitative Sample	234

Table 7.4: Descriptive Statistics for Dependent Variables (CCSSE Benchmarks and	
Factors) for SPC	36
Table 7.5: Descriptive Statistics for SDEV Enrolled Independent Variable at SPC23	37
Table 7.6: Summary of Linear Regressions for CCSSE Engagement Benchmarks and	
Factors by SDEV Enrollment for SPC	39
Table 7.7: Descriptive Statistics for Average Attempted Hours Independent Variable at	-
SPC24	41
Table 7.8: Summary of Multiple Regressions for CCSSE Engagement Benchmarks and	i
Factors by SDEV Enrollment and Average Attempted Hours24	42
Table 7.9: SPC Focus Group Demographic Profile	47
Table 7.10: SPC Focus Group Response Summary (Number Preceding Response Equa	1
Number of Responses in Group)	50
Table 8.1: Summary of Linear Regressions for CCSSE Engagement Constructs by	
SDEV Enrollment for All Colleges	56
Table 8.2: Summary of Multiple Regression Analyses for CCSSE Engagement	
Constructs by SDEV Enrollment And Average Attempted Hours for All	
Colleges	59

CHAPTER ONE

Introduction

Since the early 1970s, U.S. postsecondary enrollment has grown from about 8.5 million to nearly 17.5 million students including substantial proportional increases in college-going among women and minorities (NCES, 2006). Increased enrollment, however, has not translated into overall increases in graduation rates. Studies on national data sets find that even though more students are entering postsecondary education, graduation rates have remained fairly static since the early 1970s (Adelman, 2004; Barton, 2002; Horn & Berger, 2004).

At baccalaureate colleges and universities the average five-year degree completion rate hovers around 53 percent (Horn & Berger, 2004; Wirt, Choy, Rooney et al., 2004). Students who begin their postsecondary educations at community colleges persist at lower rates than those at baccalaureate institutions. Half of first-time, full-time (FTFT), degree-seeking community college students do not return for a second year, a rate that Tinto (1993) notes has remained consistent for decades. According to widely used computational methods, slightly more than one-third complete a degree or certificate within six years (Hoachlander, Sikora, & Horn, 2003; Phillipe & Sullivan, 2005).

Persistence and degree completion rates are widely regarded as key indicators of student success in postsecondary education (Roueche, Johnson, & Roueche, 1997). Although student success is primarily about helping students reach their goals and improve their lives, it is also an increasingly important part of maintaining fiscal viability for colleges. Retaining students from one year to the next is substantially less costly than recruiting new students (Wild & Ebbers, 2002). Success indicators tracked through the Integrated Postsecondary Education Data System (IPEDS) also figure prominently in public perception of quality among postsecondary institutions, as do calculations of popular national college rankings (e.g., US News: America's Best Colleges). Federal performance measures reflected in the Higher Education Amendments (1998) and the Carl D. Perkins Vocational and Applied Technology Education Amendments (1998) define successful outcomes primarily in terms of completion of formal credentials (Hoachlander et al., 2004). At the state level, annual higher education "report cards" on key success indicators are made available to the public in 44 states. Over half the states now practice performance budgeting where institutional outcome data are considered in drawing up state budgets. Eighteen states practice performance funding, which ties some measure of funding for colleges directly to their performance on given criteria (Bailey, Calcagno, Jenkins, Keinzl, & Lienbach, 2005).

Persistence and student success are critical issues to multiple stakeholders across the postsecondary education sector and are supported by one of the most extensive areas of scholarship in higher education (Braxton & Lein, 2000). At the institutional level, that

research is articulated into a welter of practices, programs, and initiatives designed to retain students and increase graduation rates. That aggregate retention rates have remained stubbornly stable through an era of extensive retention research and significant investment in campus-based efforts to enhance student success is no small irony.

The Historical Context of Student Success Programs

While postsecondary student persistence rates have changed little over the decades, how that problem is understood and studied within academic culture has changed substantially. As enrollment expanded to include a broader cross section of Americans in the early 1900s, questions about why some students left college were framed in terms of "college student mortality" and "patterns of academic failure" (Berger & Lyons, 2005, pp. 14-15). At mid-century postsecondary education entered a period of stunningly rapid transformation. Veterans' benefits established by the Servicemen's Readjustment Act (1944), the Truman Commission (Higher Education for Democracy, 1947) mandate for universal access to free postsecondary education, and the National Defense Education Act (1958) brought to college campuses a massive influx of students, many of whom were underprepared. Discussion of attrition turned to the relationship between student departure and student characteristics associated with academic failure, and then to academic preparation and student satisfaction. Increasingly, college departure was seen as "more complicated than a simple matter of academic fit and success" (Berger & Lyons, 2005, p. 17).

The perspective on college-leaving behavior shifted yet again when projected enrollment declines in the early 1970s. Scholarly attention turned away from why

students failed and dropped out toward how to keep students enrolled. Retention research and theory development surged through the next decade, producing seminal work by Tinto (1975), Astin (1977), and others that laid a foundation for successive waves of theory building, studies, and developing practice related to retention (Berger & Lyon, 2005).

The 1990s brought growing recognition that modes of college-going were changing and led to revised thinking about retention. An increasingly mobile culture many students were attending more than one institution before earning their degrees, redefining success in terms of completion of the credential rather than attending and graduating from the institution. Discussions of retention issues were more often framed in terms of student *persistence*, reflecting a student-centered rather than institutionally grounded understanding of behavior leading to college completion.

In the first decade of the new Millennium, the discussion continues and the study of student persistence has developed its own identity.

The early twenty-first century has dawned with retention fully entrenched as a major policy issue and a well-established professional realm that has brought researchers and practitioners together in widespread efforts to better serve and retain college students throughout the country. Retention efforts are well established on virtually every campus in the nation, retention is used as a key indicator of institutional effectiveness, there are literally thousands of studies on this topic... (Berger & Lyon, 2005, p. 25)

The widespread retention efforts noted above represent continuing efforts to operationalize theories of student persistence to provide mediating programs and services. Among the most established and pervasive of these is the student success course (Barefoot & Fidler, 1992).

The Development of Student Success Courses

The general category of student success courses includes a broad collection of courses that share a central goal to help students develop knowledge, skills, and relationships that will help them persist and succeed in college. Course activities commonly focus on orienting participants to the institution and its programs and teaching important academic survival skills (Pascarella & Terenzini, 1991). These courses are variously referred to by names such as freshman or first-year seminar, or as college survival, extended orientation, student development, or study skills courses.

Although student success courses can be traced back as far as 1880 (Mamrick, 2005), their current popularity owes much to the University of South Carolina (USC) University 101 model. The University 101 freshman seminar model was conceived in 1972 as a means of acculturating incoming students to the traditions, culture, and expectations of the institution. The success of USC's model in improving student persistence and performance led USC to establish The National Center for the Freshman Year Experience and Students in Transition (NCFYEST) in the early 1980s (Mamrick, 2005). That decision made the freshman seminar success course model perhaps the most visible retention initiative in higher education history.

From the Four-year University to the Community College

Currently, 95 percent of four-year colleges and universities offer some iteration of a student success course (Barefoot, 2002). The student success course model has become increasingly common on two-year campuses as well, where one or more success

courses are offered by 60 percent of colleges (Tobolowsky, 2005). Success courses have been widely supported for decades through federally funded programs such as TRIO (Meyers, 2003), and advocated by nationally recognized postsecondary education figures such as John N. Gardner of NCFYEST (1986), Ernest Pascarella et al. (1986), and John Roueche (1999). More recently, success courses for community colleges have been supported through national student success initiatives such as Achieving the Dream (Brock et al., 2007) and the Community College Survey of Student Engagement (CCSSE) (2003-2009).

The fact that both student success courses and the vast majority of related scholarship derives from four-year college culture becomes significant when considering their widespread adoption on two-year college campuses. Although baccalaureate institutions include a wide range of institutional types, missions, and student populations, they also share significant commonalities with regard to undergraduates. Most four-year colleges are residential and have relatively developed on-campus social cultures. Most are selective to some degree in their admissions processes. About 80 percent of their students attend full time and more than three-quarters of these are under age 25 (NCES, 2006). And though four-year college students pursue a wide range of programs, they share the relatively homogeneous goal of earning a baccalaureate degree (Bailey et al., 2005; Bers & Smith, 1991).

Community colleges share the commitment to delivering quality undergraduate general education with their baccalaureate counterparts. Due to their comprehensive missions, however, most offer multiple educational pathways that complicate

generalities about these institutions or their students. Their program offerings include technical degrees and certificates, workforce training, adult basic education, high school equivalency preparation, English as a Second Language (ESL) classes, developmental education, continuing education, community development, and enrichment classes in addition to their transferable associate degrees (Phillipe & Sullivan, 2005).

Open door admission policies at community colleges make postsecondary education available to all adults. Consequently, students who attend community colleges have a higher rate of risk factors associated with lower persistence and completion rates than students at competitive admission baccalaureate institutions (Bailey et al., 2005; Phillipe & Sullivan, 2005). More than half are the first in their families to go to college (Chen, 2005). The average age of students is 29, and about half are over age 25 (AACC, 2008; NCES, 2006). More than 60 percent are academically underprepared in one or more basic skills areas (Adelman, 2004). A disproportionately high percentage of community college students are from low-income families, and a third are minorities (AACC, 2008; Choy, 2000). Up to 84 percent work while enrolled, including more than a third who work full time (AACC, 2008; Bryant, 2001). Fully a third also care for dependents (CCSSE, 2007), and nearly two-thirds attend part-time (NCES, 2006; Phillipe & Sullivan, 2005).

Considering these substantial differences in background, obligations, resources, and enrollment patterns, it seems highly unlikely that the same policies and initiatives would be equally effective for both types of institutions (Bailey & Alphonso 2005).

Statement of the Problem

Pressures on community colleges to improve student outcome measures continue to intensify, as do pressures to be both effective and efficient in implementing the student success strategies they choose. In this increasingly stringent accountability environment, even accepted practices and approaches related to persistence are opened up to re-evaluation, not only regarding whether they have a positive impact on student outcomes, but whether they have the most positive impact possible on the most students. The question becomes whether the strategies in use are really the best practices for meeting the goals they address, or whether they are simply the most familiar.

Student success courses were developed in traditional four-year colleges, and they are rooted in persistence theory that generally assumes colleges are residential baccalaureate institutions and college students are traditional-aged and full-time. The preponderance of existing research on success courses was also conducted in four-year colleges (Pascarella & Terenzini, 2005), and supports student success courses as effective in improving student outcomes in that environment (e.g., Barefoot, 2002; Cuseo, 1997; Pascarella & Terenzini, 2005; Patton, Morelon, Whitehead, & Hossler et al., 2006).

Widespread adoption of success courses on community college campuses indicates that student success courses are regarded as valuable and effective retention strategies by professionals in the two-year sector of postsecondary education as well. However, empirical evidence supporting positive success course effects in two-year

colleges is sparse and consists primarily of single institution studies that do not support generalization (Bailey & Alfonso, 2005; Bailey et al., 2004; Braxton et al., 2004; Derby & Smith, 2004; Karp, O'Gara, & Hughes, 2008).

Calls for additional research on retention practices in two-year colleges are widespread. Wild and Ebbers (2002) term the need to develop theory and research focused specifically on community colleges and their students as "critical" (p. 504). Bailey and Alfonso (2005), Hurtado and Carter (1997), and Zeidenberg et al. (2007), advocate specifically for research on how student success courses influence outcomes for students of different racial, ethnic, and age groups, and for part-time students. Part-time students account for more that 60 percent of community college enrollment (NCES, 2006, table 179) and they persist at lower rates than full-time students (Chen, 2007; Hoachlander et al., 2003; Horn & Berger, 2004; Mohammadi, 1996; Phillipe & Sullivan, 2005). Though success courses would seem to be an ideal strategy to help part-time college students succeed, understanding how these students experience such courses is critical to realizing such outcomes.

Without a substantial body of empirical evidence regarding success course effectiveness in the very different culture of community colleges, important questions about whether, how, and for whom these courses support success are difficult to answer. How do the underlying assumptions about colleges and students in baccalaureate research affect the relationship between success courses and student outcomes in the two-year college? To what extent, and in what circumstances, are these courses effective in improving community college student outcomes? What are the similarities

and differences in how success courses influence outcomes among student from various demographic groups, and those with different enrollment patterns? Ultimately, the question is to what extent success courses have been effectively adapted for these colleges and their diverse student populations?

Research Design

Student success courses are designed to help entering students gain skills, knowledge, and experiences that will help them succeed in college. In other words, success courses purposefully foster development of the tools and experiences for successfully engaging in college. It follows, then, that a reasonable assessment of success course effectiveness could be made by comparing the differences in engagement among students who took the course with those who did not. Although specific constructs of engagement vary across different models, they share the core understanding of engagement as active participation in purposeful educational experiences (Marti, 2007).

This study examined the relationship between participation in a student success course and engagement among full- and part-time students at four large Texas community colleges. The study was conducted in Northwest Vista College, Palo Alto College, San Antonio College, and St. Philip's College, the four accredited colleges of the Alamo Community College District in San Antonio, Texas: A fifth ACCD college, Northeast Lakeview, is newly established and still undergoing accreditation process; thus it was excluded from this study. San Antonio is one of the fastest growing metropolitan areas in the U.S. with a richly diverse population of 1,256,509,

representing 9.77 percent growth from the year 2000 through 2005. ACCD's enrollment has grown by more than 40 percent since 1999 to 52,010 in Fall 2008. The District's student population is 50 percent Latino, 39 percent White, seven percent Black, and three percent Asian (AtD college profile, ACCD webpage).

The study was conducted using a mixed methods approach that combined analysis of CCSSE quantitative survey data and focus group data to develop case studies of the relationship between success courses and engagement at the district level and at each of four participant colleges. Quantitative data collected for the study consisted of CCSSE data for each of the four colleges from the 2005 and 2007 survey administrations. Voluntary student ID numbers provided on the CCSSE instrument were matched to institutional enrollment data to define the study samples. Student focus groups conducted at each of the four colleges provided qualitative data.

Research Questions

This study was guided by the following questions:

- 1. What is the relationship between participation in a student success course and engagement in college as measured by the Community College Survey of Student Engagement (CCSSE)?
- 2. How does the relationship between success course participation and engagement as measured by CCSSE compare for part-time and full-time students?
- 3. What insights do student views on success course participation as expressed in focus groups contribute to the quantitative analysis of the course participation/engagement relationship?

4. In what ways do student views on success course participation as expressed in focus groups inform analysis of the course participation/engagement relationship for full-time and part-time students?

Definition of Key Terms

The role of language in constructing our understanding of colleges, students, and the factors that influence students' persistence in college will be core to this study's examination of the relationship between success course participation and student engagement in college. Successful completion of the research will require careful delineation of terms and understandings. To facilitate careful and consistent use of language, key terms are defined below.

Alignment. The notion of alignment was a critical concept in this study. In the business world the term is used to refer to consistency in policy, plans, processes, information, and actions in support of broadly shared purpose and goals. In this study, alignment is used to express a consistency in deeper, sometimes subconscious levels of assumptions, perceptions, and beliefs that shape the way we understanding the world around us.

At-risk. The term "at-risk" is used to describe students who have one or more characteristic that increases their risk of their leaving college before completing a program. Common risk factors include delayed entry to postsecondary education, being the first generation in the family to go to college, attending part time, working full time, being financially independent of parents, having dependents, being a single parent, and not having a high school diploma. As a given student's number of risk factors increases, likelihood that student will leave also increases (CCSSE, 2003-2008).

Attrition. The term "attrition" refers to institutional loss of students who do not reenroll at the same college in subsequent semesters (Berger & Lyon, 2005).

Baccalaureate college. The terms "baccalaureate college" and "four-year college" are used interchangeably in this study to refer to public or private not-for-profit postsecondary institutions where baccalaureate degrees represent at least 10 percent of all undergraduate degrees and that award fewer than 50 master's degrees or 20 doctoral degrees per year (Carnegie, 2007).

Community college. The terms "community college" and "two-year college" are used interchangeably to refer to postsecondary institutions where the associate's degree is the highest degree offered. This definition is becoming increasingly problematic as more community colleges offer baccalaureate degrees, as exemplified by recent changes in the Carnegie classification system (Carnegie, 2007). For the purpose of this study, however, use of "community college" and "two-year college" will assume inclusion of public and private not-for-profit institutions where associate degrees remain primary and no more than 10 % of degrees conferred are at the baccalaureate level.

Course delivery. The term "course delivery" refers to the composite of two important aspects of the student success course approach: instructional mode and course format. Instructional mode denotes ways of organizing activities and experiences so that effective learning takes place (e.g., active learning or collaborative learning). Course format denotes the structure and resources involved in presenting the course and may vary in terms of mediating technology (e.g., distance learning, video streaming), form of instruction (e.g., online tutorial or instructor-led seminar), or schedule structure (e.g., self-paced learning, 8- or 16-week course).

Dropout. The term "dropout" refers to a student who leaves college before completing his or her initial educational goal (Berger & Lyon, 2005).

Engagement. The term "engagement" refers broadly to active participation in purposeful educational experiences. According to Kuh, Kinzie, Schuh, and Whitt (2005), "What students *do* during college counts more in terms of desired outcomes than who they are or even where they go to college" (p. 5).

Environment. This study defines environment (also campus environment) as including everything that a student experiences during the course of an educational program that might conceivably influence the outcomes of that program. Environment, according to Astin (1993), includes "not only the programs, personnel, curricula, teaching practices, and facilities that we consider to be part of any educational program but also the social and institutional climate in which the program operates" (p. 81).

Graduate, complete, and *succeed.* All of these terms are used to refer to completion of courses of study at a postsecondary institution, including earning a certificate or degree, or transferring to a baccalaureate institution. They are used interchangeably here for readability.

Model. The term "model" is used interchangeably with "theoretical perspective."

Orientation or orientation program. Orientation programs vary but generally refer to programs to help students develop the initial skills, knowledge, and experiences that help them adjust to college (Upcraft, Gardner, & Barefoot, 2005). For the purposes of this study, orientation programs are considered to include activities conducted before or at the beginning of an academic term and include common elements such as assessment, developmental academic advising, and registration. In two-year colleges, orientations tend to be short in response to schedule demands of students (Cook, 2000).

Persistence. The term "persistence" has been variously defined in terms of time units: semester to semester, year to year, or entry to graduation. In the past persistence has referred to continuing enrollment in college from entry to degree completion (Berger & Lyon, 2005). However, diversity of students, educational goals, and institutional type have contributed to a broader understanding of persistence as continued enrollment over time that may or may not be continuous and may or may not result in degree completion (Tinto & Pusser, 2006). The latter understanding is assumed in this study.

Retention. The term "retention" refers to an institutional rate at which students remain at the same institution where they start until they complete a program or goal. Students who transfer to other institutions before completing a degree usually are considered not to have been retained (Berger & Lyon, 2005; CCSSE, 2003-2008). Definitions of retention are important in performance reporting, where government requirements at both state and federal level define how the term "retention" will be applied.

Student outcomes. The term "student outcomes" refers to defined results of learning experiences. The majority of existing research indicates that student success courses have positive effects on student outcomes in four-year colleges (Pascarella & Terenzini, 2005).

Student success course. The designation of "student success course" is used in this study to include a broad range of courses offered with the primary goal of supporting students in making the academic and social transitions to college. Success courses may be referred to by various names, including freshman seminar, college survival course, study skills course, and extended orientation course. Two-year colleges tend to focus on introduction to college resources, study and time management skills, career development activities, and life management skills (Brock et al., 2007; Stovall, 2000).

Theoretical perspective. A theoretical perspective makes assumptions about a particular aspect of society and attempts to integrate various kinds of information in relation to those assumptions. Theoretical perspectives help us make meaning of what we see and experience. Certain consequences result from using a particular model (Lerner, 1998).

Three-peat tuition. The State of Texas subsidizes the education costs of resident college students. Changes in state tuition guidelines dictate that the State will no longer subsidize a student's enrollment for a third or subsequent attempt. Students registering a third or subsequent time for a course are charged a higher rate of tuition, in many cases the out-of-state rate. Students may be exempted

from three-peat tuition for courses repeated in the final term before graduation if the courses are taken to satisfy a degree requirement (NVC, 2008b).

Traditionally underrepresented students. Groups whose representation among college-going populations has been significantly lower than would be expected considering their overall demographic presence are referred to by this term. Traditionally underrepresented students include ethnic minorities, first-generation students, low-income students, English language learners, adult learners, and academically underprepared students.

Assumptions

The original idea for this study was to conduct a fairly tightly focused effort to measure the influence of student success courses on community college students using measures of engagement. Along the way, however, the researcher's long acquaintance with student success courses collided with a separate research project on the cultural work done by metanarratives (e.g., the American Dream) to protect and reproduce privilege in higher education. Questions opened up led to consideration of embedded narratives and implicit assumptions in dominant theoretical constructs as well as research designs derived from elite higher education cultures. From that work came still more questions about how such narratives and assumptions align with the very different cultures, missions, and populations of community colleges, and further, how a verdict of substantial misalignment might shape perceptions of effective practice in those two-year institutions. The intellectual road trip described here is detailed in the literature review in Chapter 2. However, the researcher must at this point foreground her own assumptions that (1) dominant cultural discourse of elite higher education has a subtle but significant effect on how community college practitioners perceive practices, and (2) that this effect may reproduce inefficiencies and limit innovation by obscuring possibilities for enhancing student success.

This study is built around the construct of student engagement and assumes, based on extant research, that student engagement is indeed a meaningful and measurable construct that predicts success in college. It is also assumed that there is a relationship between success course participation and engagement in college. Success courses are generally intended to help the student acquire critical knowledge, learning strategies, and supportive relationships to help them successfully engage in college and, ultimately, to succeed in reaching their educational goals. Therefore, effects related to participating in initiatives designed to support and enhance student engagement should be measurable in ways that can describe the relationship between success course participation and engagement in college.

There are four different student development courses taught in Alamo Colleges: SDEV 0170: SDEV 0171, SDEV 0173, and SDEV 0370. These courses are targeted for different audiences—general population, significantly underprepared students, or academic probation students—but they share the goal of building skills and experiences that help students successfully engage in college. For the purposes of this study, it was assumed that all students who enrolled in any SDEV course should be considered "SDEV enrolled."

Limitations

The Alamo Colleges offer student development courses in a variety of course delivery systems including distance learning. Examination of particular course formats is beyond the scope of this study. This analysis focused on seated SDEV courses taught on main or extension campuses.

Changes in success course policies and practices over the time period reviewed in this study have been significant in some of the colleges studied, and less so in others. These differences might have influenced how students experiences in success courses on the respective campuses in ways that are not anticipated or addressed in this study.

The quantitative portion of the study employed an exploratory model using CCSSE data from the four research sites to assess the influence of student success courses on engagement. The number of student cases for each institution was determined by the percentage of voluntary ID numbers provided on the CCSR. Fairly low ID report rates, data cleaning and matching processes, and missing data fields reduced that yield substantially. CCSSE administration procedures are designed to ensure a randomized sample; however, the effects of the record matching process on randomization are not known.

The choice to look at success course engagement in terms of part- and full-time enrollment skips past many aspects of difference that are overrepresented on community college campuses. Enrollment status was seen as a composite function of a multitude of

factors that bound and restrict college-going for the majority of community college students.

Factors other than those examined in this study may influence success course outcomes in ways that are not apparent. The analysis provided by this study is meant to inform practice and support further research.

Significance of the Study

The relationship between campus-based success initiatives and engagement has been unexplored to this point. Engagement is a clear and meaningful theoretical construct that is both connected to an established body of literature and capable of articulating how diverse students learn at a comprehensive community college. Looking at success course outcomes in terms of engagement paints a clear, student-centered target for course outcomes. It also provides a useful frame for looking at variables in and around the success course (e.g., campus environment, course structure) that mediate how success courses shape the way students engage in college.

The Community College Survey of Student Engagement (CCSSE) provides a validated tool (McClenney & Marti, 2006; Marti, 2009) that opens up new possibilities for understanding how student success practices shape student engagement. In addition, the concepts and student experiences it measures offer rich opportunity for pairing with qualitative data in mixed methods research. The potential benefits of this line of inquiry are considerable, not the least of which is the rich interpretation enabled by both types of data when they are used in tandem.

This study took a first step in examining how student attitudes and behaviors change after participating student success course. Understanding the relationship between success courses and different measures of student engagement can provide valuable insights into how success courses influence student outcomes and how that influence varies between student groups. Such insights could help community college administrators and practitioners shape success course models, policies, and practices to better meet the needs of their diverse student populations.

This research also adds to the literature on college experiences of full- and parttime students. Specifically, findings may contribute to a better understanding of the relationship between success course participation and engagement, as well as the particular engagement and college experiences of full-time and part-time students.

Organization of the Study

The study outlined here is presented in seven chapters. The first chapter provides an introduction to postsecondary education's economic and institutional motivations to improve retention and completion rates and some obstacle to doing so. The research problem stems from misalignment between the baccalaureate assumptions about college and college students and the very different culture and students in community colleges. Limited supporting literature and the reputational standing of success courses—largely inherited from four-year colleges—may obscure insights that would help evolve these courses in ways that would better serve the diverse student populations of community colleges.

Chapter 2 contains a review of literature, which surveys areas of existing scholarship most closely related to this study of student success courses and engagement. The review is organized to accomplish three purposes: (1) explore alignment between foundational assumptions of dominant persistence theory and the implications of that alignment for community college practice; (2) review the literature on student engagement theory, its antecedents, and its capacity to articulate factors contributing to student success in a community environment; and (3) examine the literature on student success courses to describe both historical and empirical support for its widespread adoption in community colleges.

Chapter 3 delineates the details of the mixed method research approach that was employed in collecting data for the study as well as the data analysis process. Chapters 4, 5, 6, and 7 report the study's findings in individual case studies of the participating colleges. Finally, Chapter 8 presents the study's conclusions, implications, and recommendations in a cross-case overview.

CHAPTER TWO: REVIEW OF LITERATURE

The Community College in the New Millennium

Over the last half of the Twentieth Century U.S. community colleges evolved toward the vision established by the Truman Commission in 1947 (Higher Education, 1947): to develop "a network of public community colleges that would charge little or no tuition, serve as cultural centers, be comprehensive in their program offerings with emphasis on civic responsibilities, and would serve the area in which they were located" (n. p.). Often called "democracy's colleges," the nation's system of two-year public colleges is a uniquely American sector of postsecondary education. As higher and higher percentages of the American public streamed into the halls of postsecondary learning, a growing rank of low-cost comprehensive community colleges held open the doors to accommodate them. Today the U.S. system of 1,195 community colleges offers open admissions college programs and services within less than an hour's drive of the vast majority of Americans. About half the undergraduates in U.S. postsecondary education enroll in community colleges, including more than half of college-going students of color (AACC, 2008; National Center for Educational Statistics, 2006). Among those are a disproportionate majority of students of color, students who are economically disadvantaged, students who are academically underprepared, and students with limited in English language skills (Grubb, 1999; Mellow & Heelan, 2008).

Just over the threshold of the new Millennium, community colleges face unprecedented challenges. Roueche and Roueche (1999) have contended that "community colleges may be the best institutions of higher education to develop viable

responses to many of the country's problems" (p. 1). However, the diversity and extent of such problems continue to mount, placing more diverse demands on these institutions. Recent decades have marked massive technological changes, growing competition from other education sectors, increasingly diverse and underprepared students, and concern over steady decline of U.S. educational attainment in international rankings (McCabe, 2000; NCES, 2006; Nora, 2006; Roueche & Roueche, 1993; 1999). Perhaps the single most critical challenge faced by all of higher education "is the powerful way in which the knowledge economy has altered the standards for all of work, as well as participation and world polity" (Mellow & Heelan, 2008, p. 9). Training a workforce to feed that knowledge economy is exponentially complicated by faltering U.S. and global economies and strong indicators of serious, long-term economic depression.

As community colleges stretch to meet the educational needs of diverse stakeholders in these uncertain times, they do so with dwindling revenue streams from federal and state governments, enrolling about half the nation's postsecondary students while receiving only 20 percent of higher education funding (Mellow & Heelan, 2008). At the same time, two-year institutions face increasingly stringent requirements for performance reporting and funding (Dowd, 2003; St. John, 2006). Producing documented increases in student persistence and completion rates is not only seen as a measure of institutional effectiveness, but as a vital element of the economic health of the nation (USDOE, 2006). Yet such increases are elusive. In spite of substantial expenditures on a welter of programs and initiatives in recent decades, composite persistence rates of community college students show no substantial change from those

reported 10 or even 20 years ago (Nora, 2006). Overall completion rates remain well below the averages of any other postsecondary sector (Hochlander, Sikora, & Horn, 2003; Wirt, et al., 2004).

The problem of student success in community colleges is both solution-resistant and critical to resolve. Two wisdoms from Albert Einstein lend perspective to that dilemma. First, the Nobel laureate defined insanity as "doing the same thing over and over again and expecting different results" (Brainymedia.com, 2009, n. p.). The indictment of doggedly continuing along paths of action that have not proven adequately productive in the past seems relevant. The second wisdom is even more so: "No problem can be solved from the same consciousness that created it. We must learn to see the world anew" (Brainymedia.com, 2009, n. p.). Resolving the student success dilemma begins with re-viewing with fresh eyes the assumptions about policies and practices commonly employed to support student success in community colleges. Toward that end, this literature review examines the historical and cultural contexts of student success programs and initiatives in two-year college; the theoretical construct of engagement as a suitable framework for research; the development of student success courses as an exemplar of student success initiatives; and the extant literature on the use and effectiveness of these courses in improving student outcomes.

Historical and Cultural Contexts of Student Success in Community Colleges

Community colleges are uniquely American institutions, altogether different from any other sector of the higher education system initiating here or abroad (Brint & Karabel, 1989; Mellow & Heelan, 2008). Two core elements of the Truman Commission

mandate—open admission and the comprehensive mission--have served to define the character of community colleges as a distinctively different sector of postsecondary education (AACC, 2006). Likewise, both are central to how issues affecting the success of their students must be understood.

Open Admission

The concept of open access to postsecondary education has in a few short decades become so embedded in the American notion of higher education that its revolutionary overtones are lost in familiarity. The idea that all citizens, regardless of class, race, or gender, should have access to college is quintessentially democratic and the core of the American Dream, yet it is not without collateral controversy. Mellow and Heelan (2008) acknowledge "[g]reat tension exists between the ideals to which community colleges aspire and their achievement of those goals," while pointing out that "open, fluid boundaries between the community and the college is both the community college's strength and its greatest challenge" (p. 5).

Open access to college was from the beginning seen by many as a threat to academic standards. Roueche and Baker (1987) framed the essential tension between the democratic ideals of open-door community colleges and their perceived threat to academic standards: "[C]ommunity colleges, especially today, are faced with a fundamental dilemma. On one hand, they want to keep their doors open to everyone; on the other hand, they want to offer quality and academic excellence in their programs" (p. 37).

In addition to controversy over standards, open access raises questions about equity of opportunity. The original objective of open access was not only to allow all students to enter college, but to create an educational environment that would enable them to learn (Bailey & Morest, 2006; Mellow & Heelan, 2008; Roueche, Ely, & Roueche, 2001): "Educational opportunity means more than the right to meet minimum standards; it means the right to develop one's talents to maximum effectiveness" (Cross, 1976, p. 38).

Still others argue that the community college embodies a tension between democratic goals of opportunity and capitalist goals of efficiency (Brint & Karabel, 1989; Dougherty, 1994; Dowd, 2004; Labaree, 1997). Calls for efficiency and accountability put at risk programs such as developmental education, programs that are vital to protecting educational opportunity and equity of students nationwide who enter college through the open door (Roueche, Ely, & Roueche, 2001).

Comprehensive Mission

The Truman Commission mandate also moved beyond the existing disparate collection of public and private "junior" colleges and postsecondary occupational schools to call for a national system of local, nonresidential two-year colleges supported by a combination of state and local funds. Comprehensive community colleges were developed to extend critical educational and training opportunities to the broader population in their local communities (Gleazer, 1980; Mellow & Heelan, 2008). Today these colleges offer a broad range of programs and services including transfer and technical degree programs, workforce education, GED preparation, ESL programs,

community education, and non-credit programs designed to meet needs across their service areas.

Though a precise definition of the comprehensive community college mission has always been elusive, social and economic developments in the new Millennium have complicated it even more. Gleazer (1980) has noted questions of mission often elicit responses about institutional programs, an approach that is inadequate in the face of rapid social change and dissimilarity of community contexts among colleges. Yet it is in programmatic changes that we see tangible evidence of change. Occupational training has been a significant part of the community college mission since their inception. However, dwindling revenue streams along with state government pressures on colleges to act more like businesses have led many colleges to seek economic partnerships with employers (Dowd, 2003). Workforce training partnerships with business have become significant income sources to many colleges (Roueche & Jones, 2005). Some argue that such partnerships benefit business at the expense of taxpayers, and others hold that entrepreneurial relationships place the interests of employers in conflict with those of students. For the colleges themselves, such partnerships are often issues of maintaining fiscal viability.

Within the last decade, however, community colleges have responded to growing concerns about inadequacies in the America education pipeline by expanding programs even further to accommodate the economy's need for trained workers. In response to poor high school success rates and widespread college readiness deficits among recent high school graduates, more than 200 community colleges in 24 states are partnering

with public schools to provide early college high school programs on their campuses (Flores & Hagen, 2008). On the other end of the spectrum, the need for more baccalaureate graduates in critical skills areas have led community colleges in 17 states to begin offering limited baccalaureate degree programs (Mills, 2003). What these changes mean for the mission of community colleges—for their sense of purpose, their function, and their desired outcomes—is, at this point, unclear. However, it is inevitable that such "mission stretch" will impact the fundamental notions of what these institutions are about.

Opportunity or Oppression?

Debate between the advocates and critics of community colleges has gained strength over the past twenty-five years. Passionate advocates of community colleges point to their democratic ideal, low cost, convenient locations and broad programming as key factors in keeping the American Dream of upward mobility through higher education within the grasp of all citizens. Access does not always equal equity, however, and neither guarantee credential completion (Astin, 1984; Bailey & Morest, 2006; Brint & Karabel, 1989; Dougherty, 1994; Zwerling, 1976). Critics argue that two-year colleges perpetuate a culture of privilege by "managing" working class ambition to advance their position by making associate degrees available while protecting selective admissions at four-year institutions for the nation's elite (Brint & Karabel, 1989; Karp et al., 2008; Zwerling, 1976).

Astin (1984) pointed out that substantially higher rates of student departure at community colleges compared to four-year colleges are "the most consistent finding" in

longitudinal studies. He concluded that "[t]he negative effects of attending a community college are observed even after the variables of entering student characteristics and lack of residence and work are considered" (p. 302). Brint and Karabel (1989) contended that the comparatively nonacademic community college climate had "negative effects on ultimate educational attainment even after differences in student background and measured ability are statistically equalized" (p. 161). More recently, Upcraft, Gardner, and Barefoot (2005) echoed those earlier arguments, surmising that "initial attendance at a two-year rather than a four-year institution lowers the likelihood of a student's attaining a bachelor's degree by fifteen to twenty percentage points" (p. 35).

Deficit Position

The perception of community colleges reflected in the comments of their critics frames the fault for lower success rates as a *consequence* of attending a two-year college. Valencia (1997) associates such implied causation with deficit perspective, the tendency to locate fault within the individual--or in this case, within the institution-without due consideration of other contributing factors. Though critics report controlling for student characteristics and other variables in the relationship between community college attendance and diminished prospects, they do not account for implicit assumptions that all college students *want* to go to a four-year college, and that they all *have* the option, or *perceive that they have* the option to pursue a baccalaureate degree.

Upward mobility has real social and psychological costs, and not everyone is willing—or able—to pay them. For many Americans, hopes of a 'better life' crumble in the face of obstacles; consigned to low-status jobs, they nonetheless find fulfillment in the private sphere of family and friends. Moreover, aspirations to move ahead are often accompanied by a belief in the legitimacy of

inequalities that are based on genuine differences in ability and effort--and by doubts about whether one measures up. (Brint & Karabel, p. 7)

For many students "the choice is not between the community college and a senior residential institution; it is between the community college and nothing" (Cohen & Brawer, 2003, p. 53).

A second aspect of deficit perception of community colleges might be called need-based deficit. In discussing developmental education, Grubb (2001) points out that "[b]ecause remedial education has developed as a solution to a particular problem – the lack of educational progress of many students – almost no one views it as valuable in its own right" (p. 3). In other words, its value as a solution rather than a body of learning valued for its intrinsic worth places developmental education in a perennial deficit If one extends Grubb's logic, then initiatives, programs, and even position. organizations created in response to a problem or need will, by definition, always be less valuable than those whose traditions or merits are culturally associated with intrinsic value independent of need. Roueche and Baker (1987) have aptly characterized community colleges as growing "out of the needs of the masses" (p. 4), which may be seen as a deficit attribute in the elitist construction of the American higher education myth. The notion of need-based deficit may also apply to programs and initiatives in competition with disciplines or programs associated with intrinsic worth—including student success courses.

Identity Crisis in the Community College

The composite picture of community college culture and history is that of a social/academic institution in the throes of a worsening identity crisis. It is not a new crisis. Others have postulated identity issues with community colleges (Gleazer, 1980). Roueche and Baker (1987) described the problem succinctly more than two decades ago:

[T]he community college lacks a distinct organizational identity. Even the community college leadership debates whether the term "college" correctly describes its function. Although the institution is unique in offering both career programs and associate degrees, it also overlaps the work of colleges and universities in its transfer function and the work of technical high schools and trade schools in its occupational/technical function. Furthermore, these areas often overlap within the institution, since many career degrees have some transfer as well as technical courses as degree requirements. As a result, the identity of the community college becomes blurred and problematic. (p. 7)

Although the community college identity crisis is a long-standing one, it is exacerbated by rapid cultural and economic changes. Coming to grips with their institutional identity is, arguably, one of the critical elements to increasing student success.

Cultural Dominance of the Baccalaureate Model

The two-year college model is a comparative latecomer and a somewhat uneasy fit in a higher education culture where status is rooted in selectivity. The standards, patterns, and assumptions of the baccalaureate college model are so pervasively associated with the notion of "college" that they have attained the quasi-truth status of cultural myth. Misalignment between baccalaureate "real college" assumptions and community college realities is functionally hidden by the naturalizing power of popular culture and market images of elite colleges and universities.

[O]nly one or two models dominate conceptions of institutional excellence in American postsecondary education.... a relatively small number of research universities and elite liberal arts colleges have set the academic and public standard for what most Americans believe higher education is or should be about. The hallmarks of these institutions include such factors as faculty with strong research or scholarly orientations, selective admissions policies, and undergraduate student bodies that are largely residential, full-time, traditional age, non-working, non-minority, and of middle- or upper middle-class social origins. (Pascarella & Terenzini, 1997, p. 154)

The construct of real college described here bears little resemblance to the realities on most community college campuses. Nor do the students described represent the majority of U.S. college-goers (Pascarella, 1997). According to *Barron's Guide*, top tier institutions include 146 of the most selective colleges and universities in the nation. These elite institutions enroll just over six percent of 2.7 million new freshmen entering college each year (Carnevale & Rose, 2003), compared to 42 percent who enroll in community colleges (NCES, 2006, table 184). In spite of that, the tradition, intellectual standards, and selectivity that characterize these institutions define the dominant myth of higher education that informs organizational structures, processes, and practices in all sectors. Community colleges, whose open access admissions policies are the antithesis of selectivity, nevertheless operate within the shadow of that myth.

Perspectives from Organizational Theory

Their considerable differences from the dominant model of elite higher education raises questions about whether another institutional structure might accomplish the community college mission more efficiently. DiMaggio and Powell (1983) have argued that emerging institutions gain legitimacy and power through isomorphism, a "constraining process that forces one unit in a population to resemble other units that

face the same set of environmental conditions" (p. 149), rather than by rules of marketplace efficiency. The authors contend that institutions are influenced to organize themselves according to patterns of the dominant institutions in their sector through isomorphic pressures. These pressures may derive from centralization of resources or financial reporting (coercive), from uncertainty and ambiguous goals (mimetic), or from reliance on credentials and professional organization activity in selecting staff (normative). Aurini (2006) characterizes the process by which institutions experience and respond to isomorphic forces as a "legitimation project," defined as "the ongoing act of interpreting and incorporating environmentally defined elements into an organization's institutional structure" (p. 83). Whichever type or combination of isomorphic pressures is at work, the end result is a predictable similarity across institutions within a given sector.

Meyer and Rowan (1977) have pointed out that there are substantial benefits for institutions which organize themselves to look and work like the dominant institutions in their sector. In addition to gaining organizational legitimacy, likelihood for achieving stability and survival are increased. There are also drawbacks.

Two very general problems face an organization if its success depends primarily on isomorphism with institutionalized rules. First, technical activities and demands for efficiency create conflicts and inconsistencies in an institutionalized organization's efforts to conform to the ceremonial rules of production. Second, because these ceremonial rules are transmitted by myths that may arise from different parts of the environment, the rules may conflict with one another. These inconsistencies make a concern for efficiency and tight coordination and control problematic. (p. 355)

During community colleges' heyday of expansion in the 1960s and 1970s no available organizational model would have allowed them to achieve legitimacy *as colleges* by organizing according to mission and market efficiency. Just as the layers of institutions added before them, community colleges sought academic legitimacy by isomorphically organizing themselves according to structures and values associated with the dominant myth of higher education.

Because their open admissions policy and comprehensive mission are at odds with the ceremonial rules embodied in the dominant myth of college, however, that legitimacy has remained elusive. The more an institution deviates from this set of standards, the lower it is ranked in terms of prestige or perceived educational excellence, and the more invisible it becomes. By the time one gets to community colleges, with their open admissions policies, faculties rewarded essentially for teaching, and their disproportionate numbers of non-resident, part-time, older, non-white, and working class students, what Pascarella (1997) calls the "prevailing second-best public image of community colleges" (p. 15) is unmistakable.

Community colleges' low position in the pecking order of academe is particularly visible in the academic literatures. Pascarella (1997) notes that of more than 2,600 studies reviewed in his seminal work with Terenzini (1991), *How College Affects Students*, at most five percent focused on community college students. Similarly, Cofer and Somers (2000) found only 10 percent of nearly 2000 articles on college persistence in the Education Resources Information Center (ERIC) database included two-year students. Further, a systematic review of five major higher education journals conducted

by Townsend, Donaldson, and Wilson (2005), found that only 8 percent of articles mentioned community colleges.

The comparative dearth of scholarly research on community colleges and their students demonstrated in these reviews have several implications. The limited literature on issues specific to community colleges leaves practitioners little choice but to draw on theory and research designed primarily for traditional baccalaureate colleges to design programs and initiatives for their campuses. In addition, effectiveness of community college programs is difficult to assess accurately without research models and standards that are informed by the particular challenges of two-year colleges. Finally, the significance of these implications is effectively masked by overwhelming dominance of baccalaureate discourse, making challenges to those conventional wisdoms a frustrating business for community college educators.

Image and Economics in Postsecondary Education

Nowhere is the dominance of the myth of "real college" more strongly reinforced that in the growth industry of college ranking. The methodology of various college rankings has been roundly indicted by scholars, but their popularity illustrates the power of market economy ideology in how we think about and consume higher education. Dowd (2003) contends that demands for accountability, productivity, and efficiency across higher education have forced colleges to act more like businesses. However, it can also be argued that the diverse, stratified U.S. system of postsecondary institutions has evolved in patterns consistent with market principles from the start.

According to Labaree (2006), the U.S. higher education system has historically accommodated growing numbers of students and increased access by adding less selective layers of institutions at the bottom of a stratified system—flagships, land grants, comprehensive universities, regional universities, and finally, community colleges. This distinctive stratification has served to protect elite university culture by siphoning off the masses of college-goers into less prestigious institutions. At the same time it has enabled the growth of an economy of educational credentials in which selectivity of colleges and programs determine value of credential earned, and graduates exchange those credentials for better employment and benefits (Labaree, 1997, 2006).

In the age of online degree programs and increasingly aggressive marketing by proprietary postsecondary institutions, this heretofore tacit economy of credentials has become increasingly complex and unwieldy. A recent editorial in the *Chronicle of Higher Education* illustrates the problems. Contreras (2008) argues that the term "degree" has become meaningless: "A bachelor's degree from Colby College, ITT Technical Institute, some unaccredited business college in Los Angeles, or Big Al's Overnight Degrees in Alabama looks the same, is labeled the same, and — in most states — is legally the same" (p. A37). Contreras suggests a grading system for degrees based on the granting institutions, with elite universities in the top tier, other regionally accredited colleges in the second, and accredited online degree programs in the third. Community colleges, however, are specifically excluded from any tier because they "don't provide bachelor's degrees except in rare cases" (p. A37).

Baccalaureate Assumptions and Cultural Reproduction

Baccalaureate assumptions construct "college" as a selective four-year residential institution. "Students" are expected to be 18 to 23 year-olds who live on campus and attend college full time. This image only vaguely resembles the majority of community colleges and students (Bailey & Alfonso, 2005; Schuetz, 2007). Yet baccalaureate assumptions are woven into postsecondary theory and practice in myriad unexplored ways.

Theory is, after a fashion, the coin of academe. It is alternately the conceptual framework of research and its product, the impetus of inquiry and its achievement. In the hard sciences, a good theory "must accurately describe a large class of observations on the basis of a model which contains only a few arbitrary elements, and it must make definite predictions about the results of future observations" (Hawking, 1996, p. 15). In the social sciences, however, where humans are the subjects of research and theorization, models necessarily incorporate aspects of subjectivity. Popkewitz (1980) tells us that pervasive belief structures or "meta-assumptions" about the world become so deeply rooted in the researcher's personal reality that they shape both perception and subsequent theorizing.

The unpostulated and unlabeled assumptions about the social world embedded in social theory have implications not only for knowledge of the world but for the ways in which that world is challenged. The underlying purposes, values, and commitments in theory give structure and organization to the events and issues of the social world. The language of inquiry "tells" us that "these things belong together" or that "these things are to be noticed." In organizing, categorizing, and

defining objects in social life, theory gives direction to what possibilities are to be seen as plausible and reasonable in our daily encounters. (p. 42)

Ultimately, then, the narrative function of meta-assumptions not only shapes our ways of knowing and knowledge production, it does so invisibly, under the cover of "fact."

According to St. John (2006), educational theory plays a powerful role in shaping both structure and practice of postsecondary education.

Theory plays a crucial role in research on educational attainment because it guides the selection of variables for statistical models, the assignment of individuals to treatment groups in random experiences (characteristics for selection), and the interpretation of results in both quantitative and qualitative research. Therefore, it is important that institutional researchers reconsider the role of theory, rather than select one theory because of its dominance in the literature over others. (p. 99)

When assumptions that undergird a theoretical construct are misaligned with those of the context where it is applied, effects of that misalignment may be obscured.

Institutional Differences and Questions of Alignment

Understanding the significance of alignment between assumptions embedded in theory and research and the contexts where they are applied in building practice is perhaps best accomplished through example. The differences between the missions, cultures, and student populations of two- and four-year colleges are substantial. First, they differ in how they are meant to serve students. Baccalaureate institutions are part of a long higher education tradition designed not only to educate the country's high school graduates, but to also shape their social and moral development in the years bridging from late adolescence to young adulthood. Community colleges, on the other hand,

provide a much broader range of programs designed to meet the needs of a diverse citizenry in their surrounding communities (Mohammadi, 1994, p. 39).

Four-year colleges and universities encompass a wide range of institutional types, missions, and student populations, but they also share broad commonalities with regard to undergraduates. Most four-year colleges are selective to some degree in their admissions process. Four-year colleges and universities are predominantly residential and have relatively developed on-campus extracurricular and social cultures. Though four-year college students pursue a wide range of programs, they share the relatively homogeneous goal of earning a baccalaureate degree (Bailey et al., 2005).

Community colleges share commitment to delivering quality undergraduate general education with four-year institutions, but they are distinctly different institutions in terms of mission. By virtue of their comprehensive mission, community colleges offer a range of educational credentials and services in addition to transferable associate degrees. These include technical degrees and certificates, workforce training, adult basic education, high school equivalency preparation, ESL classes, developmental education, continuing education, and community development and enrichment (Phillipe & Sullivan, 2005). Multiple program options bring in students with a variety of goals for attending, complicating the definition of "success" in these institutions (Bryant, 2001; Bailey & Alfonso, 2005; Hoachlander et al., 2003).

Differences in Student Populations

Although populations on baccalaureate campuses have become more diverse, their student bodies continue to be predominantly traditional in most respects. About three quarters of four-year students are under age 25 and 80 percent attend college full time (NCES, 2006, tables 179, 180). Among college-going students who have at least one parent with a baccalaureate degree or higher, more than three-quarters choose to begin college at a four-year college (Chen, 2005).

Community colleges are defined by their open admissions policy and significantly different student demographic profile. More than half of community college students are the first generation in their families to go to college (Chen, 2005). Nearly half are age 25 or older (NCES, 2006, table 216), and more than 60 percent are academically underprepared in one or more basic skills areas (Adelman, 2004). A disproportionately high percentage of community college students are from low-income families (Choy, 2000), and a third are minorities (Bailey et al., 2004; Phillipe & Sullivan, 2005). Up to 84 percent work while enrolled, including more than a third who work full time (Bryant, 2001). Fully a third also care for dependents (CCSSE, 2006). Nearly two-thirds of community college students attend college part-time (Phillipe & Sullivan, 2005). Where traditional baccalaureate students go to college *instead of* other choices, community college students attend college *in addition to* work, family, or other obligations (Tinto, 2006).

Students who attend community colleges are far more likely to be characterized by risk factors associated with lower persistence and credential completion rates than

students at competitive admission baccalaureate institutions (Bailey et al., 2005; Phillipe & Sullivan, 2005). Those who pass through the open door are often ill-prepared for postsecondary education. According to Kuh et al., (2005), students who "don't know how the pieces fit" and who are unsure of "what to expect and what success looks and feels like" (p. 109), are less likely to persist.

Relative Definitions of Success

Low success rates in community colleges reinforce public perceptions of them as lesser institutions. According to most sources, only about one-third of community college students complete a degree or certificate within five years as compared to more than half of four-year students (Horn & Berger, 2004; Phillipe & Sullivan, 2005). Equally disturbing is that 20 percent of community college students complete fewer than ten credits in that same five-year period (Bailey et al., 2005; Roueche, McClenney, & Milliron, 2006).

Retention statistics frame a dim view of community college quality that many argue is distorted by definitions of success based on four-year college degree patterns. Not only do such definitions distort perception of institutional performance in two-year colleges, but they also disrupt fuller understanding of processes and practices critical to improving that performance (Bailey et al., 2005; Mohammadi, 1994).

Federal education legislation and policy such as the Higher Education Act and the Carl Perkins Vocational Education Act define measures of program completion and establish standards for performance. To date, these performance indicators have been limited primarily to measuring completion of formal credentials such as a certificate or

an associate's degree (Hoachlander et al., 2003). However, because community colleges offer a wide array of educational programs to diverse students with many different goals for attending, no single benchmark or standard adequately assesses their overall performance. Factors affecting student attainment are varied, complex, and often outside the influence of postsecondary institutions.

Community college advocates advance three lines of argument against the use of completion rates as either an accountability measure or a normative goal. First, many community college students have their own goals for attending college, and they are seeking neither degrees nor transfer. Because community colleges operate under a mandate to serve multiple student needs, penalizing them for low completion rates would represent a substantial misunderstanding of the mission of these colleges and the goals of their students (Bailey et al., 2005; Hoachlander et al., 2003: Phillipe & Sullivan, 2005; Wild & Ebbers, 2002). Many of the obstacles to success faced by community college students are outside the colleges' control (Hoachlander et al., 2003). Community college students are most often employed, many have family responsibilities, and many have deficits in academic preparation for college. For these students, access to baccalaureate institutions may not be possible (Bailey et al., 2005).

Finally, students are increasingly apt to attend several colleges on a winding path to degree completion. In a study based on national longitudinal data, Bailey et al. (2005) found 40 percent of first-time community college students attended more than one college during the six years of the study. Many transfer students who attend community colleges do not intend to graduate. For some, completing an associate degree may in fact

slow their progress toward a bachelor's. When general education requirements at the receiving baccalaureate institution differ from those completed for the associate, transfer students find themselves with an excess of elective credits and a longer list of courses than anticipated to complete the higher degree.

Bailey et al. (2005) point out that performance factors at community colleges are not fully understood: "[W]e simply have a much weaker understanding of the determinants of student success in community colleges than we do in baccalaureate institutions (Bailey et al., 2005, pp. iii-iv). This "weaker understanding" owes much to the foundational assumptions about students, their options, and their goals that are reflected in prevailing theoretical models of college going and persistence

Judging open door admissions institutions against the same completion standards as competitive admissions institutions is, in effect, an apples-and-oranges comparison that penalizes community colleges for serving exactly the population they are mandated to serve.

The Impact of How Success is Defined

Hoachlander et al. (2003) illustrate how varying the definition of success changes the statistical picture of community college performance. Researchers analyzed a national longitudinal databank to assess completion rates for community college students. Using definitions and calculations commonly used for four-year colleges, they found a six-year credential completion rate for all community college students in the study to be 39 percent. After excluding students who did not intend to pursue a credential from their calculations, the completion rate rose to 42. When students who

had transferred to a four-year institution were added back in as successful outcomes, the overall success rate rose to 51 percent—approximately equal to average completion rates for baccalaureate institutions. In a final reshuffling of data, researchers looked only at students in this group who had initially declared intent to transfer. Among these students, more than 60 percent had completed a credential or transferred to a four-year institution within six years (Hoachlander et al, 2003).

As this example illustrates, changes in definitions and parameters used to calculate outcomes substantially affect the statistical picture of community college success. Further, they illustrate the powerful impact unexamined expectations and assumptions derived from four-year models can have on community colleges. Implications are significant.

...in the absence of systematic research evidence, higher educational policy makers will rely on beliefs, stereotypes, and even publicly accepted myths in making judgments about the educational effectiveness and funding priority of community colleges. (Pascarella & Terenzini, 1997, p. 156)

For community colleges, being judged by definitions of success that do not align with their mission or students' goals places them in a constant deficit position in the eyes of the public and of policy makers.

Persistence and Engagement

Braxton and Mundy (2001) refer to college student departure as an "ill-structured problem," a complex challenge that defies a single solution and calls for a variety of possible strategies which, in the final analysis, may still fail to alleviate the problem. Retention is one of the most widely studied topics in educational literature and has a

body of scholarship that spans over seventy years (Braxton, 2000; Tierney, 2000). Efforts to understand and theorize the web of factors contributing to student departure have generated a range of theoretical models drawing on a variety of literatures and persistence models (Braxton, 2000).

Campus-based practices and programs intended to enhance student success are most often underwritten by theory, which positions student action as the strategic target. Though terms used in individual models may differ—involvement, integration, or student effort, for example—the body of work referred to as student engagement theory shares a central concern with learning as an active process. Student engagement theory is rooted in the work of Astin (1984, 1985), Pace (1984), Kuh et al. (1991), and Kuh, Whitt, and Strange (1989).

Kuh et al. (2005) describe engagement concisely, saying that "what students *do* in college counts more for what they learn and whether they will persist in college than who they are or even where they go to college" (p. 8). The authors further describe their construct in terms of both student and institutional variables.

In sum, student engagement has two key components that contribute to student success. The first is the amount of time and effort that students put into their studies and other activities that lead to the experiences and outcomes that constitute student success. The second is the ways the institution allocates resources and organizes learning opportunities and services to induce students to participate in and benefit from such activities. (p. 9)

Extensive research on student engagement has consistently supported the link between student engagement and positive educational outcomes such as increased learning, persistence in college, and graduation (Astin, 1984; Pace, 1984; Pascarella & Terenzini,

2005; Pike & Kuh, 2005; Tinto, 1993). Though the relationship is clearly supported, however, research connecting engagement with outcomes in two-year colleges has been comparatively limited.

Theories and Constructs of Engagement

While there are important differences in theoretical perspectives explaining how college experiences change students across time, the broad notion of student engagement links the major theoretical frameworks through their similar construct (Marti, 2009, p. 4). Recognition of that common thread enables the construction of a generalized understanding of student engagement that connects to a substantial body of respected scholarship without necessarily binding that understanding to particular constructions of students or colleges. The theory and research reviewed here is representative of major tenets contributing to a coalescing understanding of student engagement that offers community colleges the opportunity to develop their own theoretical base for practice.

Astin (1984, 1999) theorized that *student involvement* is the key factor in persistence. Student involvement is a predominantly behavioral construct that occurs along a continuum, incorporates the investment of physical and psychological energy, and has both quantitative and qualitative features. Interaction between student and environment, including the positive relationship between student involvement and the quality of learning, and the capacity of policy or practice to increase student involvement, are also key factors. These latter constructs lend themselves to measurement and are thus particularly relevant to designing educational programs.

Pace (1984) framed his model in terms of *student effort* as the key construct associated with student outcomes in college. The author contended that the quality of effort was a direct determinant of quality of educational product, or in current terms, the student outcome. Pace's College Student Experiences Questionnaire (CSEQ) measures the quality of student experiences, perceptions of the campus environment, and progress toward important educational goals. The CSEQ was used to develop the more recent National Survey of Student Engagement (NSSE, 2007), which primarily focuses on attributes such as library holdings and faculty rank, and is designed to gather information about educational experiences directly from undergraduates. The collective NSSE research database provides a heretofore unavailable data source enabling better research and insight into what keeps students in college. That work has contributed significantly to shaping the general construct of engagement.

The work begun by NSSE was expanded to the two-year college sector in 2001 with the establishment of the Community College Survey of Engagement (CCSSE) under the auspices of the Community College Leadership Program at The University of Texas at Austin. Now in its seventh year of operation, CCSSE has undergone stringent statistical validation processes to establish itself as powerful data tool in the effort to improve student success in community colleges. Like its four-year counterpart, CCSSE brings new perspectives on student engagement to its participant colleges. "Data obtained from the CCSSE instrument, the Community College Student Report (CCSR), are intended to be used as a tool for improving teaching and learning by assessing the extent to which students are engaging in good educational practices at community and

technical colleges" (Marti, 2009, p. 3). Like NSSE, CCSSE is developing a substantial database of engagement data from several years of participation by colleges across the country. These large databases are creating possibilities for advancing research in ways that have not been possible before.

Chickering's (1969) psychosocial model of student development draws on Erikson's (1968) work on identity development. Chickering's seven vectors of student development (1969; Chickering & Reisser, 1993) describe student development in terms of vectors, or directional dimensions, along which traditional aged students evolve in their journey toward individuation and social existence. His model is perhaps the most widely known and applied theory of student development. Chickering's model emphasizes maturational development of traditional college students, and is thus not aligned with the needs and issues of most community college students. However, Chickering's principles of good practice in undergraduate education, developed with Gamson (1987), have enduring relevance for increasing student engagement across postsecondary education sectors. The good practices include encouraging student-faculty contact, cooperation among students, and active learning; giving prompt feedback; emphasizing time on task; communicating high expectations, and respecting diverse talents and ways of learning.

Tinto's (1975) interactionalist theory on student departure has not only become the most well known example of college impact theory, it has dominated the direction of persistence research since the late 1970's (Braxton, Sullivan, & Johnson, 1997). Tinto's theory poses the importance of the interaction between the student and the academic and

social systems of the college as the critical dimension in shaping student decisions to leave college or not. In subsequent work Tinto (1987, 1993) expanded his theory to emphasize the role of relationships in developing institutional commitment and explained college leaving as arising from incongruence ("poor fit") and isolation. Enhancing student persistence "hinges on the construction of educational communities in college, program, and classroom levels which integrate students into the ongoing social and intellectual life of the institution" (1987, p. 188). In this work Tinto also acknowledged the differences in college experiences among commuting adult students, emphasizing the importance of classroom interaction for this group.

Tinto's (2006) more recent work acknowledges the modest gains of retention programs built on his interactionalist model and emphasizes academic experience as a stronger determinant of college departure than previously supposed. Further, he acknowledges both the emergent position of community colleges in the postsecondary landscape and the unique character of their mission and students. Scholars from various quarters have questioned the applicability of Tinto's (1975) interactionalist theory, but particularly those from the growing ranks of researchers concerned with underserved populations and two-year colleges (Baird, 2000; Braxton & Lien 2000; Hurtado & Carter, 1997). Hurtado and Carter point out that, "the development of multicultural communities and research geared toward understanding the particular problems and experiences of racial-ethnic minorities have led to criticisms of the model as a dominant framework for research, interpretation, and practice" (p. 340). The authors advocate for

new approaches aimed at gaining better understanding of diverse student experience in college and developing better services and programs to address student needs.

Applicability of Tinto's academic and social integration constructs in two-year colleges has not been strongly supported in the literature. A recent study by Braxton, Hirschy, and McClendon (2004) reviewed persistence research based on Tinto's model and found notable differences in outcomes for the two- and four-year sectors. The authors reported robust empirical affirmation for only one of thirteen propositions in the two-year sector as compared to support for two propositions in commuter institutions and support for five propositions in residential institutions. These results suggest the possibility of mediating baccalaureate assumptions in the model's design. However, more recent work by McClenney and Marti (2006) drew a broad conclusion that lack of support for student integration and engagement models "is due to a lack of data rather than a lack of applicability of student integration and engagement models" (pp. 92-93). The authors further conclude that broad measures of student engagement on CCSSE's instrument are valid predictors of academic success and persistence in community colleges.

Theoretical Alignment with Community Colleges

Applying the particular theoretical frameworks discussed above in community colleges is complicated by their narrowly focused assumptions about the college experience and the interaction of students within the college environment. For many community college students, that interaction is constantly mediated by responsibilities, time constraints, relationships, and loyalties that exist outside the campus boundaries.

All of these models emphasize student time and effort as the operative constructs that influence student outcomes, and all contend that time and effort invested are directly related to academic and personal development. By not acknowledging the more complex life characteristics of many students, these models implicitly exclude a majority of community college students. Inadequate accounting for external factors that mediate college experience for the majority of community college students—commuting, attending part time, holding a job, family responsibilities—limits the models to a single homogeneous construction of college going that simply cannot stretch far enough in multiple directions to fully articulate two-year student experience.

Granted, many of the factors that mediate the college experience among community college students are beyond the control and data collection capacities of the college and are thus difficult to study in meaningful ways. However, the construct of engagement is a broader generalization of the core elements of a range of persistence theory. As such, it offers sufficient openness and limited reliance on preconceived assumptions of college and college going to speak to the diverse students and ways of college-going represented on two-year campuses. Engagement has the descriptive capacity and theoretical elasticity to provide community colleges with a native theoretical structure to support better research and practice. In addition, the powerful data generation capacity of CCSSE offers opportunities for research and refinement of practice that are as yet unexplored.

Patterns of College-Going as Mediating Influences on Engagement

Although the number of community colleges that have residential facilities is increasing, commuting continues to be a defining characteristic of college-going patterns for the vast majority of two-year students. Commuting is so integral to the community college experience that its impact on student success is naturalized and largely obscured by that commonness of experience. In four-year colleges, where commuting is a departure from the norm of residential campus life, commuting students provide a contrast to the dominant college-going pattern and thus provide a comparison group for study. Several studies on commuting baccalaureate students (Braxton & Lein, 2000; Chickering, 1974; Terenzini et al., 1996) have shown that living on campus, as opposed to commuting to college, is positively related to engagement (p. 187).

...with a few exceptions, the weight of evidence is clear that various measures of social integration (including interaction with faculty, interaction with peers, and extracurricular involvement) show little if any positive relationship with persistence at commuter institutions. This lack of a positive relationship holds regardless of the specific measure of social integration used and irrespective of whether or not student background characteristics were taken into account in the study design. (Pascarella & Terenzini, 1991, p. 402)

While the findings noted here are relevant to commuting students on two-year campuses, it is possible that their shorter degree program mediates their campus interaction and expectations differently than four-year students whose extended interaction with the college environment associated with longer four-year degree programs.

Another defining characteristic of community colleges is their high population of part-time students. Approximately 40 percent of all students in higher education attend

part time, but in community colleges part-timers are a majority at 65 percent of the population (Berkner, Horn, & Clune, 2000; NCES, 2006, table 180). Bailey and Alfonso (2005) point out that slightly less than two-thirds of community college students attend part time and about one-third attend full time, whereas in four-year college that ratio is roughly reversed. In addition, community college students are more likely to be older, working, and to interrupt their enrollments. Hurtado and Carter (1997) found that a significant proportion of part-time students are adults with multiple responsibilities. Among traditional-age students who attend part time, an increasing number live at home or hold part-time jobs for financial reasons. It seems unlikely that policies and initiatives designed to retain 18-year old students living in dorms would be as effective for part-time, working students, particularly for adults with families and full-time jobs (Bailey & Alfonso, 2005).

Studies have found that part-time attendance is associated with lower persistence and degree completion (Chen, 2007; Cofer & Somers, 2000; Hoachlander et al., 2003; Marti, 2009). Hoachlander et al. note that the high number of part-time students in community colleges directly contributes to slowing down degree completion rates. However, research on part-time students has been extremely limited. Studies using national databases such as IPEDS are yielding new information about broad patterns and trends in part-time college going (Chen, 2007). In addition, CCSSE national data are yielding some rich insights into how part-time students engage in college as compared to students who attend full time. For instance, part-time students are less likely than full-time students to discuss grades or assignments with an instructor often or very often (40).

percent versus 51 percent), use email to communicate with an instructor (34 percent versus 47 percent), or talk about career plans with an instructor or advisor (19 percent versus 30 percent). Similarly, part-time students are less likely than full-time students to seek help from advisors on academic and career planning, or to discuss progress with instructors in person or via email (CCSSE, 2003-2008).

Environment and Engagement

Pascarella and Terenzini (1991) point out that one of the clearest findings of retention research is that a student's experiences prior to college entry are less important to persistence than their experiences after they enter. In the 2005 update of their earlier work, the authors further describe the role of the institution in promoting student engagement and success: "Since individual effort or engagement is the critical determinant of the impact of college, then it is important to focus on the ways in which an institution can shape its academic, interpersonal, and extracurricular offerings to encourage student engagement" (p. 602).

Institutional environment is a key element in the construct of engagement, and it figures into the majority of associated theories. Reason, Terenzini, and Domingo (2007) describe institutional context as "an often-overlooked fourth domain" that contains and shapes the process of engagement. "This context comprises an institution's organizational characteristics, structures, practices, and policies, and the campus's faculty and peer cultures and environments...." (p. 279). The authors expand on that description:

Environment exists within a larger organizational context most often operationalized in research in terms such as type of control, size, mission, or selectivity. Most studies of between-college effects indicate that such variables are too remote from the student experience to have much, if any, effect on student... (p. 279)

The fact that these particular institutional type variables have not proven to be significantly related to student experience only proves that they are not the variables that can measure the relationship between students and campus environment.

Tinto (1993) describes environment as including not only "the programs, personnel, curricula, teaching practices, and facilities that we consider to be part of any educational program but also the social and institutional climate in which the program operates" (p. 81). In a study of colleges across the country that showed both higher rates of engagement (as measured by NSSE) and higher than expected rates of graduation, Kuh et al. (2005) conclude that institution-level policies, practices, and climates can powerfully influence student engagement. They also point out the role that the "ethos" of a campus—or the institution's system of values—plays in mediating student engagement and, consequently, student learning.

Rosenbaum, Diel-Amen, and Person (2006), note that organizational policy may impact campus environment in important ways. Student support services in many colleges assume that students have enough knowledge, social skills, and motivation to seek out available services and make use of them. This assumption may not always be valid. Faculty may not be able to help students in this respect, as many faculty members do not know what services the college provides or where to send students in need of assistance (Grubb, 2001).

Moving from Theory to Practice: Student Success Courses

Effectively operationalizing theoretical constructs in campus-based practice calls for a reference base of research. As noted previously, the dearth of academic literature focused on community colleges provides scant support for such decisions. Bailey et al. (2005) point out the importance of institutional research in understanding the particular needs of two-year college students in general as well students from particular demographic categories.

Since good national survey data on institutional practices are not available, we must rely on field research to identify differences in practices that might explain differences in student outcomes by college. We suspect that, at the institutional level of analysis, one can observe policies and practices that would specifically affect the outcomes of minority students and students who enter community college with economic or educational disadvantages. (p. iv)

In spite of limited resources for institutional research, the overwhelming need for effective programs to support the diverse and often under-prepared students in community colleges have led to wide-spread adoption of campus-based retention programs such as student success courses.

The Evolution of Student Success Courses

The evolution of student success courses illustrates both the promise and pitfalls of migrating baccalaureate campus-based retention strategies to two-year campuses. Although student success courses can be traced back as far as 1880 (Mamrick, 2005), their current broad presence owes much to University 101 freshman seminar model established at the University of South Carolina (USC) in 1972. USC's University 101 course was conceived as a means of acculturating incoming students to the institution, a

process which Kuh et al., (2005) describe as teaching students "what the institution values, what successful students do in their context, and how to take advantage of institutional resources available" (p. 110). USC's model was highly successful and widely replicated among four-year colleges and universities. The National Center for the First Year Experience and Students in Transition (NCFYEST) was established there under the direction of John N. Gardner and has been an active force in research and professional development regarding success courses and student transition issues since the 1980's.

The success of the University 101 model and founding of NCFYEST generated a widely visible discourse on the freshman seminar model at a time when campus administrators were looking for ways to operationalize emerging retention research. Developmental education programs designed for academically underprepared students were springing up on many campuses (Roueche & Roueche, 1993); however, increasingly diverse enrollments suggested the need for additional forms of student support.

The freshman seminar's capacity to mix "college knowledge," learning skills, personal development agendas, and acculturation activities in a single initiative made it an attractive option. The course format was a familiar delivery mode, adaptable to a variety of institutional settings, and easily integrated into existing schedules without major disruption of established institutional processes. The seminar's conceptual flexibility allowed campuses to adapt content to fit with particular students, resources, and institutional priorities. Instructors could be recruited from across the institution for a

relatively modest stipend, allowing the instructional burden on faculty to be managed as needed. And because institutions could pass on some of the cost of instruction to students through tuition and text purchases, the success course was relatively inexpensive to implement (Cueseo, 1997).

For colleges struggling with retention issues, the freshman seminar model provided a defined rationale for addressing an ill-defined, solution-resistant, and costly problem without undue cost or disruption. The appeal of the freshman seminar was further enhanced by the publication and promotion of text and instructional materials such as David Ellis's *Becoming a Master Student* (1977). The text's thorough and easily adapted content was augmented by an extensive range of teaching supplements and classroom material. For administrators interested in implementing a retention program, the test package minimized the need for extensive course development and instructor training. The power of *Master Student* in shaping the development of student success courses is supported by the fact that it has become North America's best-selling college textbook, now in its 12th edition, and has been translated into both French and Spanish (Houghton-Mifflin, n. d., section 2).

Description of Student Success Courses

The most extensive source of data on type, format, and delivery method of success courses offered at U.S. colleges is the National Survey on First-Year Seminars conducted by NCFYEST. The survey has been sent to campus administrators approximately every three years since 1988 to collect descriptive data on student success courses. Though early surveys focused almost exclusively on four-year institutions, the

number of two-year colleges participating has increased. The report of the 2003 survey results for the first time displays data for some measures separately for two- and four-year colleges.

Because of its flexibility, the freshman seminar model has evolved into a variety of forms, formats, and sizes as different institutions have tailored it to their students. The broad classification of "student success course" encompasses a substantial variety of courses which share the goal of helping incoming students develop skills, knowledge, and experience that will promote their success and persistence in college. Using data from the first national survey on first-year seminars conducted by NCFYEST in 1988, Barefoot and Fidler (1992) identified five categories of freshman seminars common in baccalaureate institutions.

Extended orientation seminar. These courses are sometimes called freshman orientation, college survival, college transition, or student success course. Content likely will include introduction to campus resources, time management, academic and career planning, learning strategies, and an introduction to student development issues.

Academic seminar with generally uniform academic content across sections. These courses may be interdisciplinary or theme-oriented, and are sometimes part of a general education requirement. Primary focus is on academic theme/discipline but content will often include academic skills components such as critical thinking and expository writing.

Academic seminars on various topics. These seminars are similar to previously mentioned academic seminars except that specific topics vary from section to section.

Pre-professional or discipline-linked seminar. These courses are designed to prepare students for the demands of the major discipline and the profession.

Basic study skills seminar. These courses are offered for academically underprepared students. The focus is on basic academic skills such as grammar, note taking, and reading texts (Mamrick, 2005).

The course types listed here were defined 20 years ago based on survey data from four-year colleges and universities. Developments in campus-based retention and student services strategies over the past twenty years, particularly considering the adaptation of this model to two-year campuses, point to limitations of this course typology. A specific issue is the conflation of orientation programs with student success courses. Many institutions now offer both, sometimes in several versions, making the "extended orientation category" problematic. On the 2003 Survey some institutions noted that they offer "hybrids," or courses that combined attributes of more than one category. This suggests that other iterations of success courses may have emerged but remain obscured by the limitations of the typology used for the survey. Research aimed at developing a descriptive typology of success courses for two-year colleges is needed.

The differences in how success courses are viewed and implemented on two- and four-year campuses become apparent when comparing types of courses offered at each. The 2003 National Survey (Tobolowsky, 2005) included 229 two-year participants, of which 163 reported offering at least one form of success course. In both two- and four-year colleges, some institutions reported offering more than one type. Among two-year colleges extended orientation and basic study skills courses were by far the most

frequently offered. Almost 70 percent of two-year colleges reported their primary success course type as extended orientation, compared to less than 44 percent of four-year institutions. More than 15 percent of two-year institutions reported basic skills as their primary course type, while just over 2 percent of four-year colleges did so. Academic seminars (uniform and variable content types combined) accounted for just over 11 percent of two-year college success courses, while among four-year respondents these were the primary course type for nearly 46 percent of institutions. Two-year colleges' strong emphasis on orientation and basic skills courses appears consistent with higher enrollments of underprepared and first-generation students.

Comparisons between reported course types, goals, and content offer useful insight into how student success courses are implemented in community colleges. Although the extended orientation course was the most frequently reported type in two-year colleges, primary course goals and content areas reported placed strongest emphasis on academic rather than "college knowledge" skills. The four most frequently reported course goals (out of eight choices) were "(1) develop academic skills; (2) provide orientation to campus resources; (3) encourage self-exploration; and (4) develop support network" (Tobolowsky, 2005, p. 30). Priorities for course content reinforce the academic emphasis suggested by goal priorities. The four most frequently reported content areas (out of eleven choices) were "(1) study skills; (2) time management; (3) campus resources; and (4) academic planning" (p. 30). College policies, which might be expected to be a significant topic in a college orientation, ranked seventh.

The fact that developing academic skills was given higher goal priority than orientation activities in a course that is ostensibly *about* orientation suggests a number of questions concerning definitional clarity, label confusion, poorly defined course goals, conflicting expectations among different campus constituencies, questionable alignment between theory and practice, and lack of course integration into the college's larger retention/student success program strategy.

Issues with Success Course Implementation

Tinto (2002) points out, "Too many colleges and universities begin conversations about the freshman seminar by asking about the type of seminar they should adopt" (p. 6). He proposes that most appropriate way to begin that conversation is with more general questions about what the character of the first year of college should be. With that general structure in mind, the next question becomes, "Do we really need a success course?" Only after these things are established do questions about the type of program become relevant.

I think we need to reconsider how we employ the Freshman Seminar. The important concepts that underlie the freshman seminar should be integrated into the very fabric of the first year. The seminar should not be left at the margins of institutional life, its ideas treated as add-ons to the "real business" of the college. Too frequently the freshman seminar is treated as a type of vaccine that we hope will make the students immune to the many dangers of the freshman year. Unfortunately, by isolating the seminar from the curriculum, students tend to discount the seminar and its activities as unimportant when in fact it is. (pp. 6-7)

Student success course type, content, and goals are important variables that have not been accounted for in existing research, nor has the impact of institutional policy.

Generalizibility of research on student success courses depends in part on grounding

quantitative studies in well developed and clearly articulated descriptive data delineating instructional characteristics of the courses being studied.

Equally important, however, is how the course is positioned by policy and how it is supported and integrated into the new community college student's experience. The same model attributes that made success courses easy to adopt for all kinds of institutions have also allowed it to be used as a "plug and play" program. No matter how well formed and fitted a student success course might be in an institution, its impact on student outcomes will in part depend on how it is supported and valued by the institution, and how well that value is communicated to students.

Success Courses in the Persistence Literature

The importance of student support services to student persistence is a relatively foundational concept in higher education. In spite of the fact that retention study has produced an extensive literature, however, the part devoted to the effectiveness of specific student support services and initiatives is sparse (Grubb, 2001). In a literature review of mainline higher education journals published between 1980 and 2002, Patton et al. (2006) found few empirical studies of on campus-based programs and initiatives designed to improve persistence.

Hundreds of studies have tested assumptions of theories of student departure...Although these theories and their efforts to test the properties of each model are useful, they do not provide empirical analyses of campus-based programs that purportedly enhance student persistence. (pp. 9-10)

Researchers compiled a list of initiative categories based on "assertions made about the efficacy" (p. 10) to guide further focused research on each initiative. Only 16 studies

were found, six of which met methodological standards for high quality. Little to no evidence was found to support categories including mentoring, counseling, career services, and center-oriented services. Small to moderate evidence supported effectiveness of learning communities and faculty-student interaction programs, and moderate to strong evidence supported transition or orientation programs.

In another study, Braxton, McKinney, and Reynolds (2006) reviewed studies and reports on campus-based initiatives from Indiana colleges and universities. The authors found the volume of research to be low and the studies that had been conducted to be methodologically insufficient and lacking in theoretical grounding.

Hossler (2005) speculates that the dearth of literature on effectiveness of campus-based programs is related to limited administrative time devoted to consistent management of enrollment management goals and initiatives. Without focused leadership, decisions on retention programs are easily influenced by professional buzz:

All too often, campus-based retention initiatives lend themselves to what might be called the *laundry list* model of student persistence programming. That is, someone on campus has read the two main strands of writing on student retention: (1) research on student persistence—usually testing theoretical models; and (2) the propositional literature in this area (short pieces, practitioner-oriented journals, and publications where campus administrators write about what they believe should improve student persistence). With this foundation they do a quick scan of their campuses and determine, "We are doing almost everything we should be doing to enhance student persistence. We have academic advising, we have orientation, we have career planning offices, we have learning communities, we have academic support centers, we have culture centers for students of color, and our faculty have frequent interactions with our students." A wise campus administrator may be successful, for example, in arguing for more funding for academic advising so that the student to advisor ratio can be reduced so that student attrition rates can be improved. Of course, based on research to date, it is unlikely that anyone in these situations on most campuses will actually conduct a study to determine whether or not the investment actually improved persistence rates. (p. 8)

Hossler's speculation underscores the fact that supporting literature and models for systematically determining effectiveness of retention initiatives are both important to effective campus-based programs and largely unavailable.

For practitioners in community colleges, empirical evidence supporting common campus-based retention initiatives is even more limited. Bailey and Alfonso (2005) note that adequate data to rigorously evaluate program effectiveness are not widely available. The authors also point out that much of the available literature focuses on four-year college populations and reflects little awareness of the incongruity of conflating two-and four-year theoretical perspectives and research. Retention literature aimed at two-year colleges continues to be posed in terms of altered four-year models rather than newly constructed models based on and developed for community colleges.

St. John and Wilkerson (2006) underscore the complexity of the task of developing adequate theoretical and methodological constructs for studying persistence in community colleges.

While standard persistence research is well positioned to continue producing replicated studies for systematic review and comparison, the more difficult issues related to improving academic success for an increasingly diverse student clientele go largely unaddressed....In comparison to the persistence research tradition as we have known it, we now face a street-level, working-class challenge: to provide high-quality institutional research that not only informs difficult institutional decisions about resource reallocation but that also encourages practitioners—college teachers and student affairs administrators—to face up to the critical challenges now facing higher education. With increasing numbers and diversity of students on the one hand and declining public financial support on the other, many colleges and universities face critical challenges in their efforts to improve student success. (p. 1)

The authors point out an important misalignment that is manifested in an academic research industry that is primarily focused on intellectual inquiry and publication. A persistence research tradition that remains aloof from practice leaves the job of education half done. Community college research in particular must be expanded to provide viable theoretical models and study designs that assist practitioners in developing more effective services and programs at the institutional level.

Bailey and Alfonso (2005) cite four specific problems with research on institutional retention practices in community colleges:

First, the large majority of the research on program effectiveness in higher education is limited to studies of four-year colleges. Insights obtained from this research do not necessarily translate to effective practices for the part-time, working, and adult population that characterizes community colleges. Second, the national data sets that allow comprehensive analysis of the experience of postsecondary students do not include data on the types of specific institutional practices and policies that colleges use to increase student success. Third, methodological problems thwart definitive conclusions about the effectiveness of community college policies and practices. Fourth, the dissemination and discussion of research on community colleges are inadequate. Reports are difficult to obtain and usually include too little information to allow a judgment about the validity of the conclusions. (p. 2)

None of these issues is simply solved, but all are solvable.

Success Course Research in Community Colleges

Student success courses in general enjoy a widespread reputation as effective campus-based retention strategy in community colleges. Pascarella and Terenzini's positive assessment of success courses in their 1991 synthesis of postsecondary college impact research codified the student success course as a valid implement in the retention toolbox throughout higher education: "The weight of the evidence suggests that a first-

semester freshman seminar is positively linked with both freshman-year persistence and degree completion. This positive link persists even when academic aptitude and secondary school achievement are taken into account" (pp. 419-420). A 1988 AACJC report (Commission on the Future of Community Colleges) urged community colleges to pay more attention to retention, and specifically recommended that every college develop a "comprehensive First Year Program with orientation for all full-time, part-time and evening students" (p. 11). Success courses are also actively supported by student success initiatives such as Achieving the Dream and the Community College Survey of Student Engagement.

A review of the literature for research on success courses outcomes in community colleges yields little empirical support for their reputational standing. Much of the limited work that does exist is based on single-institutional samples and participant-outcome methodologies. In a literature review on student success courses for their own study, Derby and Smith (2004) found "no existing studies that address how specific classes affect institutional attrition" (p. 766).

Bailey and Alfonso (2005) point out available data on program effectiveness is limited. Because insufficient national data exist on institutional practices, most program effectiveness research is based on samples from single institutions. While these can be useful in identifying program attributes and student factors that call for additional study, their conclusions are difficult to generalize because effects may be based on particular features of the college being studied. Multi-institutional studies offer a broader perspective. For example, in a study of four North Carolina community colleges, Glass

and Garrett (1995) found that completion of an orientation program during the first term of enrollment promotes and improves student performance regardless of age, gender, race, major, entrance exam scores, or employment status.

In a qualitative study conducted at four different types of institutions—an urban community college, a residential liberal arts college, an urban commuter state university, and a residential research university—Clark (2005) examined student strategizing behaviors in the first year of college. Though this study focused primarily on findings from series of interviews on the four-year commuter campus, the focus on internal and external influences on commuting student behaviors resonates with community college experience. Data was collected via bi-weekly interviews with eight traditional aged second-semester freshmen recruited from the commuter college's required freshman seminar course.

Overall findings of this study suggest that college transition experience includes an active process of strategizing to overcome challenges both inside and outside of college. Each challenge was associated with a set of influences similarly rooted both inside and outside the college that were perceived as non-negotiable attributes of the challenge situation. Students responded by developing strategies to address the challenges and accommodate related influences. Four broad challenge themes emerged: overcoming an obstacle, seizing an opportunity, adapting to change, and pursuing a goal. Student strategy-making was strongly influenced by perceptions of their responsibilities and obligations, various resources and information that they could depend on, and their

options and alternatives within a given situation. Persistence and confidence were found to be influential personal characteristics in shaping students' strategizing efforts.

Findings relative to success course experience focus on student receptivity to course content.

The results of this study further suggest that even when heuristic knowledge is taught formally, as it is in this college's freshman seminar, students may be unreceptive to the knowledge until it becomes personally relevant to them. In some cases, students do not realize that the knowledge is relevant until the second semester, when they receive the undeniable and permanent results of their first-semester academic efforts. At that point, students may be forced to acknowledge barriers to their academic success that they were previously unwilling or unable to recognize, and they become receptive to the heuristic knowledge that will help them succeed. For most students, however, the freshman seminar course is not a resource that is available to students beyond their first semester. Consequently, many students perceive or assume that they are left to negotiate challenges on their own after their first semester. (p. 311)

The experience noted above may be intensified for commuter students who "may struggle to find a sense of community or continuity" (p. 311), and for whom classes, daily schedules, and consequently, classroom-based peer relationships change from semester to semester. This observation resonates with findings by Napoli and Wortman (1996, 1998). Their analysis of research examining fit of Tinto's interactionalist model in two-year commuter colleges showed a significant initial effect size for social interaction which declined as the persistence interval increased. Viewed together, these findings suggest that for community college students an accurate understanding of social integration must be derived longitudinally.

In their study of the impact of an extended orientation success course at a large Midwestern community college, Derby and Smith (2004) assessed the course's

relationship with improved student outcomes. Course objectives focused on promoting campus familiarization, academic and career planning, personal awareness, and developing a support network. Four retention variables were measured: (a) students' success in obtaining a transferable degree within a specified two-year time period, (b) student drop-out, (c) student re-enrollment after brief enrollment breaks, or stop-outs, and (d) student persistence. The study sample included 7,466 entering and reverse transfer students with the goal of transferring to a baccalaureate institution. Reverse transfer students were defined as those transferring more than 16 credit hours into the institution. Participants were divided into cohorts by year of entry in 1998, 1999, and 2000 and followed for 4, 2, and 2 years respectively. All participants enrolled in daytime sections of the course.

Findings suggested significant associations existed between success course participation and all retention variables for all cohorts. This indicated that students who took the class had lower rates of stop-out and drop-out and higher rates of persistence and on-time associate degree attainment. Findings for reverse transfer students showed significant association with the drop-out variable for all groups, indicating fewer reverse transfers students who took the success course dropped out. A significant effect for the success variable was found for the 1999 cohort only.

While the study shows strong empirical evidence supporting improved outcomes for participants, the choice to limit the sample to transferring students in day-time classes precludes generalization of these effects to all community college students. Because of the multiple dimensions of diversity among community college students

(e.g., demographic characteristics, academic goals, enrollment patterns), consideration of sampling techniques for research in two-year colleges is critical to both conducting and interpreting research. Representational sampling and disaggregating resulting data are critical to developing fuller understanding of how success courses work across the student population.

Statewide and national databanks developed in response to increased accountability pressures are presenting rich opportunities for larger, more substantial research on campus-based programs. Existing research on whether success course participation improves outcomes for community college students includes a handful of methodologically strong studies. In one of the more rigorous studies, Zeidenberg, Jenkins, and Calcagno (2007) conducted statistical reanalysis of statewide Florida Community College System descriptive data comparing outcomes for students who participated in success courses with those who did not. Student success courses are offered at all 28 of Florida's community colleges, though they are not required for any group at 13 institutions. Required enrollment at the other 15 colleges is usually related to simultaneous enrollment in one or more remedial courses, or with academic probation. One college requires all students to take the course.

Data for the study tracked the fall 1999 cohort of students entering Florida's community colleges over 17 terms, or nearly six years. Initial descriptive analysis of this data set reported by the Florida Department of Education (2006) indicated a positive relationship for all student groups between success course completion and achieving one of three indicators success: earning a community college certificate or degree,

transferring into the state university system, or continued enrollment in college. Further statistical analysis was conducted by the Community College Research Center at Teachers College, Columbia University. After controlling for variables of race, gender, and academic preparation, the analysis showed that students who enrolled in no remedial credits and took a success course were 9 percent more likely to succeed, and that students who enrolled in one or more remedial course were 5 percent more likely to succeed.

Zeidenberg et al. (2007) provide the largest sample overview of success course effectiveness in community colleges to date. Their findings provide substantial support for the use of success courses in these institutions; however, their findings are limited in several respects. Varied policies on who was required to take success courses across the 28 institutions precludes assumption of representational sampling, and thus limits generalizibility of findings. The difference in percentages of improvement in success outcomes for developmental and non-developmental students suggests that other factors (e.g., course model, instructor selection) may operate differently for different student groups. Finally, although the longitudinal participant-outcome design of this study provides solid broad-perspective findings, it offers little insight into student experiences or operational aspects of success course practices.

In a qualitative study of how institutional support services contribute to or hinder students progress toward a degree, Karp et al. (2008) assessed the impact of student success courses on persistence. Forty-four randomly selected students participated in the first round of interviews and 36 in the second round conducted six months later. The

success courses studied were required for all students at one research site and for full-time (but not part-time) students at the other.

Karp et al. (2008) found that most study participants who had taken the success courses found them to be helpful. The courses were "the arena through which the vast majority of students gained the bulk of their college-related knowledge" (p. 13), particularly information about other student support services such as tutoring. Several of these students also mentioned that they would not have taken these courses had it not been required. Student who did not take the courses mentioned receiving misinformation and not knowing about services that were discussed repeatedly in the success course. At the college where the success course was not required for part-time students, none of the part-time students took it voluntarily.

Part-time students in the study tended to be older, to have fewer support resources for college-going, and to have more outside demands and responsibilities. Karp et al. (2008) argued "An unintended consequence of the policy exempting part-time students from taking the Student Success course is that those students likely to be in most need of assistance did not get it, while their more advantaged, full-time peers did so" (p. 13). Overall findings for the study noted students who entered with higher levels of social and cultural capital tended to be consistently more successful at navigating college process.

Within our sample, there was a high degree of co-linearity among social background, access to support services, and progress toward a degree. Thus, it appears that students' backgrounds were being reproduced by the very structures meant to minimize such inequality. Moreover, the ethos of meritocracy and open

access found in the community college, and internalized by students, legitimated and hid this process (Karp et al., 2008, p. 22).

This research supports the impression that if institutions offer a service, faculty and staff are likely to assume that students will get what they need there, and that's all that needs to be done. Alternative access to the information provided in the success course was either unavailable or invisible to those who needed it most.

Conclusion

One option for opening up different insights on success courses in community colleges as well as adding research to the knowledge base is to examine success course outcomes in terms of their influence on engagement. Student engagement theory encompasses a wide body of theory and research in the single premise that students learn through active engagement in purposeful educational experiences (Kuh, 2003). Recent research found strong evidence supporting student engagement theory as a well-aligned framework for community college research (Marti, 2008; McClenney & Marti, 2006; Schuetz, 2007). Further, validation research on the Community College Survey of Student Engagement (CCSSE) reported by McClenney and Marti (2006) and Marti (2009) established CCSSE engagement benchmarks and scales as valid predictors of several academic and persistence outcomes among two-year college students.

While no studies have examined the relationship between student success course participation and student engagement, understanding that relationship might provide valuable insights into how success courses influence student outcomes and how that influence varies between student groups. Such insights could help community college

administrators and practitioners shape success course models, policies, and practices to better meet the needs of their diverse student populations.

CHAPTER THREE: METHODOLOGY

Chapter Overview

This chapter describes the exploratory mixed methods case study approach taken to examine the empirical relationship between participation in student success courses and student engagement. The research problem, goals, and questions are reiterated, followed by description of the conceptual framework that grounds the study.

The chapter then moves to the specifics of the study design beginning with selection of the four colleges that serve as research sites, the record matching process that produced the CCSSE sample, and participant selection for the focus groups conducted on each of the campuses. A discussion of the case study and mixed methods approaches is followed by explanation of processes for collecting and record matching 1,909 CCSR reports and conducting five focus groups with a total of 65 participants. Identification and retrieval for secondary documents to provide interpretive context for the study are also noted.

The last portion of the chapter describes the data analysis procedures. Statistics were generated using SPSS. NVivo software was used to record, organize, and process qualitative data. A research process summary is followed by discussion of establishing the validity of the quantitative portion of the study, the trustworthiness of the qualitative portion of the study, and the quality of the mixed methods inferences. The chapter ends with a review of confidentiality, consent, and permission issues.

The Research Problem

As the literature review revealed, community colleges have developed organizationally and culturally in the pattern of four-year colleges in spite of significantly different missions and student populations. In that same pattern, success courses models based on traditional baccalaureate culture have been widely adopted in community colleges with little well-aligned supporting theory and research. Marti (2008) notes that, "[w]hile the factors that influence persistence in the four-year sector can reasonably be expected to be influential factors in the two-year sector, the relative importance of these factors is unlikely to be equivalent" (p. 4). In a similar vein, Bailey and Alfonso (2005) point out: "Policies designed to retain 18-year-old students living in dorms are not likely to be as effective for part-time, working students and especially for adults with families and full-time jobs" (p. 8). Inadequately aligned research and theory may diminish course impact or obscure insights on how these courses might be better constructed to support the diverse groups (Hurtado & Carter, 1997; Nora, 2004), educational goals (Hoachlander et al., 2003), programs (Bailey et al., 2005) and ways of college-going (Braxton & Mundy, 2001-2002; Chickering, 1974, Pascarella et al., 1983) that characterize community colleges.

Research on student success courses in community colleges is sparse and limited in methodological rigor, consisting primarily of single institution studies based on narrow participant-outcome models (Bailey & Alfonso, 2005; Bailey et al., 2004; Braxton et al., 2004; Derby & Smith, 2004). General outcome measures such as

persistence-over-interval rates provide a broad, cumulative picture of whether students change over time (Kuh, Pace, & Vesper, 1997). However, such measures are limited in their capacity to account for intervening variables or explicate process influences; thus they offer little practical help to colleges seeking to develop or revise success initiatives for maximum effectiveness.

Significant gaps in success course research are particularly relevant to the implementation of success courses in community colleges. Wild and Ebbers (2002) and Bailey and Alfonso (2005) point to the critical need for development of a rich theoretical base specifically focused on community colleges to inform better aligned research and practice (Bailey & Alfonso, 2005; Schuetz, 2005; Wild & Ebbers, 2002). Differences in how success course participation affects outcomes for students of different racial, ethnic, and age groups and for part-time students remain largely unexplored (Bailey& Alfonso, 2005; Hurtado & Carter, 1997; Zeidenberg et al., 2007). Part-time students are a particularly understudied subgroup, yet they account for more that 60 percent of community college enrollment (NCES, 2006, table 179) and persist at lower rates than full-time students (Chen, 2007; Hoachlander et al., 2003; Horn & Berger, 2004; Mohammadi, 1996; Phillipe & Sullivan, 2005). Success courses might play an important role in improving part-time student outcomes; however, competing responsibilities and tight schedules characteristic of this group make it important to understand how they perceive and experience participation in these courses in relation to the benefit they gain.

The relative effectiveness of different success course content, formats, and delivery methods remains largely unexamined, as does the impact of environmental

factors such as institutional policy or instructor selection. Zeidenberg et al. (2007), call for additional research to help determine what makes success courses work, what attributes and models are most effective, and how different models support improved outcomes among different student groups. Clearer consideration of these factors in all research, whether in descriptive context of the study or as study variables, is necessary to generalize findings in any study of these courses.

Process indicators and measures of behavior can be used to assess interim interactions between students and college environment; thus they can help identify effective learning activities and opportunities and the extent to which students take advantage of them (Kuh et al., 1997). Student engagement is a broadly drawn construct regarding how students learn in colleges, and its associated body of literature provides viable support for process and behavior measures of diverse students' experiences in the community college environment. The availability of the Community College Survey of Student Engagement (CCSSE) provides a validated instrument by which such measures can be made. While no studies have examined how student success course participation relates to student engagement, understanding that relationship could provide valuable insight into how success courses influence student outcomes, and how course impact might differ for various student groups.

Research Goals and Questions

This study sought to contribute to a better understanding of the relationship between success course participation and engagement as well as the engagement and college experiences of full-time and part-time students. Toward that end it was guided by the following research questions:

- 1. What is the relationship between participation in a student success course and engagement in college as measured by the Community College Survey of Student Engagement (CCSSE)?
- 2. How does the relationship between success course participation and engagement as measured by CCSSE compare for part-time and full-time students?
- 3. What insights do student views on success course participation as expressed in focus groups contribute to the quantitative analysis of the course participation/engagement relationship?
- 4. In what ways do student views on success course participation as expressed in focus groups inform analysis of the course participation/ engagement relationship for full-time and part-time students?

The Conceptual Framework

Considering the complex array of students and student goals common to community colleges, constructing a more accurate understanding of success factors requires a conceptual framework that does not gloss over their diversity and difference with the assumptions of four-year college culture. Further, it should be flexible enough to articulate experiences across the full diversity of community college students and their multiple educational pathways.

The conceptual framework for this study drew from student engagement literatures. Student engagement encompasses major tenets from a wide body of theory and research in the single premise that success in college is directly related to the time

and effort the student expends in purposeful educational activities: "What students *do* during college counts more in terms of desired outcomes than who they are or even where they go to college" (Kuh, 2003, p. 1). Although terms used in individual models differ, student engagement theory draws on a range of theoretical work in college impact study, including the work of Astin (1984, 1993); Kuh et al., (1991); Kuh et al., (1989); Pace (1984); Pascarella & Terenzini (2005); and Tinto (1975, 1982, 1987, 1993).

The works of all of these scholars are predominantly based on four-year college students and environments. However, the core notion of engagement common to all of these works represents a generalizable construct that may be articulated in relation to the particular educational setting. As a result, the construct of student engagement appears to offer both the substance of extensive literature and the flexibility to accommodate the differences and diversities of community colleges. Recent research has found strong evidence supporting student engagement theory as a well-aligned framework for community college research (Marti, 2008; McClenney & Marti, 2006; Schuetz, 2007). Further, CCSSE validation research CCSSE reported by McClenney and Marti (2006) and Marti (2009) established CCSSE benchmarks and scales as valid predictors of several academic and persistence outcomes among two-year college students.

Research Site Selection

Specific criteria guided the selection of colleges for participation in this study. First, to secure an adequate CCSSE sample size, large colleges (enrolling 5000+ students) were targeted. Each college was also required to (a) have offered one or more student success courses for at least three years; (b) have a current policy requiring first

time in college (FTIC) students to enroll in a student success course; (c) have participated in CCSSE for at least two years between 2005 and 2007; and (d) be willing to grant the researcher access to both CCSSE and de-identified institutional enrollment data.

The four accredited colleges of the Alamo College District in San Antonio, Texas—Northwest Vista College (NVC), Palo Alto College (PAC), San Antonio College (SAC), and St. Philip's College (SPC)—met all of these criteria. A fifth Alamo college, Northeast Lakeview, opened in Fall 2007, but did not meet the criteria and was excluded from the study.

The Alamo College district is one of the largest community college districts in the country, with a 2007 annual unduplicated enrollment of nearly 80,000 students (THECB, 2008). Though The Alamo Colleges operate under a single board of trustees and chancellor, each institution is independently accredited and has a unique culture, curricular emphasis, and student profile.

St. Philip's College (SPC), located on the east side of downtown San Antonio, is the oldest of the Alamo colleges. Founded in 1898, SPC is the only college in the country that is designated as both a Historically Black College (HBCU) and a Hispanic Serving Institution (HSI). Nearly 67 percent of the 16,000 students who enroll annually at SPC are minorities, and nearly 55 percent are age 25 or older.

San Antonio College (SAC), founded in 1925, is located near downtown San Antonio. SAC is the largest of The Alamo Colleges with an annual unduplicated annual

enrollment of more than 35,500 students, of whom 56 percent are minorities and an equal percentage is under age 25.

Palo Alto College (PAC) was founded as the third Alamo College in1983 on the south side of San Antonio. PAC serves 12,700 students annually, including the highest minority enrollment in the district at 68 percent, of which 63 percent are Hispanic. Fifty-eight percent of its students are under age 25.

Northwest Vista College (NVC) opened its doors in 1995. Located in the booming northwestern corner of Bexar County, NVC is currently the fastest growing of the Alamo colleges. Fifty-five percent of NVC's 15,000 students are minorities. Almost 70 percent of NVC's students are under age 25, making it the youngest overall population in the district.

An added impetus for choosing the Alamo colleges as research sites for this study is the district's 2004 selection for participation in Achieving the Dream: Community Colleges Count (AtD). AtD is a multiyear national initiative that aims to help more community college students succeed in reaching their postsecondary goals, including earning certificates or degrees, transferring to baccalaureate institutions, and developing or improving job skills. Participating institutions commit to developing and implementing specific strategies in areas they consider key to improving student success, and to collect and assess outcome data to inform their efforts (Achieving the Dream, 2006).

As part of their commitment to Achieving the Dream, The Alamo Colleges chose the student success courses, titled Student Development or SDEV, as a primary target for improvement. Initiatives to build the SDEV program have included cross-district work groups and district-wide staff development programs as well as a gradual standardization of SDEV content and policy over the past four years. Documentation associated with this process provided valuable information cross checks as well as contextual description of how this course is implemented at the college level. In addition, access to consistent institutional-level data through The Alamo Colleges Institutional Research Office (OIR) lent strength to the record matching step in identifying the quantitative sample.

These factors, along with solid district-level administrative support for research on success courses led to the selection of Northwest Vista College, Palo Alto College, San Antonio College, and St. Philip's College as research sites for this study.

Participant Selection

The participant pool for the quantitative portion of the study was drawn from students sampled at the four research sites in the 2005, 2006, and 2007 CCSSE administrations.

CCSSE Sampling Process

The Community College Student Report (CCSR), CCSSE's survey instrument, is administered each spring to participating colleges according to a stratified random cluster sampling procedure and standardized administration protocols. Credit classes are randomly selected for administration during three time periods through the day and early evening. The number of classes selected for the sample is calculated to yield a sufficient number of cases to reduce sampling error and ensure valid results. While cluster

sampling is associated with increased standard error as compared to individual sampling, it allows collection of larger amounts of data and thus offsets that disadvantage (Marti, 2009).

Data fields for success course participation and enrollment status were gathered by matching student identifiers provided on the CCSR with institutional enrollment data. Report of student identifiers on the CCSR is voluntary. Approximately 38 percent of CCSRs in the participant pool included some value in the student identifier field. After cleaning data to remove incomplete and unusable student identifier values, the student identifiers were provided to the OIR, where they were matched with consistent data sources for all colleges to provide the SDEV course number, semester taken, and final course grade for participants. A total of 1,909 viable cases were identified, representing 24 percent of the total CCSSE participant pool (Table 3.1).

Table 3.1: Total CCSSE Samples and Total Matched Case Samples by College and Year

	1641								
	All 2005	All 2006	All 2007	All Cases	Matched 2005	Matched 2006	Matched 2007	Matched Cases	
NVC	713	733	850	2296	172	180	164	516	•
PAC	567	605	635	1807	153	147	159	459	
SAC	1089	*	1198	2287	289	*	226	515	
SPC	882	*	807	1689	185	*	234	419	
Total	3251	1338	3490	8079	799	327	783	1909	

Note. * College did not participate in CCSSE in this year

Data for enrollment status was also obtained through ACCD record matches. The CCSR asks students to identify their enrollment status in a question stated as follows:

Thinking about this current academic term, how would you characterize your enrollment at this college? Response options are full-time and less than full-time. However, the data generated in response to this question may be seen as problematic in two respects. First, no clear instructions (i.e., hour delimitations) define the institutional definition of fulltime and less than full-time enrollment, leaving some question as to whether student responses adhere to that definition. Second, the question asks for the enrollment status of the current semester only. In his groundbreaking study of latent persistence pathways among community college students, Marti (2007) demonstrates a relationship between enrollment patterns over time—pathways—and engagement. Comparisons of part- and full-time student engagement relative to success course participation were a primary avenue of investigation in this study. While specific examination of enrollment patterns is beyond the purview of this research, a definition of part-time and full-time enrollment that takes into account how community college students enroll over time was deemed desirable. To that end, enrollment status for each student case in the study was defined as average attempted hours per term attended over a period of four academic years relative to the term of CCSSE participation. The period examined for each CCSSE year is as follows:

For 2005 CCSSE participants, Fall 2002 to Spring 2006

For 2006 CCSSE participants, Fall 2003 to Spring 2007

For 2007 CCSSE participants, Fall 2004 to Spring 2008

In response to these parameters, the OIR reported number of terms attended, total hours attempted, and the calculation for average hours attempted during the designated period.

This calculated average attempted hours value provided a cumulative continuous variable for enrollment status for use in statistical analysis.

Focus Group Participant Selection

Student perspectives on success course experience and engagement were assessed by conducting focus groups of at least ten participants in each of the colleges in the study. Participant recruitment was criterion based. Targeted participants were students who had taken an SDEV course within the past three years or were currently enrolled in an SDEV course. Recruitment and four of five focus groups were conducted in the latter half of the Fall 2008 semester. One additional focus group at NVC was conducted early in the Spring 2009 semester.

Focus group participants were recruited differently in each of the colleges. Initial efforts to recruit volunteers at PAC and SAC by circulating flyers in ongoing SDEV and English classes yielded minimal response. At SAC, an opportunity was made available to the researcher through the Department of Counseling and Student Development to conduct a focus group with students from two SDEV classes. At PAC, the English Department chair made an opportunity available for the researcher to conduct a focus group in an entry-level developmental English class. Both offers were accepted and focus groups were conducted at both colleges in the final class week of the Fall 2008 semester. Twenty-seven students participated in the SAC focus group. Thirteen students from the developmental English class participated in the PAC focus group.

Owing to a combination of time constraints and limited access to classes for recruiting participants at SPC, the researcher forewent efforts to recruit focus group

participants individually at that college. SPC counseling staff offered an opportunity for the researcher to conduct a focus group in a Flex II SDEV class. Flex-term courses are taught in an accelerated eight-week format, and Flex II courses are conducted during the second half of the semester. The opportunity was accepted, and twelve students elected to participate in the SPC focus group.

Recruitment of individual focus group volunteers was somewhat more successful at NVC, although two different focus group sessions were required to meet the minimum of ten participants. Volunteers for both groups were recruited through circulating information flyers with response forms in English classes (Appendix A). The first group of four students was recruited from both developmental and gatekeeper English classes. After reviewing field notes and demographics of all participants to date, the researcher determined that the composite focus group sample was skewed toward significantly underprepared students. To improve that balance, the researcher sought the assistance of NVC Institutional Research staff to identify English 1302: Freshman Composition II classes with large groups of students who entered the college in Fall 2008 and did not require developmental courses in reading or English. Participants were recruited from classes with nine or more students who met those parameters. Students who returned the volunteer sheet included with the recruitment materials were contacted by phone to confirm the date, time, and location for the session. Sixteen students responded to the recruitment flyer and nine participated in that second NVC focus group.

The Research Design

Empirical research relies on some implicit or explicit design or "plan that provides a logical sequence that connects the data to a study's initial research questions and ultimately to its conclusions" (Yin, 2009). This study attempts to look at the relationship between student success courses and engagement from a heretofore unexamined perspective. The goal is a practical one: to provide colleges with useful insight that will help them develop or examine their own courses to increase student success.

To address the research questions and forward the goal of this study, an explanatory multiple case study design was selected as the primary organizing strategy. Yin (2009) notes that case study is appropriate for investigating a contemporary phenomenon in its real life context, particularly when the boundaries between the two are unclear. Further, case study relies on multiple sources of information and can accommodate investigation of technically diverse situations.

Within the case study strategy, ex post facto analysis of CCSSE data was interwoven with student focus group data in a rich descriptive context to address the research questions. Pascarella (2006) has pointed out that research on the impact of college persistence initiatives often focuses only on the surface of relationships without addressing the nature and mechanism of that impact, making it difficult to generalize findings or replicate programs. According to Pascarella, mixed-methods research is a more robust approach capable of developing fuller understanding of the processes and

mechanisms underlying those relationships. Bailey and Alfonso (2005) contend that research on institutional practices to enhance student success "should combine quantitative research on student outcomes with qualitative research to elicit insights from students about those outcomes" (p. 4).

Mertens (2005) contends that mixed-methods research can speak to questions that cannot viably be answered in any other way. The capacity of quantitative methods to state data in clear numerical relationships supports "knowing." Qualitative inquiry's concern with "understanding" (Lincoln & Guba, 1985) allows the researcher to develop a finer textured, more nuanced picture of the complex interplay of personal, academic, and organizational factors that influence student experiences and behaviors in college. The combination of multiple methods has the capacity to address complex research questions and to provide a more complete picture of the behavior and experience of research participants. This study's pragmatic mixed-methods research approach opened a large toolbox for gathering and examining data to examine the research questions.

Data Collection

Two primary data sources were used for this study: institutional CCSSE data for 2005 through 2007 and student focus group data gathered at each of the campuses. Additional information on student success course participation and enrollment status over time was secured from Alamo College enrollment records. To ground findings in an accurate descriptive context for how the success course model is implemented within the institutions, primary electronic document sources were also collected and analyzed.

Instrumentation

Quantitative analysis of engagement among success course participants and non-participants was based on data from the 2005, 2006, and 2007 CCSSE survey administrations on the participating campuses.

Established in 2001 as a project of the Community College Leadership Program at The University of Texas at Austin, CCSSE is a sister project to the baccalaureate sector survey project, the National Survey of Student Engagement (NSSE) at Indiana University. A substantial overlap with the older survey was intentionally included in the construction of the Community College Student Report, CCSSE's survey instrument (Appendix B). Sixty-seven percent of questions on the 2005 CCSR version were common to both instruments (Marti, 2006). Survey items draw on extensive research connecting good educational practices to improve retention and other desired student outcomes. However, the CCSR, CCSSE's survey instrument, specifically focuses on the distinctive institutional mission and populations served by two-year colleges (Marti, 2004).

As a validated instrument specifically developed for two-year colleges, CCSSE provides a heretofore unavailable tool for the study of relationships between institutional practices and student engagement. Dimensions of engagement measured by the CCSR were initially defined in early analysis of the instrument's psychometric properties (Marti, 2009). That research had a twofold purpose which, while similarly motivated, diverged in emphasis.

The first goal of analysis was "to define the model of best fit, which is a theoretically meaningful model of the underlying dimensions of student engagement that provide the best statistical fit to the data as measured by fit indexes" (Marti, 2009, p. 4). Nine latent engagement factors were identified in the more granular model of best fit (MBF): faculty interactions, class assignments, exposure to diversity, collaborative learning, information technology, mental activities, school opinion, and student services. These factors were statistically significant as person-level engagement factors. For a full list of factors and associated survey items, see Appendix C.

The second goal for validation analysis was to construct from those initial factors a practically useful number of benchmarks for effective educational practices. These more molar measures provide a general means by which practitioners might evaluate institutional-level strengths and weakness in student engagement. The resulting CCSSE benchmarks are composed of groups of questions topically focused and statistically linked as measures of five dimensions of student engagement—active and collaborative learning, student effort, academic challenge, student-faculty interaction, and support for learners. CCSSE benchmarks and associated CCSR items are detailed in Appendix D. Validation research shows that CCSSE benchmarks and factors provide reliable and valid measures of student engagement, and as such, predictors of educational outcomes among two-year college students (Marti, 2008; 2009; McClenney & Marti, 2006).

As the research chronicled here is exploratory in nature, both MBF factors and benchmarks were seen as potentially important to the process of explicating the relationship between success course participation and engagement. Therefore, both sets of factors were included in the statistical analysis.

Student Focus Group Data

Five focus groups were conducted for this study: one each at SAC, PAC, and SPC, and two at NVC. At each focus group session, students were asked to complete a consent form (Appendix E) brief demographic questionnaire (Appendix F) along with their consent forms. Discussion in the groups was guided by, but not restricted to, a list of investigative questions focused on entering student experiences, contributors to successful engagement in college, and experience in SDEV classes (Appendix G). No instructors were present during any of these sessions, nor was any course credit or reward associated with participation. The researcher provided no compensation for participation. Snacks were provided.

Catarall and McClaran (1997) point out that recording and analyzing details of group dynamics in focus groups helps the researcher understand what was happening in the group and why it might have been happening in just that way. These insights can substantially enrich analysis of data. To assist in evaluating group dynamics, the researcher recorded field notes regarding the conditions and processes of each focus group following the conclusion of the sessions.

Document Collection for Review

To contextualize the analysis of the primary data in this study, documents reflecting success course policy and practice were reviewed. Hatch (2002) contends that a major strength of qualitative research is its capacity to examine social phenomena in

context through careful description. The term *context* is used to indicate the particular settings, participants, relationships, and activities that influence and compose a particular phenomenon. In social science research, rich and precise description of the context of the phenomenon under study is important in the interpretation of both quantitative and qualitative studies. Lack of such descriptive context has often placed significant limitations on the extent to which findings may be generalized to other institutions or situations.

A purposeful and specific selection of electronic texts was reviewed to provide an interpretive context for the district and college case studies. To assess the visibility of SDEV policy and its general presentation in college documentation, the colleges' online catalogs, student handbooks, and policy manuals were searched for the term SDEV. Attention was given first to accessibility of information, including where and how course policies on SDEV courses were presented and the frequency of hits on the search term. Second, documents were reviewed for indications of institutional commitment to the SDEV program, including information about how the course was administered and integrated into overall college processes.

Quantitative Methods

Dallal (2007) avers that multiple linear regression techniques are most commonly applied when the research questions concern either developing models for prediction or uncovering mechanisms. Research designs that seek to explore mechanisms often compare a model including the particular predictor under investigation with one that does not: "The research question can usually be restated as

whether the model including the mechanism better predicts the outcome than the model that excludes it...Sometimes the question is not about effects but associations" (sect. 14, pt. 4). In the case of this study, the mechanism of interest is engagement and the relevant associations are those between success course participation and engagement. While the utility of the CCSSE engagement model has been well documented through validation research, the process of fitting that model to institutional practice is one of the goals of this study. For that reason, multiple regression analysis was selected as the appropriate statistical process.

Ex post facto analyses of CCSSE data to answer Research Questions 1 and 2 were conducted by fitting linear and multiple regression models using SPSS statistical analysis software.

Explanation of Variables

The CCSSE engagement constructs used in this study were comprised of nine statistically derived latent engagement factors and five benchmarks of institutional effectiveness developed from those factors. A complete description of CCSSE factors is available in Appendix C and similar details of engagement benchmarks in Appendix D. A summary of CCSSE benchmark and factor survey item overlap may be found in Appendix H.

There are four different SDEV courses taught in ACCD: SDEV 0170: SDEV 0171, SDEV 173, and SDEV 0370. These courses are targeted for different audiences—general population, significantly underprepared students, or academic probation students—they share the goal of building skills and experiences that help students

successfully engage in college. For the purposes of this study, it was assumed that students who enrolled in any SDEV course received the basic elements of treatment should be considered "SDEV enrolled."

The independent variable for success course participation was divided into two primary levels of participation: No SDEV and SDEV Enrolled. The SDEV Enrolled group included any student who enrolled in the class, regardless of subsequent withdrawal or final course grade. Values for Average Attempted Hours were calculated by adding all hours attempted for a four-year period relative to students' CCSSE participation and then dividing the totals by number of terms attended. The relative periods used to calculate Average Attempted Hours are as follows:

For 2005 CCSSE participants, Fall 2002 to Spring 2006

For 2006 CCSSE participants, Fall 2003 to Spring 2007

For 2007 CCSSE participants, Fall 2004 to Spring 2008

Statistical Processes

To answer Research Question 1 (What is the relationship between participation in a student success course and engagement in college as measured by CCSSE?), mean averages for CCSSE's benchmarks and engagement factors item clusters were regressed on the independent variable, success course participation.

To answer Research Question 2 (How does the relationship between success course participation and engagement as measured by CCSSE compare for part-time and full-time students?), engagement benchmarks and factors were regressed on SDEV enrollment levels and a continuous variable for average attempted hours per term

attended. Part-time students constitute a critical demographic in community college populations. This study sought to enable a clearer view on whether success courses work the same for students at different enrollment levels. Focus group data allowed for a more finely textured analysis of how engagement of part-time and full-time students is influenced by participating in success courses.

Qualitative Methods

To answer Research Question 3 (What insights do student views on success course participation as expressed in focus groups contribute to the quantitative analysis of the course participation/ engagement relationship?) and Research Question 4 (In what ways do student views on success course participation as expressed in focus groups inform analysis of the course participation/engagement relationship for full-time and part-time students?), student focus group data were transcribed and pattern coded. Data collected from focus groups included more than 150 pages of transcripts and field notes from five group sessions involving a total of 65 students. To facilitate analysis, all demographic questionnaire data, transcripts, field notes, and audio recordings were loaded into NVivo qualitative analysis software.

All sessions were audio recorded and subsequently transcribed semi-verbatim. Semi-verbatim indicates a true and accurate representation of actual conversation with minor verbal interrupters such as "like" and "um" removed for clarity. Audio recordings and transcripts were loaded into NVivo where transcripts were further annotated through multiple listening sessions. Using a start list of codes loosely based on CCSSE engagement constructs, transcripts, annotations, and field notes were coded in several

sessions. Analysis using NVivo's query function refined patterns and identified dominant themes, leading to additional layers of coding.

Data Analysis Process Summary

- 1. Document analysis was conducted to help the researcher understand the policy and procedural context of success course implementation across the district. This process was ongoing throughout the early phases of the study.
- 2. An overarching analysis of composite CCSSE data for all colleges and all years was conducted to assess the first two research questions at the ACCD level. First, the relationship between success course enrollment and engagement was analyzed by regressing engagement benchmarks and factors (DV) on levels of success course enrollment (IV). Second, to explore the effects of enrollment status on the relationship between success course participation and engagement, average attempted hours per term attended was added to the previous regression model as an independent variable.
- 3. Generation and analysis of statistics in Step 2 were repeated for each individual college.
- 4. Concurrently with the previous steps, focus group data was processed and analyzed to generate thematically organized student perspective on success courses and how they impact the experience of engaging in college.
- 5. Within-case analysis of quantitative and qualitative data was conducted and case studies for each college were constructed.
- 6. Cross-case analysis returned the interpretive task to the ACCD level for a final review of findings for district-level consideration.

Reliability and Validity

Underlying the question of reliability is "whether the study is consistent, reasonable, stable over time and across researchers and methods?" (Miles & Huberman, p. 278). The central concern in assessing the validity of research is "truth telling" (p.

278). Credibility of overall study findings is established through triangulating general descriptive data for each institution, focus groups data, and quantitative data on engagement with a careful eye to the literature. Cross-case analysis provided an additional check for patterns and discrepancies.

Quantitative Data

Reliability and validity of quantitative data used for this study was imputed from CCSSE research. Using multiple-group confirmatory factor analysis (CFA) to assess reliability, Marti (2009) found that that "the CCSR is appropriate for use in a wide variety of populations, as respondents are answering questions in a reliable manner and the results can be demonstrated to be effectively related to other relevant measures" (p. 14). To establish the validity of the CCSR, CCSSE's survey instrument, three major studies were undertaken by three different researchers using data sets from the National Center for Higher Education Management Systems (NCHEMS), the Florida Department of Education, and the Achieving the Dream Project. Each study linked 2003, 2004, and 2005 CCSSE student data with an external data source for analysis of the reliability and validity of the instrument's five benchmarks for student engagement. Strong consistency in findings across the three studies indicated "strong support for the validity of the use of the CCSR as a measure of institutional processes and student behaviors that impact student outcomes" (McClenney & Marti, 2006, p. 7).

Qualitative Data

Guba and Lincoln (1989) contend that credibility is a more appropriate criterion for assessing the veracity and dependability of qualitative research findings than the

positivistic concepts of reliability and validity. A frequently used method of assessing credibility is triangulation, or analyzing information collected through different methods and from different sources to assess patterns and consistencies (Mertens, 2005).

Inherent in mixed method research is the triangulation of two different types of data. To support and enhance credibility of qualitative findings and the overall study, collateral document sources were analyzed to establish descriptive cultural contexts for each of the institutional case studies. Evolution of policy and practice regarding SDEV courses at each college was analyzed through review of the college catalog, ACCD policy statements, and AtD documents. Course goals and structure were examined through a review of syllabi. The interweaving of these diverse sources highlighted both consistent patterns and disconnects of course implementation.

Transferability is qualitative research's equivalent for external validity, or the extent to which findings may be generalized to other contexts (Guba & Lincoln, 1989). To provide readers with adequate detail to assess transferability, the researcher provides "thick description," a careful and extensive chronicling of the time, place, context, and culture associated with the data gathered (Mertens, 2005). Thick description involves providing enough information of the phenomenon being studied to enable readers to determine how closely their situations match the situation described in the study.

Ethical Considerations

Permissions

Application to the Internal Review Board (IRB) of The University of Texas at Austin to conduct this study was approved on October 10, 2008 (Appendix I).

Institutional processes for IRB and administrative review were completed on each of the campuses. In addition, executive permissions to conduct this research and to use institutional CCSSE data were secured from each site.

Confidentiality

Student ID numbers used to match CCSRs with institutional records were voluntarily provided on that instrument at the time of administration according to IRB approved CCSSE protocols. During analysis, data was maintained on a password-protected computer in office at 2030 Green Valley Road in Cibolo, Texas.

Consent

All students participating in focus groups were informed of the details of the study by the researcher, including the minimal risks of loss of confidentiality. The voluntary nature of their participation was emphasized both in the researcher's discussion and the study description given to participants at the beginning of the focus group. Students were asked to sign a consent form outlining the anticipated proceedings, dispositions of data, and possible risks and benefits (Appendix E). Use of names was avoided during focus groups, and any inadvertent use of identifiable references was deleted during transcription. Following completion of related research, recordings will be destroyed.

Summary

This mixed methods research combined ex post facto analysis of CCSSE engagement data with student focus group data in an explanatory multi-case study. The use of quantitative survey data promoted broad understanding of the relationship

between success course participation and engagement, while the in-depth exploration of the issues with a small number of students provided richer perspective and texture to how that relationship may differ among student groups.

CHAPTER FOUR: NORTHWEST VISTA COLLEGE

Introduction

The goal of this case study was to develop a rich understanding of a particular case and to use that case to better understand an issue. The case-level unit of investigation was Northwest Vista College (NVC), one of the Alamo Colleges in San Antonio, Texas. The specific issue under investigation was the student success course, Student Development 0170 (SDEV), which is implemented on that campus to assist incoming students in adjusting to and engaging in college.

Teddlie and Tashakkori (2006) have suggested the structure of a research study "is not a design issue, but is related to the function that the results from the study eventually serve (e.g., to corroborate findings, to enhance or elaborate findings)" (p. 13). This study's results are intended to inform process and practice related to the implementation of student success courses specific to two-year colleges. The study was conducted as a concurrent mixed method explanatory case study using qualitative data to enrich interpretation of quantitative results. The primary function of the mixed methods approach was to explain the quantitative results with a two-fold qualitative investigation of institutional documentation and student focus group data. A secondary purpose was to use triangulation to compare and contrast the findings from the CCSSE data, the document analysis, and the focus groups to better understand student success courses as a campus-based student success initiative.

The College

Northwest Vista College is located on 137 acres of natural Texas hill country vegetation in northwest Bexar County. One of the most striking characteristics of NVC is its history of explosive growth. The college officially opened in the fall of 1995 with an enrollment of 12 students. In Fall 2008, NVC's headcount enrollment teetered at the threshold of 12,000 students and continues to increase. Rapidly expanding enrollment has required physical expansion as well. Five new buildings have been or will be completed during the 2008-2009 academic year, adding 250,000 square feet to the campus. In addition, existing buildings are being renovated.

NVC has enjoyed consistent leadership from its founding president since 1998. The college espouses three principles as foundations of college operations: a student centered focus, a collaborative approach, and a "can-do" spirit. To meet the needs of students and corporate partners, NVC offers coursework in 16-, 8-, and 3-week semesters.

Demographic Profile

Like all of the Alamo Colleges, the majority of NVC students are female (57 percent) and Latino (47 percent) (Table 4.1). White students account for 42 percent of the population, African American students for 6 percent, and Asian students for 4 percent (THECB, 2009). The NVC student body is distinctive among the Alamo Colleges in its relative youth and its strong orientation toward college transfer programs. Almost 70 percent of the NVC student body is younger than 25, compared to 45 percent

to 58 percent at its sister colleges. Although NVC serves its community with a wide range of programs and services, fully 87 percent of the student body is enrolled in transfer programs (compared to 32 percent to 52 percent at the other colleges). Another seven percent enroll in technical programs and six percent in continuing education programs (THECB, 2009).

Table 4.1: Summary of NVC Student Demographic Attributes

Subscale	Frequency			
Age				
Under 25	8097	76.2%		
25-34	1706	16.1%		
Over 34	<u>824</u>	<u>7.8%</u>		
Total	10,627	100.0%		
Gender				
Female	5,982	56.3%		
Male	<u>4,645</u>	43.7%		
Total	10,627	100.0%		
Goals				
Academic	9,809	92.3%		
	<u>818</u>	<u>7.7%</u>		
Technical	10.60=	400.00/		
Total	10,627	100.0%		
Enrollment Status				
Full-time	3,352	31.5%		
Part-time	<u>7,275</u>	<u>68.5%</u>		
Total	10,627	100.0%		
Race				
African American	640	(10/		
	648	6.1%		

Asian American	452	4.3%
Latino	4,824	45.4%
Native American	44	0.4%
White	4,644	43.7%
International	<u>15</u>	<u>0.1%</u>
Total	10,627	100.0%

Note: Texas Higher Education Coordinating Board (THECB). (2009). Higher Education Accountability System. Retrieved February 5, 2009 from Texas Higher Education Data *Web site*: http://www.txhighereddata.org/Interactive/accountability/

While NVC students are more traditional in age and college goals, their patterns of attendance are distinctly non-traditional. Fully 69 percent of credit students attend part-time (THECB, 2009). What's more, NVC has the lowest percentage of traditional day students of the Alamo Colleges (61 percent compared to 67-69 percent) (NVC, 2008). The college reports 64 percent of its students are economically disadvantaged (NVC, 2008); however, THECB reports that only a quarter of NVC students receive Pell grants, compared to 33 percent to 44 percent at its sister colleges. About 84 percent of NVC students enter college academically underprepared and require some level of remediation. However, only two percent of NVC student have limited English skills, which is the lowest percentage among the Alamo Colleges (NVC, 2008).

Student Development (SDEV) Course Background

NVC's first student success course was started in 2000. SDEV 0170 was initially offered as an elective targeted for students. The Student Development program is staffed by three full-time staff members, including a director, a coordinator, and a specialist, signifying a substantial commitment of institutional resources. Although the program

operates under the administration of the Vice President of Student Success, Student Development is listed as a discipline under the Communications Arts Department. This partnership between academic and student success divisions in support of a student success course is unique among the Alamo Colleges.

Institutional Policy on SDEV

The NVC catalog presents a clear and specific policy stating that all students entering with 15 or fewer hours are required "to complete a student development course designed to help them successfully transition to college and better understand the Alamo Community Colleges' expectations" (2007, n. p.). Dual credit hours are specifically excluded from the credit count for this purpose. The policy statement also offers justification for the requirement: "Students who complete SDEV courses have a proven record of higher retention and persistence in college" (2007, n. p.).

Though the statement notes that "A variety of SDEV courses are offered to fit specific student needs" (n. p.), evidence of a variety of SDEV courses was not apparent either in the policy statement, the course descriptions, or the course schedule. Some variety in section themes (e.g. peace studies, women's studies) was observed in the course schedule. The policy statement also specifies that SDEV must be taken during the first semester in college, and if not completed, in subsequent semesters until completed. Further, it is clearly stated that SDEV is subject to regular tuition and three-peat tuition on a third enrollment.

Consistent with policy across the district, SDEV course credit is awarded at the developmental or "0" level and is not transferrable. SDEV course credit level is not directly addressed in the catalog or on the web site.

Course Iterations

The NVC online catalog lists two Student Development courses: SDEV 0170: Student Development Course and SDEV 0173: Master Student Course. As is the case across the Alamo Colleges, SDEV 0170 is the required orientation course for entering students with fewer than 15 credit hours. SDEV0170 meets once per week for an 80minute period and carries one credit hour. According to the catalog description, course work "focuses on both life skills and study skills" with the goal of providing students with "the skills necessary to assume responsibility for individual learning" (NVC, 2008-2009, n. p.). Content areas noted in the course description are "familiarization with College regulations, communication and study skills, goal setting, priority management, comprehension, note-taking, test-taking, creativity, establishing reading for relationships, and the power of a positive attitude" (NVC, 2008-2009, n. p.).

The SDEV 0173 Master Student Course also meets once per week for an 80-minute period and carries one credit hour. Rather than a general entering student audience, SDEV 0173 is "designed to examine techniques to assist students in improving their academic standing at the college" (NVC, 2008-2009, n. p.). As such, its content focuses less on orientation topics and more on academic skills, including "personal learning style, academic issues that create difficulty, life management, campus

resources, critical thinking skills, time management, and career planning" (NVC, 2008-2009, n. p.).

District policy recommends students who require multiple developmental courses be placed in the 3-hour SDEV course. While the other three colleges in the study offer the 3-hour SDEV course and two require it for student placed in two or more developmental courses, s, no such course is currently offered at NVC.

Analysis of Primary Electronic Documents

From a user perspective, print and electronic institutional documents provide an important contact surface through which prospective, new, and returning students develop their understanding of the college's policy and expectations. The dominant messages delivered by such documents are generally direct and intentional on the part of college (e.g., drop/add procedures or graduation requirements) and deliberately consumed by the student. However, other messages may be unconsciously embedded and subliminally experienced (e.g., importance of information communicated by page placement or number of clicks to reach the page) by the student. To assess both intentional and incidental messages regarding SDEV courses conveyed in high traffic college documents, searches of the college web site and catalog were conducted using SDEV as the search term.

Web Site Review

In the search of the NVC web site (http://www.accd.edu/nvc/default.asp), 19 hits were returned for the term SDEV, 18 of which led to live links. Thirteen of those hits

linked to current or back issues of La reVista, NVC's online newsletter, and five to various web pages.

The La reVista hits were of three types. First were casual mentions of SDEV in feature profiles of faculty or staff who teach the course and one employee comment in an article focused on another topic (4). Second were recruiting notices for themed SDEV sections (5). Both types of hits support the impression that SDEV is an integrated part of the NVC college experience. Third were specific mentions of SDEV in articles by or regarding top-level administrators (4), including the following:

- 1. President's Message (February 27, 2009) on district AtD progress points to standardization of the SDEV requirement, course goals, and instructor training as specific achievements.
- 2. President's Message (July 18, 2008) regarding Balanced Scorecard report on undeclared majors notes addition of a goal setting module to SDEV in response to findings.
- 3. President's Message (June 29, 2007) on strategies to achieve growth targets lists the SDEV educational planning/goal-setting module and links it to graduation support.
- 4. A "Faculty/Staff Highlight" (October 10, 2008) item features a newly published book chapter on NVC's SDEV program authored by the President, two SDEV administrators, and the Vice President for Student Success.

Repeated positive mentions of SDEV by, and associated with, senior administrators sends a strong validating message about the importance of SDEV to faculty and staff as well as to students.

The five webpage hits included a single casual reference in a job title and four links to institutional processes or organizations. The latter links highlight the position of the SDEV course in the overall academic culture of the college.

- 1. SDEV is listed as a content area on Communications Arts Department home page.
- 2. Support for SDEV faculty and students is listed as a focus area on the Critical Thinking Across the Curriculum Committee mission statement.
- Training in critical thinking pedagogy for SDEV faculty is listed as a committee
 responsibility on Critical Thinking Across the Curriculum Standing Committee
 home page.
- 4. SDEV is specifically included in the college course evaluation process on the Institutional Research webpage.

These hits suggest that the SDEV course is academically validated and integrated into the institutional process for course quality and faculty development.

College Catalog Review

NVC merges student handbook information and policies with the catalog. Notably, the NVC catalog is entirely electronic. In contrast to PDF catalog versions located on college web sites, the fully electronic version is fully searchable and allows hits on catalog references to be included in general web site searches and facilities specific searches of the catalog itself without first downloading a large document file.

The search of the NVC 2008-2009 catalog returned total of eight hits linking to three pages. Two hits linked to the catalog table of contents, where Student

Development Course (SDEV) is listed as the third topic under the Registration heading, which in turn links to the SDEV policy statement discussed above. Three hits linked to the SDEV entry in the alphabetical listing of subjects on the Course Descriptions home page. The final three hits linked to the course descriptions themselves, as discussed above. The prominent positioning and cross linking demonstrated in this search suggest that information on SDEV courses is well integrated into the catalog web and easily accessible by students.

Document Analysis Summary

In summary, the document analysis shows evidence that NVC's SDEV course is presented as a valid academic experience for new students in primary college documents. The frequency of hits, prominent positioning, and clearly stated references consistently support an impression of institutional commitment to the programs. The added status attributed to SDEV by repeated references from the president in her regular La reVista articles adds significantly to this impression. No conflicting or negative messages were noted. Two elements of SDEV information that might be expected were absent. No departmental syllabi were located via online search, nor was an explanation of transferability or applicability of SDEV credit.

Quantitative Data

Sample

The participant pool for the quantitative portion of the study was drawn from students sampled at the four research sites in the 2005, 2006, and 2007 CCSSE administrations. Data fields for success course participation and enrollment status were

gathered by matching student identifiers voluntarily provided on the CCSR with institutional enrollment data secured through the Alamo Colleges Office of Institutional Research. Approximately 38 percent of CCSRs in the participant pool included some value in the student identifier field. After cleaning incomplete and unusable values, valid identifier values were provided to The Alamo Colleges Office of Institutional Research (OIR). OIR staff matched the student identifiers with consistent institutional data sources for all colleges to provide the SDEV course number, the semester taken, and final course grade for participants.

Table 4.2 NVC SDEV Enrollment by Year										
No S	<u>SDEV</u>	SDE	EV 0170	<u>T</u>	<u>'otal</u>					
<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>					
103	19.96%	69	13.37%	172	33.33%					
99	19.19%	81	15.70%	180	34.88%					
<u>89</u>	<u>17.25%</u>	<u>75</u>	<u>14.53%</u>	<u>164</u>	31.78%					
291	56.40%	225	43.60%	516	100.00%					
	No S n 103 99 89	No SDEV n % 103 19.96% 99 19.19% 89 17.25%	No SDEV SDI n % n 103 19.96% 69 99 19.19% 81 89 17.25% 75	No SDEV SDEV 0170 n % n % 103 19.96% 69 13.37% 99 19.19% 81 15.70% 89 17.25% 75 14.53%	No SDEV SDEV 0170 T n % n % n 103 19.96% 69 13.37% 172 99 19.19% 81 15.70% 180 89 17.25% 75 14.53% 164					

A total of 1,909 viable cases were identified, representing 24 percent of the total CCSSE participant pool. Of the 1,909 total cases, 516 cases came from NVC. These 516 cases constitute the sample for analysis to respond to Research Questions 1 and 2. Of the 516 NVC student cases, 225 (44 percent) enrolled in an SDEV course prior to or during the semester in which they participated in CCSSE (Table 4.2).

Demographically, students in the sample were representative of the overall college population in terms of age, although females and Latino students were represented at somewhat higher rates (Table 4.3).

Table 4.3: NVC Quantitative Sample Demographics

Subscale	Frequency	Percent	Valid Percent	
Age				
18 to 24	369	71.51%	73.10%	
25 to 39	107	20.74%	21.20%	
40 +	29	5.62%	5.70%	
Missing	<u>11</u>	<u>2.13%</u>	0.00%	
Total	516	100.00%	100.00%	
<u>Gender</u>				
Male	181	35.08%	35.40%	
Female	331	64.15%	64.60%	
Missing	<u>4</u>	0.78%	<u>0.00%</u>	
Total	516	100.00%	100.00%	
Race				
Native American	4	0.78%	0.80%	
Asian American	10	1.94%	2.00%	
African American	21	4.07%	4.10%	
White	175	33.91%	34.40%	
Latino	281	54.46%	55.20%	
Other	18	3.49%	3.50%	
Missing	<u>7</u>	<u>1.36%</u>	<u>0.00%</u>	
Total	516	100.00%	100.00%	

Note. n = 516

High rates of concurrent employment and academic underpreparedness are common among community college populations, and both attributes are significantly represented in the sample group. Eighty-three percent of the sample students reported that they work for pay in addition to taking classes, and 62 percent reported working 20 or more hours per week. Sixty-four percent of sample students reported taking or intending to take developmental math, 25 percent reported similar experience with reading, and 20 percent with English. Substantially higher percentages of SDEV-enrolled students took developmental courses in all areas than non-enrolled students: 18 percent more in math, 22 percent more in reading, and seven percent more in English.

Notes on Statistical Procedures

The SDEV Enrolled predictor variable value used in the statistical analysis below included all students who had registered for an SDEV class prior to or during the semester in which they participated in CCSSE, regardless of whether they finished or passed the class. The No SDEV group—students who never enrolled in an SDEV class—served as the reference group in fitting the regressions.

Dependent variables used in the analysis include fourteen clusters of CCSSE items validated as predictors of one or more student success outcomes through the instrument's validation research. The item clusters comprise five CCSSE benchmarks for institutional effectiveness and nine latent engagement factors. As the CCSSE benchmarks were developed from the nine latent factors, substantial overlap between the two sets of constructs exists. Table 4.4 summarizes descriptive statistics for all engagement constructs. A copy of the CCSSE survey instrument may be found in

Appendix B, and detailed descriptions of benchmarks and factors are provided in Appendices D and C, respectively. A cross-referenced listing of survey items for benchmarks and factors is provided in Appendix H.

Table 4.4: Descriptive Statistics for Dependent Variables (CCSSE Benchmarks and Factors) for NVC

Subscale	N	Range		/ J	Mean	Mean Std.Error	Std. Deviation	Variance
Engagement Benchmarks								
Active/Collaborative Learning	516	.90	.10	1.00	.4454	.00712	.16173	.026
Student Effort	516	.95	.03	.98	.5083	.00679	.15418	.024
Academic Challenge	516	.87	.11	.98	.5783	.00716	.16259	.026
Student/Faculty	516	1.00	.00	1.00	.4094	.00811	.18433	.034
Support/Learners	516	1.00	.00	1.00	.4414	.00871	.19779	.039
Engagement Factors								
Faculty Interaction	516	1.00	.00	1.00	.4248	.00778	.17674	.031
Class Assignments	516	1.00	.00	1.00	.6056	.01015	.23064	.053
Diverse Experience	516	1.00	.00	1.00	.5470	.01161	.26383	.070
Collaborative	516	1.00	.00	1.00	.3332	.00791	.17965	.032
Learning								
Info.Technology	516	1.00	.00	1.00	.6544	.01165	.26472	.070
Mental Activities	516	.94	.06	1.00	.5744	.00912	.20710	.043
School Opinions	511	1.00	.00	1.00	.5295	.00947	.21396	.046
Student Services	503	1.00	.00	1.00	.3910	.01058	.23739	.056
Academic	511	.90	.10	1.00	.5246	.00689	.15565	.024
Preparation								

Note. Valid N (listwise) = 498

Understanding relationships among complex matrices of factors that influence engagement and college success is much more likely to be a matter of attending to small signals and noise ratios rather than substantial causal linkages. R² effect sizes for the regression models were assessed using Cohen's (1988) effect size standards which denote effect sizes of 25 percent as large, nine percent as medium, and at least one percent as small.

Fitting a regression to multiple variables measuring different dimensions of a central construct—engagement, in this case—increases the likelihood of some level of correlation between variables. High correlation among dependent variables can contribute to overestimation of significance, or alpha inflation (Cohen, et al., 2003). As the following discussion reflects, NVC's SDEV course demonstrated a statistically significant relationship with all engagement constructs. To assess the model fit for NVC's dependent variables as discretely at possible while considering the wide range of differences between colleges, courses, and samples in this study, significance was assessed at both the standard $\alpha = .05$ and at a somewhat more finely grained $\alpha = .01$ level.

Research Question 1

What is the relationship between participation in a student success course and engagement in college as measured by the Community College Survey of Student Engagement (CCSSE)?

To address the first research question, the five CCSSE benchmarks and nine latent engagement factors were regressed as dependent variables on a dummy coded dichotomous predictor variable for enrollment in an SDEV course (Table 4.5).

Table 4.5: Descriptive Statistics for SDEV Enrolled

	•					Std.	Std.	
N	1	Range	Minimum	Maximum	Mean	Error	Deviation	Variance
510	6	1	0	1	.38	.021	.486	.236

Note: $Valid\ N\ (listwise) = 516$

All dependent variables in the study were significant at the $\alpha = .05$ level. At the $\alpha = .01$ level, a statistically significant relationship with SDEV Enrollment was demonstrated for four of the five benchmarks.

Analysis of Engagement Benchmarks

Student/Faculty Interaction was the single benchmark that demonstrated statistical significance at only the $\alpha = .05$ level. Its p value of .013 was associated with a slope indicating that students who enrolled in an SDEV course would show a .042 increased likelihood of interacting with instructors to extend or enrich academic experiences. The R^2 value of .012 indicates an explained variance of 1.2% and a small effect size for this variable.

Of the four benchmarks that demonstrated statistical significance at the α =.01 level, Support for Learners showed the strongest relationship with SDEV enrollment (p=.000, B=.094, df=1). The slope of predicted a .094 increase in student recognition and use of quality support resources among SDEV enrollers relative to students who did

not take the course. A small effect size was indicated by an explained variance of 5.5 percent ($R^2 = .055$).

Both Active and Collaborative Learning (p = .003, b = .044, df = 1) and Student Effort (P = .002, b = .044, df = 1) were significantly related to SDEV Enrollment at the α = .01 level. Both variables denote dimensions of students' academic initiative and involvement in active learning experiences. Both variables reported slopes indicating a predicted increase of .044 on these engagement benchmarks for SDEV enrolled students relative to students who did not enroll. R^2 values of .017 and .019 respectively indicated small effect sizes, explaining 1.7 percent and 1.9 percent of variances.

Table 4.6: Summary of Linear Regression for all Engagement Benchmarks and Factors by Success Course (SDEV) Enrollment

Dependent Variables	b	SE	Beta	t	p	R^2
Engagement Benchmarks						
Active/Collab. Learning	.044	.015	.131	2.948	.003	.017
Student Effort	.044	.014	.138	3.109	.002	.019
Academic Challenge	.050	.015	.150	3.388	.001	.023
Student/Faculty	.042	.017	.112	2.499	.013	.012
Support/Learners	.094	.018	.235	5.388	.000	.055
Engagement Factors						
Faculty Interaction	.034	.016	.095	2.122	.034	.009
Class Assignments	.073	.021	.155	3.494	.001	.024
Diverse Experience	.080	.024	.149	3.346	.001	.022
Collaborative Learning	.044	.017	.118	2.657	.008	.014
Information Technology	.053	.024	.099	2.210	.028	.010
Mental Activities	.057	.019	.135	3.027	.003	.018

School Opinions	.103	.019	.236	5.397	.000	.055
Student Services	.073	.022	.150	3.380	.001	.023
Academic Preparation	.028	.014	.089	1.989	.047	.008

Note: df = 1

The Academic Challenge variable addresses both students' perceptions of the quality of education at the college and their activities related to meeting those challenges. Academic Challenge demonstrated a statistically significant relationship with SDEV enrollment at the $\alpha = .05 = .01$ level (p = .001, b = .05, df = 1). Its slope predicted .05 higher engagement on the factor for SDEV enrollers than non-enrollers. The associated R^2 of .023 indicated a small effect size, with 2.3 percent of variance explained by this model.

The regression model predicted that students who enroll in NVC's SDEV course will be more engaged on all benchmarks than students who do not enroll in the course, making a solid case for the positive impact of SDEV courses at this college. The strongest evidence supports increased engagement in Support for Learners benchmark, which assesses student perceptions of the availability of support services that provide assistance with college logistics and challenges beyond the classroom. The least robust, although still significant, evidence pertained to the Student/Faculty Interaction benchmark, which focuses on direct interaction with academic faculty in the learning process.

Analysis of Engagement Factors

All engagement factors also showed statistically significant relationships with SDEV Enrollment at the $\alpha = .05$ level in this model; however, three factors that were significant at the .05 level were not significant at the $\alpha = .01$ level.

Similar to the Student/Faculty Interaction benchmark, Faculty Interaction assesses direct interaction with instructors in and beyond the classroom. Faculty Interaction was statistically significant at the .05 level, and its slope predicted a .034 increase in factor engagement for SDEV enrollers (p = .034, B = .034, df = 1). The associated R^2 of .009 indicated a marginally small effect for the model with .9 percent of variance explained.

Information Technology's probability was also significant at $\alpha = .05$ (p = .028, B = .053, df = 1). This variable focuses specifically on student use of online communication technologies to accomplish an academic task. The associated slope predicted a .053 increase in academic use of online communication for course enrollers relative to non-enrollers, although the associated R^2 of one percent denoted a small effect size.

The third engagement factor significant only at the $\alpha = .05$ level was Academic Preparation (p = .047, B = .028, df = 1). The Academic Preparation item cluster assesses the level of effort students invest in learning activities. Its slope predicted a .028 increase in such effort for SDEV enrollers; however, its associated R^2 of .8 percent falls short of the one percent threshhold for a small effect (Cohen, 1988).

Six engagement factors exhibited statistically significant relationships with SDEV enrollment at the $\alpha=.01$ level. The School Opinions item cluster questions how students experience support for meeting challenges within the college environment. School Opinions, which has several items in common with the Support for Learners benchmark, showed the strongest statistical significance with a p value of .000 (p = .000, B = .103, df = 1). The associated slope predicted that SDEV enrollers would report a .103 higher level of factor engagement than students who did not enroll in the course. The R^2 for School Opinions showed a small effect size with explained variance of 5.5 percent.

Diverse Experience (p = .001, B = .08, df = 1), Class Assignments (p = .001, B = .073, df = 1), and Student Services (p = .001, B = .073, df = 1) showed similar levels of statistical significance at the p in their relationships with SDEV enrollment. Diverse Experiences focuses on student exposure and learning relative to cultural, racial, and personal differences. Class Assignments questions involvement in active learning and critical thinking experiences, while Student Services assesses students' use of college resources to further their academic goals. Associated slopes for the three variables predicted similar increases in factor engagement of .08, .073, and.073 respectively. Model R^2 values yielded similar small effects, explaining, in order, 2.2 percent, 2.4 percent, and 2.3 percent of variance.

Collaborative Learning (p = .008, B = .044, df = 1) and Mental Activities (p = .003, B = .057, df = 1) also demonstrated statistically significant relationships with SDEV enrollment at the $\alpha = .01$ level. Similar to the Active and Collaborative Learning

benchmark, the Collaborative Learning factor assesses learning interactions in and out of class. The items that make up the Mental Activities factor focus on student involvement in critical thinking and deep learning experiences. The slope values for these two items were .044 and .057 respectively, predicting that SDEV takers would experience increased engagement at these levels compared to students who did not take the course. Their R^2 values denoted small effects, with 1.4 percent and 1.8 percent of model variances explained respectively.

Model Summary

The evidence of a statistically significant relationship between enrolling in an NVC SDEV course and increasing engagement in college produced by this regression model is compelling in its consistency. Though all benchmarks and factors demonstrated some level of significant relationship with SDEV enrollment, the strongest relationships were with engagement constructs that focus on understanding and using campus resources to meet needs and achieve goals (Support for Learners, School Opinions, Student Services), and on ways in which students understand and practice good learning habits in college (Academic Challenge, Student Effort, Class Assignments, Mental Activities, Diverse Experiences).

Research Question 2

How does the relationship between success course participation and engagement as measured by CCSSE compare for part-time and full-time students?

To address the second research question, Average Attempted Hours was added as a second independent variable to the regression model used to address Research

Question 1 (Table 4.7). Student case values for Average Attempted Hours were calculated by adding all hours attempted for a four-year period relative to CCSSE participation, and then dividing the totals by number of terms attended. For 2005 CCSSE participants the relative period used to calculate Average Attempted Hours was Fall 2002 to Spring 2006. For 2006 participants, the period was Fall 2003 to Spring 2007. For 2007 participants, the period was Fall 2004 to Spring 2008.

Table 4.7: Descriptive Statistics for Average Attempted Hours at NVC

					Std.	Std.	
N	Range	Minimum	Maximum	Mean	Error	Deviation	Variance
516	14.00	3.00	17.00	9.8380	.10935	2.48390	6.170

Note: Valid N (listwise) = 516

Based on the calculated value of Average Attempted Hours for each student case, only 23 percent of students in the sample averaged a full-time load of 12 or more credit hours. The largest group included 67 percent of students who averaged course loads between 6.1 and 11.9 credit hours. Less than 10 percent averaged six or fewer hours per term.

Table 4.8 presents a summary of multiple regression analyses for the 14 CCSSE engagement constructs regressed on the dummy coded variable for SDEV enrollment and the continuous Average Attempted Hours variable. Similar to the regression for the first research question, all benchmarks, and all but one engagement factor showed statistically significant relationships with enrolling in an SDEV course. Evidence of the relationship between the engagement constructs and the Average Attempted Hours variable is somewhat more mixed.

Analysis of Engagement Benchmarks

Two benchmarks, Academic Challenge and Student Effort, showed statistically significant relationships with both SDEV Enrollment and Average Attempted Hours. Academic Challenge was significantly related to SDEV enrollment at the $\alpha = .01$ level. The associated slope predicts a mean increase in factor engagement of .037 for SDEV enrollers compared to students who did not take the course (p = .017, B = .037, df = 2).

With regard to Average Attempted Hours, Academic Challenge was similarly related, though with a smaller slope of .008. The slope predicts that, controlling for SDEV enrollment, for every increase of one in Average Attempted Hours, Academic Challenge engagement of SDEV enrollers will increase by .008 (p = .006, B = .008, df = 2). The model R^2 indicates a small effect size with 3.8 percent of variance explained. These results are consistent with validation research, which found consistent correlations between Academic Challenge and number of terms enrolled and credit hours accumulated.

Student Effort was significant for SDEV Enrollment at the α =.05 level. The slope predicts a mean benchmark increase of 2.9% for SDEV enrollers (p = .050, B = .029, df = 2). The relationship between Student Effort and Average Attempted Hours was significant at the α = .01 level. The slope statistic predicts an increase in mean benchmark engagement for SDEV enrollers of .01 for every increase of one in Average Attempted Hour, assuming SDEV enrollment remains at 0 (p = .001, B = .01, df = 2). Four percent of variance is explained by this model (R² = .04), indicating a small effect size.

Table 4.8: Summary of Multiple Regression Analysis of Engagement Benchmarks and Factors on SDEV Enrollment Status and Average Hours Attempted.

una Paciors on SDL					Average Attempted				
	SDEV Enrolled				Hours				
Dependent Variables	b	SE	p	b	SE	p	R^2		
Engagement Benchmarks									
Active/Collab. Learning	.034	.016	.027	.006	.003	.056	.024		
Student Effort	.029	.015	.050	.010	.003	.001	.040		
Academic Challenge	.037	.015	.017	.008	.003	.006	.038		
Student/Faculty	.039	.018	.027	.002	.004	.603	.013		
Support/Learners	.093	.018	.000	.001	.004	.738	.056		
Engagement Factors									
Faculty Interaction	.035	.017	.043	.000	.003	.961	.009		
Class Assignments	.049	.022	.025	.016	.004	.000	.049		
Diverse Experience	.066	.025	.009	.009	.005	.057	.029		
Collaborative Learning	.036	.017	.039	.005	.003	.134	.019		
Information Technology	.029	.025	.243	.015	.005	.002	.029		
Mental Activities	.043	.020	.031	.009	.004	.018	.029		
School Opinions	.099	.020	.000	.003	.004	.457	.057		
Student Services	.064	.023	.005	.006	.004	.202	.026		
Academic Preparation	.013	.015	.366	.010	.003	.001	.029		

Note: df = 2

The regression models for these two variables show that their relationships with SDEV enrollment remain significant when the second predictor variable, Average

Attempted Hours, was added. Comparing these models to those fitted for Research Question 1 with SDEV Enrolled as the only predictor variable supports that conclusion: observed increases in R^2 statistics from .023 to .038 for Academic Challenge and from .019 to .04 for Student Effort indicates that the addition of Average Attempted Hours explains a higher percentage of variance.

Three benchmarks, Support for Learners, Active and Collaborative Learning, and Student/Faculty Relationships, demonstrated statistically significant relationships with SDEV Enrollment at the α =.01 level for the first and at α = .05 level for the second and third. None demonstrated a relationship with Average Attempted Hours. Compared to the regression model fitted for Research Question 1, the relationships between these three benchmarks and SDEV enrollment remained relatively stable with the addition of Average Attempted Hours as a second predictor.

The slope for Support for Learners predicted a .093 increase in engagement on this dimension for course enrollers (p = .000, B = .093, df = 2). No significant relationship with Average Attempted Hours was indicated (p = .738, B = .001, df = 2). The model produced a small effect size with 5.6% of associated variance explained ($R^2 = .056$).

Active and Collaborative was associated with a slope of .034 (p = .027, B = .034, df = 2). However, no significant relationship between Active and Collaborative Learning and Average Attempted Hours was found (p = .056, B = .006, df = 2). The model R^2 of indicated that the model explained 2.4 percent of variance for a small effect size.

The Student/Faculty Interaction benchmark was associated with a .039 slope (p = .027, B = .039, df = 2). Again, no significant relationship with Average Attempted Hours was demonstrated (p = .603, B = .002, df = 2).

Analysis of Engagement Factors

Of the engagement factors regressed as dependent variables, two of nine—Class Assignments and Mental Activities—demonstrated statistically significant relationships at the $\alpha=.05$ for SDEV Enrollment and a significant relationship with Average Attempted Hours as well.

The slope for Class Assignments predicted an increase of .049 in engagement on this dimension for course enrollers (p = .025, B = .049, df = 2). Class Assignments was significantly related to Average Attempted Hours at the $\alpha = .01$ level (p = .000, B = .016, df = 2) with a 1.6 percent slope. The R^2 of .049 shows a small effect size, with 4.9 percent of variance explained.

The slope for Mental Activities predicted an increase of .043 in engagement on this dimension for course enrollers (p = .031, B = .043, df = 2). With regard to Average Attempted Hours, the relationship with Mental Activities was significant at the $\alpha = .05$ level with a .009 slope (p = .018, B = .009, df = 2). The R^2 of .029 shows a small effect size, with 2.9 percent of variance explained.

The regression models for these two variables show that their relationships with SDEV enrollment remained significant when the second predictor variable, Average Attempted Hours, was added. Comparison to the regression models fitted for Research Question 1 with SDEV enrollment as the only predictor shows observed increases in \mathbb{R}^2

statistics from .024 to .049 for Class Assignments and from .018 to .029 for Mental Activities. The increase in explained variance indicates that the addition of Average Attempted Hours actively functions to improve the predictive value of the model.

Three engagement factors—School Opinions, Student Services, and Diverse Experience, demonstrated a statistically significant relationship with SDEV Enrollment at the $\alpha=.01$ level, and two factors—Faculty Interaction and Collaborative Learning—at the $\alpha=.05$. None of the five had significant relationships with Average Attempted Hours. The School Opinions factor slope predicted a .099 increase in factor engagement for SDEV participants (p=.000, B=.099, df=2). No relationship with Average Attempted Hours was demonstrated (p=.457, B=.003, df=2). The R^2 of .057 indicates a small effect size, explaining 5.7 percent of variance.

The slope for Student Services predicted an increase of .064 in factor engagement for SDEV enrollers (p = .005, B = .064, df = 2). No relationship with Average Attempted Hours was demonstrated (p = .202, B = .006, df = 2). Explained variance ($R^2 = .026$) indicated a small effect size.

Diverse Experience's slope predicted a .066 increase in engagement for course takers (p = .009, B = .066, df = 2). However, no significant relationship between Diverse Experience and Average Attempted Hours was found (p = .057, B = .009, df = 2). The R^2 of .029 indicated a small effect size with the model explaining 2.9 percent of variance. The slope for Faculty Interaction predicted a .035 increase in engagement on this dimension for SDEV enrollers (p = .043, B = .035, df = 2). No significant relationship with Average Attempted Hours was indicated (p = .961, p = .000, p =

explained only .9 percent of associated variance, marginally indicating a small effect size $(R^2 = .009)$.

The Collaborative Learning slope predicted a .036 increase in factor engagement for course enrollers (p = .039, B = .036, df = 2). No significant relationship with Average Attempted Hours was demonstrated (p = .134, B = .005, df = 2). Explained variance ($R^2 = .019$) indicated a small effect size. The statistically significant relationships between these factors and SDEV enrollment demonstrated by the regression model fitted for Research Question 1 remain significant with addition of the Average Attempted Hours predictor. The absence of significance for Average Attempted Hours supports the conclusion that enrollment status does not substantially mediate that relationship.

Two factors, Information Technology and Academic Preparation, showed no significant relationship with SDEV Enrollment but demonstrated a statistically significant relationship with Average Attempted Hours at the $\alpha = .01$ level.

No significant relationship between Information Technology and SDEV Enrollment was demonstrated (p = .243, B = .029, df = 2). However, the factor slope predicted a .015 increase in engagement on the Information Technology variable for each additional average hour attempted (p = .002, B = .015, df = 2). The model R^2 of .029 indicated a small effect size with 2.9 percent of variance explained.

Similarly, Academic Preparation showed no statistically significant relationship with SDEV Enrollment (p = .366, B = .013, df = 2) in this model. The slope for the relationship between Academic Preparation and Average Attempted Hours indicated a .001 increase in factor engagement for each additional average hour attempted (p = .001,

B = .01, df = 2). The 2.9 percent explained variance denoted by the R^2 was consistent with a small effect size.

Though both of these factors were significantly related to SDEV enrollment in the single predictor regression model fitted for Research Question 1, those relationships disappeared with the introduction of the Average Attempted Hours predictor. That change, along with the strong probability levels for Average Attempted Hours, indicates that engagement for these factors is significantly more affected by enrollment status than SDEV participation.

Model Summary

In general terms, the relationships between SDEV enrollment and engagement constructs remained significant after the adding the Average Attempted Hours predictor to the regression model. Information Technology and Academic Preparation variables were the exceptions, and their relationships with Average Attempted Hours indicated that enrollment level was the stronger influence on engagement in these areas. The other four variables that demonstrated relationships with Average Attempted Hours were related to academic skills and effort.

Qualitative Data

Two focus group sessions were conducted at NVC to meet the minimum of 10 participants established in the research design. Volunteers for both groups were recruited through circulating information flyers with response forms in English classes (Appendix A). The focus groups were conducted on the college campus, including the first group of

four students in early December 2008, and the second group of nine students in mid-February, 2009.

At the beginning of each group, the researcher explained the study's purpose, voluntary status, potential risks, and possible benefits of participation, as mandated by IRB protocols. Students were given a written copy of the study description and were asked to complete a consent form (Appendix E) and a brief demographic questionnaire (Appendix F). Proceedings were audio recorded and transcribed, then coded and analyzed using NVivo qualitative analysis software.

Table 4.9: NVC Focus Group Demographic Profile

Subscale	Frequency	Percent
<u>Age</u>		
18-19	10	76.9
20-21	1	7.7
22-24	1	7.7
40-49	<u>1</u>	<u>7.7</u>
Total	13	100.0
Gender		
Female	5	38.5
Male	<u>8</u> 13	<u>61.5</u>
Total	13	100.0
Goals		
Transfer	10	76.9
Associate	2	15.4
Other	1 <u>1</u> 13	<u>7.7</u>
Total	13	100.0
Race		
Latino	9	69.2
White	2	15.4
Asian American	1	7.7
Other	<u>1</u>	<u>7.7</u>
Total	13	100.0

First Generation		
Parent/No College	5	38.5
Parent/Some College	<u>8</u>	<u>61.5</u>
Total	13	100.0
Enrollment Status		
Full-time	10	76.9
Part-time	<u>3</u>	<u>23.1</u>
Total	13	100.0

Sample

A total of 13 students participated in the focus groups conducted at NVC (Table 4.9). Compared to the college's overall population, the sample was slightly younger than average and included somewhat higher representation of male students and Latinos. Participants for the first group were recruited from first and second level developmental English classes, which indicated at least some degree of academic under-preparedness. The two males and two females were first-semester college students who had recently completed their SDEV course. One male and one female were recent high school graduates, and one male and one female were entering college for the first time in their early 20s. The older female student described herself as a high school dropout who had earned a GED. One male and one female were part-time students, and the others attended full time. Both males reported their college goals as earning an associate degree, while both females reported transfer as their goal.

To balance an overall skew toward underprepared students across the Alamo Colleges, participants for the second focus group were purposefully recruited from English 1302: Freshman Composition II classes with high concentrations of students

who did not require developmental courses in reading or English. For students who entered first enrolled in Fall 2008—which included 11 of 13 sample students—this English enrollment level indicated that they had entered college reasonably well prepared in terms of verbal skills. However, based on conversation during the focus group, most of these students had placed into developmental math. During the course of the focus group, several students voiced frustration with their math placement levels, suggesting that most of these students perceived themselves as reasonably well prepared for college level academic work.

Seven of nine participants were in their second semester of college. All were traditional aged college students with the exception of one female who had entered college after retiring from the U. S. Air Force. Eight of the nine students reported intensions to transfer to a four-year institution to complete a bachelor's degree, with the ninth student reporting his goals as "other." Similarly, eight of nine reported their enrollment as full time, with one attending part time.

Research Question 3

What insights do student views on success course participation as expressed in focus groups contribute to the quantitative analysis of the course participation/engagement relationship?

Student Perceptions of SDEV

In light of CCSSE and document analysis evidence in support of SDEV's positive influence on NVC student engagement, overall student comment on the course was at best lukewarm. When asked to talk about the value of the course, general

comments were "It was all right," or "It got me to know the campus better than I would have." One female student articulated a representative viewpoint: "I mean I learned a little bit, but I pretty much knew what they were talking about, so guess I kind of agree...it was kind of a waste of time..." Comments such as these reflected a cost/benefit approach to evaluating learning gained for investment of resources.

Even students who acknowledged that the SDEV course had value took issue with the fact that they were required to take SDEV since the credit earned for the course is non-transferrable and does not fulfill any degree requirement. As one student put it, "When [the advisor] explained how that credit wasn't going to transfer that was kind of offsetting, because you figure that if you take it, it will transfer." An exchange between students in the first focus group further illustrates objections students raised to SDEV's absence of what they consider to be meaningful credit, and the difficulty they found with justifying the requirement to take it:

Female student: If it wasn't required I don't think many people would take it.

Male student: Yeah, but it doesn't transfer, and you're not going to be at this college for the rest of your life.

Female student: Yeah, I know, but what my advisor told me was that if you don't take the SDEV class you won't be able to transfer.

Male student: That's because it's required.

Female student: Yeah I know, but...never mind.

Even though the female student tried to defend SDEV's value in promoting long-term success, the only evidence she could think of was the advisor's authority. When

confronted by the male student's citing the requirement as—ostensibly—the only reason to take the course, she retreated from the exchange.

Secondary objections that related to lack of meaningful credit for SDEV reflected deficit perceptions of its use of their resources, specifically time and money. At least seven specific objections were raised to the amount of time used to cover the material. One student generalized the issue: "I just didn't need all that time for it, you know what I mean?" Another pointed to a more specific iteration of the perceived problem: "They could have told you [the useful material] in the first three days. One time we spent a whole class on how to figure your grade point average. You could teach that in a 15 minute lecture." Implicit in this evaluation, however, is an assumption that the speaker's perspective and understanding are universal.

That kind of generalization is also mirrored in the following speaker's assessment of what was valuable in the course: "Yeah, college knowledge, that's basically it. Like everything else, you already learned that growing up. Unless you were from a pretty dysfunctional family or something. A lot of this stuff is common knowledge." From the perspective of better prepared students with more background resources to support their college aspirations, the needs of students with different levels of college preparedness and resources are viewed as deficits. In community colleges, such diversity is the norm rather than the exception.

Deficit perceptions of the course appeared to compound negative aspects of course experience for some students. One student's comment pointed to his own lack of investment in the course as a possible mediating element in his perceived lack of course

value. One student observed: "I thought it was a waste of time personally. I don't remember my teacher's name. But we really didn't do much of anything. I mean, she told us stuff that I already knew going into the class. I just thought it a waste of time and money." The fact that the student did not learn his SDEV instructor's name in the course of a semester suggests that his investment of effort in the class was likely minimal.

Through the course of the focus group, however, conversation appeared to lead some students to reflect more deliberately on how the course had impacted their prospects for succeeding in college. One student shared his evolving perspective on the course's value.

Well, I was thinking like, yeah, cut the class, but now I like the purpose [of SDEV]. Like the scholarships, and how to transfer. I like the CAT Center, that was a pretty good thing they have, you know, a place where you can answer your own questions, to know where to turn to [when] you need help with something like that.

Valued Learning in SDEV

Students most frequently cited classic "college knowledge" areas as valuable learning in their SDEV classes. Nine students mentioned valuing learning about topics such as understanding financial aid, degree plans, prerequisites, schedule planning, and transfer issues. One student shared what he had learned about developing a long-range perspective on his college aspirations.

For me it was probably planning out the whole two years that you're going to be spending here, or at least what's supposed to be two years. I planned out pretty much all the classes I'm going to be taking, and that way I don't have to do them last minute and not get the class. And that two years extends to three, and then, you know, four. So that was probably the most [valuable thing was] planning out the classes and what to expect from them.

Five students cited career preparation and planning topics as valuable learning, including job readiness, job placement, and resume preparation. The college's Career and Transfer (CAT) Center was specifically pointed out as one of the most frequently used campus resource, along with the writing and math labs.

The challenges of balancing school with other commitments and responsibilities were reflected in comments by three students who said organizational skills and time management were their most valued learning in SDEV. One student found new learning about personal management skills was helping him manage the challenges of making the transition from high school habits to balancing the very different schedule of college classes with work responsibilities.

It's not hard here, but the thing is managing your time and wanting to do it. Because the way it is, you have two days out of the week and you can go full time. The way it works, you're like a little lazy and doing it at the last minute...Switching from five days going to school to two, it's just kind of different, you know, managing your time for it.

Mentions of academic skills such as note taking and test taking were few. However, students had favorable comments on activities and assessment instruments that promoted self–understanding, such as priority identification activities, learning styles assessments, and career inventories.

The process of going through the assessment, the job assessments thing—what your personality traits are and what jobs out there, and kind of aligning those issues...She did that whole thing with us, and it was really interesting...

Students mentioned SDEV activities designed to help them learn to use college web site resources in both positive and negative terms. Two participants commented on the value of learning to using the student login function and library databases. Two

others pointed out that glitches during a demonstration of logging into the college email system were so substantial that "half of the students couldn't get in." One student pointed to the web site as the least valuable thing he learned about in his SDEV course: "Least valuable? A lot of the web site for the school. Except for the stuff you sign up for I never used anything else. I couldn't even log into my email."

Particularly interesting were references of SDEV experiences with learning about specific core principles of NVC's academic culture. One student brought up learning about ASK—an institutional commitment to holistic education practices that will equip students with the *Attitudes, Skills and Knowledge* they will need to succeed in the world (NVC, 2008). Another student mentioned learning about integrity, one of NVC's core institutional values. The value of Integrity serves as framework for the institutional policy on academic dishonesty. Though the students did not fully articulate the principles in question, the fact that they volunteered these references points to some degree of success for efforts to include aspects of institutional enculturation in SDEV classes.

Major Theme: Interactive Classes Work

Students expressed a strong preference for an interactive SDEV class. As one student put it, "the thing that I didn't like a lot in that class, there was lack of promotion of direct activity between the students. I didn't make a friend in that class." Classes where instructors did most of the talking were negatively noted, but the most negative comments seemed reserved for classes where successions of speakers visited to talk about various topics. One student noted that his teacher "had other people talk for her."

Positive comments were made about SDEV classes that included icebreaker activities, interactive group work, and ventured out of the classroom to explore the campus. When asked what portion of their SDEV classes were spent working interactively, estimates ranged from "none" to 90 percent of the time. One student reported that his SDEV class met in a computer room, where they ended up working on the computers in almost every class "even though we weren't supposed to." Classes where students sat at tables were pointed out as creating chances to interact and get to know people.

Not all group work is created equal—or equally created. One student noted that group work in her class was minimally interactive: "We got into groups, but we never really interacted with each other. All we did was the assignment and that was it. Once the assignment was done we didn't talk to each other." Another student echoed a similar experience: "In my class we got in groups once or twice, and every time there was that awkward silence, like, who's going to break the ice? ...I didn't meet anyone new in that class at all."

When asked how the SDEV course might look different if students designed it, several students smiled and started talking. A female student responded with excitement: "I think it would be, it would surprise you. I think it would be really, really good." Other students offered that it would be more social, more interactive. The distinction between "social" and "interactive" seems important here. Whereas some students seemed motivated to develop friendships as social connections, a comment made earlier by a male student in the same group provided a contrasting perspective:

If I'm in a group I'll talk, I'll make friends, but I'm not looking for anything big like best friends or anything. I'm more into getting my schoolwork done. So I get my associates degree and move on to get a bachelor's. So I'm just trying to get away, because that's what I did in high school, I was more into friends, going out, and stuff and now I'm into college and stuff.

An interactive class would promote engagement in learning first, offering a counterpoint to "boring" classes where instead of "tend[ing] to let stuff go in one ear and out the other...you're listening and you put yourself into the activity."

Major Theme: Good Instructors Make Good SDEV Classes

As happened often during the course of the focus groups, the conversation on interactive classes turned to the most critical attribute of good SDEV classes: good instructors. As one student observed, the best designed class would be disappointing if poorly taught:

I don't have any problem with the content of the class. In my opinion, I would go back again with the teacher. So if the content changes, that's not going to make a lot of difference if we don't have somebody who's taking charge of the situation as it should be.

Participants characterized a good SDEV instructor as "motivated," committed," and "really speaking at the level of where the students are at." Two students spoke positively of their instructors who were college advisors, saying they took the course seriously and were particularly "knowledgeable." Two students mentioned that their instructors were also pursuing degrees, and were therefore able to relate to students especially well.

According to these students, the importance of having a good instructor for SDEV cannot be overemphasized: "If you're going to have a teacher that's not interested in the subject, you're not going to be interested in the subject either. So you

should have someone that is interested, wanting you to learn." The single older student in the sample group described her own SDEV instructor in glowing terms:

I would [rate the class] four [out of five]. And the only reason I say that, I believe it is because of the teacher. She is on fire, passionate for the students... just looking at them and assessing the situation, and just... I don't know, she just has a gift of empowering people, and... you know, helping them take hold of their vision for themselves, not because of their parents, not because of any of that... Whenever I see her she'll stop and say what's going on with this, and where are you headed...? So, yeah, it made all the difference to me.

Developing relationships with instructors is strongly associated with positive college engagement. The student's final comment notes the validating power of her ongoing relationship with her SDEV instructor.

In contrast to good instructors, bad instructors were characterized as teaching the course "just because," they "just sat there," they "didn't do anything," or they "let someone else talk for them." Perhaps the most negative feedback came from a student who said his instructor "realized [SDEV] was a waste of time," and made that opinion obvious to the students.

Research Question 4

In what ways do student views on success course participation as expressed in focus groups inform analysis of the course participation/engagement relationship for full-time and part-time students?

Although a significant majority of NVC students attend part-time, representation of part-time students in these focus groups was disproportionately low. Only 3 of 13 participants reported their current enrollment status as part-time. This distribution is possibly due to the fact that most part-time students juggle multiple commitments and

spend little time on campus outside of classes, and were thus less likely to respond to recruitment efforts. The focus group participants were predominantly male. More than three quarters of the participants were traditional aged college students, and a similar percentage was in their first or second semester in college. Based on anecdotal assessment during the focus groups, many still live at home with their families.

Part-time students tend to be older, female, Latino, and financially independent. They are also likely to be to be less well prepared academically and the first generation of their families to attend college (Chen, 2007). Other than a significant majority of Latinos, the participants in the NVC focus groups were demographically dissimilar from the general profile of part-time students.

Based on low representation of part-time students in the sample group as well as distinctly different demographics, inadequate data are available to support a qualitative assessment of engagement among part-time students at NVC.

Summary of Case

The analysis of NVC online college documents provided here is a narrow picture of institutional commitment to SDEV. However, the college web site and online catalog are critical institutional information conduits available to students, particularly on a campus where strong commitment to green practices place emphasis on electronic rather than paper communication channels.

The analysis showed evidence that NVC's SDEV course is presented as a valid academic experience for new students in these primary college documents. Hits on the search term, SDEV, demonstrated easily navigated links to clearly stated course

descriptions and policy statements. Prominent positioning of an SDEV link in the catalog table of contents and integration of course references into both academic and student services processes consistently supported an impression of institutional commitment to the SDEV program. The added legitimacy afforded to SDEV by repeated references from the president in her regular La reVista articles adds significantly to this impression. No conflicting or negative messages were noted. Two elements of SDEV information that might be expected were absent. No departmental syllabi were located via online search, nor was an explanation of transferability or applicability of SDEV credit.

Quantitative evidence supporting SDEV's effectiveness in enhancing student engagement appears quite strong. All benchmarks and engagement factors demonstrated significant relationships with SDEV enrollment in the linear regression fitted for the first research question. All engagement benchmarks remained significantly related to SDEV enrollment with the addition of the Average Attempted Hours predictor, as did all but two engagement factors, suggesting that the SDEV relationship with engagement constructs was minimally mediated by enrollment status. The overall story told by the quantitative analysis is that NVC's SDEV course is successful in enhancing student engagement across a broad array of dimensions.

Findings from the focus groups appear, on the surface, to present a counterpoint to the distinctly positive findings of the document analysis and the analysis of CCSSE data. Student responses presented a sort of cost/benefit evaluation of SDEV that asserted course value for investment was, in some measures, lacking. Understanding the

story these data are telling requires lending a careful eye to the sample structure and a critical ear to the messages convey by student discussion.

Participants in the second focus group were purposefully recruited to add voices of more prepared students to a district sample that was skewed toward substantially underprepared students. As SDEV became a requirement for all entering students across the district in the fall of 2007, it was deemed important to attempt to reflect the broad range of students taking these courses in the focus groups. However, that purposeful recruiting of prepared students at NVC likely excluded student voices that would have spoken to how the course works on that campus from different cost/benefit perspectives. Had the sample included more underprepared students, more part-time enrollers, or a larger number of older students, the findings may have been quite different.

The perceptions of the NVC focus group students highlighted two critical themes regarding good student success courses: group and interactive learning experiences, and committed, engaged, and knowledgeable instructors. These two themes precisely coincide with CCSSE validation research that found Active and Collaborative Learning and Faculty/Student Interaction to have the strongest predictive relationships with most student success outcomes of any of the CCSSE constructs. Considering these dimensions of engagement as critical to student success, the question then becomes *how* they are critical for *whom*. It is possible that a highly successful student success course may meet the needs of most students while still having minimal impact for others. The focus group evidence suggests that instructor selection and training is a critical dimension of a successful student success course program.

Based on NVC's broad success with its SDEV program, it would appear the college is already experiencing some success with both of these critical areas. Findings would also suggest that students who enter college with few or no developmental requirements might have a different set of collateral preparedness needs as compared to less prepared students. This group might respond better to other course options in terms of format or content focus. NVC already offers some themed SDEV sections and a limited number of condensed, pre-semester sections.

In summary, the NVC SDEV model illustrates high standards of institutional commitment to a student success course program, and it reaps the benefits of that commitment in student engagement and success. The shared investment of faculty and staff in the SDEV program offers important validation of student development as a collateral academic experience. The course is further validated through clear and careful articulation through institution communication. Ongoing course evaluation and experimentation with different course formats and themed content attest to vital student-center program management. The result is a student success course program that is both highly successful and committed to becoming more so.

CHAPTER FIVE: PALO ALTO COLLEGE

Introduction

This case study sought to develop a rich understanding of one particular case and to use that case to better understand an issue. The case-level unit of investigation was Palo Alto College (PAC), the third oldest of the Alamo Colleges in San Antonio, Texas. The specific focus of investigation was the student success course, Student Development 0170 (SDEV), which is implemented on that campus to assist incoming students in adjusting to and engaging in college.

This research was conducted as an exploratory mixed method case study using qualitative data to enrich interpretation of quantitative analysis. The primary function of the mixed methods approach was to explain the quantitative results with a two-fold qualitative investigation of institutional documentation and student focus group data. A secondary purpose was to explore use of a triangulation approach to compare and contrast the findings from the CCSSE data, the document analysis, and the focus groups, as a model for better understanding student success courses as a campus-based student success initiative.

This study's results are intended to inform process and practice related to the implementation of student success courses specific to two-year colleges.

The College

Palo Alto College (PAC) was founded in the Southside of Bexar County in 1985, bringing to fruition the collaborative efforts of Communities Organized for Public Service (COPS) and the Alamo Community Colleges Board of Trustees. The college opened doors at its current 126 acre location in 1987, where by Fall 2007 its initial enrollment of 231 students had grown to a credit enrollment of 8,021 (THECB, 2009). Facilities have expanded dramatically as well, more than doubling the original campus square footage. Most recent additions include a convocation center and a new sciences and veterinary technology building that are under construction courtesy of a 2005 bond issue.

PAC is often noted as the heart of the Southside community. Its mission statement emphasizes "accessible education" as well as nurturing and inspiring students "through a dynamic and supportive learning environment, which promotes the intellectual, cultural, economic and social life of the community" (Palo Alto College, 2009, n. p.). The college's fifth president has led the institution since 2002.

Demographic Profile

Within the overall demographic attributes of the PAC student population (Table 5.1), two demographic attributes stand out. First, at 62 percent, it has the highest percentage of female students among the Alamo Colleges where all institutions have substantially higher female populations. Second, PAC's population is 65 percent Latino, as compared to 45 percent to 48 percent among its sister colleges.

PAC students tend to be young, with just over 70 percent of its students under age 25. In addition, they are strongly oriented toward transfer programs: 87 percent of credit students are enrolled in academic programs and 13 percent in technical programs.

The college reports a high transfer success rate of 38 percent among Latino students, which is more than four times the average for the state of Texas (PAC, 2009).

Table 5.1: Summary of PAC Student Demographic Attributes

Subscale	Frequency	Percent
Age		
Under 25	5635	70.3%
25-34	1415	17.6%
Over 34	<u>971</u>	<u>12.1%</u>
Total	8,021	100.0%
<u>Gender</u>		
Female	4,963	61.9%
Male	3,05 <u>8</u>	38.1%
Total	8,021	100.0%
	,	
<u>Goals</u>		
Academic	7,008	87.4%
Technical	<u>1,013</u>	<u>12.6%</u>
Total	8,021	100.0%
Enrollment Status		
Full-time	2,869	35.8%
Part-time	5,152	64.2%
Total	8,021	100.0%
_		
Race		
African American	169	2.1%
Asian American	61	0.8%
Latino	5,232	65.2%
Native American	24	0.3%
White	2,513	31.3%
International	<u>22</u>	<u>0.3%</u>
Total	8,021	100.0%

Note: Texas Higher Education Coordinating Board (THECB). (2009). Higher Education Accountability System. Retrieved February 5, 2009 from Texas Higher Education Data *Web site*: http://www.txhighereddata.org/Interactive/accountability/

Student Development Course Background

Student development courses have been taught at PAC for at least 17 years (Reyna, 2009). Up until 2002 the courses were recommended, but they were made mandatory for incoming students in 2003. A registration hold, which prevents new students from completing registration unless they have scheduled the required SDEV course, was implemented in the fall of 2007. PAC does not conduct orientation in any other format. SDEV courses are offered in a variety of formats including -day course sections in summer, flex term (8 week) sections, and online sections.

PAC's student development program is housed in the Counseling Services department of Student Services. All SDEV courses are taught by counselors. According to the web site (http://www.accd.edu/pac/htm), the college employs 13 counselors with a minimum of master's level credentials, of whom four have terminal degrees and five are licensed. Several of the counselors hold faculty ranks. According to the Counseling Services web site, two counselors hold the rank of full professor, two are associate professors, and four are assistant professors. One counselor is listed as instructor, one as Passkey (Trio) counselor, and three as adjunct counselors.

SDEV Policy and Practice

In keeping with policy for the Alamo Colleges, PAC requires all students entering with fewer than 15 credit hours to enroll in SDEV 0170: Strategies for Succeeding in College in their first semester. Dual credit hours are not counted to meet the 15-hour threshold for the SDEV requirement. Students subject to this policy are not

allowed to complete registration without signing up for SDEV. Either SDEV 0170: Strategies for Succeeding in College or SDEV 0370 Personal and Academic Success may be taken to fulfill that requirement at PAC.

Students who register for SDEV 0170 and do not complete the course will be required to re-enroll in the course the subsequent semester. Students entering in summer may defer their SDEV requirement until fall if they wish. Exceptions or waivers require approval. Students are charged regular tuition rates for SDEV courses. Three-peat tuition (a tuition rate unsubsidized by the state) applies on a third enrollment. Consistent with policy across the district, SDEV course credit is awarded at the developmental or "0" level and is not transferrable. Direct information on SDEV course credit level was not found on the web site or in the catalog.

Course Iterations

PAC offers four different Student Development courses, the largest variety of the Alamo Colleges.

SDEV 0170: Strategies for Succeeding in College is the required student development course taught under the same number across the district. SDEV 0170 provides PAC students "with a variety of experiences and information which can help them adjust to college life and help make their experiences in college more successful" (PAC, 2009, p. 381). College policies and procedures as well as personal development are emphasized. There are also special interest sections of SDEV 0170 for students interested in Business, Education, Learning Strategies, and STEM fields, but no further information on these options were available in college documents.

SDEV 0171: Enhancing Academic Success is a one contact hour, one credit course designed for the academically at-risk student needing to improve his or her study and time management skills. Students placed on academic probation, continued academic probation, and/or financial aid suspension are encouraged to take SDEV 0171. Emphasis is placed on academic skills such as study techniques, time management, note-taking, and test-taking (PAC, 2009).

SDEV 0172: Career and Life Planning is also a one-credit, one-contact hour course. This course is exclusive to PAC and is intended for students who are undecided about their major or need help in selecting a program of study. It focuses on assisting undecided students in developing goal-setting and decision-making processes to assist them in defining realistic academic and career goals that will help them succeed in college (PAC, 2009).

SDEV 0370: Personal and Academic Success is a three-credit, three-contact hour course designed to provide more in-depth experiences and information to assist students in becoming successful in college. Specific goals focus on developing better understanding of self, academic skills, interpersonal skills, and planning skills for personal, academic, and career applications (PAC, 2009). This course may be taken to fulfill the college's student development course requirement. SDEV 0370 is taught in smaller sections specifically designed to meet the needs of learning disabled students and students with developmental requirements in all disciplines.

The Alamo Colleges recommend that SDEV 0370 be the mandatory student development course for students who place into two or three developmental classes.

However, PAC's current staffing structure would not support scaling the 3-hour course up to meet such a requirement, since the Counseling Services department lacks the manpower and classroom space to implement such a policy change. Currently they offer only two sections of the 3-hour course per semester (Reyna, Personal Communication, 2009).

Analysis of Primary Electronic Documents

Print and electronic institutional documents provide critical information interfaces through which prospective, new, and returning students develop their understanding of the college's policies and expectations. The dominant messages delivered by such documents are generally direct and intentional on the part of college (e.g., drop/add procedures or graduation requirements) and deliberately consumed by the student. However, other messages may be unconsciously embedded and subliminally experienced. Institutional priorities, such as the importance of a particular program, may be communicated by a number of textual signals such as linking routes, page placement, or number of clicks to reach the page. Alternately, important messages may be lost or misrepresented in a welter of poorly organized links. To assess both intentional and incidental messages regarding SDEV courses conveyed in high traffic college documents, searches of the college web site and catalog were conducted using SDEV as the search term.

Web Site Review

In the search of the PAC web site (http://www.accd.edu/pac/htm), 15 hits were returned for the term SDEV, all of which led to live links. Nine links, including the first

six, led directly to SDEV web pages featuring important information related to the courses. One led to the Counseling Services home page, one to the Welcome Enrollment Center advising page, and four to various registration checklists.

All hits were linked through the Current Students directory. The linking of SDEV information on the web site appeared organized and deliberate. Links from the search page led to SDEV information either through the Welcome Enrollment web or through Student Services/Counseling Services web. Welcome links mentioned SDEV in connection with other processes, while the Counseling links led directly to Student Development pages detailing policy information, course descriptions, counselor/faculty contact listings, and course material and resources.

Information available to students through the links described here include a clear policy statement including information about SDEV waivers, course descriptions, a course syllabus for SDEV 0170, and a variety of well organized course materials and resource links. No syllabi and very limited information for SDEV course offerings other than SDEV 0170 were available. No cross-links to other areas of the college, including academic areas, were observed.

College Catalog Review

The college catalog is not directly searchable from the web site. An Adobe Advanced Search of the online catalog PDF file using the term "SDEV" returned 18 textual hits on five locations in the document. The five locations were Table of Contents (1); Section II: Introduction (8); Section IV: Registration (5) and two locations in Section XIII: Course Descriptions.

Catalog information on SDEV was made reasonably visible by the prominent positioning of "Student Development Course (SDEV)" in the table of contents under Registration. An overview of the program, including brief mention of all course offerings, and the SDEV requirement are given in the Introduction section, while course policy similar to statements used by all colleges in the district are listed under Registration. A single entry of the SDEV prefix on the course prefixes page is followed by course descriptions for all four SDEV courses.

Document Analysis Summary

In summary, the document analysis showed that information on PAC's SDEV course was clearly presented in primary college documents and easily accessed by new students. Links to SDEV information led to a handful of well-developed pages offering policy, course, contact, and resource information. No conflicting or negative messages were noted.

No hits linking SDEV to any other program or department in the college were observed. In particular, no connections between SDEV participation and academic courses were in evidence. No explanation of transferability or applicability of SDEV credit was evident.

Quantitative Data

Sample

The participant pool for the quantitative portion of the study was drawn from students sampled at the four research sites in the 2005, 2006, and 2007 CCSSE administrations. Data fields for success course participation and enrollment status were

gathered by matching student identifiers voluntarily provided on the CCSR with institutional enrollment data secured through the Alamo Colleges Office of Institutional Research.

Approximately 38 percent of CCSRs in the participant pool included some value in the student identifier field. After cleaning incomplete and unusable student identifier values, valid identifier values were provided to the Alamo Colleges Office of Institutional Research (OIR). OIR staff matched the student identifiers with consistent institutional data sources for all colleges to provide the SDEV course number, the semester taken, and final course grade for participants.

Table 5.2: PAC SDEV Enrollment by Course and Year

1 11010	Those bill 1110 BB Li Billionintent by course that I can										
	No SDEV		SDEV 0170		SDEV 0171		SDEV 0370		<u>Total</u> .		
Year	n	%	n	%	n	%	n	%	n	%	
2005	71	15.50%	79	17.20%	3	0.70%	0	0.00%	153	33.30%	
2006	58	12.60%	81	17.60%	8	1.70%	0	0.00%	147	32.00%	
2007	<u>57</u>	<u>12.40%</u>	<u>96</u>	<u>20.90%</u>	<u>4</u>	<u>0.90%</u>	<u>2</u>	0.40%	<u>159</u>	<u>34.60%</u>	
Total	186	40.50%	256	55.80%	15		2		459	100.00%	

A total of 1,909 viable cases were identified, representing 24 percent of the total CCSSE participant pool. Of the 1,909 total cases, 459 cases came from PAC. These 459 cases constitute the sample for analysis to respond to Research Questions 1 and 2. Of the 459 PAC student cases, 273 (59.5 percent) enrolled in an SDEV course prior to or during the semester in which they participated in CCSSE. The distribution of student cases across the three years of administration and the proportion enrolled in SDEV are

reported in Table 5.2. The vast majority (55.8 percent) of students who took SDEV took SDEV 0170. Slight increases in SDEV 0170 and SDEV 0370 enrollments in 2007 suggest possible effects of strengthening application of the SDEV requirement as part of Achieving the Dream strategies to increase student success.

Table 5.3: PAC SDEV Enrollment by Course and Year

No SDEV SDEV 0		EV 0170	170 SDEV 0171			SDEV 0370		<u>Total</u>	
n	%	n	%	n	%	n	%	n	%
71	15.50%	79	17.20%	3	0.70%	0	0.00%	153	33.30%
58	12.60%	81	17.60%	8	1.70%	0	0.00%	147	32.00%
<u>57</u>	12.40%	<u>96</u>	<u>20.90%</u>	<u>4</u>	0.90%	<u>2</u>	0.40%	<u>159</u>	<u>34.60%</u>
186	40.50%	256	55.80%	15		2		459	100.00%
	n 71 58 <u>57</u>	n % 71 15.50% 58 12.60% 57 12.40%	n % n 71 15.50% 79 58 12.60% 81 57 12.40% 96	n % n % 71 15.50% 79 17.20% 58 12.60% 81 17.60% 57 12.40% 96 20.90%	n % n % n 71 15.50% 79 17.20% 3 58 12.60% 81 17.60% 8	n % n % 71 15.50% 79 17.20% 3 0.70% 58 12.60% 81 17.60% 8 1.70% 57 12.40% 96 20.90% 4 0.90%	n % n % n % n 71 15.50% 79 17.20% 3 0.70% 0 58 12.60% 81 17.60% 8 1.70% 0 57 12.40% 96 20.90% 4 0.90% 2	n % n % n % 71 15.50% 79 17.20% 3 0.70% 0 0.00% 58 12.60% 81 17.60% 8 1.70% 0 0.00% 57 12.40% 96 20.90% 4 0.90% 2 0.40%	n % n % n % n 71 15.50% 79 17.20% 3 0.70% 0 0.00% 153 58 12.60% 81 17.60% 8 1.70% 0 0.00% 147 57 12.40% 96 20.90% 4 0.90% 2 0.40% 159

Notes on Statistical Procedures

Fourteen dependent variables were used to examine the two quantitative research questions in the study. These variables included five benchmarks of institutional effectiveness and nine latent engagement factors made up of clusters of CCSSE survey items.

Table 5.4: Descriptive Statistics for Dependent Variables (CCSSE Benchmarks and Factors) for PAC

						Mean			
						Std.	Std.		
	N	Range	Min.	Max.	Mean	Error	Deviation	Variance	
Engagement Benchmark	Engagement Benchmarks								
Active/Collab.	450	1.00	00	1.00	2020	00725	1.57.40	025	
Learning	459	1.00	.00	1.00	.3830	.00735	.15743	.025	
Student Effort	459	.886	.089	.975	.4799	.00748	.16019	.026	
Academic Challenge	459	.92	.08	1.00	.5719	.00768	.16451	.027	
Student/Faculty	459	1.00	.00	1.00	.3996	.00789	.16908	.029	

Support/Learners	459	1.00	.00	1.00	.4621	.00951	.20385	.042			
Engagement Factors											
Faculty Interaction	459	1.00	.00	1.00	.4160	.00760	.16284	.027			
Class Assignments	459	1.00	.00	1.00	.5350	.01089	.23336	.054			
Diverse Experience	459	1.00	.00	1.00	.5162	.01282	.27457	.075			
Collaborative Learning	459	1.00	.00	1.00	.2665	.00830	.17791	.032			
Information Tech.	458	1.00	.00	1.00	.5921	.01358	.29059	.084			
Mental Activities	459	1.00	.00	1.00	.5623	.00984	.21076	.044			
School Opinions	457	1.00	.00	1.00	.5397	.01000	.21378	.046			
Student Services	446	1.00	.00	1.00	.3876	.01215	.25668	.066			
Academic Preparation	457	1.00	.00	1.00	.5098	.00711	.15191	.023			

Note: Valid N (listwise) = 443

Both benchmarks and engagement factors have been statistically validated as predictors of one or more student success outcomes through CCSSE validation research (McClenney & Marti, 2006; Marti, 2009). The benchmarks were developed from the nine latent engagement factors; thus, substantial overlap between the two sets of constructs exists. A copy of the CCSSE survey instrument is found in Appendix B, and detailed descriptions of benchmarks and factors are provided in Appendices D and C, respectively. A cross-referenced listing of survey items for benchmarks and factors is found in Appendix H. Descriptive statistics for each of the 14 CCSSE benchmarks and engagement factors are provided in Table 5.4.

Understanding relationships among complex matrices of factors that influence engagement and college success is much more likely to be a matter of attending to small signals and noise ratios rather than substantial causal linkages. R^2 effect sizes for the

regression models were assessed using Cohen's (1988) effect size standards which denote effect sizes of 25% as large, 9% as medium, and at least 1% as small.

Research Question 1

What is the relationship between participation in a student success course and engagement in college as measured by the Community College Survey of Student Engagement (CCSSE)?

To address the first research question, the five CCSSE benchmarks and nine latent engagement factors were regressed as dependent variables on a dummy coded dichotomous predictor variable for enrollment in an SDEV course. The SDEV Enrolled predictor variable used in the statistical analysis included all students who registered for an SDEV class prior to or during the semester in which they participated in CCSSE, regardless of whether they finished or passed the class. The No SDEV group—students who never enrolled in an SDEV class—served as the reference group in fitting the regressions. Descriptive statistics for the SDEV Enrolled variable are presented in Table 5.5. Statistical significance in the following models was assessed at the $\alpha = .05$ level.

Table 5.5: Descriptive Statistics for SDEV Enrolled Independent Variable at PAC

					Mean Std.	Std.	
N	Range	Minimum	Maximum	Mean	Error	Deviation	Variance
459	1	0	1	.46	.023	.499	.249

Note: Valid N (listwise) = 459

Analysis of Engagement Benchmarks

A summary of linear regression statistics for the 14 dependent variables is presented in Table 5.6. Two benchmarks, Student/Faculty Interaction and Support for Learners, were significantly related to SDEV enrollment.

The probability of .036 for Student/Faculty Interaction (p = .036, b = .034, df = 1) was associated with a slope indicating that students who enrolled in an SDEV course would show a .034 increased likelihood of interacting with instructors to extend or enrich academic experiences. The R^2 value of .01 indicates an explained variance of one percent and a small effect size for this variable.

The p value of .046 for Support for Learners also showed a statistically significant relationship with SDEV enrollment with (p = .046, b = .038, df = 1). The slope predicted a .038 increase in student recognition and use of quality support resources among SDEV enrollers relative to students who did not take the course. The R^2 value was marginal for a small effect size, however, explaining only .9 percent of variance ($R^2 = .009$).

Neither Academic Challenge (p = .306, b = .016, df = 1), Student Effort, (p = .423, b = .012, df = 1), nor Active/Collaborative Learning (p = .920, b = .002, df = 1) benchmarks were statistically related to SDEV enrollment.

Table 5.6: Summary of Linear Regression Statistics for all Engagement Benchmarks and Factors by Success Course (SDEV) Enrollment at PAC

Dependent Variables	b	SE SE	Beta	t	P	R^2
Engagement Benchmarks						
Active/Collaborative						
Learning	.002	.15	.005	.100	.920	.000
Student Effort	.012	.015	.038	.802	.423	.001
Academic Challenge	.016	.015	.049	1.024	.306	.002
Student/Faculty	.034	.016	.100	2.105	.036	.010
Support/Learners	.038	.019	.095	2.000	.046	.009
Engagement Factors						
Faculty Interaction	.002	.015	.006	.130	.897	.000
Class Assignments	.052	.022	.111	2.351	.019	.012
Diverse Experience	.021	.026	.037	.785	.433	.001
Collaborative Learning	.013	.017	.035	.738	.461	.001
Information Technology	.088	.027	.151	3.216	.001	.023
Mental Activities	007	.020	016	345	.730	.000
School Opinions	.042	.020	.098	2.074	.039	.010
Student Services	.008	.024	.015	.316	.752	.000
Academic Preparation	.041	.014	.133	2.816	.005	.018

Analysis of Engagement Factors

Four engagement factors, Information Technology, Academic Preparation, Class Assignments, and School Opinions, also showed statistically significant relationships with SDEV Enrollment at the $\alpha = .05$ level in this model.

Information Technology's probability was highly significant at .001 (p = .001, b = .088, df = 1). Its slope predicted a .088 increase in academic use of online communication for course enrollers relative to non-enrollers The R^2 value indicated that the model explained 2.3% of variance, denoting a small effect size.

The Academic Preparation item cluster assesses the level of effort students invest in learning. The slope for Academic Preparation activities (p = .005, b = .041, df = 1) predicted a .041 increase in factor engagement for SDEV enrollers as compared to non-enrollers. The associated R^2 indicated 1.8 percent of variance explained by the model, which is consistent with a small effect size.

The relationship between Class Assignments and SDEV enrollment was also statistically significant (p = .019, b = .052, df = 1). Survey items in this cluster question involvement in active learning and critical thinking experiences. The slope for Class Assignments predicted a .052 increase in factor engagement for SDEV enrollers. A small effect size for the interaction was indicated by explained variance of 1.2 percent ($R^2 = .012$).

School Opinions, which has several survey items in common with the Support for Learners benchmark, showed statistical significance with a probability of .039 (p = .039, b = .042, df = 1). The School Opinions item cluster questions how students experience support for meeting challenges within the college environment. The associated slope predicted that SDEV enrollers would report a .042 higher level of factor engagement, and the R^2 showed a small effect size with explained variance of one percent.

Five engagement factors exhibited no statistically significant relationships with SDEV enrollment: Diverse Experience (p = .433, b = .021, df = 1), Collaborative Learning, (p = .461, b = .013, df = 1), Mental Activities (p = .730, b = -.007, df = 1), Student Services (p = .752, b = .008, df = 1), and Faculty Interaction (p = .897, b = .002, df = 1).

Model Summary

The regression model for Research Question 1 predicted that students who enroll in PAC's SDEV course will be more engaged on two benchmarks, Student/Faculty Interaction and Support for Learners, than students who do not enroll in the course. Slopes for both variables were modest, however, and effect sizes were also marginal based on Cohen's (1988) standards. Four of nine engagement factors demonstrated statistically significant relationships with SDEV enrollment. Information Technology and Academic Preparation showed the most robust statistical relationships, although their effect sizes were small. Class Assignments and School Opinions showed significant relationships with marginally small effect sizes. These findings suggest that enrollment in an SDEV course at this college is related to a positive but modest gain in engagement on the dimensions noted.

Research Question 2

How does the relationship between success course participation and engagement as measured by CCSSE compare for part-time and full-time students?

To address the second research question, Average Attempted Hours was added as a second independent variable to the regression model used to address Research

Question 1. Student case values for Average Attempted Hours were calculated by adding all hours attempted for a four-year period relative to CCSSE participation and then dividing the totals by number of terms attended. For 2005 CCSSE participants the relative period used to calculate Average Attempted Hours was Fall 2002 to Spring 2006. For 2006 participants, the period was Fall 2003 to Spring 2007. For 2007 participants, the period was Fall 2004 to Spring 2008.

Descriptive statistics for the Average Attempted Hours variable (Table 5.7) indicate PAC students in the CCSSE sample carried academic loads ranging from 2 to 16.5 credit hours with a mean load of 9.68 hours.

Table 5.7: Descriptive Statistics for Average Attempted Hours Independent Variable at PAC

					Mean Std.	Std.	
N	Range	Minimum	Maximum	Mean	Error	Deviation	Variance
459	14.50	2.00	16.50	9.6804	.11568	2.47839	6.142

Note: Valid N (listwise) = 459

Based on the calculated value of Average Attempted Hours for each student case, only 22 percent of students in the sample averaged a full-time load of 12 or more credit hours. The largest group, 68 percent, averaged between 6.1 and 11.9 credit hours. Ten percent averaged course loads of six or fewer hours per term.

Analysis of Engagement Benchmarks

Table 5.8 presents a summary of multiple regression analyses for the 14 CCSSE engagement constructs regressed on the dummy coded variable for SDEV enrollment and the continuous Average Attempted Hours variable. No benchmarks showed

statistically significant relationships with both SDEV Enrollment and Average Attempted Hours.

One benchmark, Support for Learners (p = .044, b = .039, df = 2), demonstrated a statistically significant relationship with only SDEV enrollment at the $\alpha = .05$ level. The Support for Learners item cluster focuses on how students understand and use campus resources to achieve their academic goals. The model slope predicted an increase in benchmark engagement of .044 for SDEV enrollers. However, explained variance of only .9 percent, indicated a marginally small effect size for the model. No relationship between Support for Learners and Average Attempted Hours was found (p = .738, b = -.001, df = 2).

Table 5.8: Summary of Multiple Regression Analysis of Engagement Benchmarks and Factors on SDEV Enrollment Status and Average Hours Attempted.

	SDEV Enrolled			Aver	age Atte	empted H	ours
Dependent Variables	b	SE	P	b	SE	P	R^2
Engagement Benchmarks							
Active/Collab. Learning	006	.015	.698	.007	.003	.018	.013
Student Effort	.005	.015	.737	.007	.003	.029	.012
Academic Challenge	.007	.016	.635	.008	.003	.010	.017
Student/Faculty	.029	.016	.079	.005	.003	.142	.015
Support/Learners	.039	.019	.044	001	.004	.738	.009
Engagement Factors							
Faculty Interaction	001	.016	.937	.003	.003	.317	.002
Class Assignments	.039	.022	.084	.013	.005	.005	.030
Diverse Experience	.014	.027	.591	.006	.005	.265	.004

Collaborative Learning	.003	.017	.850	.009	.003	.009	.016
Information Technology	.072	.028	.010	.016	.006	.006	.040
Mental Activities	013	.020	.527	.006	.004	.154	.005
School Opinions	.039	.021	.055	.002	.004	.601	.010
Student Services	.006	.025	.817	.002	.005	.705	.001
Academic Preparation	.028	.014	.052	.012	.003	.000	.055

Three benchmarks demonstrated no relationships with SDEV enrollment; however, controlling for SDEV enrollment, they were found to have statistically significant relationships with the Average Attempted Hours predictor at the established alpha.

Academic Challenge (p = .010, b = .008, df = 2) addresses both students' perceptions of the rigor of education at the college and their activities related to meeting those challenges. Its slope of .008 predicted that benchmark engagement would increase by .008 for each additional average hour attempted. This model explained 1.7 percent of variance ($R^2 = .017$).

The slope for Active and Collaborative Learning (p = .018, b = .007, df = 2) predicted an increase of .007 in students' academic initiative and involvement in learning experiences for each increase of one average hour attempted. The R^2 statistic denoted 1.3 percent of variance was explained by the model.

The Student Effort benchmark (p = .029, b = .007, df = 2) also addresses dimensions of student initiative and involvement in learning, and was associated with a

slope that predicted a .007 increase in benchmark engagement for each added average attempted hour. The model explained 1.2 percent of variance ($R^2 = .012$).

As for Student/Faculty Interaction, no relationship was found with either SDEV enrollment (p = .079, b = .029, df = 2) or Average Attempted Hours (p = .142, b = .005, df = 2).

Analysis of Engagement Factors

A single engagement factor, Information Technology, demonstrated significant relationships with both SDEV enrollment (p = .010, b = .072, df = 2) and Average Attempted Hours (p = .006, b = .016, df = 2). The Information Technology factor includes only two survey items, both of which focus on use of online communication technologies for academic purposes. Its relationship with SDEV enrollment was characterized by a slope of .072, predicting that course enrollers would increase in factor engagement by that amount. As to Average Attempted Hours, the slope predicted an increase of .016 for each additional average attempted hour. The R2 of .040 indicated that four percent of variance is explained by this model.

No other engagement factor demonstrated a significant relationship with SDEV enrollment in this multiple regression model. However, controlling for SDEV enrollment, three engagement factors--Academic Preparation, Class Assignments, and Collaborative Learning--were found to have statistically significant relationships with the Average Attempted Hours predictor.

Academic Preparation demonstrated the strongest statistical relationship with Average Attempted Hours with a probability of .000 (p = .000, b = .012, df = 2). Its

slope predicted a 2.8 percent increase in factor engagement, and 5.5 percent of variance was explained by the model ($R^2 = .055$).

Probability for Class Assignments was estimated at .005 (p = .005, b = .013, df = 2), indicating strong significance. The associated slope predicted 1.3 percent increase in factor engagement for each additional average hour attempted. Variance explained was three percent ($R^2 = .030$).

Collaborative Learning (p = .009, b = .009, df = 2) demonstrated strong significance and a slope that predicted a .009 increase in factor engagement for each average hour increase. One percent of variance was explained ($R^2 = .01$).

As noted above, no relationships were found between SDEV enrollment and Collaborative Learning (p = .850, b = .003, df = 2), Class Assignments (p = .084, b = .039, df = 2) and Academic Preparation (p = .052, b = .028, df = 2). However, Academic Preparation, which was significant in the regression model fitted for Research Question 1, was marginal with a probability of .052.

Five factors were unrelated to either predictor variable. School Opinions was marginal for relationship with SDEV enrollment with a probability of .055 but did not meet the significance test (p = .055, b = .039, df = 2), nor was it related to Average Attempted Hours (p = .601, b = .002, df = 2). Faculty Interaction was statistically unrelated to SDEV enrollment (p = .937, b = -.001, df = 2) or with Average Attempted Hours (p = .317, b = .003, df = 2) in this model. Similarly, Diverse Experience showed no relationship with either predictor variable (p = .591, b = .014, df = 2; and p = .265, b = .006, df = 2, in order). Mental Activities and Student Services were statistically

unrelated to either SDEV enrollment (p = .527, b = -.013, df = 2; and p = .817, b = .006, df = 2; respectively) or to Average Attempted Hours (p = .154, b = .006, df = 2; and p = .705, b = .002, df = 2; respectively).

Model Summary

The multiple regression models examined here offer limited evidence of relationships with SDEV enrollment for two variables—Support for Learners and Information Technology. Seven constructs demonstrate significant relationships with Average Attempted Hours, including Information Technology. This suggests that, in this context, level of enrollment hours is a stronger predictor of engagement than SDEV enrollment.

Summary of Quantitative Findings

Significant relationships between engagement constructs showed mixed consistency across the two models. Information Technology is a narrow construct, comprised of only two variables on use of communication technology for academic purposes. The small size and specific focus of this item cluster regarding common technology use limits the inferences that be drawn from its statistics.

Support for Learners demonstrated the most consistent results. Its statistical relationship with SDEV enrollment was similarly significant in both regression models. The R^2 value remained unchanged; however, with only .9 percent of variance explained, the model is marginal for even a small effect size. This suggests that, while there is a relationship between SDEV enrollment and students' recognition and use of support services available at the college, its impact on student behavior may be minor.

Four constructs—Student/Faculty Interaction, Class Assignments, School Opinions, and Academic Preparation—were significantly related to SDEV enrollment in the linear regression fitted for Research Question 1, but not in the multiple regression model fitted for Research Question 2. The absence of significance for School Opinions draws attention, as it shares five survey items with the Support for Learners benchmark which did maintain significance across models. School Opinions excludes two items on use of counseling and advising services that are part of the Support for Learners cluster and shares an additional item on time spent studying with the Academic Challenge benchmark.

The overall picture presented by these analyses suggests that the measurable impact of SDEV enrollment on student engagement as it was experienced by this group of CCSSE participants was limited. In the second regression model, enrollment level demonstrates significant relationships with seven of fourteen engagement constructs, suggesting that in this context it is the stronger of the two predictor variables examined.

Oualitative Data

The specific goal for conducting focus groups as part of this study was to explore student experiences with SDEV courses and, to the extent feasible, to relate that exploration to student engagement. Questions used to guide the focus groups were developed with an eye to the engagement constructs measured by CCSSE and loosely organized around five lines of inquiry: perceived obstacles to college success, expectations of college and the SDEV course, perceptions of SDEV's value, SDEV's

policy and process environment, and perspectives on SDEV and campus relationships (Appendix G).

After an unproductive attempt to recruit focus group volunteers through distributing flyers in SDEV classes, the researcher contacted the chair of the English department at the college. An opportunity was made available to conduct a focus group in a section of English 0300, which is the most basic level of developmental writing. The focus group was conducted during a midday class period with 13 students who agreed to participate. The instructor was not present for the focus group, nor was any class credit associated with participation. The focus group was conducted in early December 2008.

At the beginning of the group, the researcher explained the study's purpose, voluntary status, potential risks, and possible benefits of participation, as mandated by IRB protocols. Students were given a written copy of the study description and were asked to complete a consent form and a brief demographic questionnaire (Appendix F). Proceedings were audio recorded and transcribed, then coded and analyzed using NVivo qualitative analysis software.

Sample

A total of 13 students participated in the PAC focus group. Compared to the college's overall population, the sample was somewhat younger than average with 100 percent of participants under age 25. Latino students were substantial overrepresented at almost 85 percent. A summary of demographic attributes of focus group participants is given in Table 5.9.

More than two-thirds (69 percent) of the focus group participants were first-generation college students. Eleven of thirteen students were in their first semester in college, one was in her second, and one in his fourth. One student noted that she had been enrolled in the ESL program and was beginning regular classes for the first time in this semester. The majority (61.5 percent) were attending college full time. However, during the focus group eight students reported that they worked in addition to college, and five said they worked more than 20 hours per week. All but one participant reported their goal as transferring to a baccalaureate institution.

All participants entered college substantially underprepared, as demonstrated by the fact that these students were enrolled in ENGL 0300. Upon successful completion of this course, they would be required to successfully complete another level of developmental writing before being eligible to enroll in a college-level English class.

Most of the students had taken their SDEV class in the Fall 2008 semester. Because SDEV is taught in a 13-week format instead of the full 16-week semester, the students had completed the class by the time the focus group was conducted. Some of the students mentioned having been in the same class with others, but it is assumed that their SDEV views were derived from a variety of different class experiences.

Table 5.9: PAC Focus Group Demographic Profile

Table 5.9: PAC Focus Group Demographic Profile					
Subscale	Frequency	Percent			
Age					
18-19	7	53.8			
20-21	5	38.5			
22-24	<u>1</u>	<u>7.7</u>			
Total	13	100.0			
<u>Gender</u>					
Female	7	53.8			
Male	<u>6</u>	<u>46.2</u>			
Total	13	$\frac{10.2}{100.0}$			
10111	13	100.0			
<u>Goals</u>					
Transfer	12	92.3			
Associate	<u>1</u>	7.7			
Total	$1\overline{3}$	$10\overline{0.0}$			
Race					
Latino	11	84.6			
NHI	1	7.7			
White	<u>1</u>	<u>7.7</u>			
Total	13	100.0			
First Generation					
Parent/No College	9	69.2			
Parent/Some College	<u>4</u>	<u>30.8</u>			
Total	13	100.0			
F 11					
Enrollment Status					
Full-time	8	61.5			
Part-time	<u>5</u> 13	38.5			
Total	13	100.0			

Research Question 3

What insights do student views on success course participation as expressed in focus groups contribute to the quantitative analysis of the course participation/engagement relationship?

Student responses during the focus group were more positive (103 responses) than negative (81 responses). In general, most students had little negative to say about the SDEV course, instead directing most of their negative speech toward self critique or expressions of concern about succeeding in college. Positive and negative student comments are summarized by category in Table 5.10.

Because the PAC focus group was conducted in an entry-level developmental writing class, this exploration of SDEV experience is by default an exploration of how the course meets the needs of substantially underprepared students. All students with one exception of a female former ESL student saw a counselor or advisor to plan their course schedule for the fall. One former ESL student received advising within that program. All students recalled being told that SDEV was a required course. One was told that the class was for undecided majors. None, however, recalled receiving specific information about what the course would involve or why it was required. Students expressed no objections to having to take the course. Their understanding of and feelings about the credit for the SDEV course being non-transferrable were not clear.

All students recalled being told during their first registration that SDEV was a required course. None, however, recalled receiving specific information about what the course would involve or why it was required. As one student put it, "I just thought it was

like just a required class, I didn't even know what it was, what it was about." However, students expressed no objections to having to take the course. No student raised the issue of transferability of SDEV credit, so participant views of that aspect of SDEV value were not discussed.

In response to questions about their experiences entering college, some students mentioned the ACCUPLACER placement test as significant. One male student responded to a question about whether his PAC experience had thus far been what he expected from college. His response reflected the tensions in sense of student self that accompanies the placement process: "Yeah, because I took my basics... I took my ACCUPLACER and I didn't do good, so they put me in my basics and let me in class, so..." The placement process appeared to have had a substantial influence on his sense of legitimacy as a student. The student went on to report satisfaction with his progress: "It's doing good. Passing my classes and everything."

Student Perceptions of Self as Learner

Participants expressed their concerns about beginning college in terms of two things: ability to do the academic work, and adapting to the new environment of a college campus.

When asked how many thought upon entering that they would be good students in college, only one student raised her hand in response. That female student characterized herself as "just an average student." One female student made her decision to attend at the last moment.

I wasn't going to come to school. I wasn't going to come to college, but my mom convinced me, she talked me into it. And I did everything at the last minute. Like two days, like you know, like Thursday and then Friday and then Monday was school so I did everything Thursday. I wasn't going to college; I didn't think it was for me.

Table 5.10: PAC Focus Group Response Summary (Number Preceding Response

Equals Number of Responses in Group)

Equals Number of Responses in Group)						
Topic/Theme	<u>Positives</u>	<u>Negatives</u>				
Perception of self as learner		12 Didn't think they would be "pretty good students" in college 5 Worried about handling classes 1 Average student				
Value of SDEV	 Everything learned was important Fun—liked it Rated ≥ 8 of 10 on usefulness of course: class average 8.4 	1 Rated course usefulness "1"				
Value in Self Knowledge Gained in SDEV		Get distracted easily Lazy about school work Just fooled around in course Relied on other people's work in high school				
Value of Life Skills Gained in SDEV	3 Time management 1 Motivation 1 Stress management 2 Getting organized					
Valuable College Knowledge	2 Scholarships 1 Registration 1 Campus tour 1 College processes 2 Transfer 1 Choosing major					
Value of Learning Skills Gained in SDEV	4 Study skills					
Need for SDEV	10 Rated course high in importance as class	12 Did not see self as good student 5 Worried about academic abilities				
Aspects of SDEV That Were Not Useful		12 Not told about what course would be about1 Expected it to be boring2 Thought increasing course length				

		would be a mistake
		No mention of transferability of credit
SDEV Requirement	12 informed about requirement by counselor or advisor 1 told class was for people who were undecided about majors	13 Not told what class would cover
Experiences w/SDEV class format	6 Preferred doing group work 1 Liked reading, bookwork assignments 1 Described campus tour 3 Described classes as participatory 1 Described SDEV in terms of Activities 1 Described SDEV in terms of Projects	4 Described SDEV lecture-based
Faculty Relationships	2 Instructors help you a lot 2 Knew SDEV instr. best 8 Knew English instr. best 1 Knew aerobics inst. best	1 Concern re. what instructors would be like
Peer Relationships	 5 Knew people who went to PAC 2 Made friends in SDEV 1 Group work helped 2 Meet people in classes 	Worried about meeting people Worried about diverse student population Doesn't feel he knows people on campus
Family Relationships	2 Encouraged by family2 Great role models in family	1 Significant caretaking responsibilities
Part-time and Nontraditional Student Issues		8 Worked outside of school 5 Worked more than 20 hours/wk. 1 Cared for disabled family member 2 Concerned about study required
Recommendations to College Re. SDEV	Length is fine Make course longer Make group work central to how course is taught	

During the discussion five students expressed concerns about being able to handle the college workload. A male student expressed an uncertainty about self-as-learner that appeared to resonate with other students: "I didn't know if I could get the good grades though, but I was going to study hard and try to do something..."

Three students referred to perceptions of their own limitations, but not in terms of academic ability. One student spoke of being concerned about success "because I get distracted easily distracted..." and two other students described themselves as "lazy." Still another student spoke of confronting challenges in college because he had not invested in earlier educational experiences: "...because I feel like in high school I never used to do my work, people did it for me, so I just copied from them."

Student Perceptions of the Value of SDEV

This group of students was quite positive overall regarding their SDEV experiences. Students were asked to verbally rate their SDEV experiences on a 1-to-10 scale with 1 being unlikely to succeed in college because of SDEV and 10 meaning that because of SDEV they were sure they would succeed in college. Female responses averaged 9.9, male responses averaged 7.4, and the overall average response was 8.4. Students described their SDEV courses as enjoyable: "But it was fun, I liked it"; as valuable: "No, everything was important, what the teachers were saying"; and as sufficient in its current length: "Well I'm thinking it, like, its fine the way it is." The single student who voted a low rating—1—for the course qualified his rating by blaming himself for not investing effort in the course.

Value of "college knowledge" learning in SDEV. When asked what was the single most valuable thing they learned in SDEV, eight students noted classic "college knowledge" on topics such as scholarship information (2); understanding registration (1); navigating college processes (1); transfer information (2); touring the campus (1); and choosing a major.

Value of life skills learning in SDEV. In response to the same question on valued learning in SDEV, seven students mentioned personal management skills that become additionally critical in balancing college with other commitments. Specific skills mentioned were time management (3); personal organization (2); stress management (1) and motivation (1).

Value of academic skills learning in SDEV. Four students also mentioned study skills as being among their most valued SDEV learning. The students articulated the value of study skills slightly differently, speaking of "how to study," "how to study more," and "how to study better." Such fine distinctions suggest students' awareness of method, volume, and strategy as elements of effective study. This may also suggest results of a reflective learning process where students evolved a personalized understanding of study principles as applied to their own habits and circumstances.

Major Theme: Interactive Classes Work Preferred

In response to a question about the most important thing that should happen in terms of how SDEV classes are taught, students responded unanimously with "group work." When asked to expand on that, some were unable to articulate a reason, but persisted in the choice: "I don't know, because in group and... I don't know, I just think group work..."; and "Don't know. I just like it." Other students were more specific about their preference, mentioning having a chance to talk with and get to know classmates, voicing opinions, and sharing ideas as aspects they valued about working in groups. The value students placed on interactive class experience was also reflected in

characterizations of the course as participatory (3), and as including projects (1), activities (1), and a campus tour (1).

Major Theme: Relationships Key to Success

It was apparent that for this group of underprepared students, evolving understandings of themselves as learners was substantially influenced by a web of relationships both on and off campus.

Family relationships. Students spoke variously of critical roles played by family members in their decisions to attend college. "But my mom convinced me, and she talked me into it, and I decided to come." Students also cited family members as role models and as critical supporters. "So he [brother] pushes me a lot, and he tells me I can do it"; and "Now he [father] just pushes me and my brothers to stay in school and just gives us the best."

Peer relationships. Peer relationships serve as important vehicles for helping students negotiate and find legitimacy in the college environment. When asked if they knew people on campus, responses were mostly noncommittal or "a few." Students noted most of their acquaintances were made in classes or labs. Five of the students in this group reported they knew someone who was in school at PAC before they started classes there. One student noted that these existing relationships were helpful in getting to know people on campus: "Just for like people I already knew introducing me to like their friends or whatever."

Two students expressed concerns about getting to know people in college. One student who knew no one on campus when she started described her discomfort: "I

didn't, like, I didn't know no one, so I was kind of scared if I was going to know people or not." Another appeared anxious about being in a more broadly diverse learning environment for the first time: "The classes, like there's older people, younger people. Like people that are coming back to school."

Faculty relationships. Faculty are critical figures in an entering student's field of view. A male student summed up the concern of many entering students who wonder how their instructors will deal with them: "Teachers, if they're going to be like straight up or if they're going to be hard on you."

When asked what instructor they had gotten to know best, two students indicated their SDEV instructors. Through the course of conversation, two other students commented on supportive and helpful SDEV instructors as well. Eight students pointed to their writing instructor as the faculty member they had gotten to know best, and one to her aerobics instructor. The strong ties to English faculty, while not unusual, may in this case be skewed by the fact that this group was an English class. Also germane is the researcher's knowledge from prior professional association that the English instructor in question is an exceptional teacher.

Research Question 4

In what ways do student views on success course participation as expressed in focus groups inform analysis of the course participation/engagement relationship for full-time and part-time students?

The direction of discussion in this focus group was shaped by the students' senses of themselves as students, their experiences in their respective SDEV classes, and

collateral issues affecting their engagement in college. Five of the 13 students participating in the focus group reported their enrollment status as part time on the demographic questionnaire distributed with the consent form. Discussion in the focus group did not address enrollment status directly; rather, general college experiences and collateral life circumstances were acknowledged.

During the focus group eight students reported that they worked in addition to taking college classes, and five said they worked more than 20 hours per week. One female student put it succinctly when asked what was most difficult in being successful in college: "Because there's a lot of distractions...[like] working." A male student noted the concerns that accompany balancing work and classes: "Yeah, 'cause I have work, and I didn't know if I was going to have enough time to study, so I was worried about that."

Work, however, is not the only reason students attend classes part time. For many students family responsibilities represent a substantial commitment of resources. One student who was neither married nor a parent noted her own considerable family responsibilities: "I have three nieces and my mom because she's disabled...And I take care of them."

In response to a request to rate their likelihood of reaching their academic goals on a 1- to -10 scale, students responded with ratings between five and nine, with a class average response of 7.4. When the researcher observed that no one rated their chances as a 10, a student reflected his sense of divided obligations that appeared to be shared by

several others who were juggling work and school: "You got to take a lot of classes. I don't know, you got to live."

Summary of the Qualitative Findings

The PAC focus group presented a narrow but critical view of SDEV experience and student engagement among a very specific sample group: substantially underprepared students under age 25. A key consideration in examining the data presented here is evidence presented on their views of themselves as students. The students' qualified articulations of legitimacy as learners along with positive assessments of SDEV experiences suggest that, for these students, SDEV courses addressed genuine needs on multiple levels.

In speaking of learning they valued in their SDEV courses, students most often noted "college knowledge" topics that would be necessary to managing their college experience as well as to support their sense of legitimacy as students. Second were life and personal management skills such as time management and organization. Study skills were the only academic skills mentioned as valued learning. Whether that represents a value judgment on the part of students, a response to types of learning characteristic of underprepared students, a reflection of the courses being taught from a counseling perspective, or some other factor is unclear.

Two significant themes emerged from student comments. First, the students expressed a strong preference for active and interactive learning formats, particularly group work. Second, they emphasized, both directly and indirectly, the importance of relationship in their decision to attend college and their efforts to persist.

Summary of the Case

The document analysis showed that information on PAC's SDEV course is clearly presented in primary college documents and easily accessed by new students. Web site links to SDEV information led to a handful of well-developed pages offering policy, course, contact, and resource information. However, absence of links to units outside the Welcome and Student Development webs was noted. No web site links between SDEV and any other program or department in the college were observed. In particular, no connections between SDEV participation and academic areas or institutional quality processes were in evidence. Similarly, the college catalog listed Student Development prominently in the table of contents for the registration section and provided good policy and course description information in the appropriate sections. However, no evidence of course integration into college quality processes or links to academic units were observed in the catalog.

In terms of quantitative findings, the overall picture presented by analysis of CCSSE data suggests that the measurable impact of SDEV enrollment as it was experienced by this group of CCSSE participants was limited. Significant relationships between engagement constructs and SDEV enrollment demonstrated in the first regression model had a mixed consistency with findings after Average Attempted Hours was added as a second predictor variable. The Support for Learners benchmark demonstrated the strongest relationship with SDEV enrollment. Survey items that comprise that benchmark focus primarily on non-academic dimensions of college experience, including support for coping with social and financial issues as well as

collateral obligations such as work and family. Those areas of concern resonate with focus group responses, and may highlight the strengths of the strong counseling orientation of the SDEV program at PAC.

Although Support for Learners showed similar significance in both regression models, its explained variance of .9 percent was marginal for even a small effect size. This suggests that, while there may be a relationship between SDEV enrollment and students' recognition and use of support services available at the college, the impact of that relationship on student behavior is likely to be minor. Stronger findings linked Average Attempted Hours with seven of fourteen engagement constructs, suggesting that in this context enrollment level is the stronger of the two predictor variables examined.

The focus group presented a narrow but critical view of SDEV experience and student engagement among substantially underprepared students under age 25. Students most often noted "college knowledge" topics as valued learning, closely followed by life and personal management skills such as time management and organization. Study skills were the only academic skills mentioned as valued learning. Emergent themes included a strong preference for active and interactive learning formats, particularly group work, and the importance of relationships in their decision to attend college and their efforts to persist. A key consideration in examining the data presented here is evidence presented on their views of themselves as students. Participant comments revealed uncertainties about their academic abilities and concerns about balancing competing commitments. At the same time, they spoke positively about their SDEV experiences and learning,

suggesting that, for these students, SDEV courses addressed genuine needs on multiple levels.

In summary, the three types of evidence presented in this case study paint a mixed picture of the PAC SDEV program. Institutional commitment to the program is evident in the roster highly qualified counselors that staff the Student Development program and in the faculty ranks carried by the majority of those counselors. However, document evidences shows no evidence that the SDEV program is significantly integrated into the academic arena where SDEV completers must ultimately succeed.

CHAPTER SIX: SAN ANTONIO COLLEGE

Introduction

This research reported in this case study sought to develop a rich understanding of how student success courses influence course participants in community. The case-level unit of investigation was San Antonio College, one of the Alamo Colleges in San Antonio, Texas. The student courses under investigation were those offered under the auspices of the Counseling and Student Development Department, which are designed to assist incoming students in adjusting to and engaging in college.

The College

San Antonio College (SAC) is the largest single-campus community college in Texas and one of the largest in the United States. It was established in 1925 as University Junior College under the auspices of the University of Texas. As San Antonio Junior College, in 1946 it joined with its sister college, St. Philip's Junior College, to form the San Antonio Union Junior College District. The college moved its 500 students to its present location on San Pedro Avenue near downtown in 1951. In the late 1960s, SAC became a comprehensive community college by expanding offerings in occupational and technical courses. SAC offers general education, liberal arts and sciences, career education, continuing education, and developmental education programs to the citizens of Bexar county and surrounding areas (SAC, 2008)

Demographic Profile

SAC's long history in downtown San Antonio has made it the most visible of the Alamo Colleges. More than a third of the students who attend SAC are age 25 and older,

and 59 percent are female (Table 6.1). The largest racial identity group is Latinos at 48 percent, followed by Whites with 43 percent. African Americans represent 5 percent of the population and Asian students 3 percent. Nearly 41 percent of SAC's credit students enroll in technical programs, and 65 percent attend college part time. Approximately 33 percent of SAC students receive Pell Grants.

Table 6.1: Summary of SAC Student Demographic Attributes

Subscale	Frequency	Percent	
Age			
Under 25	13872	64.7%	
25-34	4802	22.4%	
Over 34	<u>2765</u>	12.9%	
Total	21,439	100.0%	
<u>Gender</u>			
Female	12,682	59.2%	
Male	<u>8,757</u>	40.8%	
Total	21,439	100.0%	
Goals			
Academic	12,697	59.2%	
Technical	<u>8,742</u>	40.8%	
Total	21,439	100.0%	
Enrollment Status			
Full-time	7,505	35.0%	
Part-time	<u>13,934</u>	65.0%	
Total	21,439	100.0%	
Race			
African American	1,036	4.8%	
Asian American	588	2.7%	
Latino	10,218	47.7%	
Native American	102	0.5%	
White	9,201	42.9%	
International	<u>294</u>	1.4%	
Total	$21,\overline{439}$	100.0%	

Note: Texas Higher Education Coordinating Board (THECB). (2009). Higher Education Accountability System. Retrieved February 5, 2009 from Texas Higher Education Data *Web site*: http://www.txhighereddata.org/Interactive/accountability/

Student Development (SDEV) Background

Student Development courses at SAC are administered through the Counseling and Student Development Department and are primarily taught by trained counselors. According to SAC counseling staff, student success courses have been taught at the college for about 40 years and required for at least some students for most of that time. Consistent with district solidification of policy regarding SDEV requirements, SAC uses registration holds and systematized advising processes to insure students are appropriately placed in either SDEV 0170: Orientation to College or SDEV 0370: Personal and Academic Success.

SDEV Policy and Practice

In keeping with accreditation guidelines on orientation, SAC requires all students entering with fewer than 15 credit hours to enroll in SDEV 0170: Orientation to College in their first semester. Students transferring 15 or more hours to SAC may be exempted by the Coordinator of Student Development. Dual credit hours are not counted to meet the 15-hour threshold for the SDEV requirement. SDEV 0370: Personal and Academic Success may be taken to fulfill the orientation requirement and is the appropriate course for students who place into developmental classes in two or more academic areas.

Students who register for SDEV 0170 and do not complete the course will be required to re-enroll in the course the subsequent semester. Students entering in summer may defer their student development requirement until fall if they wish. Exceptions or waivers require approval. Students are charged regular tuition rates for SDEV courses,

and three-peat tuition (unsubsidized by the State) applies on a third enrollment (SAC, 2008. Consistent with policy across the district, SDEV course credit is awarded at the developmental or "0" level and is not transferrable. However, no specific information on SDEV course credit was found on the college web site or in the college catalog.

Course Iterations

SAC students may meet the student development course requirement by completing SDEV 0170: Orientation to College. This course is designed to help new students adjust to the college, its staff, facilities, services, policies, and procedures. Course activities also seek to support academic motivation, connecting socially, and stimulation of continued personal growth. It is offered in a variety of day, evening, and pre-semester (summer) formats. It is required of both day and evening students who are either entering freshman or have earned less than 15 semester hours of college credit, and who enroll for nine or more semester hours meeting on the SAC campus in one semester.

Completion of SDEV 0370: Personal & Academic Success will also satisfy the orientation requirement. This 3-hour course is intended "for the full developmental education student, who needs full remediation in English, mathematics and reading" (SAC, 2008, n. p.). Approval from a counselor or departmental advisor is listed as a course prerequisite. SDEV 0370 is also recommended for all international students who have completed required ESOL course sequences. Course content includes topics such as campus services, time management, decision making, personal issues, interpersonal communication, career analysis, behavioral self-management, test taking and study

techniques, library use and question-asking skills. (SAC Counseling and Student Development, 2008).

Students who enroll in SDEV 0171: Strategies for Success are referred to the course by counselors, advisors, or deans, generally in connection with unsatisfactory academic progress. The one-hour course is designed to help students improve academic skills. Topics covered include study techniques, note-taking, test-taking, time management, library use, critical thinking skills, career planning, and interpersonal skills (SAC Counseling and Student Development, 2008).

Analysis of Primary Electronic Documents

In all colleges, print and electronic institutional documents provide a critical contact surface through which prospective, new, and returning students develop their understanding of the college's policy and expectations. In very large colleges the accessibility and coherence of online information is even more critical, as it serves as the means by which many students will seek both information and an understanding of the institutional processes, structure, and culture. Intentional communication on the part of college (e.g., drop/add procedures or graduation requirements) is likely to be mediated by other messages communicated by page placement or number of clicks to reach the page. To assess both intentional and incidental messages regarding SDEV courses conveyed in SAC's high traffic college documents, searches of the college web site and catalog were conducted using SDEV as the search term.

Web Site Review

To gather a general sense of how SDEV is presented in public documents, the college's web site was searched for the term SDEV. The search was conducted on March 12, 2009, and yielded 284 hits.

A significant majority of these search hits were links to faculty instructional materials. Fully 191 hits led to pages for a single instructor who teaches online sections of student development courses. An additional 35 links led to materials such as library assignment materials for other faculty members.

Twenty-four links led to programs and services: twelve links led to pages related to learning communities which included SDEV courses; nine links connected to Disability Services pages where SDEV was mentioned; and three to pages related to academic alerts.

Six links led to course schedules, some of which were out of date. One link led to a page on the Programs and Services for Women and Non Traditional Students web site describing a special section of SDEV 0370: Personal and Academic Success for returning women students. This page was not linked to any other material on SDEV policy or course information.

A page for SDEV 0171: Strategies for Success was linked through the Counseling and Student Development Department but was listed separately from the other student development course pages and had a different format and appearance than the other SDEV course pages. Two other hits with the same name as the SDEV 0171

course—Strategies for Success—led to an online study skills workshop site developed under a grant in 2000. Though this site included disclaimers explaining that the online workshop did not count for any SDEV course requirement, the use of the same name for both a student development course and the online workshop was confusing.

Among the generic hits were two leading to faculty council minutes, five leading to news items, and nine where mentions of SDEV were incidental and inconsequential.

Two links connected to pages in the Counseling and Student Development Center web. One listed Center services with the last link connecting to SDEV 0170 and 0370 information. The second led to a similar page where Student Development was the next to last link and all three SDEV courses were listed. A page of links to generic or departmental course syllabi listed SDEV 0170 and 0370 only.

With the indirectly related materials accounted for, only 6 of the 284 links led directly to information on the SDEV requirement or courses: two connecting to Counseling and Student Development Center statement of SDEV policy (mentions only SDEV 0170 and 0370); one connecting to course descriptions; and one link each to departmental syllabi for the three SDEV courses.

Particularly in the case of such a large number of search returns, the hits that occur early in the list are most likely to be seen by the searcher. Ten items appeared on the first page of search hits. The first was a link to Disability Services noting special sections of SDEV 0370 for its students. Hits two through five plus eight and nine connected to learning community information. Hit six was instructor material. Hit seven

led to the SDEV 0171: Strategies for Success page, and hit ten leads to the departmental syllabus for SDEV 0370: Personal and Academic Success. No links to information on the required SDEV 0170 appeared on the first page. Syllabi for SDEV 0170 and 0171 appeared on the second page of hits; however, the other eight hits led to course material for various instructors.

College Catalog Review

Nine references to Student Development courses appeared in six locations in the 577-page SAC catalog. One was a listing for SDEV in the table of contents under Registration, and the second was under Disability Support Services. Another link led to the list of courses counted for a scholarship. One listing led directly to SDEV policy under the registration section and three to respective course descriptions in that section of the catalog. A final hit led to an index entry for Student Development (SDEV).

Document Analysis Summary

The web site analysis found a high volume of search returns that would be of interest to only a narrow range of students or employees. This appears to be the function of a somewhat flat organization of web materials related to SDEV. For example, while there are in excess of 180 links to course materials of a single online instructor, there are only six single links to broadly applicable SDEV course information. No matter what audience searched on the term SDEV, the searcher would likely have to weed out more than 250 extraneous hits to find the information he or she was seeking. Accurate information about SDEV for students who have questions is overwhelmed by links to instructional materials for specific instructors and classes.

In addition to confusion created by the high volume of flat-linked material, the intended audiences for various SDEV courses were often unclear. In some references all three course options were listed while in others only two were noted. For a new student seeking SDEV information, the distinctions in course purposes and applications would not be easily understood.

All focused material on SDEV was linked through the Counseling and Student Development Center web, a logical choice considering this is the administrative unit for the Student Development program. However, cross links to special SDEV sections (such as the one provided for returning women students) or resources (such as the Strategies for Success online workshop) outside the administrative unit were not in evidence.

The college catalog was presented in PDF by section and as a whole, and could only be searched using the Adobe search function. Chapters are not linked and must be downloaded and searched individually. Students seeking catalog information would have to know how to locate the catalog, download the enormous PDF file, open it, and use that discrete search function to look for SDEV course policy and information listed there.

Basic SDEV policy and course description information were found in the catalog, along with table of contents and index links. A single reference listed SDEV in the course list required for a scholarship.

No evidence of cross linking between SDEV and other academic areas was found. In spite of the huge number of hits on the search term SDEV, this document

analysis found little evidence that the program is coordinated or integrated with organizational units outside the Counseling and Student Development Department.

Quantitative Data

Sample

The participant pool for the quantitative portion of the study was drawn from students sampled at the four research colleges in the 2005, 2006, and 2007 administrations of CCSSE's survey instrument, the Community College Student Report (CCSR); however, SAC participated in CCSSE in 2005 and 2007 only. CCSRs with ID numbers voluntarily provided were record matched with institutional records to provide data fields for success course participation and enrollment status. Enrollment by course and year are summarized in Table 6.2.

Table 6.2: SAC SDEV Enrollment by Course and Year

	No SDEV	<u>SDEV0170</u>	<u>SDEV0171</u>	SDEV0370	<u>Total</u>	
Year	<u>n</u> %	<u>n</u> %	<u>N</u> <u>%</u>	<u>n</u> %	<u>n</u> %	
2005	100 19.4%	119 23.1%	36 7.0%	34 6.6%	289 56.1%	
2007	<u>71</u> <u>13.8%</u>	<u>93</u> <u>18.1%</u>	<u>15</u> <u>2.9%</u>	<u>47</u> <u>9.1%</u>	<u>226</u> <u>43.9%</u>	
Total	171 33.2%	212 41.2%	51 9.9%	81 15.7%	515 100.0%	

A total of 1,909 viable cases were identified, representing 24 percent of the total CCSSE participant pool. Of the 1,909 total cases, 515 cases came from SAC. These 515 cases constituted the sample for analysis to respond to Research Questions 1 and 2.

Of these cases, only 344 (66.8 percent) enrolled in one of the college's three SDEV courses prior to or during the semester in which they participated in the CCSSE survey.

Demographically, the sample resembled the overall college population in several respects, although Whites were somewhat underrepresented and Latinos overrepresented (Table 6.3).

Table 6.3: SAC Quantitative Sample Demographics

Subscale	Frequency	Percent	Valid Percent
<u>Age</u>			
18 to 24	332	64.46%	65.23%
25 to 39	138	26.80%	27.11%
40 +	39	7.57%	7.66%
Missing	6	1.17%	
Total	515	100.00%	100.00%
<u>Gender</u>			
Male	204	39.61%	40.08%
Female	305	59.22%	59.92%
Missing	6	1.17%	
Total	515	100.00%	100.00%
Race			
Native American	3	0.58%	0.60%
Asian American	22	4.27%	4.37%
African American	16	3.11%	3.17%
White	146	28.35%	28.97%
Latino	292	56.70%	57.94%
Other	25	4.85%	4.96%
Missing	11	2.14%	
Total	515	100.00%	100.00%

Note. n = 515

Notes on Statistical Procedures

The SDEV Enrolled predictor variable used in the statistical analysis included all students who registered for an SDEV class prior to or during the semester in which they participated in CCSSE, regardless of whether they finished or passed the class. The No SDEV group—students who never enrolled in an SDEV class—served as the reference group in fitting the regressions. Descriptive statistics for the SDEV Enrolled variable are provided in Table 6.4.

Table 6.4: Descriptive Statistics for SDEV Enrolled Independent Variable at SAC

	V	Range	Minimum	Maximum	Mean	Mean Std. Error	Std. Deviation	Variance
51	15	1	0	1	.49	.022	.500	.250

Note: Valid N (listwise) = 515

Dependent variables used in the analysis include fourteen clusters of CCSSE survey items validated as predictors of one or more student success outcomes through the instrument's validation research—five CCSSE benchmarks for institutional effectiveness and nine latent engagement factors (Table 6.5).

Table 6.5: Descriptive Statistics for Dependent Variables (CCSSE Benchmarks and Factors) for SAC

Subscale	N	Range	Min.	Max.	l Mean	Mean Std. Error	Std. Deviation	Variance
Engagement Benchmarks		<u>V</u> -	-					
Engagement Denominarks								
Active/Collab. Learning	515	1.00	.00	1.00	.3383	.00699	.15865	.025
Student Effort	515	.93	.00	.93	.4652	.00736	.16711	.028
Academic Challenge	515	.93	.08	1.00	.5681	.00744	.16893	.029
Student/Faculty	515	.94	.00	.94	.3457	.00828	.18786	.035
Support/Learners	515	1.00	.00	1.00	.4170	.00951	.21585	.047
Engagement Factors								
Faculty Interaction	515	.94	.00	.94	.3778	.00786	.17837	.032
Class Assignments	515	1.00	.00	1.00	.4740	.01073		
							.24355	.059
Diverse Experience	515	1.00	.00	1.00	.5192	.01215	.27577	.076
Collaborative Learning	515	1.00	.00	1.00	.2223	.00751	.17043	.029
Information Tech.	515	1.00	.00	1.00	.5081	.01283	.29126	.085
Mental Activities	515	1.00	.00	1.00	.5646	.00978	.22200	.049
School Opinions	510	1.00	.00	1.00	.4933	.00980	.22141	.049
Student Services	504	1.00	.00	1.00	.3762	.01153	.25876	.067
Academic Preparation	510	.93	.07	1.00	.4960	.00671	.15145	.023

Note. Valid N (listwise) = 499

As the CCSSE benchmarks were developed from the nine latent factors, substantial overlap between the two sets of constructs exists. A copy of the CCSSE survey instrument is found in Appendix B, and detailed descriptions of benchmarks and

factors are provided in Appendices D and C, respectively. A cross-referenced listing of survey items for benchmarks and factors is found in Appendix H.

Probabilities for dependent variables were assessed at the α = .05 level. R² effect sizes for the regression models were assessed using Cohen's (1988) effect size standards which denote effect sizes of 25 percent as large, nine percent as medium, and at least one percent as small.

Research Question 1

What is the relationship between participation in a student success course and engagement in college as measured by the Community College Survey of Student Engagement (CCSSE)?

To address the first research question, the five CCSSE benchmarks and nine latent engagement factors were regressed as dependent variables on a dummy coded dichotomous predictor variable for enrollment in an SDEV course (Table 6.6).

Analysis of Engagement Benchmarks

Two benchmarks, Student/Faculty and Active/Collaborative Learning, demonstrated statistically significant relationships with SDEV enrollment at the predetermined α level.

The Student/Faculty Interaction (p = .003, b = .051, df = 1) item cluster is concerned with interactions between students and faculty to extend or enrich learning. Its slope predicted that SDEV-enrolled students would experience a .051 increase in benchmark engagement compared to non-enrollers. The model explained 3.5 percent of variance ($R^2 = .035$), indicating a small effect size.

Table 6.6: Summary of Linear Regression Statistics for CCSSE Benchmarks and Engagement Factors

Dependent Variables	b	SE	Beta	t	P	R^2
Engagement Benchmarks						
Active/Collaborative						
Learning	.032	.014	.101	2.273	.023	.010
Student Effort	012	.015	036	793	.428	.001
Academic Challenge	.006	.015	.019	.414	.679	.000
Student/Faculty	.051	.017	.134	3.025	.003	.018
Support/Learners	001	.019	003	059	.953	.000
Engagement Factors						
Faculty Interaction	.051	.016	.143	3.212	.001	.020
Class Assignments	.016	.022	.033	.745	.456	.001
Diverse Experience	.027	.025	.049	1.097	.273	.002
Collaborative Learning	.024	.015	.071	1.576	.116	.005
Information Technology	.053	.026	.091	2.045	.041	.008
Mental Activities	.008	.020	.017	.390	.697	.000
School Opinions	.010	.020	.022	.484	.629	.000
Student Services	024	.023	046	-1.029	.304	.002
Academic Preparation	001	.014	003	067	.947	.000

The slope for Active and Collaborative Learning (p = .023, b = .032, df = 1) predicts an increase of .032 in active and interactive learning engagement for SDEV enrolled students. An explained variance of one percent denoted a small effect size.

Three benchmarks—Student Effort (p = .428, b = -.012, df = 1), Academic Challenge (p = .679, b = .006, df = 1), and Support/Learners (p = .953, b = -.001, df=1)—demonstrated no statistically significant relationship with SDEV enrollment.

Analysis of Engagement Factors

On the nine engagement factors, Faculty Interaction and Information Technology, showed relationships with enrollment in an SDEV course that were statistically significant at the α level of .05.

Faculty Interaction (p = .001, b = .051, df = 1) has five survey items in common with Student/Faculty Interaction and is focuses on extending learning through interacting with faculty. The factor demonstrated a highly significant relationship and a slope predicting a 5.1 percent increase in factor engagement for course participants. Two percent of variance was explained by the model ($R^2 = .02$).

Information Technology (p = .041, b = .053, df = 1) also met the threshold for significance. Its slope predicted an increase of .053 in factor engagement for course participants. However, with only .8 percent explained variance for the model, Cohen's (1988) threshold for a small effect size was not met.

Seven factors failed to demonstrate any significant relationship with enrollment in an SDEV course: Collaborative Learning (p = .116, b = .024, df = 1), Diverse Experience (p = .273, b = .027, df = 1), Student Services (p = .304, b = -.024, df = 1), Class Assignments (p = .456, b = .016, df = 1), Mental Activities (p = .697, b = .008, df = 1), School Opinions (p = .629, b = .010, df = 1), and Academic Preparation (p = .947, b = -.001, df = 1).

Model Summary

The regression model fitted to answer Research Question 1 demonstrated significant relationships between four engagement constructs and SDEV enrollment. The Student/Faculty Interaction benchmark item cluster includes all survey items from the Faculty Interaction engagement factor, thus the two are closely related. Both were highly significant and explained similar percentages of variance. Active and Collaborative Learning also demonstrated a significant relationship. Its emphasis on active and interactive learning tracks closely with the faculty interaction measures noted above.

Research Question 2

How does the relationship between success course participation and engagement as measured by CCSSE compare for part-time and full-time students?

To address the second research question, Average Attempted Hours was added as a second predictor variable to the regression model used to address Research Question 1. Values for Average Attempted Hours were calculated by adding all hours attempted for a four-year period relative to students' CCSSE participation and then dividing the totals by number of terms attended (Table 6.7). For 2005 CCSSE participants, the relative period used to calculate Average Attempted Hours was Fall 2002 to Spring 2006. For 2007 CCSSE participants, the period was Fall 2004 to Spring 2008.

Average Attempted Hours was regressed as a continuous variable; however, analysis of frequencies within ranges of enrollment hours shows distinctive enrollment patterns. Only 20 percent of students in the sample averaged a full-time load of 12 or

more credit hours. Sixty seven percent—averaged course loads between 6.1 and 11.9 credit hours. Only 13 percent of students averaged six or fewer hours per term.

Table 6.7: Descriptive Statistics for Average Attempted Hours Independent Variable at SAC

-					Mean Std.	Std.	
N	Range	Minimum	Maximum	Mean	Error	Deviation	Variance
515	15.50	3.00	18.50	9.4856	.11308	2.56626	6.586

Analysis of Engagement Benchmarks

The multiple regression model fitted to answer Research Question 2 found that one benchmark, Active and Collaborative Learning, had statistically significant relationships with both SDEV enrollment and Average Attempted Hours at the $\alpha = .05$ level (Table 6.8). The relationship with SDEV enrollment remained substantially consistent with that found in the regression for Research Question 1, where probability was .023 and slope was .032. In this model (p = .020, b = .033, df = 2), the probability for SDEV enrollment was .020, and the slope predicted a .033 increase in factor engagement for course participants. Controlling for SDEV enrollment, the relationship between Active and Collaborative Learning and Average Attempted Hours (p = .001, b = .009, df = 2) was associated with a slope predicting a .009 increase in factor engagement for each additional average hour attempted. The R^2 of .032 indicated that this model explained 3.2 percent of variance. Compared to the variance explained in the Research Question 1 model, this represents an observed increase of 2.2 percent, indicating that the addition of the Average Attempted Hours predictor added substantially to the composite relationship.

Table 6.8: Summary of Multiple Regression Analysis of Engagement Benchmarks and Factors on SDEV Enrollment Status and Average Hours Attempted at SAC.

at SAC.	SDEV Enrolled		Avera	ge Atte	empted Ho	urs	
Dependent Variables	b	SE	P	b	SE	P	R^2
							_
Engagement Benchmarks							
Active/Collab. Learning	.033	.014	.020	.009	.003	.001	.032
Student Effort	011	.015	.441	.006	.003	.049	.009
Academic Challenge	.007	.015	.662	.005	.003	.067	.007
Student/Faculty	.051	.017	.002	.004	.003	.226	.021
Support/Learners	001	.019	.960	.003	.004	.481	.001
Engagement Factors							
Faculty Interaction	.051	.016	.001	.003	.003	.303	.022
Class Assignments	.017	.022	.431	.013	.004	.003	.019
Diverse Experience	.028	.025	.262	.009	.005	.051	.010
Collaborative Learning	.025	.015	.102	.011	.003	.000	.030
Information Technology	.054	.026	.036	.016	.005	.002	.028
Mental Activities	.008	.020	.690	.003	.004	.445	.001
School Opinions	.010	.020	.615	.006	.004	.135	.005
Student Services	024	.023	.308	.003	.004	.492	.003
Academic Preparation	.000	.013	.980	.009	.003	.001	.024

Student/Faculty Interaction was the only other benchmark exhibiting a significant relationship with SDEV enrollment in this model (p = .002, b = .051, df = 2). Slope predicted a .051 increase in factor engagement for SDEV enrollers. Similar to Active and Collaborative Learning, this relationship was substantially consistent with

that found in the linear regression addressing Research Question 1. No significance was found in the relationship with the Average Attempted Hours predictor (p = .226, b = .004, df = 2). The model R^2 of .021 was also similar to that of the first regression, indicating the addition of the Average Attempted Hours predictor did little to mediate the relationship.

Although Student Effort was not related to SDEV enrollment (p = .441, b = .011, df = 2), the factor demonstrated a statistically significant relationship with Average Attempted Hours (p = .049, b = .006, df = 2). Controlling for SDEV enrollment, its slope predicted only minor increase of .006 in effort and use of learning resources for each additional average hour attempted. Explained variance for the model was a modest .9%, making it marginal for a small effect by Cohen's (1988) standards.

Two benchmarks demonstrated no statistically significant relationships with either the SDEV enrollment predictor or the Average Attempted Hours predictor. Academic Challenge (p = .662, b = .007, df = 2; p = .067, b = .005, df = 2, in order); and Support/Learners (p = .960, b = -.001, df = 2; p = .481, b = .003, df = 2, in order).

Analysis of Engagement Factors

Information Technology was the only engagement factor to exhibit statistically significant relationships with both SDEV enrollment (p = .036, b = .054, df = 2) and Average Attempted Hours (p = .002, b = .016, df = 2) at the $\alpha = .05$ level. Again, the SDEV enrollment relationship remained substantially consistent with that found in the regression addressing the previous research question. In this model, the slope predicted an increase in factor engagement of .054 for SDEV enrollers. The slope for Average

Attempted Hours predicted an increase in factor engagement of .016 for each additional average attempted hour. The variance explained by this model was .028, representing an observed increase of 2.8 percent over the first model, indicating that the addition of the Average Attempted Hours predictor added substantially to the composite relationship.

Faculty Interaction also demonstrated a significant relationship with SDEV enrollment (p = .001, b = .051, df = 2). Similar to its related benchmark, Student/Faculty Interaction, the highly significant relationship shown in the linear regression addressing Research Question 1 remained similar in this model. The slope was unchanged from model to model, predicting a .051 increase in factor engagement for SDEV enrollers. No significance was found in its relationship with the Average Attempted Hours predictor (p = .303, b = .003, df = 2). The model R^2 indicated 2.2 percent of variance explained, an observed increase of only .2 percent from the first regression.

Three factors exhibited significant relationships with Average Attempted Hours predictor but not with SDEV enrollment.

As noted above, Class Assignments showed no relationship with SDEV enrollment (p = .431, b = .017, df = 2). With regard to Average Attempted Hours, however, a highly significant relationship was demonstrated (p = .003, b = .013, df = 2). Class Assignments is comprised of three survey items focusing on quality of intellectual investment in course work. The associated slope predicted that, controlling for SDEV enrollment, factor engagement would increase by .013 for each increase of one average hour attempted. An R^2 indicated the model explained 1.9 percent of variance.

Neither Collaborative Learning (p = .102, b = .025, df = 2) nor Academic Preparation (p = .980, b = .000, df = 2) were related to SDEV enrollment. Both, however, exhibited highly significant relationships with Average Attempted Hours. Collaborative Learning (p = .000, b = .011, df = 2) is concerned specifically with interaction with other learners in or out of classroom. Its slope predicted an increase of .011 in factor engagement for each additional average attempted hour. Variance explained for the model was 3 percent ($R^2 = .030$). Academic Preparation (p = .001, b = .009, df = 2) focuses on extent or volume of academic activity, e.g., time spent preparing for class, number of books read. Again controlling for SDEV enrollment, the slope predicts that factor engagement will increase by .009 for each additional hour averaged. Variance explained by this model was 2.4 percent ($R^2 = .024$).

Diverse Experience exhibited no relationship with SDEV enrollment (p = .262, b = .028, df = 2). With regard to Average Attempted Hours, its probability of .051 (p = .051, b = .009, df = 2) did not meet the predetermined α , but was marginal.

Four engagement factors demonstrated no statistically significant relationships with either the SDEV enrollment predictor or the Average Attempted Hours predictor. These were (statistics in order of predictors): Mental Activities (p = .690, b = .008, df = 2: p = .445, b = .003, df = 2); School Opinions (p = .615, b = .010, df = 2; p = .135, b = .006, df = 2); and Student Services (p = .308, b = -.024, df = 2; p = .492, b = .003, df = 2).

Model Summary

A notable attribute of this series of multiple regressions is the consistency of construct significances for SDEV enrollment with those found in Research Question 1. All constructs that demonstrated statistical relationships with course enrollment in that model were also significant at very similar levels in this multiple regression model. Two of the four, Active and Collaborative Learning and Information Technology, also demonstrated relationships with Average Attempted Hours. Associated gains in explained variance indicate that these later relationships add to the predictive power of the model rather than mediating the SDEV relationship. The related constructs of Student/Faculty Interaction and Faculty Interaction maintain their relationships as explained in the first model while showing no relationship with the Average Attempted Hours predictor.

Four other constructs demonstrated relationships with the Average Attempted Hours predictor. Student Effort, Class Assignments, Collaborative Learning, and Academic Preparation all relate to dimensions of student learning behaviors that contribute to student success over time, thus their strong relationships with this predictor appear imminently logical.

Summary of Quantitative Findings

The regression model fitted to answer Research Questions 1 and 2 demonstrated relationships between four engagement constructs and SDEV enrollment that remained consistently significant across both models. The Student/Faculty Interaction benchmark

and its related engagement factor, Faculty Interaction, are closely related. Both were highly significant and explained similar percentages of variance.

Active and Collaborative Learning also demonstrated a significant relationship and also with Average Attempted Hours. The associated gain in explained variance in the second model suggests that the second relationship adds to the predictive power of the model rather than mediating the SDEV relationship. Its emphasis on active and interactive learning tracks closely with the faculty interaction measures noted above.

These findings suggest that the most significant effects of SDEV participation at SAC relate to student investment in active and interactive learning behaviors, particularly in terms of working with faculty to enrich learning. Although the Information Technology factor also demonstrated a significant relationship with SDEV enrollment and Average Attempted Hours, the narrow and specific nature of the items contributing to that factor make it difficult to interpret that finding in relationship to the course.

Qualitative Data

The specific goal for conducting focus groups as part of this study was to explore student experiences with SDEV courses and, to the extent feasible, to relate that exploration to student engagement. Questions used to guide the focus groups were developed with an eye to the engagement constructs measured by CCSSE and loosely organized around five lines of inquiry: perceived obstacles to college success, expectations of college and the SDEV course, perceptions of SDEV's value, SDEV's

policy and process environment, and perspectives on SDEV and campus relationships (Appendix G).

An attempt was made to recruit focus group participants by asking SDEV instructors to pass out recruiting flyers in their classes. Response was limited. In light of the semester's rapidly approaching close, the chair of the Counseling and Student Development Department located two instructors who were willing to allow the researcher to conduct a focus group in their SDEV 0370 classes. The focus group was conducted in early December 2008 during a 9:00 a. m. class period. Two separate SDEV classes joined together for that period. Twenty-seven students chose to participate in the focus group. The instructors were not present for the focus group, nor were any class credits associated with participation.

At the beginning of the group, the researcher explained the study's purpose, voluntary status, potential risks, and possible benefits of participation, as mandated by IRB protocols. Students were given a written copy of the study description and were asked to complete a consent form (Appendix E) and a brief demographic questionnaire (Appendix F). Proceedings were audio recorded and transcribed, then coded and analyzed using NVivo qualitative analysis software.

Sample

A total of 27 students participated in the SAC focus group (Table 6.9). Based on data from the brief demographic questionnaire administered to students at the beginning of the focus group, the sample was somewhat younger compared to the college's overall population, with 93 percent of participants under age 25. Racial demographics reflected

some overrepresentation of Latinos and African Americans and underrepresentation of Whites. More than two-thirds (67 percent) came from homes where at least one parent had attended college. All 27 students were in their first semester in college. A significant majority of 81.5 percent were attending college full time, compared to the SAC full-time attendance rate of 35 percent. Almost three-quarters reported their college goals as transfer to a baccalaureate institution. Another 22 percent reported a technical degree as their goal and 4 percent sought a certificate.

Because all participants came from SDEV 0370 classes, it may be assumed that they placed into two or more developmental course work areas upon entering in the fall.

Table 6.9: Demographic Summary for SAC Focus Group Sample

Subscale	Frequency	Percent
Age		
18-19	20	74.1
20-21	1	3.7
22-24	3	11.1
25-29	1	3.7
40-49	1	3.7
65+	<u>1</u>	<u>3.7</u>
Total	27	100.0
Gender		
Female	15	55.6
Male	<u>12</u>	<u>44.4</u>
Total	27	100.0
Goals		
Transfer	20	74.1
Associate	6	22.2
Certificate	<u>1</u>	<u>3.7</u>
Total	$\frac{1}{27}$	100.0
Race		
Latino	15	55.6
White	7	25.9
	212	

African American	3	11.1
Other	<u>2</u>	<u>7.4</u>
Total	27	100.0
First Generation		
Parent/No College	9	33.3
Parent/Some College	<u>18</u>	<u>66.7</u>
Total	27	100.0
Enrollment Status		_
Full-time	22	81.5
Part-time	<u>5</u>	<u>18.5</u>
Total	27	100.0

Research Question 3

What insights do student views on success course participation as expressed in focus groups contribute to the quantitative analysis of the course participation/engagement relationship?

The blending of two particular SDEV classes turned out to be a defining characteristic of the SAC focus group. Both classes were taught by counselors, but the two instructors had distinctly different teaching styles. In general, student responses during the focus group were slightly more negative (78 responses) regarding SDEV than positive (69 responses). Positive and negative student comments are summarized by category in Table 6.10.

It should be noted that this summary is a somewhat inadequate depiction of actual student experiences expressed. A few very vocal students were responsible for a substantial proportion of both strongly positive and strongly negative comments, making it difficult to generalize about the experiences of the larger group from a simple response count. However, the researcher observed that these more vocal students seemed to express views shared in each case by several other students. Positive and negative views

appeared to be roughly aligned according to SDEV class, with one class expressing a generally positive course experience and the other group expressing dissatisfaction with some aspects of their experiences in the class.

Students from the two classes sat in relatively segregated groups during the focus group and the interpersonal dynamics among those groups were noticeably different. Students from the more interactive class were talkative, laughing, and generally seemed at ease with conversational interaction. Students from the less interactive group—the "bookwork" group—were less interactive among themselves, but contributed some of the richer and more sustained comments to the focus group.

Table 6.10: SAC Focus Group Response Summary (Number Preceding Response

Equal Number of Responses in Group)

Topic/Theme	Positives	Negatives
Perception of self as learner	2 Ready for college 2 Taking responsibility for self- as-learner	Returning students had self doubts Not my college
Value of SDEV (General)	Would have taken even longer course Learned a lot Everybody was into it Shared experience with classmates through the day	Course was not valuable Course covered common knowledge Course
Value in Self Knowledge Gained in SDEV	3 Recognized need to changes study & work habits 2 Better understanding of self in interpersonal contexts 6 Learned about self 2 Improved self-esteem	
Value of Life Skills Gained in SDEV	2 Covey time use quadrants	
Valuable College Knowledge		3 Confused by mismatches between schedule and map acronyms 1 Missed class because misunderstood day abbreviations on schedule

Value of Learning Skills Gained in SDEV	1 PQ3R 1 LASSI	
Need for SDEV		2 Ready for college
Aspects of SDEV That Were Not Useful		7 Too many assignments 3 Took study away from credit classes 3 Took semester hours that could have been spent on credit courses 3 Uneven experience between classes 1 Material was common knowledge
SDEV Requirement		Credit doesn't transfer Not everyone needs this— revise requirement
Experiences w/SDEV class format	1 Bookwork ok 1 Reflective journaling 4 Daily discussion 4 Self-assessment instruments 2 Touring campus in class 2 Participation	3 Would have preferred two-day format for course 1 Not advised well on 2-day option 3 All bookwork, no discussion 7 Too many assignments
Faculty Relationships	1 Explained concepts well 1 Available 1 Great counselor 1 Nice person 1 Good class presentation 3 Great discussion	4 Required expensive book 2 Not enough participation 7 Too many assignments 5 Hard grader 2 Not flexible
Peer Relationships	2 Made strong friendships in SDEV 2 Generally felt I knew people on campus 1 Opportunity to meet new people 1 Familiar faces from high school comforting	1 Knowing people from high school
Family Relationships	4 Family in college	
Part-time and Nontraditional Student Issues		Attended college nearest job Unfamiliar technology created difficulty Uncertain of ability to do college work

Recommendations to College Re.	2 No change	1 Reevaluate who needs class
SDEV		2 Shorten
		2 More field trips
		3 One-day format
		2 Pick teachers carefully

Perceptions of Self-as-Learner

Although few students spoke directly of how they saw themselves as learners, several traditional aged students shared experiences of uncertainty and confusion about college places and processes from their first days on the campus. Some mentioned having difficulty finding where they should be because acronyms on their maps and schedules didn't match. One female student remembered similar confusion about times:

I missed my first day of class because I had... I have a class on Tuesday/Thursday and I thought TR meant for only Thursday, so I thought the first thing happened was a Thursday. But it was a Tuesday/Thursday class and I didn't know that. I thought it was TR meant for Thursday instead of Tuesday class. That's what messed me up Tuesday.

The initial uncertainty seemed to have been mediated somewhat by SDEV learning that had supported students not only in the practical aspects of transitioning to college but in becoming more conscious of self-as-learner: "She taught the class for us to understand ourselves and what the world is about and how we interpret other people."

Value of SDEV

Student comments on the overall value of SDEV were mixed, reflecting the different experiences of the two classes. On the positive side, students cited learning a lot (2), a positive class energy where everyone was engaged in class (1), and sharing course learning with classmates throughout the day (2). One student commented on the value of the interactive relationships established in SDEV: "It was kind of easy, since

like a lot of us had the same classes. You could like, help them, like use the lesson that we learned that day." These students were members of the more interactive class.

Student from the other class saw the course as not useful (1) and teaching what was effectively common knowledge (1): "I just don't feel like I grasped what they wanted me to. Maybe it was my teacher, I don't know, but I just don't feel like I grasped anything... it's common knowledge stuff." The interactive dimension of the course mentioned above was also seen negatively by a student from the "bookwork" class: "This is a requirement, and I pay for my education. I feel like it was pretty much a waste of time to come in to socialize. That's pretty much what it is. I mean, I have friends."

Value of Self-Knowledge and Life Skills Gained in SDEV

Growth in self-knowledge expressed by students included learning about self (6) and improving self esteem (2). Students also reflected on learning to understand and relate in interpersonal situations: "She taught the class for us to understand ourselves and what the world is about and how we interpret other people." Significant gains in recognizing the need to change study and work habits to achieve a goal were also noted (3). One student, notably from the book-oriented class, expressed his journey quite powerfully:

It taught me to get up in the morning. You know I learned a lot of stuff. I sit quiet a lot of time because I'm tired, but I did enjoy the way she taught. She used mostly videos. She was mostly counseling. It was worth it coming here to be in this class. I paid for the class out of my pocket, so you know... I don't think I 'm going to pass, but I did enjoy being in it. I need to work harder on my homework. Out of all my classes, this was the hardest thing. But it's not about the homework. It's not that hard, it's mostly about yourself...Yeah, it opened my eyes up to the fact that I need to do my homework, and to speak up, keep a positive attitude, and not to, not put yourself down. I got that out of this class.

Value of College Knowledge and Learning Skills Gained in SDEV

Students named few specifics about college logistics or specific learning skills acquired in SDEV, but did mention the PQ3R study method (1), Stephen Covey's time use quadrants (2), and participating in the LASSI, an assessment of students' awareness about and use of learning and study strategies (1). In terms of college knowledge, an exchange on the credit for their SDEV course between students in the respective classes pointed to a distinct gap in college knowledge where their SDEV course was concerned:

Moderator: How many hours a week did this course meet?

Multiple: Three.

Moderator: And it's three credit hours?

Multiple: One...

Moderator: It's one credit hour?

Multiple: No, it's three.

(Crosstalk disagreeing on credit hours awarded for the class)

Male: It's 301—three hours, one credit. It is one credit, well, for us it is. Did we

not take the same student development class? It's one credit and it's non transferrable. And I didn't learn that in class, but we should have...

The student who insisted that the course carried a single credit hour was in error, as the SDEV 0370 course is indeed a three-credit hour course. This student's misapprehension was also reflected in comments he made about wishing he had been advised to take the two-day version of SDEV at the beginning of the semester. Only the one-hour version of the course is taught in that format. That confusion along with limited comments on college knowledge learning at the end of a 3-hour student development course raises questions about whether that aspect of the course was as effectively presented as the affective dimensions of the course.

Major Theme: The Instructor's Style Matters—A Lot!

Students were reluctant to challenge or criticize instructors directly, demonstrating a certain loyalty on the part of most. In a show-of-hands poll conducted during the focus group, the researcher asked students how they would rate the benefit of the course on a 10-point scale with 10 as high, five as neutral, and one as negative impact. A handful of students responded with 5 or below, several in the 7-8 range, and about a third of the group in the 9-10 range. These latter students were mostly seated in the area dominated by the more interactive class. One student attributed her very positive course experience to her instructor: "I think the grading—the one to ten scale—it also falls on the teacher. Because she's the one who made it possible to grade this class a ten. So it also falls on the teacher's lap."

The unevenness of the experiences of these two groups is highlighted in comments from students in each section. An older student from the "bookwork" class noted that her SDEV experience had actually detracted from her academic work: "We had 31 assignments before midterm. And you had to take them back and correct them. I got behind in my other three classes..." However, a traditional aged student from the more interactive class characterized her experience very differently:

For our class I have to say that this was my easiest course out of all of mine. When we did do an assignment it was mostly journals. You mainly were answering questions about how you felt. And the fact that it was just discussions every day. I thought it was extremely easy."

Students seemed to see the major differences in experiences between the two classes centered on the teaching approaches of the two instructors. A student from the book-

oriented class attempted to attribute his negative experience to teaching methods: "Her major is counseling, psychology... so... I just feel like her teaching methods weren't as up to par as some other teachers." A student from the other class countered his attribution immediately, defending his own instructor, rather than criticizing the instructor of the other class: "Our teacher is a counselor, too, and she didn't grade that way."

Major Theme: Interactive Classes Work

The contrast between experiences of the two classes underscored the importance of teaching approach in SDEV classes. Students were outspoken in their preferences for class activities such as reflective journaling (1), class participation and discussion (6), learning about self through assessment instruments (4), and getting out of the classroom onto the campus (2). One student made a strong case for the latter:

Really, like we only came out of this room what, two, three times maybe? Everyone calls this orientation; it should have involved more going outside. We only saw this side of campus. They didn't even show us the other side. A lot of people don't even know about the other side.

Research Ouestion 4

In what ways do student views on success course participation as expressed in focus groups inform analysis of the course participation/engagement relationship for full-time and part-time students?

Representation of part-time students in the SAC focus groups was disproportionately low. Only 5 of 27 participants reported their current enrollment status as part-time. Based on low representation of part-time students in the sample group as

well as distinctly different demographics, inadequate data are available to support a qualitative assessment of engagement among part-time students at SAC.

Summary of the Qualitative Findings

The course experiences of students in the two classes from which focus group participants were drawn were significantly different, yielding uneven SDEV experiences for these students. For those in the more book-oriented SDEV class the workload was so substantial as to interfere with their academic classes, causing frustrations on the part of some. Students from the interactive class reported a highly positive experience overall, including building solid peer relationships and valuable insights into their own motivations, goals, and habits. However, none of the students were able to accurately identify the credit status of their own SDEV courses when that question was posed, suggesting that skills for navigating college logistics might not have been emphasized in these classes.

A major theme emerging from the class highlights the importance of selecting and training success course instructors who understand the students' affective, cognitive and interpersonal development. In addition, the students clearly showed a strong preference for an active, participatory course format.

Summary of Case

San Antonio College is the largest single-campus community college in the state of Texas, with a history dating back nearly 85 years. It has offered a student success course for roughly forty of those years (Mendiola, personal communication, 2009), longer than some of its sister colleges have been in existence. A large college with a

long history necessarily faces challenges in terms of communicating consistently and in integrating services across departmental and division lines.

Regression analysis of record-matched CCSSE data for 2005 and 2007 showed statistical evidence that predicts students who enroll in SDEV classes will be more engaged on four of fourteen dimensions than students who do not. One of those dimensions, Active and Collaborative Learning, is possibly the single most powerful predictor of success measured by the CCSSE survey. The Student/Faculty Interaction benchmark and the Faculty Interaction engagement factor are closely related to each other and align well with Active and Collaborative Learning. These findings suggest that the most significant effects of SDEV participation at SAC relate to student investment in active and interactive learning behaviors, particularly in terms of interactions with faculty to enrich learning.

The responses to SDEV experiences by focus group participants provide a rich context for considering the CCSSE results. Students from the two classes represented in the group had significantly different SDEV experiences. One class used videos and structured learning activities in class and also had a rigorous out-of-class assignment schedule that students felt interfered with their work in their academic classes. The other class was highly interactive, with daily discussions, reflective journaling, and student interaction sufficient for some strong friendships to form. While no conclusions can be drawn on how much students learned from the respective courses based on the available evidence, their preferences for interactive class formats and committed, student-centered teachers were clear.

While SAC's tradition of student success courses gives evidence of institutional commitment to supporting student success, the collective baggage of history may in some ways impede that same effort. Consistent, reliable sharing of accurate information to all stakeholders is critical and difficult. The web site document analysis illustrates the challenges of information sharing at SAC. Web design conventions note that the fewer clicks that are needed to get to a piece of information, the more likely it is that the intended party will reach that information. The number of hits on the search term SDEV at SAC was several times higher than the number of hits from the same search at any other Alamo College. The flattened organization of the web site places large amounts of relatively undifferentiated information between the searcher and answers to his or her questions. Accurate information about SDEV for students who have questions is overwhelmed by links to instructional materials for specific instructors and classes.

A second question is raised by apparent isolation of SDEV courses within the Counseling and Student Development Center web site. Certainly this is a logical location considering this is the administrative unit for the Student Development program. However, no evidence of cross linking between SDEV and academic areas was found. If the goal of SDEV is to prepare students to succeed academically in college, absence of evidence of collaboration between counseling and instructional units raises questions.

CHAPTER SEVEN: ST. PHILIP'S COLLEGE

Introduction

This research reported in this case study was undertaken to develop a rich understanding of how student success courses influence course participants in community. The case-level unit of investigation was St. Philip's College, one of the Alamo Colleges in San Antonio, Texas. The student development courses under investigation were those offered under the auspices of the Counseling department, which are designed to assist incoming students in adjusting to and engaging in college.

The College

Located east of downtown San Antonio near the IH35 corridor, St. Philip's College is the oldest of the Alamo Colleges. The college was founded in 1898 as a sewing school for girls by the West Texas Diocese of the Episcopal Church. Under more than half a century's leadership by Artemisia Bowden, a teacher and daughter of a former slave, St. Philip's evolved into an industrial school and finally into a fully accredited two-year college. In 1942 the college relinquished its private status to enter an affiliation with San Antonio College and the San Antonio Independent School District. Three years later, St. Philip's College and San Antonio College formed the San Antonio Union Junior College District under a single district board of trustees. That organization became the core of what evolved into the Alamo Community College District.

SPC is among the oldest and most diverse two-year colleges in the nation and the only postsecondary institution in the country to be designated as both a Historically Black College and a Hispanic Serving Institution.

Demographic Profile

Like all of the Alamo Colleges, the majority of SPC students are female (57.5 percent). Latinos are the largest racial identity group with 47.3 percent of the student population, followed by Whites with 33.8 percent. SPC's African American population is the highest in the district at 16.2 percent (Table 7.1).

Table 7.1: Summary of SPC Student Demographic Attributes

Subscale	Frequency	Percent
Age		
Under 25	5,470	55.6%
25-34	2,524	25.6%
Over 34	<u>1,850</u>	<u>18.8%</u>
Total	9,844	100.0%
Gender		
Female	5,661	57.5%
Male	<u>4,183</u>	<u>42.5%</u>
Total	9,844	100.0%
Goals		
Academic	5,183	52.7%
Technical	<u>4,661</u>	<u>47.3%</u>
Total	9,844	100.0%
Enrollment Status		
Full-time	3,505	35.6%
Part-time	<u>6,339</u>	64.4%
Total	9,844	100.0%

Race		
African American	1,592	16.2%
Asian American	212	2.2%
Latino	4,657	47.3%
Native American	41	0.4%
White	3,331	33.8%
International	<u>11</u>	<u>0.1%</u>
Total	9,844	100.0%

Note: Texas Higher Education Coordinating Board (THECB). (2009). Higher Education Accountability System. Retrieved February 5, 2009 from Texas Higher Education Data *Web site*: http://www.txhighereddata.org/Interactive/accountability/

The SPC student body is distinctive among the Alamo Colleges in that it is older and has the highest rate of enrollment in technical programs. Almost 19 percent of SPC students enrolled in credit programs are age 35 or older, compared to 8 percent to 13 percent at its sister colleges. Although SPC serves its community with a wide range of programs and services, fully 47 percent of the student body is enrolled in technical programs (compared to eight percent to 41 percent at the other colleges), while 53 percent are enrolled in transfer programs (THECB, 2009).

Sixty-eight percent of SPC credit students attend college part time, and about 44 percent receive Pell grants. In addition, a substantial majority enter college underprepared. About 84 percent of SPC students require some level of remediation in math, reading, or writing (THECB, 2009).

Student Development (SDEV) Background

SPC was the last of the Alamo Colleges to make a student success course mandatory for incoming students. As part of the district-wide commitment to Achieving

the Dream: Community Colleges Count, the current policy was implemented in Fall 2007. SPC's SDEV courses are coordinated through the Counseling department under the Student Services division.

Institutional Policy on SDEV

All SPC students with fewer than 15 credit hours are required to take one of the college's SDEV courses in their first semester of enrollment. Hours earned through dual enrollment are not counted toward the 15-hour course requirement threshold. Students subject to the SDEV requirement are placed under a registration hold that requires them to sign up for the appropriate course to complete their registration for classes. Students who withdraw or do not complete SDEV satisfactorily are required to re-enroll in subsequent semesters until the requirement is met.

Students who place into no more than one area of developmental course work (math, reading, or writing) may take SDEV 0170: Orientation to College. Students who place in more than one developmental area are advised to take SDEV 0370: Personal and Academic Success

SDEV courses are subject to regular tuition rates, and repeat course takers are subject to the three-peat tuition rule, which requires students to pay a higher rate of tuition for a third or subsequent enrollment in the same course. Consistent with policy across the district, SDEV course credit is awarded at the developmental or "0" level and is not transferrable.

Course Iterations

The SPC online catalog lists two Student Development courses: SDEV 0170: Orientation to College, and SDEV 0370: Personal and Academic Success.

In the regular 16-week semester, SDEV 0170 courses meet twice per week for 50-minute class periods and earn one credit hour. According to the catalog description, SDEV 0170 "guides the student in the transition to college; its staff, facilities, services, policies and procedures" with the goal of motivating students "to become more actively involved in their education" (SPC, 2008-2009, p. 488.). Specific content areas are not noted in the course description.

SDEV 0370: Personal and Academic Success is a three credit hour course. In a 16-week semester it meets in two- and three-day class formats for a total of 150 minutes. Its goal is to support student success in college by assisting participants "in obtaining skills necessary to reach his/her educational objectives." Course content includes "campus services, critical thinking, time management and stress, career exploration, college reading skills, test-taking and study techniques, library use, decision-making skills and communication skills" (SPC, 2008-2009, p. 489). SDEV 0370 is also recommended for students on academic probation.

Analysis of Primary Electronic Documents

Electronic and print documents are critical information sources by which students and the general public learn about a college, its policies, and its programs. To gain a general sense of accessibility of information and of how SDEV is presented in

public information sources, the college's web site and online catalog were searched for the term "SDEV."

Web Site Review

The majority of 33 hits on the SPC web site (http://www.accd.edu/spc) using the search term "SDEV" led to various administrative documents dated from 2005 through the present. Administrative documents included institutional effectiveness and planning materials, meeting minutes, course listings for specific areas, VA policies, and similar pages. These documents provided valuable insights into the development of SPC's Student Development program, but would be less useful to students searching for information on an SDEV course.

A general principle of web design is that the number of clicks required to reach information on a given topic is inversely related to the likelihood that people will reach that information. Of the ten links appearing on the first page of SDEV search results, three connected to various schedules from the previous semester; five connected to administrative documents; and two led to direct and substantial information on SDEV courses.

One of the first-page links to substantive SDEV information led to a Counseling departmental syllabus for SDEV 0370. The syllabus for SDEV 0170 was the eleventh hit and appeared on the second page of search results. Another link led to an administrative clarification of SDEV placement policy. That policy clarification and two others dated variously from 2006 were posted under the Business Information Systems department web site. The reason for this placement was unclear.

In addition to the syllabi links noted above, three additional hits connected to the Counseling home page where links to the two SDEV course syllabi are listed. No other links to Student Development or SDEV are available on the Counseling home page. A separate hit led to a web page featuring a special section of SDEV 0370 for African American males; however, this page was connected to the Student Life area and was not cross linked to general SDEV information. Although the Student Services Directory listed a First Year Experience Center, no web linkages between SDEV and that center were observed.

Web site search hits connecting directly to the college catalog included a single link leading to the SDEV policy statement in Section 5: Student Services and Activities of the 2006-2008 SPC Bulletin, but not to any other section. Links to course descriptions were not available through this link. No links to the 2008-2009 Bulletin were observed. The 33rd link in the search led to the Spring 09 Class Schedule.

Evidence of cross linking SDEV between academic and student services areas was minimal and peripheral. Neither "SDEV" nor "Student Development" appeared in the Student Services directory. Course syllabi links appeared on the Counseling Center home page, but no other information on SDEV appeared or was obviously linked to that page. A single hit led to departmental listings under Center for Distance Education, where SDEV was listed as the only course prefix under a Liberal Arts Department heading. Associated links to more information and the directory were not live. A single link to a business instructor's page showed an SDEV 0370 syllabus was available along

with his business course syllabi. However, the link was not active and web site appeared to be under construction.

College Catalog Review

A search of the SPC 2008-2009 Bulletin Online Catalog revealed that information on SDEV courses was provided at three points in that document. In Section 2: Introduction, a Student Development section (pp. 15-16) noted that SDEV 0170: Orientation to College and SDEV 0370: Personal and Academic Success were offered to help students make the transition to college. A policy statement notes that incoming students with 15 or fewer hours are required to take the course in their first semester, and to repeat it in subsequent semesters if not satisfactorily completed. It was also stated that students will be placed on registration hold until they register for SDEV as required. Students are directed to Section 9 of the catalog for course descriptions; however, course descriptions are found in Section 13.

In Section 4: Registration (p. 68), the general purpose of Student Development courses was summarized and higher persistence rates among participants were noted. SDEV policy parameters from Section 2 were reiterated along with additional information stating the course is subject to regular and three-peat tuition policies, and further, that dual credit hours are not counted for the 15-hour rule.

Specific descriptions for SDEV courses were found in Section 13: Course Descriptions. SDEV 0170: Orientation to College, the standard required course through the district, was described as being for new students and focused on transition to college. SDEV 0370: Personal and Academic Success was presented as a more skills-oriented

course, including topics such as "campus services, critical thinking, time management and stress, career exploration, college reading skills, test-taking and study techniques, library use, decision-making skills and communication skills" (pp. 488-489). The 15-hour policy was reiterated and, for the first time in the *Bulletin*, placement in the respective SDEV courses was associated with the number of developmental courses the student is required to take. The course description for SDEV 0370 included a final statement recommending that students on academic probation take this course.

Summary of Document Analysis

The analysis of the college web site and online catalog presented a somewhat unclear picture of how SDEV courses fit into the overall pathway to student success at SPC. For a student user searching for information on an SDEV course, links to the catalog course descriptions and departmental syllabi would be helpful. However, finding the right links would require time and effort.

Information about SDEV across the web site was inconsistently cross linked between departments or not cross linked at all. Between the web site and catalog, policy information on SDEV requirements was available in several places. However, students would find it necessary to check multiple sites to find all available information as no single source covered all policy and course information. For new students who might be unsure of what questions to ask, such weakly organized information could lead to confusion and mistakes.

The administrative status and ownership of the SDEV courses was unclear based on examination of these documents. Although the courses are listed under the

Counseling department, information available at that site is limited. The complete absence of connection to the First Year Experience Center, where student success courses are often coordinated, seems somewhat counterintuitive. The listing of the SDEV course prefix as the only entry under a Liberal Arts heading in the Distance Education directory is confusing. Although this may have been an attempt to integrate SDEV into academic functions, lack of explanation and the absence of live linking from that source defeated that conclusion.

Quantitative Data

Sample

The participant pool for the quantitative portion of the study was drawn from students sampled at the four research sites in the 2005, 2006, and 2007 CCSSE administrations. SPC participated in CCSSE in 2005 and 2007. Surveys with voluntary ID numbers were record matched with institutional records by the Alamo Colleges Office of Institutional Research (OIR) to provide data fields for success course participation and enrollment status. A total of 1,909 viable cases were identified, representing 24 percent of the total CCSSE participant pool. Of the 1,909 total cases, 419 cases came from SPC (Table 7.2). These 419 cases constitute the sample for analysis to respond to Research Questions 1 and 2. Of the 419 SPC student cases, only 83 (19.8 percent) enrolled in one of SPC's two SDEV courses prior to or during the semester in which they participated in CCSSE.

Table 7.2: SPC Quantitative Sample by SDEV Enrollment by Course and Year

	No SDEV		SDEV	SDEV 0170		<i>y</i> 0370	<u>Total</u> .	
Year	n	%	n	%	n	%	n	%
2005	171	40.80%	8	1.90%	6	1.40%	185	44.20%
2007	<u>165</u>	<u>39.40%</u>	<u>15</u>	3.60%	<u>54</u>	12.90%	<u>234</u>	<u>55.80%</u>
Total	336	80.20%	23	5.50%	60	14.30%	419	100.00%

Representations of females, Latinos, and African Americans were slightly higher in the quantitative sample than in the overall SPC student population. This sample of CCSSE students was also older: 44 percent of the sample was age 25 or older compared with 34 percent over all (Table 7.3).

Table 7.3: Demographic Summary for SPC Quantitative Sample

	8 1 33 2	_	1	
Subscale	Frequency		Percent	Valid Percent
<u>Age</u>				
24 and Under	2	223	53.20%	54.80%
25 to 34	1	45	34.60%	35.60%
35 or Above		39	9.30%	9.60%
Missing		<u>12</u>	<u>2.90%</u>	<u>0.00%</u>
Total	4	119	100.00%	100.00%
<u>Gender</u>				
Male	1	50	35.80%	36.60%
Female	2	260	62.10%	63.40%
Missing		<u>9</u>	<u>2.10%</u>	0.00%
Total	4	119	100.00%	100.00%

Race			
Native American	4	1.00%	1.00%
Asian	5	1.20%	1.20%
African American	91	21.70%	22.50%
White	72	17.20%	17.80%
Latino	217	51.80%	53.70%
Other	15	3.60%	3.70%
Missing	<u>15</u>	<u>3.60%</u>	0.00%
Total	419	100.00%	100.00%

As for academic preparation, 71 percent of sample students reported taking or intending to take developmental math, 37 percent reported similar experience with reading, and 34 percent with English.

Notes on Statistical Procedures

The SDEV Enrolled predictor variable value used in the statistical analysis (Table 7.4) included all students who had registered for either SDEV 0170 or SDEV 0370 prior to or during the semester in which they participated in CCSSE, regardless of whether they finished or passed the class. The No SDEV group—students who never enrolled in an SDEV class—served as the reference group in fitting the regressions.

Table 7.4: Descriptive Statistics for Dependent Variables (CCSSE Benchmarks and Factors) for SPC

	J					Mean Std.	Std.	
Subscale	N	Range	Min	Max.	Mean	Error	Deviation	Variance
Engagement Bench	<u>mark</u>	<u>s</u>						
Active/Collab. Learning	419	1	0	1	0.3918	0.00781	0.15978	0.026
Student Effort	419	0.84	0.08	0.92	0.4805	0.00780	0.15974	0.026
Academic Challenge	419	0.92	0.05	0.97	0.5956	0.00806	0.16492	0.027
Student/Faculty	419	1	0	1	0.3895	0.00920	0.18837	0.035
Support/Learners	417	1	0	1	0.4906	0.01098	0.22417	0.050
Engagement Factor	<u>S</u>							
Faculty Interaction	419	1	0	1	0.4272	0.00900	0.18428	0.034
Class Assignments	419	1	0	1	0.5000	0.01240	0.25386	0.064
Diverse Experience	419	1	0	1	0.5932	0.01400	0.28664	0.082
Collaborative	419	1	0	1	0.2714	0.00864	0.17693	0.031
Learning Information Technology	419	1	0	1	0.5358	0.01515	0.31006	0.096
Mental Activities	419	1	0	1	0.6100	0.01075	0.21997	0.048
School Opinions	414	0.94	0.06	1	0.5753	0.01119	0.22769	0.052
Student Services	404	1	0	1	0.3929	0.01333	0.26787	0.072
Academic Preparation	415	0.89	0.11	1	0.4931	0.00739	0.15052	0.023

Note: Valid N (listwise) = 401

Dependent variables used in the analysis included fourteen clusters of CCSSE items validated as predictors of one or more student success outcome measures through the instrument's validation research (Marti, 2009; McClenney & Marti, 2006). The item clusters comprise nine latent engagement factors and five CCSSE benchmarks for

institutional effectiveness. As the CCSSE benchmarks were developed from the nine latent factors, substantial overlap between the two sets of constructs exists. For summaries of the conceptual cores for each of the CCSSE engagement constructs used as dependent variables in the regression models, see Appendices C and D. For a detailed accounting of survey questions corresponding to each item and question overlaps between benchmarks and factors, see Appendix H.

Probabilities for dependent variables were assessed at the α = .05 level. The R^2 effect sizes for the regression models were assessed using Cohen's (1988) effect size standards which denote effect sizes of 25 percent as large, nine percent as medium, and at least one percent as small.

Research Question 1

What is the relationship between participation in a student success course and engagement in college as measured by the Community College Survey of Student Engagement (CCSSE)?

To address the first research question, the five CCSSE benchmarks and nine latent engagement factors were regressed as dependent variables on a dummy coded dichotomous predictor variable for enrollment in an SDEV course. Table 7.5 lists descriptive statistics for the SDEV Enrolled variable.

Table 7.5: Descriptive Statistics for SDEV Enrolled Independent Variable at SPC

N	Range	Minimum	Maximum	Mean	Mean Std. Error	Std. Deviation	Variance
419	1	0	1	.14	.017	.348	.121

Note: Valid N (listwise) = 419

Analysis of Engagement Benchmarks

With probability assessed at the $\alpha = .05$ level, no statistically significant relationships were found (Table 7.6). However, the Support for Learners variable (p = .053, b = .061, df = 1), was marginally above significant with a probability of .053. The slope predicted that SDEV enrollers would recognize and use campus support resources to adjust to college at a .061 higher rate than students who did not take the course. The R^2 value of .009 was also marginal for a small effect size, indicating only .9 percent of variance is explained by the model.

Regression models for Active/Collaborative Learning (p = .743, b = -.008, df = 1), Student Effort (p = .617, b = -.011, df = 1), Academic Challenge (p = .505, b = .015, df = 1), and Student/Faculty (p = .903, b = -.003, df = 1) demonstrated no significant relationships with SDEV enrollment.

Analysis of Engagement Factors

School Opinions was the single engagement factor that demonstrated statistical significance at the $\alpha=.05$ level with a probability value of .050 (p=.050, b=.063, df=1). The School Opinions item cluster questions how students experience support for meeting challenges within the college environment, and it has several survey items in common with the Support for Learners benchmark. Its associated slope indicated that students who enrolled in an SDEV course would show a .063 increased likelihood of interacting with instructors to extend or enrich academic experiences. The R^2 value of .010 explained one percent of variance and a small effect size for this variable.

Table 7.6: Summary of Linear Regressions for CCSSE Engagement Benchmarks and Factors by SDEV Enrollment for SPC

Subscale	b	SE	Beta	t	p	R^2
Engagement Benchmarks						
Active/Collaborative Learning	008	.023	016	329	.743	.000
Student Effort	011	.022	025	500	.617	.001
Academic Challenge	.015	.023	.033	.667	.505	.001
Student/Faculty	003	.027	006	122	.903	.000
Support/Learners	.061	.031	.097	1.944	.053	.009
Engagement Factors						
Faculty Interaction	014	.026	028	551	.582	.001
Class Assignments	006	.036	009	180	.857	.000
Diverse Experience	003	.041	003	065	.948	.000
Collaborative Learning	.003	.025	.005	.101	.920	.000
Information Technology	029	.044	034	674	.501	.001
Mental Activities	.021	.031	.034	.685	.494	.001
School Opinions	.063	.032	.098	1.970	.050	.010
Student Services	.024	.038	.031	.623	.534	.001
Academic Preparation	.000	.021	001	021	.983	.000

Note: df = 1

Faculty Interaction (p = .582, b = -.014, df = 1), Class Assignments (p = .857, b = -.006, df = 1), Diverse Experience (p = .948, b = -.003, df = 1), and Collaborative Learning (p = .920, b = .003, df = 1) demonstrated no statistically significant relationship with SDEV enrollment. Nor was a significant relationship found between SDEV enrollment and Information Technology (p = .501, b = -.029, df = 1), Mental Activities

(p = .494, b = .021, df = 1), Student Services (p = .534, b = .024, df = 1), or Academic Preparation (p = .983, b = .000, df = 1).

Model Summary

The regression model fitted to answer Research Question 1 demonstrated a single statistically significant relationship between School Opinions and SDEV enrollment and another probability marginally above significance for the Support for Learners benchmark. The benchmark and factor share five survey items regarding perceptions of the college environment's support for social adjustment, non-academic responsibilities, and services such as financial aid. However, Support for Learners also includes two items that measure frequency of use for advising and career counseling services. The slightly stronger significance of School Opinions may indicate that perception of those services was less related to SDEV enrollment than the items common to both measures. These findings suggest that SPC's SDEV program as it was experienced by students participating in 2005 and 2007 CCSSE administrations had little overall impact on the engagement constructs measured here, but may have had a small impact on how students perceived and used campus resources.

Research Question 2

How does the relationship between success course participation and engagement as measured by CCSSE compare for part-time and full-time students?

To address the second research question, Average Attempted Hours was added as a second predictor variable to the regression model used to address Research Question 1. (Table 7.7). Values for Average Attempted Hours were calculated by adding all hours

attempted for a four-year period relative to students' CCSSE participation and then dividing the totals by number of terms attended. For 2005 CCSSE participants the relative period used to calculate Average Attempted Hours was Fall 2002 to Spring 2006. For 2007 CCSSE participants, the period was Fall 2004 to Spring 2008.

Table 7.7: Descriptive Statistics for Average Attempted Hours Independent Variable at SPC

					Mean Std.	Std.	
N	Range	Minimum	Maximum	Mean	Error	Deviation	Variance
 419	18.00	1.00	19.00	9.6940	.12552	2.56935	6.602

Note: Valid *N* (listwise)= 419

Although Average Attempted Hours was regressed as a continuous variable, analysis of frequencies within ranges of enrollment hours shows distinctive enrollment patterns. Only 23 percent of students in the sample averaged a full-time load of 12 or more credit hours. The largest group by far—67 percent—averaged course loads between 6.1 and 11.9 credit hours. Only 10 percent of students averaged six or fewer hours per term.

Analysis of Engagement Benchmarks

None of the CCSSE engagement benchmarks demonstrated a statistically significant relationship at the predetermined α level with either predictor variable in this multiple regression model (Table 7.8). Support for Learners, which was marginally significant for SDEV enrollment in the first model, showed no relationship with either predictor in this model (p = .105, b = .052, df = 2). Active/Collaborative Learning (p = .485, b = -.016, df = 2), Student Effort (p = .513, b = -.015, df = 2), Academic Challenge

(p = .596, b = .012, df = 2), Student/Faculty Interaction (p = .823, b = -.006, df = 2), and were similarly unrelated.

Table 7.8: Summary of Multiple Regressions for CCSSE Engagement Benchmarks and Factors by SDEV Enrollment and Average Attempted Hours

una Factors by S.					Average Attempted			
	SDE	SDEV Enrolled			Hours			
Dependent Variables	b	SE	P	b	SE	P	R^2	
Engagement Benchmarks								
Active/Collaborative								
Learning	016	.023	.485	.006	.003	.061	.009	
Student Effort	015	.023	.513	.003	.003	.409	.002	
Academic Challenge	.012	.024	.596	.002	.003	.539	.002	
Student/Faculty	006	.027	.823	.002	.004	.600	.001	
Support/Learners	.052	.032	.105	.006	.004	.156	.014	
Engagement Factors								
Faculty Interaction	015	.027	.581	.000	.004	.948	.001	
Class Assignments	032	.036	.383	.017	.005	.001	.029	
Diverse Experience	002	.042	.967	001	.006	.914	.000	
Collaborative Learning	008	.026	.765	.007	.004	.047	.010	
Information Technology	045	.044	.307	.011	.006	.073	.009	
Mental Activities	.023	.032	.465	001	.004	.762	.001	
School Opinions	.053	.032	.100	.006	.004	.157	.015	
Student Services	.022	.039	.565	.001	.005	.865	.001	
Academic Preparation	012	.022	.581	.008	.003	.008	.017	

Note: df = 2

With regard to the Average Attempted Hours predictor, relationships with the benchmarks were also absent for Support for Learners (p = .156, b = .006, df = 2),

Active/Collaborative Learning (p = .061, b = .006, df = 2), Student Effort (p = .409, b = .003, df = 2), Student/Faculty Interaction (p = .600, b = .002, df = 2) and Academic Challenge (p = .539, b = .002, df = 2).

Analysis of Engagement Factors

The multiple regression analysis of engagement factors demonstrated no statistically significant relationships with SDEV enrollment. School Opinions, which was significant in the regression fitted for Research Question 1, demonstrated no such relationship after the addition of the Average Attempted Hours predictor. However, statistically significant relationships with Average Attempted Hours were predicted for three factors.

As noted above, neither Class Assignments (p = .383, b = -.032, df = 2) nor Academic Preparation (p = .581, b = -.012, df = 2) predicted relationships with SDEV enrollment. With regard to Average Attempted Hours, however, both variables demonstrated significant relationships at the $\alpha = .01$ level. Class Assignments (p = .001, b = .017, df = 2) is comprised of three survey items focusing on quality of intellectual investment in course work. The associated slope predicted that, controlling for SDEV enrollment, factor engagement would increase by .017 for each increase of one in Average Hours Attempted. An R^2 of .019 indicated the model explained 1.9% of variance. Academic Preparation (p = .008, b = .008, df = 2) focuses on extent or volume of academic activity—time spent preparing for class, number of books read, etc. Again controlling for SDEV enrollment, the slope predicts that factor engagement will increase by .008 for each additional hour averaged.

A third factor, Collaborative Learning, showed no relationship with SDEV enrollment (p = .765, b = -.008, df = 2), but was significantly related to Average Attempted Hours at the $\alpha = .05$ level. The Collaborative Learning variable (p = .047, b = .007, df = 2) is concerned specifically with interaction with other learners in or out of classroom. The model slope predicted that, controlling SDEV enrollment, for each increase of one in average hours attempted, engagement in collaborative learning activity would increase by .007. Variance explained by the model was three percent ($R^2 = .030$).

Faculty Interaction (p = .581, b = -.015, df = 2), Diverse Experience (p = .967, b = -.002, df = 2), Information Technology (p = .307, b = -.045, df = 2), Mental Activities (p = .465, b = .023, df = 2), School Opinions (p = .100, b = .053, df = 2), and Student Services (p = .565, b = .022, df = 2) were not statistically related to SDEV Enrollment. Similarly, these same factors showed no relationships with Average Attempted Hours: Faculty Interaction (p = .948, b = .000, df = 2), Diverse Experience (p = .914, b = -.001, df = 2), Information Technology (p = .073, b = .011, df = 2), Mental Activities (p = .762, b = -.001, df = 2), School Opinions (p = .157, b = .006, df = 2), and Student Services (p = .865, b = .001, df = 2).

Model Summary

The multiple regression fitted to answer Research Question 2 showed that the addition of the Average Attempted Hours predictor attenuated the marginal relationships for Support for Learners and School Opinions with SDEV enrollment. The statistics suggest that at this college, Class Assignments, Academic Preparation, and

Collaborative Learning increase with higher levels of hours enrolled. Class Assignments and Academic Preparation factors measure dimensions of quality and volume of academic experience. Their significant relationships with the Average Attempted Hours predictor may point to student skills that develop with more hours spent in the academic environment. Along a similar line, the relational nature of the Collaborative Learning variable may also be enabled by higher enrollment loads which increase the learner's interface time in the campus environment.

Qualitative Data

The specific goal for conducting focus groups as part of this study was to explore student experiences with SDEV courses and, to the extent feasible, to relate that exploration to student engagement. Questions used to guide the focus groups were developed with an eye to the engagement constructs measured by CCSSE and loosely organized around five lines of inquiry: perceived obstacles to college success, expectations of college and the SDEV course, perceptions of SDEV's value, SDEV's policy and process environment, and perspectives on SDEV and campus relationships (Appendix G).

Sample

The SPC focus group had the highest representation of part-time students of the five groups conducted for the study (Table 7.9). Eleven of twelve participants were first-semester college students, and the last was finishing her second. None were recent high school graduates, and only one student was in the 18 to 19-year-old age group. Gender and Latino representation were reasonably close to the college population.

However, African Americans were overrepresented compared to the general college population. Several of the participants had begun their college entry process too late to register for classes at the beginning of the long semester so they began in the Flex II term. This may have accounted for the higher representation of part-time students, as Flex classes require double the number of class hours to cover the material in half a semester. The SDEV class in which the focus group was conducted was an eight-week Flex II section of SDEV 0370: Personal and Academic Success which began in October and ended in mid-December.

Research Question 3

What insights do student views on success course participation as expressed in focus groups contribute to the quantitative analysis of the course participation/engagement relationship?

Although the quantitative portion of the study offered minimal evidence of a relationship between SDEV enrollment and increased engagement, focus group evidence suggests that for older students characterized by multiple risk factors, the course has value on several levels (Table 7.10).

The Value of SDEV

When asked to discuss the value of participating in SDEV, students responded with equal numbers of positive and negative observations (28 each). Perception of gain and description of experience was often tempered or qualified. "It has some good information in it." "I learned more than I thought I would." Two students articulated specific gains in study skills, one as follows:

I didn't know about study times. If you study after 11:00 your body is already tired and you don't get much. But if you study between 2 and 6 you take in a lot more information. And I was studying a lot after 10:00 at night. I'd just read over a little something. I didn't get anything done. Now I study earlier.

Others cited learning skills gains such as better understanding of critical thinking (4) and focus (2), and specific steps for writing a paper (1).

Table 7.9: SPC Focus Group Demographic Profile

Subscale	Frequency	Percent
Age		
18-19	1	8.3
20-21	3	25.0
22-24	4	33.3
30-39	3	25.0
40-49	<u>1</u>	<u>8.3</u>
Total	12	100.0
<u>Gender</u>		
Female	7	58.3
Male	<u>5</u>	<u>41.7</u>
Total	12	100.0
<u>Goals</u>		
Transfer	4	33.3
Associate	4	33.3
Certificate	2	16.7
Other	<u>2</u>	<u>16.7</u>
Total	12	100.0
Race		
Latino	6	50.0
African American	5	41.7
White	<u>1</u>	<u>8.3</u>
Total	12	100.0
First Generation		
Parent/No College	9	75.0
Parent/Some College	<u>3</u>	<u>25.0</u>
Total	12	100.0
Enrollment Status		
Full-time	5	41.7
Part-time	<u>7</u>	<u>58.3</u>
Total	12	100.0

Students also cited valuable learning in life skills collateral to success in college. Money management and budgeting skills were cited by six students, which was the most frequent mention of any perceived gain associated with the course. Other life skills mentioned included organization (1), not procrastinating (1), and understanding the difference between wants and needs (1).

The strongest comments on value in SDEV, however, were gains in self-knowledge. Three students commented on assessment activities, including a learning styles inventory, as contributing to better understanding of self as person and as learner. One male student summarized a learning styles assessment activity:

We took a few surveys and it kind of broke it down in different sections. It didn't tell you exactly this is the way you are, but it told you you're a little like this and a little like that, and what percentage. A lot of the people in here right now probably know how they're visual or spatial learners. That was pretty interesting.

Another male student noted new insights gained through the composite experience of assessment and class: "Some [assessed] skills that I didn't have, well, probably had them but that I wasn't aware of. This class kind of made me aware of some things, some personality characteristics that I possess that can help me but that I didn't know I had."

Four students pointed to gains in self confidence as valuable course learning. An older female student noted the following:

I didn't know if I could do it. I've been through a lot of stuff. I want to do something but I won't do it. Actually starting college and learning the stuff in this class, it taught me a lot, it helped me a lot. I feel pretty good about going to college. As long as the finances look good I'll keep coming.

An older male student noted that the course provided a critical opportunity to come to terms with his fears about going to college.

[I learned] That I'm not the only one struggling. That other people out there are going through what I'm going through, having the same feelings that I'm having, that other people are having those feelings. I'm too old for this. I should have done this a long time ago. What am I doing here? There are other people feeling like that. This class has given me a path to go around those obstacles, those feelings that I was feeling.

Aspects of SDEV that Were Not Useful

Students had few negative things to say about their SDEV class, but on those topics they said quite a bit. Ten comments were made describing their first day of class, when "confusion ruled" regarding shifts in the room where their SDEV class met. Reasons for the multiple moves were variously ascribed to "The teacher wasn't here...", "It was too small or too stuffy...", and "It was too hot." The confusion of that experience appeared to have been magnified by the larger issue of feeling physically lost on the campus, about which four students also commented. One student reflected specifically on the experience of being an older student on an unfamiliar campus: "No, I didn't know my way around. I had to ask students. They're very friendly here... I'm 39, everybody in the class is younger than me. I felt like, wow.... After a while you meet people and you get comfortable."

Confusion about the text required for the class was another point of extended discussion. Five students commented on conflicts between text information given online and the expectations of the instructor, e. g., "No, online when you're registering for classes it says that no book is required for this class, that any materials needed will be

provided"; and "But when we got in here the first day she jumped on us for not having the book." Additionally, five students commented on the cost of the book, e.g., "I bought mine downstairs still in the packaging and it was \$49.50"; and "And it can't be bought back... 'cause they're online books."

Table 7.10: SPC Focus Group Response Summary (Number Preceding Response Equal Number of Responses in Group)

	minder of Kesponses in Group)	T
Topic/Theme	<u>Positives</u>	<u>Negatives</u>
Value of SDEV	Will be much more likely to succeed Better personal and learning skills Learned more than expected	1 Boring
Value in Self Knowledge Gained in SDEV	3 Learning from learning styles and other assessment instruments 4 Confidence in self as learner	
Value of Life Skills Gained in SDEV	6 Budgeting and money management 1 Organizing 1 Don't procrastinate 1 Difference between wants and needs	
Value of Learning Skills Gained in SDEV	4 Critical thinking2 Focus2 Study1 Steps for writing paper	
Aspects of SDEV That Were Not Useful		 10 Room confusion 5 Confusion about book requirement 5 Expense of book 3 Late syllabus 8 Long class sessions
SDEV Requirement		12 SDEV not explained in registration
Experiences w/SDEV Instructor	1 Preference for demonstration and active teaching	Not available first day at beginning of class Confusion from classroom shifts She jumped on us for not having the book.
Peer Relationships	1 Friend/current student helped 1 Students on campus are helpful	
Recommendations to College Re. SDEV		Better explanation of course from counselors

		1 Don't take in Flex term 5 Make it shorter 2 Put something up on the walls
PT or Nontraditional Student Issues		1 Different being older student
Needed to Know: Physical Campus	4 Confused or lost on campus	2 Helped by other students, employees
Needed to Know: College Environment/ Culture	1 Preferred seated class to learn from peer context	1 Schedule was dropped 2 Didn't bring enough money for placement test 1 Different from business school

A third point of extended comment was the length of the class, generally referring to the 3-hour class periods characteristic of the Flex session format. Eight students commented similar to the following: "I didn't think it was this long. And when I looked at my schedule and saw two days for three hours, I thought whoa..." and "We'll be learning but we don't learn for the whole time we're in here." One student summed up what appeared to be the consensus of the class:

It probably doesn't have to be this long. If you can get your point across in the least amount of time why drag it on if you can do the same thing in two hours instead of four? Once you drag it on for so long people start to lose interest and start thinking about other things. It's not even productive any more.

Other aspects of the class mentioned as not helpful were a syllabus not being available until later in the course (3) and characterization of the class as "boring."

SDEV as a Required Class

The participants in this particular focus group did not question the requirement to take SDEV; however, they did point out that they received little information about SDEV at advising or registration. "They said it was a requirement to take this class, that it was the orientation to college"; "They just told me it was a requirement, and it was

called orientation"; and "Just show up or your records would be put on hold." All but one student said they learned about SDEV during registration from a counselor or advisor. When asked specifically whether they talked to an advisor or counselor, students responded variously, indicating one or the other, but did not appear to distinguish between the functions of the two.

Similarly, none of the students were told in registration what the course would cover: "I wondered what this whole semester is going to take? I thought orientation, maybe one or two days, but not a whole semester." In the absence of fuller explanation, one student reported that she thought she would not need SDEV:

I thought that I didn't need it. I didn't go to college, but I went to business school when I got out of high school so I figured I pretty much knew, you know, it was like a college type business school. So I figured why did I have to take this class?

The same student later indicated she found her previous experience had not prepared her for her current endeavor: "This college is different from the business college I went to, it's totally different. The scheduling, all of it. It's like a big change."

Research Question 4

In what ways do student views on success course participation as expressed in focus groups inform analysis of the course participation/engagement relationship for full-time and part-time students?

As the sample demographic profile noted (Table 7.9), the majority of participants in this focus group were part-time students. They were also predominantly older, first generation in college, racial minorities, and academically underprepared. The concentration of risk factors associated with lower college persistence and success may

have mediated these students' decisions about level of enrollment in college in ways that are not obvious here. Only two of seven part-time students were male. A lighthearted exchange between two of the part-time female students illustrated the challenges of balancing college with family responsibilities:

Female:

I'm part time right now but in the summer I get rid of my kids, and I can go fulltime. I can go full time because my kids will spend the whole summer with the family.

Female:

Can my kids go with them? (Laughter)

Some participants were beginning college for the first time in the Flex term in the middle of a long semester. Their comments suggested that the decision to begin college had been made recently, and that their enrollment status might change in subsequent semesters: "When I registered we were already at the end of fall Flex so I basically got what there was"; and "I'm part time this semester. Next semester it'll be full time."

Another student indicated that part-time attendance balanced well with her other commitments: "I'm only taking six hours. It's been pretty easy, three classes. I do what I need to do. Maybe if I jump into a lot more classes it would be different, but nah..."

Summary of Case

To understand the data presented here it is important to first remember that SPC's SDEV program is the youngest in Alamo Colleges. Its mandatory SDEV requirement is comparatively recent, having evolved in response to goals established as part of the district colleges' participation in Achieving the Dream: Community Colleges

Count. The current SDEV policy became fully operative as of Fall 2007. That policy history has undoubtedly influenced the data discussed here on several levels.

The analysis of the SPC college web site and online catalog revealed limited, dispersed, and inconsistently linked information on SDEV course content and policy. Between the web site and online catalog, policy information on SDEV requirements was available in several places, but no single source covered all policy and course information clearly and in a readily accessible form and location. Institutional commitment to the course was assessed by frequency and stems of coherent links, representation of administrative ownership, and level of course integration into institutional processes, particularly those associated with instructional quality. These aspects of the SDEV program showed minimum visibility and were at times poorly articulated.

SDEV associations with administrative units seemed somewhat isolated and confused. An unexpected association with an ostensibly academic Liberal Arts unit was found, and association with a First Year Experience initiative that might be expected was absent. For a student user, links to the SDEV course descriptions and departmental syllabi would be helpful, but these are somewhat difficult to find and could be confusing to new students who might be unsure of what questions to ask. Overall, the document analysis findings were consistent with a developing SDEV course program that had not yet been fully integrated into a coherent student information interface in major college documents.

The regression model fitted to answer Research Question 1 demonstrated a marginally significant relationship for the Support for Learners benchmark and a significant relationship for the School Opinions engagement factor with regard to enrollment in an SDEV class. This suggest that SPC's SDEV program, as it was experienced by students participating in 2005 and 2007 CCSSE administrations, may have had a small impact on how students perceive and use campus resources.

However, the multiple regression fitted to answer Research Question 2 showed that the addition of the Average Attempted Hours predictor attenuated the marginal relationships for Support for Learners and School Opinions with SDEV enrollment. Three engagement factors, Class Assignments, Academic Preparation, and Collaborative Learning, demonstrated significant relationships with the Average Attempted Hours predictor. These findings suggested that student engagement on these factors at SPC is more related to higher enrollment loads which increase the learner's interaction in the campus environment.

The comparatively recent implementation of SPC's mandatory SDEV policy undoubtedly affected representation of SDEV enrollers in SPC's CCSSE sample, which was relatively small at 19.8%. Such a small sample may not fully reflect course effects. In addition, changes in SDEV policy would necessarily have been accompanied by institutional challenges of scaling the program up, particularly with regard to identifying and training a sufficient number of instructors. The quantitative findings, then, are a snapshot of a program in transition, and should be regarded in that light.

The students in this focus group were characterized by a variety of demographic risk factors associated with lower rates of college success. They did not take exception with the requirement to take SDEV, suggesting that they found the course met significant needs. It is possible that because these students had many obstacles in common, they felt freer to explore and share their experiences than they might have in an SDEV class dominated by traditional aged students. The eloquent articulations of self discovery shared by some of the focus group participants were quite powerful and suggested that their college learning challenges were deeply personal as well as academic.

Although these students were substantially older than traditional college students, several found value in life skills instruction in basic money management, specifically mentioning points such as not getting credit cards, organizing finances, and learning the difference between needs and wants. These kinds of skills may be seen as maturational skills for traditional aged college students. However, first generation college students, particularly those from low socio-economic backgrounds, may well have had limited exposure to such life skills learning through other channels. Life skills learning among more mature students may be assumed in postsecondary education culture, inadvertently compounding commensurate disadvantages.

The findings from this focus group support the conclusion that students with multiple risk characteristics face a more complex adjustment task in entering college than students with fewer or no such characteristics. Further, the students' articulations of

learning and acceptance of the SDEV requirement support the conclusion that the course can meet important needs for this population.

In summary, the three data sources examined in assessing the SPC SDEV program suggest that it meets important student needs, but at present demonstrates ongoing challenges with full and effective implementation.

CHAPTER EIGHT: CONCLUSIONS

The overarching motivation for this study was, to borrow Braxton's (2000) phrase, the "ill structured problem" of student success in the particular context of community colleges. The purpose of the study was to seek a better understanding of how student success courses influence student engagement on two-year college campuses. The student success course model is a fairly elastic learning structure and has been widely adapted from four-year colleges to a range of diverse community colleges. To better understand how these courses influence student engagement in the two-year setting, it is also necessary to understand the context and organization of the success courses being examined.

The need to look beyond conventional outcome-focused research perspectives for answers to our ill-structured problem was brought home to the researcher at a professional conference in the spring of 2008. In the interchange between speakers and conference participants, phrases like "initiative fatigue" and "better integration" called attention to a growing frustration experienced by postsecondary educators. Working hard to keep multiple programmatic balls in the air, they were discouraged by limited results. Tinto has captured the frustration expressed by those professionals quite succinctly:

[W]hile many colleges have adopted a variety of programs to enhance retention, most programs are add-ons that are marginal to the academic life of the institution...The result is a growing segmentation of services for students into increasingly autonomous fiefdoms whose functional responsibilities are reinforced by separate budget and promotion systems. Therefore, while it is true that retention programs abound on our campuses, most institutions, in my view, have not taken student retention seriously. They have done little to change the

way they organize their activities, done little to alter student experience, and therefore done little to address the deeper roots of student attrition. As a result, most efforts at enhancing student retention, though successful to some degree, have had more limited impact than they should or could. (Tinto, 2002, p.1)

Tinto's observation highlights the importance of factors that limit effectiveness of any student success initiative. To address the limited programmatic impact to which he refers, the researcher sought first to understand these courses in their institutional contexts, and then the processes by which they influence students.

Through the four case studies presented here, the researcher employed three different data sources, each highlighting a different approach and perspective, to paint a broad picture of some of the factors that shape success courses and the students who enroll in them. To gain breadth, some depth is sacrificed. Each of the data sources could have been examined as an individual study in its own right. To see a larger picture, however, one must choose a vantage point that opens up the view—in essence looking across the entire forest before focusing on distinct clusters of trees.

Student Development Policy in the Alamo Colleges

Although the colleges studied here are members of a common district, they are highly individual institutions with separate accreditations, distinctive histories, unique campus environments, and singular relationships with their surrounding communities. The Alamo Colleges' common student success course requirement went into effect in Fall 2007 (Alamo Community College District, 2006b), including a registration hold process which requires students to register for the appropriate SDEV course to complete their registrations (ACCD, 2006a). Within district guidelines, each institution represents

a unique implementation of the SDEV course program reflecting the structures, priorities, and populations of the host institution. SDEV courses at PAC, SAC, and SPC are administered through the college counseling departments. The NVC SDEV program operates in the Student Success directorate and the course is listed under the Communications Arts department. SDEV courses are taught primarily by counselors at PAC, SAC, and SPC, and by a combination of advisors, administrators, and faculty at NVC. Further, the requirement for all entering students to take a one-hour SDEV 0170 has evolved to include the recommendation that students in two or more developmental courses should take the 3-hour SDEV course. SAC has followed a similar policy for some time and SPC now requires SDEV0370 for students in multiple developmental courses. PAC offers that course but does not currently have the personnel or space resources to scale their 3-hour course up to handle the course volume that adopting such a policy would require (Reyna, personal communication, 2009). No 3-hour SDEV course is presently offered at NVC.

Review of Document Analyses

The analyses of SDEV representation on college web sites and in college catalogs was undertaken early in the study to provide a context for understanding analyses of CCSSE and focus group data on the respective campuses.

In addition to the obvious information conveyed through institutional documents, communication attributes such as page level, frequency of hits, and linking patterns convey messages beyond the text that may be unconsciously embedded and subliminally experienced by the student/consumer. A broad assumption underlying the document

analysis process was that institutional commitment to an initiative would be reflected in how that initiative was represented in the institution's primary information interfaces. It was also assumed that low institutional commitment to an initiative might influence how students perceive and experience that initiative. If students feel they are being forced to take a low-value course to check off an institutional requirements that perception might work against student success goals that SDEV and similar courses were developed to promote. Therefore, a second concern of the document analysis was to assess available electronic document evidence of how SDEV courses are administered, integrated, and valued within the institutions.

Representations of SDEV on the SPC web site offered somewhat obstructed information access and limited evidence of institutional commitment to the courses. Links were weakly developed and inconsistent, and no centralized web or catalog area provided complete and coherent information about relevant policies and course options. Syllabus links from the Counseling web page are the sole information interface for SDEV through its administering unit. This also suggests the status of the program within the institution may be uncertain or does not merit significant investment of information resources.

Other SDEV links were confusing, such as a link to a page listing academic departments where a liberal arts department heading included only the SDEV course prefix with links to further information which were inactive. The lack of connection between the Freshman Year Experience program and the SDEV program was confusing

as well and suggested questionable integration of programs within Student Service.

Connections to academic units were not in evidence.

Representations of SDEV on SAC's web site presented a different set of information challenges. The 284 hits returned on a search for SDEV were several times the number of hits returned in searches of the other colleges' web sites, and were, in effect, overwhelming. The search illustrated how a flat web organization can create obstacles for students seeking basic program information.

Considering the relative youth of the student development program at SPC along with the challenges of bringing that program to scale, it might be assumed that the view discussed here is that of a work in progress. However, as Tinto (2002) has pointed out, the danger to effectiveness is that initiatives such as student success courses may be gradually pushed to the margins of institutional life. There they limp along absorbing both institutional and student resources without bringing the benefits to students that full and committed implementation can foster.

SAC's long history of student success courses and its large size pose challenges to effective implementation of student success programs, and those were to an extent reflected in the web site. The volume of hits included many that were out of date, and the flat information structure may well be a holdover from long-established patterns of work and communication. The volume of web connections to specific personalities through posting of course materials was striking. While this personal tone could be construed as a real benefit to students, it appears to be achieved at the expense of ease of information access. Evidence of interaction between academic areas and the student

development program was present, but most of it appeared to be connected to a particular instructor who took a leadership role in integrating the course into his department. Integrating a success course program into academic areas and processes can be particularly challenging on a large campus.

PAC's representation of SDEV courses in online documents was, in some ways, the exact opposite of SAC's. Where SAC's was voluminous and sprawling, PAC's was clean, concise, and orderly. With all links organized through the Welcome and Counseling areas, SDEV information was complete, well ordered, and easily accessed by students. Institutional investment in SDEV was illustrated by the large and highly qualified group of counselors who staff the SDEV program. In terms of institutional valuing of the SDEV initiative, however, the fact that course links are completely contained within those specific administrative areas raises questions about how well SDEV is integrated with and valued by other student services and academic areas across the college.

The NVC web site also presents a clean and coherent organization of SDEV information, but the pieces included in that information create a much broader picture of how the course "lives" on that campus. Complete and organized information on SDEV policy and courses was easily accessed through the fully electronic college catalog. Although the student development program is administered under the student services directorate, recruiting notices for discipline-oriented course sections taught by faculty members demonstrated faculty involvement and commitment to the SDEV course. In addition, web hits leading to SDEV's listing as an instructional area under the

Communications Arts department and in academic course quality processes testified to course's substantial integration into academic as well as student services functions of the college. Additional evidence that the course is valued and supported across the institution was presented in several references to SDEV in the president's regular column in the college's online newsletter, La reVista.

The analysis of SDEV representation in electronic documents in these four colleges was intended to provide context for analysis and raise important questions about how information on student success courses is shared. The comparative ease of access to information in the fully electronic NVC catalog offered an important contrast to the PDF versions at the other colleges. This is being addressed at the district level. As of this writing, The Alamo Colleges are going live with a fully electronic district-wide catalog.

Each of these colleges has a distinct culture and a unique population, and choices about SDEV implementation and representation for the respective colleges are made with those factors in mind. However, clear, complete, and accessible information on SDEV policy, purpose, and content is critical for students. As was clearly demonstrated in the focus groups at all colleges, students often arrive in their SDEV classes with vague or mistaken expectations of the course which may erode their commitment to the learning opportunities these courses provide. To improve on how they tell the SDEV story to students, however, colleges must first evaluate how they tell that story within the organization.

Research Question 1

Linear regression models fitted to examine the relationships between participation in student development courses and CCSSE engagement constructs yielded mixed results across the colleges (Table 8.1). All fourteen constructs were significantly related to SDEV enrollment at NVC; six at PAC; four at SAC, and one at SPC. None of the benchmarks or engagement factors demonstrated statistically significant relationships with SDEV enrollment at all four colleges. Three constructs demonstrated relationships at three of four colleges, but not all the same colleges: Student/Faculty Interaction and Information Technology showed significant probabilities at NVC, PAC, and SAC, and School Opinions showed a significant probability at NVC, PAC, and SPC.

Table 8.1: Summary of Linear Regressions for CCSSE Engagement Constructs by SDEV Enrollment for All Colleges

SDEV Enroument for All Colleges											
	<u>PA</u>	<u>.C</u>	<u>N</u> V	<u>VC</u>	SAC		<u>SPC</u>				
	p	R^2	P	R^2	p	R^2	p	R^2			
Engagement Benchmarks											
Active/Collab. Learning	.920	.000	.003	.017	.023	.010	.743	.000			
Student Effort	.423	.001	.002	.019	.428	.001	.617	.001			
Academic Challenge	.306	.002	.001	.023	.679	.000	.505	.001			
Student/Faculty	.036	.010	.013	.012	.003	.018	.903	.000			
Support/Learners	.046	.009	.000	.055	.953	.000	.053	.009			
Engagement Factors	007	000	024	000	001	020	502	001			
Faculty Interaction	.897	.000	.034	.009	.001	.020	.582	.001			
Class Assignments	.019	.012	.001	.024	.456	.001	.857	.000			
Diverse Experience	.433	.001	.001	.022	.273	.002	.948	.000			
Collaborative Learning	.461	.001	.008	.014	.116	.005	.920	.000			
Information Technology	.001	.023	.028	.010	.041	.008	.501	.001			
Mental Activities	.730	.000	.003	.018	.697	.000	.494	.001			
School Opinions	.039	.010	.000	.055	.629	.000	.050	.010			
Student Services	.752	.000	.001	.023	.304	.002	.534	.001			
Academic Preparation	.005	.018	.047	.008	.947	.000	.983	.000			

A Look at the Constructs

Student/Faculty Interaction was significantly related to SDEV enrollment at NVC, PAC, and SAC. In validation research, Student/Faculty Interaction was the least consistent benchmark in terms of outcome relationships; however, it was consistently related with some outcomes measuring both academic performance and persistence,

including Number of Terms Enrolled, Credit Hours Completed, and Degree/Certificate Completion (Marti, 2009; McClenney & Marti, 2006). Student/Faculty Interaction's six survey items focus on direct interaction with the instructor through conventional and electronic means as well as receiving prompt feedback from the instructor. Probabilities for this factor at these three colleges would suggest that SDEV enrollment is related to increased interaction with faculty for their students.

Information Technology was shown to be a good to adequate predictor of a variety of several academic and persistence outcomes. The factor includes only two items and is specifically focused on use of online communications to complete an assignment or communicate with an instructor. It is possible that this cluster measures a basic level of technology literacy that has become increasingly critical for functioning in a postsecondary environment.

School Opinions was significantly related to SDEV enrollment at NVC, PAC, and SPC. Further, its related benchmark, Support for Learners demonstrated significance at NVC and PAC, and was marginal for significance for SPC. Validation research showed that the Support for Learners benchmark was consistently correlated with persistence outcomes but showed little evidence of relationship with academic (Marti, 2009; McClenney & Marti, 2006).

Marti (2009) has observed that student services factors are not always directly related to learning, which may influence their relationships with academic outcomes. Further, underprepared students may make greater use of student services, and would not necessarily have best grades. The association of the Support for Learners and School

Opinions with underprepared students is an important consideration in this study, particularly for SPC. SPC students are older, likely to be minorities, and likely to be low-income, all factors that are commonly associated with underpreparedness. These constructs were the only ones to show significant or near- significant relationships at with SDEV enrollment at SPC, suggesting that their students are seeking such services. Attention to building on that foundation of connecting underprepared to needed services could also be a foundation for building the program's support for learning skills development.

Research Question 2

How SDEV courses influence part- and full-time students differently was examined by adding the continuous variable for Average Attempted Hours to the regression model fitted for Research Question 1. Class Assignments and Academic Preparation were very significantly related to Average Attempted Hours at all four colleges. Student Effort and Information Technology were significantly related to Average Attempted Hours at NVC, PAC and SAC, as was Collaborative Learning was for PAC, SAC and SPC. All these engagement constructs deal with academic habits and learning experiences that research has shown to be predictive of academic outcomes (McClenney & Marti, 2006; Marti, 2009).

The pattern of significant relationships with learning skills factors is even more interesting when considering the engagement constructs that were significant for *none* of the colleges: Student-Faculty Interaction, Support for Learners, Faculty Interaction, Diverse Experiences, School Opinions, and Student Services. These more relationally

based engagement constructs involve interactions with faculty or with staff in making use of campus services. For part-time students, competing commitments often limit time on campus and thus restrict opportunities to engage more fully in campus life (Chen, 2007). These findings are fully consistent with research that contends the classroom is the critical environment for engaging community college students.

Table 8.2: Summary of Multiple Regression Analyses for CCSSE Engagement Constructs by SDEV Enrollment And Average Attempted Hours for All Colleges

	NV	-		PA			SA			SP	-	
	<u>SDEV</u>	<u>AAH</u>		<u>SDEV</u>	<u>AAH</u>		<u>SDEV</u>	<u>AAH</u>		<u>SDEV</u>	<u>AAH</u>	
	p	P	R2	p	p	R2	P	P	R2	p	p	R2
Engagement Be	Engagement Benchmarks											
Act/Coll.Lrng	0.027	0.056	0.024	0.698	0.018	0.013	0.020	0.001	0.032	0.485	0.061	0.009
Stud.Effort	0.050	0.001	0.040	0.737	0.029	0.012	0.441	0.049	0.009	0.513	0.409	0.002
Acad.Chall.	0.017	0.006	0.038	0.635	0.010	0.017	0.662	0.067	0.007	0.596	0.539	0.002
Stud/Faculty	0.027	0.603	0.013	0.079	0.142	0.015	0.002	0.226	0.021	0.823	0.600	0.001
Support/Lrnrs	0.000	0.738	0.056	0.044	0.738	0.009	0.960	0.481	0.001	0.105	0.156	0.014
Engagement Fa	ctors											
Fac.Interact.	0.043	0.961	0.009	0.937	0.317	0.002	0.001	0.303	0.022	0.581	0.948	0.001
Class Assign	0.025	0.000	0.049	0.084	0.005	0.030	0.431	0.003	0.019	0.383	0.001	0.029
Diverse Exp.	0.009	0.057	0.029	0.591	0.265	0.004	0.262	0.051	0.010	0.967	0.914	0.000
Collab. Lrnng	0.039	0.134	0.019	0.850	0.009	0.016	0.102	0000	0.030	0.765	0.047	0.010
Info. Tech.	0.243	0.002	0.029	0.010	0.006	0.040	0.036	0.002	0.028	0.307	0.073	0.009
Ment. Activ.	0.031	0.018	0.029	0.527	0.154	0.005	0.69	0.445	0.001	0.465	0.762	0.001
School Opin.	0.000	0.457	0.057	0.055	0.601	0.010	0.615	0.135	0.005	0.100	0.157	0.015
Student Serv.	0.005	0.202	0.026	0.817	0.705	0.001	0.308	0.492	0.003	0.565	0.865	0.001
Acad. Prep.	0.366	0.001	0.029	0.052	0.000	0.055	0.98	0.001	0.024	0.581	0.008	0.017

Active and Collaborative Learning is the single most consistent predictor of positive outcomes among the CCSSE constructs. In the Research Question 2 model it maintained the significant relationships with SDEV enrollment at NVC and SAC shown in the first model. That evidence correlates with the strong message from focus

groups—particularly the groups at these two colleges that students strongly prefer an active and interactive course format for SDEV.

Probabilities for a relationship between Active and Collaborative Learning and Average Attempted Hours were significant at PAC and SAC, suggesting that enrollment level plays a substantial role in how students engage along this dimension. Though NVC and SPC did not show relationships at the established alpha level, their probabilities (p = .056 and p = .061, respectively) were not extremely high, which is consistent with the importance of enrollment level regarding this dimension.

With these findings in mind, it is also important to consider the fact tour of the seven items that make up the Active and Collaborative learning item cluster specifically address out-of-class activities. Active and Collaborative Learning is a strong predictor of success. Increasing student engagement through modeling active and collaborative learning strategies in SDEV classes appears to be both logical and data-supported. For "drive on, drive off" part-time students this is particularly critical. Students who balance college with other commitments are likely to arrange schedules as economically as possible, leaving little time on campus outside class commitments.

Considerations in Understanding Data

It is important to qualify the findings discussed above with the observation that the research design used in this study applies CCSSE constructs and measures to a different sort of assessment task, one for which its utility has been postulated but not previously tested. Using CCSSE as a measure of a campus-based student success program brings into play different sets of assumptions. As a measure of institutional

effectiveness, the focus for CCSSE assessment is on the overall success of an integrated academic enterprise. In this study's application, however, the focus of assessment is the quality of implementation of a specific program within an institution. a course that is designed to support student engagement by building the collateral skills of studenthood. Inevitably programmatic assessment will reflect overtones of overall institutional effectiveness. That, however, is how students experience these courses, and also how practitioners need to be able to assess effectiveness in order to build better success courses.

Statistical relationships examined in CCSSE validation research may or may not remain similar in a program assessment application. For instance, the absence of a significant relationship between Student/Faculty Interaction and Average Attempted Hours is somewhat surprising as CCSSE validation research found that it to be correlated with Number of Terms Enrolled and Credit Hours (McClenney and Marti, 2006). Compared to that research, this study presents stronger findings for student services oriented factors and weaker findings for active and collaborative learning and student faculty relationships. As applied to the more holistic SDEV purpose and process however, those findings make sense. Underprepared students who persist generally make more use of campus resources and services, and thus tend to score higher on services oriented factors.

Another consideration critical to considering this data is that the samples across these colleges are different. All the samples used here are samples of a sample—slices of representative CCSSE samples that varied in several respects from college to college.

And without doubt, there are factors other than those measured by the CCSR that shape the interaction between students and SDEV courses.

Intent to Treat and Variable Definition

The choice to include all students who enrolled in an SDEV course was based on the principle of intent to treat, in which analysis is based on the initial intention to provide treatment (effectively, selection to the sample group) rather than whether the treatment is actually delivered over time. The logic behind intent to treat analysis is that by excluding those who drop out of a sample group along a course of treatment, randomization is broken and bias may be introduced to statistical analysis. Intent to treat focuses statistical findings on the effects of a treatment policy rather than the specific effects of the treatment itself.

The success course participation predictor in this study—SDEV Enrolled—was defined as all students who received any grade value for an SDEV course before or during the term in which they participated in CCSSE. That included students who withdrew from the course as well as those who received IPs or failing grades. By making that choice, the researcher intended to keep the focus on the broad picture of how SDEV courses operate within the given institutional context on each campus. A different definition of the SDEV variable—one that excluded W and IP grades, for example—may well show somewhat different relationships and strengths of relationships from those shown in the current analysis. Additional analysis disaggregating course participants as to course outcome may add valuable perspective to the data presented here.

Research Question 3

Student perspectives captured in focus group data offered important insights into the dynamics of engagement among specific groups of students. The focus group conducted at SPC highlighted experiences of students who were generally older, minority, and substantially underprepared for college. These students expressed a few negative points about the course such as long classes and the cost of the textbook. Overall, however, they expressed positive experiences in the course, particularly in terms of better understanding of self-as-learner and life skills such as financial management. For these students, college was a strange land; the process of engaging in college was exciting, but also substantially mediated by work and family responsibilities.

The SAC focus group was quite different. Although their placement in the 3-hour student development course indicated that these students were significantly underprepared for college, a much higher percentage were traditional-aged students who communicated clearer expectations about what social and academic experiences in college should be like. The blending of two SDEV classes created a unique dynamic, and divided sentiments about course experience appeared to largely follow class lines. One group expressed positive experiences in relationship building and personal growth, while the other largely reported negative effects of a burdensome workload for the class. The differences in experiences of the two groups underscore how uneven student experiences in student success courses can be, dependent upon how the courses are valued and implemented on the campus. These students spoke powerfully about how

active learning and selection of instructors influence students' engagement in a student success course, and in effect, underscored the critical need for consistent quality of success course implementation

By virtue of their placement in the most basic level of developmental composition, the predominantly traditional-aged PAC focus group participants were assumed to be substantially underprepared for college as well. Most of these students appeared satisfied with the SDEV requirement. These students expressed substantial uncertainty about their probabilities of reaching their college goals. They expressed value of college knowledge and life skills more than academic skills, suggesting that learning related to understanding and engaging in their roles as students and the college environment met important needs. Their strong preference for group work where lateral learning from classmates could provide additional cues and validation seemed to meet those needs as well.

The NVC focus groups were also predominantly made up of traditional-aged students. In contrast to the other groups, however, these students were more academically prepared for college. Value of the SDEV course was assessed by several students in cost/benefit terms that devalued their SDEV experience based on the course's non-transferable credit status and limited personal relevance of course learning. These students saw themselves as prepared for college, and noted that NVC's required group advising/orientation session during registration met most of their college knowledge needs. These students also placed premium value on well-informed and engaged instructors and an active, collaborative instructional format.

Because groups were so different, comparing their responses raised important questions on what different groups need from student success courses and how course learning influences their engagement in college. Two axes of difference in student expectations and experiences emerged. First, older students responded differently than younger students, more often expressing value of gains in self-confidence and self understanding. Second, better prepared students responded differently than less prepared students, expressing higher expectations for value gained in exchange for their investments of time and tuition. By contrast, less prepared students offered little challenge to the SDEV requirement and expressed value found in self understanding as well as understanding the college environment.

Marti (2009) has pointed out that one problem for two-year colleges with relying on literature dominated by four-year college theory and research is the distinct underrepresentation of developmental students in the samples on which that body of work is based. The topic of academic preparedness has received substantial attention as accountability pressures have mounted in recent years, and clearer definitions of academic learning standards at all levels of education have begun to emerge. However, no such consensus defines the complex web of personal, cultural, and social characteristics that contribute to collateral college preparedness. These issues of access and equity, and their relationship to student success in community colleges is distinct (Bailey & Morrest, 2006) yet limited attention has been focused on how those factors influence engagement of developmental students. The findings from these focus groups

suggest the importance of questioning assumptions about collateral aspects of college preparedness that may be incorporated into student success course designs.

Research Question 4

Limited representation of part-time students in the focus groups conducted for this study also limits conclusions that might be drawn as to how enrollment status mediates engagement in college. The SPC group had the largest concentration of part-time students. These students were predominantly older, the first generation of their families to attend college, racial minorities, and academically underprepared. The concentration of risk factors associated with lower college persistence and success may have mediated these students' decisions about level of enrollment in college in any number of ways. Discernable patterns that would inform interpretation of CCSSE findings were not in evidence.

Conclusions

In response to a question about the possibility of keeping America's cities vital, architect and visionary, Richard Saul Wurzman responded thus:

We have to understand before we act. And although there are a lot of little ideas for making things better—better learning, increased safety, cleaner air—you can't solve the problem with a collection of little ideas. One has to understand them in context and in comparison to other places. (Bellows, 2009, p. 29)

Community colleges have applied a lot of little ideas to the problem of student success, but putting challenges and ideas in context is critical to finding new perspectives on an old challenge—student success. The diversity of the colleges, courses, and students

examined in this study underscores the complexity of understanding how student success courses work.

Key Findings

Instructional Commitment Is Not Optional

All four of the institutions that participated in this study have made commitments to providing quality student success courses through their SDEV programs. How those commitments are interpreted and implemented across the campuses, however, offers a broad view of successes and challenges faced by community college professionals as they seek to enhance the success of students on their own campuses. These models differ in institutional support, structure, and approach. Yet as Tinto (2006) has pointed out, the first and most important question regarding any first year initiative is what should be the character of the first year of college? Tinto goes on to underscore the critical importance of broad, deliberate integration of student success courses into the daily practice and process of the college.

The important concepts that underlie the freshman seminar should be integrated into the very fabric of the first year. The seminar should not be left at the margins of institutional life, its ideas treated as add-ons to the "real business" of the college. Too frequently the freshman seminar is treated as a type of vaccine that we hope will make the students immune to the many dangers of the freshman year. Unfortunately, by isolating the seminar from the curriculum, students tend to discount the seminar and its activities as unimportant when in fact it is. (p. 6)

The NVC model of broad campus integration of their SDEV program is supported by strong evidence of success. The benefits are not only seen in terms of the course itself, but in increased communication and collaboration across the campus.

Instructors Make the Course

Focus groups made a clear point about the importance of instructors in success courses. Interestingly, student preferences regarding instructors were most strongly stated at NVC and SAC, and these were the only institutions where both the CCSSE Student/Faculty Interaction benchmark and the Faculty Interaction engagement factor were significantly related to SDEV enrollment.

The more evaluative and outspoken students were generally those who saw themselves as better prepared for college or as having a clear set of goals for college going. These students were the most vocal on teacher quality. Critical attributes of a "good" SDEV teacher were first to have a realistic view of student needs and responsibilities to their other academic classes. Students also valued instructors who were knowledgeable in the material being taught and some appreciated hearing from the instructor's own discipline. Most important, however, was that SDEV instructors should be committed to teaching the course as an active and valuable learning experience.

The strong preference for active, engaged SDEV instructors was likely influenced by the students' broader college experiences as well as their experiences in SDEV. However, how students experience their SDEV instructor influences their overall assessment of the worth of the course. In addition, that instructor will in many cases be the faculty member to whom entering students have greatest access. When PAC students were asked with which instructor they felt they had the best relationship as their first semester neared the end, two said their SDEV instructors, but more than half the class named their English instructor. In both writing classes and SDEV classes students

may be asked to open themselves up in new ways, and the instructor's acceptance and validation can be a significant force in shaping their views of self-as-learner.

Active Learning Is Critical

The single most consistent response from focus group students in this study concerned preference for active and interactive learning experiences. Reflective journaling, campus tours, working in groups, and open class discussions were among the specific learning activities that students cited as valuable and enriching. CCSSE research shows its Active and Collaborative Learning benchmark to be the single most consistent predictor of success across studies and outcome measures (McClenney & Marti, 2006; Marti, 2009). Practitioners recognize that students learn by doing (Roueche, Milliron, & Roueche, 2003). The literature on the power of active learning is rich and well established (Chickering & Gamson, 1987; Kuh, Kinzie, Schuh, & Whitt, 2005). For two-year college students, the classroom provides the primary contact surface with the college. Active learning in success course classroom where students are ostensibly learning how college works provides a critical model for developing not only knowledge, but learners. Active learning environments have also been shown to have a positive influence on social integration and institutional commitment (Braxton, Milem, & Sullivan, 2000).

Not Everyone Needs the Same Thing

The focus groups in this study provided important insights into how students who enter success course with different college expectations, different levels of academic preparation, and different age perspectives. Particularly striking were the

explorations of self-as-learner discernable in the responses—and reluctance to respond—of students who entered college with significant academic deficits. These students were working to understand the systems and expectations of college culture while attempting to master academic challenges. In the midst of that, their speech, both directly and indirectly, revealed the process of negotiating their own identities as learners with the other roles and identities in their lives. For most students, but particularly older and underprepared students, their success course was an opportunity to sort through some of the self reflection called for in the process of developing a new sense of self-as-learner. For others, particularly those in the high-workload class at SAC, the frustration of work overwhelming the opportunity for reflection and personal growth was very evident.

Recommendations for Further Research

This study attempted to open a broader perspective on how student success courses impact student engagement. In doing so, it opens up more questions than it answers. The analysis of college documents attempts to situate quantitative assessment of success course effects in particular institutional environments. The student voices gathered from focus groups lends the texture of student experiences to that assessment as well.

The strikingly positive relationships between SDEV participation and engagement constructs bears further investigation to help define policies and practices that might be useful to other institutions. Several aspects of the NVC program are unique. First, as the document analysis indicated, SDEV is integrated into institutional

and academic processes across the college in ways not seen in the other colleges. Further research on that model is warranted. Second, in addition to SDEV, NVC requires all entering students to attend a two-hour group advising/orientation session in order to complete registration. Whether the combination of the two programs contributed significantly to the strong CCSSE analysis is unclear, and bears further study. Third, NVC has in the past shown the strongest engagement scores in the district. CCSSE data is designed to describe institutions. Analysis to determine how overall CCSSE performance might color findings for a programmatic assessment such as the one undertaken here is critically important to exploring additional institutional applications for CCSSE data.

Each year hundreds of community colleges nationwide participate in CCSSE to learn more about how they might become more effective institutions. Using CCSSE data in the more particular application of investigating the relationship between student success initiatives and the subsequent engagement of participants in those initiatives is a new application of a powerful data tool. Establishing the viability of that application of CCSSE data will require much more research. The potential of opening up new views on old problems could be an important added value for CCSSE colleges. However, this more narrowly focused application of CCSSE constructs a metrics for program evaluation will necessarily require careful attention to context and the voices of student experience.

Student success courses are not associated with a disciplinary body of knowledge as academic courses are. In many ways this poses an even greater challenge for program

designers and instructors, who have few resources other than four-year college based research and commercially produced program packages to guide their efforts. This study has suggested that older students, underprepared students, and college ready students may gain more from different success course experiences. Additional research into how different student groups learn in success courses and what learning they value most is a critical consideration.

Finally, quality research on different models of selecting and training instructors for success courses is long overdue. As student voices in this study have pointed out, the quality of course experience for students is largely dependent on the instructor. Similarly, the validity of success courses as learning experiences is strongly influenced by the instructor's approach. What is taught in the courses is important, but how it is taught may, at least for some groups, be at least as important.

APPENDIX A

Recruiting Flyer

Free Food for Your Feedback!!

What really helps new students succeed in college? You can help answer that question by participating in a focus group on early student experiences and college success. The focus group will take place on:

Wednesday, February 11 from 12:30 to 1:30.

FREE PIZZA, DRINKS, AND COOKIES WILL BE PROVIDED FOR PARTICIPANTS!

To participate, complete the form below. Students selected for the focus group will receive an email invitation with the location by Monday, February 9.

For more information, contact Maryellen Mills, University of Texas at Austin,

,	im at <u>metmills@gmail.com</u> or 210-632- 99.
Te	ar here
•	elow. Tear off this section and return it portion as a "save the date" reminder.
Phone Do you mainly attend college	Last Name E-mail part time or full time?

Thank you for your time!

APPENDIX B

Community College Survey of Student Engagement: Community College Student Report

The Community College Student Report

Instructions: It is essential that you use a No. 2 pencil to complete this survey. Mark your answers as shown in the following example: Correct Mark Started here Started elsewhere 1. Did you begin college at this college or elsewhere? 2. Thinking about this current academic term, how Full-time Less than full-time would you characterize your enrollment at this college? 3. Have you taken this survey in another class this term? 4. In your experiences at this college during the current school year, Often Never about how often have you done each of the following? a. Asked questions in class or contributed to class discussions b. Made a class presentation c. Prepared two or more drafts of a paper or assignment before turning it in d. Worked on a paper or project that required integrating ideas or information from various sources e. Come to class without completing readings or assignments f. Worked with other students on projects during class g. Worked with classmates outside of class to prepare class assignments h. Tutored or taught other students (paid or voluntary) i. Participated in a community-based project as a part of a regular course j. Used the Internet or instant messaging to work on an assignment k. Used e-mail to communicate with an instructor 0 I. Discussed grades or assignments with an instruction m. Talked about career plans with an instructor or advisor 0 n. Discussed ideas from your readings or classes with instructors outside of class o. Received prompt feedback (written or oral) from instructors on your performance p. Worked harder than you thought you could to meet an instructor's standards or q. Worked with instructors on activities other than coursework Discussed ideas from your readings or classes with others outside of class (students, family members po-workers, etc.)
 Had serious conversations with students of a different race or ethnicity other than 0 0 0 \circ Had serious conversations with states who differ from you in terms of their religious beliefs, political opinions, or personal values u. Skipped class 5. During the current school year, how much has your coursework at Quite Very Some this college emphasized the following mental activities? much a bit little a. Memorizing facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form b. Analyzing the basic elements of an idea, experience, or theory c. Synthesizing and organizing ideas, information, or experiences in new ways Making judgments about the value or soundness of information, arguments, e. Applying theories or concepts to practical problems or in new situations 0 0 f. Using information you have read or heard to perform a new skill PLEASE DO NOT MARK IN THIS AREA SERIAL #

© CCSSE 2005, All rights reserved

reading	and writing have you done at this college?	None	1 to 4	5 to 10	11 to 20	More than 2
a. Numbe	er of assigned textbooks, manuals, books, or book	-length		_		
	of course readings	O	0		0	0
	er of books read on your own (not assigned) for pe	ersonal				
	ment or academic enrichment	0	0	0	0	0
c. Numbe	er of written papers or reports of any length	0	0	0	0	0
	e response that best represents the extent to year have challenged you to do your best wor		ns durii	ng the c	urrent	
	Extremely challenging ⑦ ⑤ ⑤	4 3 2 1		ely easy	•	_
3. Which o	of the following have you done, are you doing, do while attending this college? ship, field experience, co-op experience, or clinical that a second language course.	or do you ho don	re e	l plan to do	do	ve not ne nor n to do
a. Interns	ship, field experience, co-op experience, or clinical	l assignment	>		Piu	0
b. Englis	h as a second language course			0		0
	opmental/remedial reading course	0	0			0
	opmental/remedial writing course	0		0	0	
e. Develo	opmental/remedial math course	0		0		0
f. Study	skills course	0		0		0
g. Honor	s course	0		0		0
	e orientation program or course)		0		0
i. Organ	ized learning communities (linked courses/study g	roups led by				
faculty	y or counselors)	~ Q "		0		0
iacuity	, or course of	•				
9. How mu	ch does this college emphasize each of the fo	ollowing?	Very much	Quite a bit	Some	Very little
	S.A.		much	a bit		
a. Enco	ouraging you to spend significant amounts of time	studying	much	a bit	0	little
a. Enco	ouraging you to spend significant amounts of time iding the support you need to light you succeed at	studying this college	much	a bit		little
a. Enco b. Provi	ouraging you to spend significant amounts of time iding the support you need to help you succeed at ouraging contact among students from different ec	studying this college	much	a bit	0	little
a. Enco b. Provi c. Enco or eti	ouraging you to spend significant amounts of time iding the support you need to help you succeed at ouraging contact among students from different ec hnic backgrounds	studying this college	much	a bit	0	little
a. Enco b. Provi c. Enco or ett d. Helpi	ouraging you to spend significant amounts of time iding the support you need to help you succeed at ouraging contact among students from different echnic backgrounds ing you cope with your non-academic	studying this college	much	a bit	0 0	little
a. Enco b. Provi c. Enco or etl d. Helpi respo	puraging you to spend significant amounts of time iding the support you need to help you succeed at puraging contact among students from different echnic backgrounds ing you cope with your non-academic onsibilities (work, family, etc.)	studying this college	much	a bit	0 0 0	little
a. Enco b. Provi c. Enco or etl d. Helpi respo e. Provi	ouraging you to spend significant amounts of time iding the support you need to help you succeed at ouraging contact among students from different echnic backgrounds ing you cope with your non-academic	studying this college onomic, social, and racia	much	a bit	0 0	little

About how many hours do you spend in a typical		1	1	1	1	More
7-day week doing each of the following?	None	1 – 5	6 - 10	11 - 20	21 - 30	than 3
a. Preparing for class (studying, reading, writing, rehearsing,						
doing homework, or other activities related to your program)		0	0		0	0
b. Working for pay	0	0	0	0	0	0
c. Participating in college-sponsored activities (organizations,						
campus publications, student government, intercollegiate or						
intramural sports, etc.)	0		0	0	0	
d. Providing care for dependents living with you (parents,						_
children, spouse, etc.) e. Commuting to and from classes	0	0	0	0	0	0
Mark the number that best represents the quality of your rela	ationshi	ps with	people	at this c	ollege.	
Your relationship with:						
a. Other Students	_					
Friendly,	5.	Unfrien	dly uns	unnorti	VΑ	
supportive, sense of belonging 7 6 5 4 3 2	W	sense o	of aliena	tion	vc,	
		P.				
b. Instructors		Unfrien ense d	1			
Available, helpful, sympathetic ⑦ ⑥ ⑤ ④ ③ ②	1	Unavail	able, ur	helpful	, unsym	pathet
c. Administrative Personnel & Offices						
c. Administrative Personnel & Offices Helpful, considerate, flexible 7 6 5 4 2 2	1	Unhelp	ful, inco	nsidera	te, rigio	l
How much has YOUR EXPERIENCE AT THIS COLLEGE cont	ributed	to	Very	Quite		Very
your knowledge, skills, and personal development in the foll	owing a	reas?	much	a bit	Some	little
a. Acquiring a broad general education			0	0	0	0
b. Acquiring job or work-related powledge and skills				0	0	0
c. Writing clearly and effectively				0	0	0
d. Speaking clearly and effectively			0	0	0	0
e. Thinking critically and analytically				0	0	0
f. Solving numerical problems			0	0	0	0
g. Using computing and information technology			0	0	0	0
h. Working effectively with others			0	0	0	0
i. Learning effectively on your own			0	0	0	0
j. Understanding yourself			0	0	0	0
k. Understanding people of other racial and ethnic backgrounds			0	0	0	0
Developing a personal code of values and ethics			0	0	0	0
m. Contributing to the welfare of your community			0	0	0	0
n. Developing clearer career goals						

PLEASE DO NOT MARK IN THIS AREA

13. This section has three parts. Please answer all three sections, indicating (1) HOW OFTEN you use the following services, (2) HOW SATISFIED you are with the services, and (3) HOW IMPORTANT the services are to you AT THIS COLLEGE.

		(1) Frequency of Use			(2) Satisfaction				(3) Importance			
		Often	Some- times	Rarely/ Never	Don't know/ N.A.	Very	Some- what	Not at all	N.A.	Very	Some- what	Not at all
a.	Academic advising/plannin	g 🔾	0	0	0	Ö	0	0	0	O	O	0
b.	Career counseling	0	0	0	0	0	0	0	0	0	0	0
c.	Job placement assistance	0	0	0	0	0	0	0	0	0	0	0
d.	Peer or other tutoring		0	0	0	0	0	0	0	0	0	0
e.	Skill labs (writing, math, etc	c.) 🔘								0	0	0
f.	Child care		0	0	0	0		0	0	0	0	0
g.	Financial aid advising						CO			0	0	0
	Computer lab		0	0	0		" A		0	0	0	0
i.	Student organizations							\circ		0	0	0
•	Transfer credit assistance	0	0	0	0	0		\bigcirc		0	0	0
	Services to students with							4.6	7			
	disabilities				0			0		0	0	0
14.	How likely is it that the from class or from this a. Working full-time b. Caring for dependent	college	e? (Plea	es woul ise resp	Mula e	you to each ite	m)	IV.	Very likely	Likely	Some- what likely	Not likely
	a. Working full-time					45				0	0	0
						4.			0	0	0	0
	c. Academically unprepared	ared							0	0	0	0
	d. Lack of finances e. Transfer to a 4-year c	allawa a		a lika s					0	0	0	0
15	How supportive are you	S	Tra.	•	ding thi	مدالمه عنا	202		○ Extre	,	○ So	omewhat
٦.	now supportive are you	ar irien	dsigity	A	iding <u>tin</u>	is coneç	ge :		O Quite	a bit	O N	ot very
16.	How supportive is your	imme	diate far	nily of y	our atte	nding <u>tl</u>	his colle	ge?	ExtreQuite			omewhat ot very
17.	Indicate which of the fo attending this college.								imary goal	Secon goa		Not a goal
	a. Complete a certificate	progra	ım						0	0		0
	b. Obtain an associate of								0	0		0
	c. Transfer to a 4-year c	ollege o	r univer	sity					0	0		0
	d. Obtain or update job-	related	skills						0	0		0
	e. Self-improvement/per	sonal e	njoymen	t					0	0		0
	f. Change careers								0	0		0

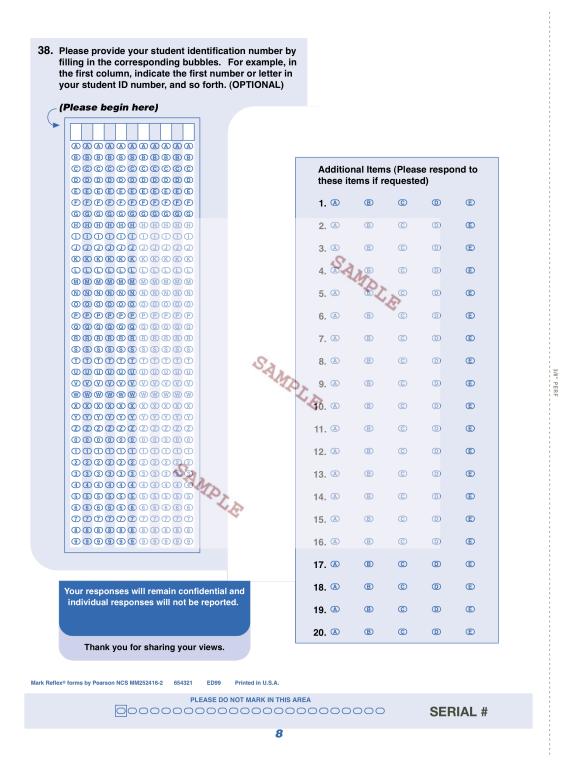
	PLEASE DO NOT MARK IN THIS AREA
SERIAL #	000000000000000000000000000000000000000

 Indicate which of the following are <u>sources</u> you use to pay your tuition at this college? (Please respond to each item) 	Major source	Minor source	Not a source
a. My own income/savings	0	0	0
b. Parent or spouse/significant other's income/savings	0	0	0
c. Employer contributions	0	0	0
d. Grants and scholarships	0	0	0
e. Student loans (bank, etc.)	0	0	0
f. Public assistance	0	0	0

19.	Since high school, which of the following types of schools have you attended other than the one you are now attending? (Please mark all that apply)
	Proprietary (private) school or training program Public vocational-technical school Another community or technical college 4-year college or university None
20.	When do you plan to take classes at this college again?
	I will accomplish my goal(s) during this term and will not be returning I have no current plan to return Within the next 12 months Uncertain At this college, is what represed to your every leading grade a worker.
21.	At this college, in what range is your overall college grade average?
	A A- to B+ B B- to C+ C C- or lower Do not have a GPA at this school Pass/fail classes only
22.	When do you most frequently take classes at this college? (Mark one only)
	Day classes (morning or afternoon)Evening classesWeekend classes
23.	How many TOTAL credit hours have you earned <u>at this college</u> , not counting the courses you are currently taking this term?
	○ None ○ 1-14 credits
	○ 15-29 credits
	○ 30-44 credits ○ 45-60 credits
	Over 60 credits

24.	At what other typ	es of institutions are you taking classes this term? (Please mark all that apply
	NoneHigh schoolVocational/techrAnother communication4-year college/uOther	nity or technical college
25.	How many classed None 1 class 2 classes 3 classes 4 classes or more	es are you <i>presently</i> taking at OTHER institutions?
26.	Would you recon	mend this college to a friend or family member?
	○ Yes ○ No	valuate your entire educational experience at this care pe?
27.	How would you e	valuate your entire educational experience at this care e?
	Excellent Good Fair Poor	
28.	Do you have chile	dren who live with you?
	○ Yes ○ No	dren who live with you?
29.	Mark your age gr	oup.
	Under 18 18 to 19 20 to 21 22 to 24 25 to 29 30 to 39 40 to 49 50 to 64 65+	SAMPLE
30.	Your sex:	
		ale
31.	Are you married?	
	○ Yes ○ No	
32.	ls English your n	ative (first) language?

33.	Are you an international student or foreign national?			
	○ Yes ○ No			
0.4				
34.	What is your racial identification? (Mark only one)			
	American Indian or other Native American			
	Asian, Asian American or Pacific IslanderNative Hawaiian			
	Black or African American, Non-Hispanic			
	White, Non-Hispanic			
	─ Hispanic, Latino, Spanish			
	Other			
35.	What is the highest academic credential you have earned?			
	None			
	High school diploma or GED			
	○ Vocational/technical certificate○ Associate degree			
	Bachelor's degree			
	Master's/doctoral/professional degree	My		
		TOT		
		MPLE		ı
36.	What is the highest level of education obtained by your.	Father	Mother	
	a. Not a high school graduate b. High school diploma or GED c. Some college, did not complete degree d. Associate degree e. Bachelor's degree f. Master's degree/1st professional g. Doctorate degree		0	
	b. High school diploma or GED	0	6	
	c. Some college, did not complete degree		0	
	d. Associate degree	0	0	
	e. Bachelor's degree			
	f. Master's degree/1st professional	0	0	
	g. Doctorate degree	0	0	
	h. Unknown	0	9	
37.	Using the list provided, please fill in the bubbles that corres	nond to the co	de indicatin	a vour
07.	program or major. Using the first column, indicate the first r	number in the i		
	the second column, he cate the second number in the prog	ram code.		,
	the second column, harcate the second number in the prog			
	140			
	₩			
	33			
	4			
	5			
	6			
	8			



APPENDIX C

Definitions of Engagement Factor Item Clusters for the Community College Survey of Student Engagement Data

Faculty Interactions Indicator composed of six survey items. A four-item response scale (*Never, Sometimes, Often, Very Often*) is used for the following college activities:

- Asked questions in class or contributed to class discussions
- Discussed grades or assignments with an instructor
- Talked about career plans with an instructor or advisor
- Discussed ideas from your readings or classes with instructors outside of class
- Received prompt feedback (written or oral) from instructors on your performance
- Worked with instructors on activities other than coursework

Class Assignments Indicator composed of three survey items. A four-item response scale (*Never, Sometimes, Often, Very Often*) is used for the following college activities:

- Made a class presentation
- Prepared two or more drafts of a paper or assignment before turning it in
- Worked on a paper or project that required integrating ideas or information from various sources

Exposure to Diversity Indicator composed of three survey items. A four-item response scale (*Never, Sometimes, Often, Very Often*) is used for the following college activities:

- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)
- Had serious conversations with students of a different race or ethnicity other than your own
- Had serious conversations with students who differ from you in terms of their religious beliefs, political opinions, or personal values

Collaborative Learning Indicator composed of four survey items. A four-item response scale (*Never, Sometimes, Often, Very Often*) is used for the following college activities:

- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments
- Tutored or taught other students (paid or voluntary)
- Participated in a community-based project as a part of a regular course Information Technology Indicator composed of two survey items. A four-item response scale (*Never, Sometimes, Often, Very Often*) is used for the following college activities:
 - Used the internet or instant messaging to work on an assignment
 - Used email to communicate with an instructor

Mental Activities Indicator composed of six survey items. A four-item response scale (*Never, Sometimes, Often, Very Often*) is used for the following college activity:

• Worked harder than you thought you could to meet an instructor's standards or expectations

A four-item response scale (*Very little, Some, Quite a bit, Very much*) is used for the following mental activity items:

- Analyzing the basic elements of an idea, experience, or theory
- Synthesizing and organizing ideas, information, or experiences in new ways
- Making judgments about the value or soundness of information, arguments, or methods
- Applying theories or concepts to practical problems or in new situations
- Using information you have read or heard to perform a new skill

School Opinions Indicator composed of six survey items. A four-item response scale (*Very little, Some, Quite a bit, Very Much*) is used for the following college opinion items:

- Encouraging you to spend significant amounts of time studying
- Providing the support you need to help you succeed at this college
- Encouraging contact among students from different economic, social, and racial or ethnic backgrounds
- Helping you cope with your non-academic responsibilities (work, family, etc.)
- Providing the support you need to thrive socially

- Providing the financial support you need to afford your education Student Services Indicator composed of five survey items. A four-item response scale (Don't Know/N.A., Rarely/never, Sometimes, Often) is used for the following student services items:
 - Frequency: Academic advising/planning
 - Frequency: Career counseling
 - Frequency: Peer or other tutoring
 - Frequency: Skill labs (writing, math, etc.)
 - Frequency: Computer lab

Academic Preparation Indicator composed of four survey items. A five-item response scale (*None, Between 1 and 4, Between 5 and 10, Between 11 and 20, More than 20*) is used for the following academic preparation items:

- Number of assigned textbooks, manuals, books, or book-length packs of course readings
- Number of written papers or reports of any length

A seven-item response scale (*Ranging from 1 to 7, with scale anchors described: (1)* Extremely easy (7)Extremely challenging) is used for the following exam item:

- Mark the box that best represents the extent to which your examinations during the current school year have challenged you to do your best work at this college A six-item response scale (*None*, *1-5 hours*, *6-10 hours*, *11-20 hours*, *21-30 hours*, *More than 30 hours*) is used for the following time allotment item:
 - Preparing for class (studying, reading, writing, rehearsing, doing homework, or other activities related to your program)
- McClenney, K. M., & Marti, C. N. (2006) Exploring relationships between student engagement and student outcomes in community colleges: Report on validation research. Community College Survey of Student Engagement. Austin, TX: The University of Texas at Austin, 125-136.

APPENDIX D

Benchmark Descriptions for the

Community College Survey of Student Engagement Data

Active and Collaborative Learning Benchmark composed of seven survey items. A fouritem response scale (*Never, Sometimes, Often, Very often*) corresponds to the following Active and Collaborative Learning college activities:

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments
- Tutored or taught other students (paid or voluntary)
- Participated in a community-based project as a part of a regular course
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

Student Effort Benchmark composed of eight survey items. A four-item response scale (*Never, Sometimes, Often, Very often*) corresponds to the following Student Effort related college activities:

- Prepared two or more drafts of a paper or assignment before turning it in
- Worked on a paper or project that required integrating ideas or information from various sources
- Come to class without completing readings or assignments

A five-item response scale (*None, Between 1 and 4, Between 5 and 10, Between 11 and 20, More than 20*) is used for the following academic preparation item:

• Number of books read on your own (not assigned) for personal enjoyment or academic enrichment

A six-item response scale (*None, 1-5 hours, 6-10 hours, 11-20 hours, 21-30 hours, More than 30 hours*) is used for the following time allotment item:

• Preparing for class (studying, reading, writing, rehearsing, doing homework, or other activities related to your program)

A four-item response scale (*Don't Know/N.A., Rarely/never, Sometimes, Often*) is used for the following student services items:

- Frequency: peer or other tutoring
- Frequency: skill labs (writing, math, etc.)
- Frequency: computer lab

Academic Challenge Benchmark composed of ten survey items. A four-item response scale (*Never, Sometimes, Often, Very often*) is used for the following Academic Challenge related college activity:

• Worked harder than you thought you could to meet an instructor's standards or expectations

A four-item response scale (*Very little, Some, Quite a bit, Very much*) is used for the following mental activity items:

- Analyzing the basic elements of an idea, experience, or theory
- Synthesizing and organizing ideas, information, or experiences in new ways
- Making judgments about the value or soundness of information, arguments, or methods
- Applying theories or concepts to practical problems or in new situations
- Using information you have read or heard to perform a new skill

A five-item response scale (*None, Between 1 and 4, Between 5 and 10, Between 11 and 20, More than 20*) is used for the following academic preparation items:

- Number of assigned textbooks, manuals, books, or book-length packs of course readings
- Number of written papers or reports of any length

A seven-item response scale (Ranging from 1 to 7, with scale anchors described: (1) *Extremely easy;* (7) *Extremely challenging*) is used for the following exam item:

• Mark the box that best represents the extent to which your examinations during the current school year have challenged you to do your best work at this college A four-item response scale (*Very little, Some, Quite a bit, Very much*) is used for the following college opinion item:

- Encouraging you to spend significant amounts of time studying

 Student-Faculty Interaction Benchmark composed of six survey items. A four-item
 response scale (*Never, Sometimes, Often, Very often*) is used for the following StudentFaculty Interaction related college activities:
 - Used email to communicate with an instructor
 - Discussed grades or assignments with an instructor
 - Talked about career plans with an instructor or advisor
 - Discussed ideas from your readings or classes with instructors outside of class
 - Received prompt feedback (written or oral) from instructors on your performance
 - Worked with instructors on activities other than coursework

Support for Learners Benchmark composed of seven survey items. A four-item response scale (*Very little, Some, Quite a bit, Very much*) is used for the following college opinion items:

- Providing the support you need to help you succeed at this college
- Encouraging contact among students from different economic, social, and racial or ethnic backgrounds
- Helping you cope with your non-academic responsibilities (work, family, etc.)
- Providing the support you need to thrive socially
- Providing the financial support you need to afford your education

A four-item response scale (*Don't know/N.A., Rarely/never, Sometimes, Often*) is used for the following student services items:

- Frequency: Academic advising/planning
- Frequency: Career counseling
- McClenney, K. M., & Marti, C. N. (2006) Exploring relationships between student engagement and student outcomes in community colleges: Report on validation research. Community College Survey of Student Engagement. Austin, TX: The University of Texas at Austin, 125-136.

APPENDIX E

Consent to Participate in Research Study

Study Title: Success Course Participation and Engagement among Full- and Part-time

Community College Students (University of Texas at Austin IRB Protocol

#2008-08-0070)

Principle Investigators:

Maryellen T. Mills, Doctoral Candidate

Community College Leadership Program

Department of Educational Administration

The University of Texas at Austin

The University of Texas at Austin

Ph: 210-632-5799 Ph: 210-471-7551

You are being asked to participate in a focus group that is part of a study of student success courses. This form provides you with information about the study. The person in charge of this research will also describe this study to you and answer all of your questions. Please read the information below and ask any questions you might have before deciding whether or not to take part.

Your participation is entirely voluntary and you can refuse to participate without penalty. You can stop your participation at any time. To do so simply tell the investigator you wish to stop.

The purpose of this study is to explore the relationship between participating in a student success course (such as SDEV 101) and succeeding in college.

If you agree to be in this study, you will participate in a group discussion on student success courses. The discussion will be audio taped and transcribed so that no personally identifying information is included.

Total estimated time to participate in the study is 90 minutes.

Potential Risks

Questions will ask for rather harmless information, and all responses will be held confidential. Risks to you are minimal, but it's possible that a risk is currently unforeseeable. If you wish to discuss any risks you may experience, you may ask questions now or call the principal investigator listed on the front page of this form.

Potential Benefits

- By talking about college entry and/or success course experiences, you may obtain an
 increased sense of personal power and ownership about your academic decisions and
 aspirations.
- For community colleges and their administrators, practitioners, and faculty, findings from this study may assist in developing more effective programs for entering students.

Compensation

• No compensation is provided for participation in this study.

Confidentiality and Privacy Protections

The audio recording of this focus group will be securely stored and will be heard by the investigator and associates only for research purposes. Tapes will be erased after they are transcribed. Authorized researchers and members of the University of Texas at Austin Institutional Review Board have the legal right to review research records and will protect the confidentiality of those records. Any publications resulting from this research will exclude any information that might make it possible to identify you as a subject.

Contacts and Questions

If you have any questions about the study please ask now. If you have questions later, want additional information, or wish to withdraw your participation call the investigators conducting the study. Their names, phone numbers, and e-mail addresses are at the top of this page. If you have questions about your rights as a research participant, complaints, concerns, or questions about the research please contact Jody Jensen, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects at (512) 232-2685 or the Office of Research Support and Compliance at (512) 471-8871 or email: orsc@uts.cc.utexas.edu.

You may keep this information for your records.

Please complete the consent form below, tear it off, and return it to the Investigator.

Thank you!!

Study Title: Success Course Participation and Engagement among Full- and Part-time Community College Students (IRB Protocol #2008-08-0070)

Statement of Consent

I have read the above information and have sufficient information to make a decision about participating in this study. I consent to participate in the study.

Signature:

Date:

Signature of Person Obtaining Consent

Date:

APPENDIX F

Focus Group Participant Demographic Information

Study	Γitle:			Engagement Among B Protocol #2008-08-0070			
College	e:	Pa					
Please	answer	the following questi	ions:				
1.	Did you begin college here or elsewhere?hereelsewhere						
2.	colleg T		ster _	semesters have you attended this 3 semesters 4 or more semesters			
3.	fu	is your current enrol ll time (12 or more out art time (less than 12	credit hours)	this college?			
4.	Ar As Na Bl W H	is your racial identifuerican Indian or Natian, Asian American Itive Hawaiian ack or African American hite, Non-Hispanic ispanic, Latino, Spanther	ative American n or Pacific Isla rican, Non-Hisp				
5.	Your s		Fem	ale			
6.	U 18 20 22	your age group. nder 18 8 to 19 9 to 21 2 to 24 5 to 29	30 to40 to50 to65+	49			
7.	Please this co		the following be	est describes your goal(s) for attending			

To complete a certificate						
To obtain an Associate degre	ee					
To transfer to a 4-year college	ge or university					
Other	•					
Who in your family has attended	at least some college?					
Mother	Child					
Father	Spouse/partner					
Brother/sister	Legal guardian					
None of the above	0 0					
Would you recommend this college to a friend or family member?						
Yes	No					

APPENDIX G

Potential Focus Group Questions

Perceived Obstacles to Engagement:

- Thinking back to your first days here at this college, what kinds of obstacles did you run into? (expectations of college)
- Sitting in the parking lot on the first day of class, what were you most concerned about? (expectations of college)

Course Expectations:

- On the first day of class, what did you expect SDEV to be like? (expectations of college/course)
- Looking back over the course, how was it different than you expected it to be at the beginning? (expectations of college/course)

Course Value:

- What kinds of things/topics did you learn about in SDEV? (course content)
- What was the most valuable experience you had in SDEV? (active/collaborative learning, relationships)
- What was the most valuable thing you learned to do in SDEV? (active/collaborative learning)
- Since that first day in college, what is the most important thing you have learned about how to succeed in college? (course value)
- If you had to describe this class in a single word or a brief phrase, what might that be? *(course value)*
- How do you think your college experience would be different if you had not taken SDEV? (course value)
- Think about how this course has impacted your probability for success in college. Now think of a 1-5 scale measuring how you think this course will impact your successfully meeting your goals at this college. If 1 means you are much less likely to succeed because of this course, 3 means it made no difference, and 5 means you are much more likely to succeed because of this course, how would you rate the impact of SDEV on YOUR probability of succeeding in college? (course value)
- If you could change one thing about the class, what would you change? (course value)

- How does the effort and cost required by this course balance with the benefit you have received from the course? (course value)
- If you had a friend or relative who was going to enroll at this college, would you recommend SDEV to them? Why or why not? *(course value)*

Relationships:

- Who has helped you most in being successful in college? *(faculty interaction, relationships, student services)*
- When you need answers now, where do you go to find them? (faculty interaction, relationships, student services)
- How many of instructors on this campus know your name? (faculty interaction)
- How/where have you gotten to know people at this college? *(relationships)*

Policy and Process Environment of the Course:

- When did you register for classes for your first term at this college? (student support, expectations of college)
- What was your registration experience like? (student support, college processes)
- Tell me about how you learned about SDEV. (student support, college processes)
 - Who first told you about SDEV? (student support, college processes)
 - How was the class described to you? (student support, college processes)
 - What choices were you given about
 - Whether or not to take the class? (student support, college processes)
 - When to take the class? (student support, college processes)

APPENDIX H

CCSR Questions and Response Values

for Engagement Factors and CCSSE Benchmarks

Item and Scale	Engagement Factor	CCSSE Benchmark
College Activities (Never, Sometimes, Often, Very Often)		
Asked questions in class or contributed to class discussions	Faculty Interactions	Active and Collaborative Learning
Made a class presentation	Class Assignments	Active and Collaborative Learning
Prepared two or more drafts of a paper or assignment before turning it in	Class Assignments	Student Effort
Worked on a paper or project that required integrating ideas or information from various sources	Class Assignments	Student Effort
Come to class without completing readings or assignments	Student Effort	
Worked with other students on projects during class	Collaborative Learning	Active and Collaborative Learning
Worked with classmates outside of class to prepare class assignments	Collaborative Learning	Active and Collaborative Learning
Tutored or taught other students (paid or voluntary)	Collaborative Learning	Active and Collaborative Learning
Participated in a community- based project as a part of a regular course	Collaborative Learning	Active and Collaborative Learning
Used the Internet or instant messaging to work on an assignment*	Information Technology	
Used email to communicate with an instructor	Information Technology	Student-Faculty Interaction
Discussed grades or assignments	Faculty Interactions	Student-Faculty

with an instructor		Interaction
Talked about career plans with an instructor or advisor	Faculty Interactions	Student-Faculty Interaction
Discussed ideas from your readings or classes with instructors outside of class	Faculty Interactions	Student-Faculty Interaction
Received prompt feedback (written or oral) from instructors on your performance	Faculty Interactions	Student-Faculty Interaction
Worked harder than you thought you could to meet an instructor's standards or expectations	Mental Activities	Academic Challenge
Worked with instructors on activities other than coursework	Faculty Interactions	Student-Faculty Interaction
Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)	Exposure to Diversity	Active and Collaborative Learning
Had serious conversations with students of a different race or ethnicity other than your own	Exposure to Diversity	
Had serious conversations with students who differ from you in terms of their religious beliefs, political opinions, or personal values	Exposure to Diversity	
Mental Activities (Very little, Some, Quite a Bit, Very Much)		
Analyzing the basic elements of an idea, experience, or theory	Mental Activities	Academic Challenge
Synthesizing and organizing ideas, information, or experiences in new ways	Mental Activities	Academic Challenge
Making judgments about the value or soundness of information, arguments, or methods	Mental Activities	Academic Challenge
Applying theories or concepts to practical problems or in new	Mental Activities	Academic Challenge
	20 =	

situations

Using information you have read or heard to perform a new skill

Mental Activities

Academic Challenge

Academic Preparation (None, Between 1 and 4, Between 5 and 10, Between 11 and 20, More than 20)

Number of assigned textbooks, manuals, books, or book-length packs of course readings

Academic Preparation

Academic Challenge

Number of books read on your own (not assigned) for personal enjoyment or academic enrichment

Student Effort

Number of written papers or reports of any length

Academic Preparation

Academic Challenge

Exams (Responses range from 1 to 7, with scale anchors described: (1) Extremely easy (7) Extremely challenging)

Mark the box that best represents the extent to which your examinations during the current school year have challenged you to do your best work at this college

Academic Preparation

Academic Challenge

Opinions about Your College (Very little, Some, Quite a bit, Very much)

Encouraging you to spend significant amounts of time studying

School Opinions

Academic Challenge

Providing the support you need to help you succeed at this college

School Opinions

Support for Learners

Encouraging contact among students from different economic, social, and racial or ethnic backgrounds

School Opinions

Support for Learners

Helping you cope with your nonacademic responsibilities (work,

family, etc.)

School Opinions

Support for Learners

Providing the support you need to

thrive socially

School Opinions

Support for Learners

Providing the financial support you need to afford your education

School Opinions

Support for Learners

Time Allotment (*None, 1-5 hours, 6-10 hours, 11-20 hours, 21-30 hours, More than 30 hours*)

Preparing for class (studying, Academic Preparation Student Effort reading, writing, rehearsing, doing homework, or other activities related to your program)

Student Services (Don't Know/N.A., Rarely/never, Sometimes, Often)

Frequency: Academic Student Services Support for Learners advising/planning

Frequency: Career counseling Student Services Support for Learners

Frequency: Peer or other tutoring Student Services Student Effort

Frequency: Skill labs (writing, Student Services Student Effort

math, etc.)

Frequency: Computer lab Student Services Student Effort

Adapted from: Marti, C. N. (2006). [Questions, response values, and standardized coefficients for items in MBF and MEEP CFA model]. Unpublished chart.

APPENDIX I

Internal Review Board Letter of Approval



OFFICE OF RESEARCH SUPPORT THE UNIVERSITY OF TEXAS AT AUSTIN

P.O. Box 7426, Austin, Texas 78713 (512) 471-8871 -FAX (512 471-8873) North Office Building A, Suite 5.200 (Mail code A3200)

FWA: 2030 Date: 10/30/08

PI(s): Patricia A Somers Department & Mail Code: EDUC ADMIN D5400

Maryellen T Mills EDUC ADMIN D5400

IRB Approval-IRB Protocol #: 2008-08-0070

EXEMPT DETERMINATION OF RESEARCH PROPOSAL

Title: Success Course Participation and Engagement Among Community College Students

Approval Period: 10/30/2008 - 10/29/2011

Approval determination was based on the following Code of Federal Regulations: 45 CFR 46.101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:

(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Responsibilities of the Principal Investigator(s):

Research that is determined to be Exempt from IRB review is not Exempt from protection of the human subjects. The following criteria to protect human subjects must be met:

- The investigator assures that all investigators and co-investigators are trained in the ethical principles, relevant Federal Regulations and institutional policies governing human subject research;
- The investigator assures that human subjects will voluntarily consent to participate in the research when appropriate (e.g. surveys, interviews) and will provide subjects with pertinent information, e.g. risks and benefits, contact information for investigators and IRB chair, etc.;
- The investigator assures that human subjects will be selected equitably, so that the risks and benefits of the research are justly distributed.
- 4. The investigator assures that the IRB will be immediately informed of any information, unanticipated problems that would increase the risk to the human subjects and cause the category of review to be upgraded to Expedited or Full Review;
- 5. The investigator assures that the **IRB will be immediately informed of any complaints** from participants regarding their risks and benefits; and
- The investigator assures that confidentiality and privacy of the subjects and the research data will be maintained appropriately to ensure minimal risk to subjects.

Page 1 of 2 Exempt Determination of Research Proposal

REFERENCES

- Achieving the Dream: Community Colleges Count [AtD]. (2006, July). *Fact sheet: Core commitments of participating colleges*. Retrieved January 6, 2007 from http://www.achievingthedream.org/default.tp
- Achieving the Dream: Community Colleges Count. (2006, July). *Fact sheet: The Achieving the Dream initiative*. Retrieved January 6, 2007 from http://www.achievingthedream.org/default.tp
- Adelman, C. (2004). *Principal indicators of student academic histories in postsecondary education, 1972–2000.* Washington, DC: U.S. Department of Education, Institute of Education Sciences.
- Alamo Community College District. (2006a, May 1). Academic Recommendations #1 2005-2006. Retrieved February 15, 2009, from http://www.accd.edu/main/html/atd/pdf/continuity/admissions registration.pdf
- Alamo Community College District. (2006b, May 1). Academic Recommendations #5 2005-2006. Retrieved February 15, 2009, from http://www.accd.edu/main/html/atd/pdf/continuity/curriculum.pdf
- Alamo Community College District. (2009). Retrieved February 15, 2009, from *Web site*: http://www.accd.edu/
- American Association of Community Colleges. (2006). *Historical information*. Retrieved July 1, 2008, from American Association of Community Colleges *Web site*:
 - http://www.aacc.nche.edu/Content/NavigationMenu/AboutCommunityColleges/HistoricalInformation/Historical Information.htm
- American Association of Community Colleges. (2008). Fast facts about community college. Retrieved July 1, 2008 from www.aacc.nche.edu
- Astin, A. W. (1977). Four critical years. San Francisco: Jossey-Bass.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25, 297-308.

- Astin, A. W. (1985). Involvement: The cornerstone of excellence. Change, 17, 35-39.
- Astin, A. W. (1993). What Matters in College? Four Critical Years Revisited. San Francisco: Jossey-Bass.
- Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development, 40*, 518-529.
- Aurini, J. (2006, March). Crafting legitimation projects: An institutional analysis of private education businesses. *Sociological Forum*, 21, 83-111.
- Bailey, T. R., & Alfonso, M. (2005). Paths to persistence: An analysis of research on program effectiveness at community colleges (Vol.6, New Agenda Series). Indianapolis, IN: Lumina Foundation.
- Bailey, T. R., Alfonso, M., Calcagno, J. C., Jenkins, D., Kienzl, G, & Leinbach, T. (2004). *Improving student attainment in community colleges: Institutional characteristics and policies*. Retrieved July 15, 2007, from the Columbia University Community College Research Center *Web site*: http://ccrc.tc.columbia.edu/Research.asp
- Bailey, T. R., Calcagno, J. C., Jenkins, D., Kienzl, G., & Leinbach, T. (2005). *The effects of institutional factors on the success of community college students*. Retrieved July 10, 2007, from the Columbia University Community College Research Center *Web site*: http://ccrc.tc.columbia.edu/Research.asp
- Bailey, T. R., & Morest, V. S. (2006). Introduction: Defending the community college equity agenda. In T. R. Bailey & V. S. Morest (Eds.), *Defending the community college equity agenda* (pp. 1–27). Baltimore: The Johns Hopkins University Press.
- Baird, L. L. (2000). College climate and the Tinto model. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 62-80). Nashville, TN: Vanderbilt UP.
- Barefoot, B. O. (2002). Second national survey of first-year academic practices. Brevard, NC: Policy Center on the First Year of College.
- Barefoot, B. O., & Fidler, P. P. (1992). The national survey of freshman seminar programs: Continuing innovations in the collegiate curriculum. Columbia, S.C.: National Resource Center for the Freshman Year Experience and Students in Transition.

- Barton, P. E. (2002). *The closing of the education frontier?* Princeton, NJ: Educational Testing Service. (ERIC Document Reproduction Service No. ED 469984)
- Berger, J. B., & Lyon, S. C. (2005). Past to present: A historical look at retention. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 1-30). Westport, CT: American Council on Education/Praeger.
- Berkner, L., Horn, L., & Clune, M. (2000). *Descriptive summary of 1995–96 beginning postsecondary students: Three years later* (NCES 2000–154). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Bers, T. H. & Smith, K. E. (1991). Persistence of community college students: The influence of student intent and academic and social integration. *Research in Higher Education*, 32, 539-555.
- Boylan, H. R., & Saxon, D. P. (2005). What works in remediation: 30 years of research. Paper prepared for The League for Innovation in the Community College. Retrieved January 2, 2009 from http://www.ncde.appstate.edu/reserve_reading/what_works.htm
- Brainymedia.com. (2009). Albert Einstein quotes. Retrieved March 16, 2009, from www.brainyquote.com/quotes/authors/a/albert einstein.html
- Braxton, J.M., Ed. (2000). *Reworking the student departure puzzle*. Nashville, TN: Vanderbilt UP.
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). *Understanding and reducing college student departure*. ASHE-ERIC Higher Education Report, 30(3). San Francisco: Jossey-Bass.
- Braxton, J. M., & Lein, L. A. (2000). The viability of academic integration as a central construct in Tinto's interactionalist theory of college student departure. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 11-28). Nashville, TN: Vanderbilt UP.
- Braxton, J. M., McKinney, J. S., & Reynolds, P. J. (2006). Cataloging institutional efforts to understand and reduce college student departure. In E. P. St. John & M. Wilkerson (Vol. Eds.), New Directions for Institutional Research: Vol. 130. Reframing Persistence Research to Improve Academic Success (pp. 25-32). San Francisco: Jossey Bass.

- Braxton, J. M., Milem, J. F., Sullivan, A. S. (2000). The influence of active learning on the college student departure process: Toward a revision of Tinto's theory. *The Journal of Higher Education*, 71, 569-590.
- Braxton, J.M., & Mundy, M.E. (2001-2002). Powerful institutional levers to reduce college student departure. *Journal of College Student Retention*, *3*, 91-118.
- Braxton, J. M., Sullivan, A. S., & Johnson, R. M. (1997). Appraising Tinto's theory of college student departure. In J.C. Smart (Ed.), *Higher education: A handbook of theory and research* (pp. 107-164). New York: Agathon.
- Brint, S. G., & Karabel, J. (1989). *The diverted dream: Community colleges and the promise of educational opportunity in America, 1900-1985*. New York: Oxford University Press.
- Brock, T., Jenkins, D., Ellwein, T., Miller, J., Gooden, S., Martin, K., et al. (2007, May). Building a culture of evidence for community college student success: Early progress in the Achieving the Dream initiative. Retrieved July 1, 2007, from the MDRC Web site: http://www.mdrc.org/publications/452/full.pdf
- Bryant, A. N. (2001). ERIC review: Community college students recent findings and trends. *Community College Review*, 29, 77-93.
- Carl D. Perkins Vocational and Applied Technology Education Amendments of 1998. Pub. L. No. 105-332, § 20, 112 Stat. 3076 (1998).
- Carnegie Foundation for the Advancement of Teaching. (2007). Carnegie classifications. Retrieved June 1, 2008, from the Carnegie Foundation *Web site*: http://www.carnegiefoundation.org/ classifications/index.asp
- Carnevale, A.P., & Rose, S.J. (2003). *Socioeconomic status, race/ethnicity, and selective college admissions*. New York: Century Foundation.
- Catterall, M. and Maclaran, P. (1997). Focus group data and qualitative analysis programs: Coding the moving picture as well as the snapshots. *Sociological Research Online*, 2, n. p. Retrieved February 12, 2009 at http://www.socresonline.org.uk/socresonline/2/1/6.html
- Chen, X. (2005). First generation students in postsecondary education: A look at their college transcripts (NCES 2005–171). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

- Chen, X. (2007). *Part-time undergraduates in postsecondary education: 2003–04* (NCES 2007-165). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Chickering, A. W. (1969). Education and identity. San Francisco: Jossey-Bass.
- Chickering, A. W (1974). Commuting versus resident students: Overcoming the educational inequities of living off campus. San Francisco: Jossey-Bass.
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *Wingspread Journal*, 9, n. p.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (rev. ed.) San Francisco: Jossey-Bass.
- Choy, S. (2000). Low-income students: Who they are and how they pay for their education (NCES 2000–169). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Clark, M. R. (2005). Negotiating the freshman year: Challenges and strategies among first-year college students. Journal of College Student Development, 46, 296-319.
- Claunch, J. (2009, February 27). President's message: Achieving the Dream report. *La reVista*, 10, (n. p.). Retrieved March 1, 2009, from http://www.accd.edu/nvc/employees/pr/larevista/022709/president022709.htm
- Cofer, J. & Somers, P. (2000). Within-year persistence at two-year colleges. Community *College Journal of Research and Practice*, *24*, 785–807,
- Cohen, A. M. & Brawer, F. B. (2003). *The American community college (3rd ed.)*. San Francisco: Jossey-Bass.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Commission on the Future of Community Colleges. (1988). *Building communities: A vision for a new century*. Washington, D.C.: American Association of Community and Junior Colleges.
- Community College Survey of Student Engagement (CCSSE). (2006). *Act on fact: Using data to improve student success*. Austin, TX: Community College Leadership Program

- Community College Survey of Student Engagement (CCSSE). (2003-2009). Community College Survey of Student Engagement web site: http://www.ccsse.org/aboutccsse/aboutccsse.cfm
- Contreras, A. (2008, March 14). Many degrees of separation: States should take a stand. *Chronicle of Higher Education*, 54:A36.
- Cook, L. P. (2000). Constructing comprehensive programs on the two-year campus. In M. J. Fablich (Ed.), *Orientation planning manual 2000*. Pullman, WA: National Orientation Directors Association.
- Cross, K. P. (1976). Accent on leaning. San Francisco: Jossey-Bass
- Cuseo, J. B. (1997). Freshman orientation seminar at community colleges: A research-based rationale for its value, content, and delivery. (ERIC Document Reproduction Service No. ED411005).
- Dallal, G. E. (2007). The little handbook of statistical practices. Retrieved January 12, 2009, from http://www.tufts.edu/~gdallal/LHSP.HTM
- Derby, D. C., & Smith, T. (2004). An orientation course and community college retention. *Community College Journal of Research and Practice*, 28, 763-773.
- DiMaggio, P. J., & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147-60.
- Dougherty, K. (1994). *The contradictory college*. Albany, NY: State University of New York Press.
- Dowd, A. C. (2003). From access to outcome equity: Revitalizing the democratic mission of the community college. *The Annals of the American Academic of Political and Social Science*, 586, 92-119.
- Ellis, D. (1977). *Becoming a master student*. New York: Houghton-Mifflin.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: W. W. Norton & Co.
- Flores, R., & Hagan, B. (2008, June 26). It's about access [Electronic version]. *Diverse: Issues in Higher Education*, 25(10), 16-16.

- Florida Department of Education. (2006). *Taking student life skills course increases academic success* (Data Trend no. 31). Tallahassee, FL: Florida Department of Community Colleges and Workforce Education.
- Gardner, J. N. (1986). The freshman year experience. *College and University*, 61, 261-274
- Glass, J. C. Jr., & Garrett, M. S. (1995). Student participation in a college orientation course, retention, and grade point average. *Community College Journal of Research and Practice*, 19, 117–132.
- Gleazer, E. J. (1980). *The community college: Values, vision, and vitality.* Washington, DC: The Community College Press.
- Grubb, W. N. (1999). Honored but invisible: An inside look at teaching in community colleges. New York: Routledge.
- Grubb, W. N. (2001). "Getting into the world": Guidance and counseling in community colleges. Retrieved July 16, 2007, from the Columbia University Community College Research Center Web site: http://ccrc.tc.columbia.edu/Research.asp.
- Guba, E. G. and Lincoln, Y. S. 1989. *Fourth generation evaluation*. Newbury Park, CA: Sage.
- Hatch, J. A. (2002). Doing qualitative research in education settings. Albany: State University of New York Press.
- Hawking, S. (1996). *The illustrated A brief history of time* (Rev. ed.). New York: Bantam Books
- Higher Education Amendment of 1998. Pub L. No. 105–244, § 20, 112 Stat. 1581 et seq. (1998).
- Higher Education for Democracy: A Report of the President's Commission on Higher Education (Truman Commission). Vol. 1, Establishing the Goals. (1947). New York: Harper & Brothers.
- Hoachlander, G., Sikora, A.C., & Horn, L. (2003, June). Community college students: Goals, academic preparation, and outcomes. Postsecondary education descriptive analysis reports (NCES 2003-164). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

- Horn, L., & Berger, R. (2004). College persistence on the rise? Changes in 5-year degree completion and postsecondary persistence rates between 1994 and 2000 (NCES 2005–156).
 U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Hossler, D. (2005). Managing student retention: Is the glass half full or half empty, or simply empty? Paper presented at the 15th Annual Conference on Strategic Enrollment Management, November 13-16, 2005 Chicago, Illinois. Retrieved June 14, 2008, at the American Association of Collegiate Registrars and Admissions Officers Web site: http://www.aacrao.org/sem15/Managing Student Retention.pdf
- Houghton-Mifflin College Division. (n.d.). Meet the Authors of College Survival. Retrieved July 15, 2007 from the Houghton-Mifflin *Web site*: http://college.hmco.com/collegesurvival/resources/students/authors/d_b_ellis.ht ml
- Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education*, 70, 324-345.
- Johnson, R. M., Jr. (2000). Investigating the processes of persistence: Refining discourse analysis as a tool for generating new departure theory. In J. M. Braxton (Ed.) *Reworking the student departure puzzle* (pp. 157-169). Nashville, TN: Vanderbilt UP.
- Karp, M. M., O'Gara, L., & Hughes, K. L. (2008). Do support services at community colleges encourage success or reproduce disadvantage? An exploratory study of students in two community colleges (Working Paper No. 10). Retrieved June 10, 2008, from the Columbia University Community College Research Center Web site: Retrieved July 10, 2007, from the Columbia University Community College Research Center Web site: http://www.tc.columbia.edu/ccrc/
- Kozeracki, C. A. (2003). The effects of freshman-year programs at community colleges. *Community College Journal of Research and Practice*, 27, 439-443.
- Kuh, G. D. (2003). *The National Survey of Student Engagement: Conceptual framework and overview of psychometric properties*. Retrieved June 28, 2008, from the National Survey of Student Engagement *Web site*: http://nsse.iub.edu/pdf/conceptual_framework_2003.pdf
- Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2005). *Student success in college: Creating conditions that matter*. San Francisco: Jossey-Bass.

- Kuh, G. D., Pace, R. C., & Vesper, N. (1997). The development of process indicators to estimate student gains associated with good practice in undergraduate education. *Research in Higher Education*, 38, 435-454.
- Kuh, G. D., Schuh, J. H., Whitt, E. J., and Associates (1991). *Involving colleges:* encouraging student learning and personal development through out-of-class experiences. San Francisco: Jossey-Bass.
- Kuh, G. D., Whitt, E. J., and Strange, C. C. (1989, March). The contributions of institutional agents to high quality out-of-class experiences for college students, Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Labaree, D. F. (1997). How to succeed in school without really learning: The credentials race in American education. New Haven, CT: Yale University Press.
- Labaree, D. F. (2006). Mutual subversion: A short history of the liberal and the professional in American higher education. *History of Education Quarterly*, 46: 1, 1-15.
- Lerner, R. M. (1998). Theories of human development: Contemporary perspectives. In W. Damon (Series Ed.) & R. M. Lerner (Vol. Ed.) *Handbook of child psychology: Vol. 1, Theoretical models of human development* (pp. 1-24). New York: Wiley.
- Lincoln, Y. S., & Guba, E. E. (1985). Research, evaluation, and policy analysis: Heuristics for disciplined inquiry. *Policy Studies Review*, *5*, 546-565.
- Mamrick, M. (2005). The first-year seminar: A historical perspective. In Tobolowsky, B.F., *The 2003 national survey on first-year seminars: Continuing innovations in the collegiate curriculum* [Monograph No, 41], 15-18. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Marti, C. N. (2009). Dimensions of student engagement in American community colleges: Using the Community College Student Report in research and practice. *Community College Journal of Research and Practice*. 33, 1-24.
- Marti, C. N. (2008). Latent postsecondary persistence pathways: Educational pathways in American two-year colleges. *Research in Higher Education*, 49, 317-336.

- McCabe, R. (2000). *No one to waste*. Washington, DC: American Association of Community Colleges.
- McClenney, K. M. (2004). Keeping America's promise. In K. Boswell and C.D. Wilson (Eds.) *Keeping America's promise: A report on the future of the community college.* (pp. 7-18). Denver, CO: Education Commission of the States and the League for Innovation in the Community College.
- McClenney, K. M., & Marti, C. N. (2006) Exploring relationships between student engagement and student outcomes in community colleges: Report on validation research. Community College Survey of Student Engagement. Austin, TX: The University of Texas at Austin.
- Mellow, G. O., & Heelan, C. (2008). Minding the dream: The process and practice of the American community college. Lanham, MD: Rowman & Littlefield
- Mertens, D. M. (2005). Research and evaluation in education and psychology: Integrating Diversity with quantitative, qualitative, and mixed methods. Thousand Oaks, CA: Sage.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. American Journal of Sociology, 83, 340-363.
- Meyers, R. D. (2003). *College success programs*. Washington, DC: Pathways to College Network Clearinghouse.
- Miles, M. B., & Huberman, M. A. (1994). Qualitative data analysis: An expanded sourcebook (2nd ed.). Thousand Oaks, CA: Sage.
- Mills, K. (2003, Winter). *National cross talk* [Electronic version]. National Center for Public Policy and Higher Education. ED No. 473684.
- Mohammadi, J. (1996). Exploring retention and attrition in a two-year public community college. *VCCA Journal*, *10*: 39-50.
- Napoli, A. R., & Wortman, P. M. (1996). A meta-analytic examination of the relative importance of academic and social integration among community college students. *Journal of Applied Research in the Community College*, 4, 5-21.
- Napoli, A. R. & Wortman, P. M. (1998). Psychosocial factors related to retention and early departure of two-year community college students. *Research in Higher Education*, 39, 419-455.

- National Center for Education Statistics (NCES). *Digest of Education Statistics*, 2006. Retrieved July 1 from http://nces.ed.gov/programs/ digest/d06/
- National Center for Public Policy and Higher Education [NCES]. (2006). *Measuring up 2006: The national report card on higher education*. Retrieved October 30, 2006 from http://measuringup.highereducation.org/
- National Defense Education Act of 1958, Pub. L. No. 85-864, § 20 U.S.C. 401 Stat. 1580 (1958).
- National Resource Center for the First Year Experience and Students in Transition. (n.d.) *National Resource Center history*. Retrieved July 10, 2007, from The National Resource Center for First-Year Experience and Students in Transition *Web site* at http://www.sc.edu/fye/center/history.html
- National Survey of Student Engagement (NSSE). (2007). *Overview*. Retrieved June 15, 2008, at http://nsse.iub.edu/html/origins.cfm
- Nora, A. (2006). *Reexamining the community college mission* [issue paper]. Retrieved June 19, 2008, from the American Association of Community Colleges *Web site*: http://www.aacc.nche.edu/Content/NavigationMenu/ResourceCenter/Projects_Partnerships/Current/NewExpeditions/IssuePapers/Reexamining_the_Community_College_Mission.htm
- Northwest Vista College. (2008). *Malcolm Baldrige National Quality Award application*. San Antonio, TX: Author.
- Northwest Vista College. (2008). *Northwest Vista college catalog* 2008-2009. Retrieved December 29, 2008, from http://www.accd.edu/nvc/students/catsched.htm
- Pace, C. R. (1984). *Measuring the quality of college student experiences*. Center for the Study of Evaluation University of California Los Angeles, Los Angeles.
- Palo Alto College. (2007). *Palo Alto college bulletin 2007-2009*, 22 (1). San Antonio: Author. Retrieved January 9, 2009, from http://www.accd.edu/pac/htm/Current/academics/catalogs.htm
- Pascarella, E. T. (2006). How college affects students: Ten directions for future research. *Journal of College Student Development, 47*, 508-520.

- Pascarella, E. T., Duby, P. B., & Iverson, B. K. (1983) A text and reconceptualization of a theoretical model of college withdrawal in a commuter institutions setting. *Sociology of Education*, *56*, 88-100.
- Pascarella, E. T. (1997). It's time we started paying attention to community college students. *About Campus*, 1, 14-18.
- Pascarella, E. T., & Terenzini, P. T. (1991). How college affects students: Findings and insights from twenty years of research. San Francisco: Jossey-Bass.
- Pascarella, E. T., & Terenzini, P. T. (2005). How college affects students: A third decade of research. San Francisco: Jossey-Bass.
- Pascarella, E. T., Terenzini, P. T., and Wolfle, L. M. (1986). Orientation to college and freshman year persistence/withdrawal decisions. *Journal of Higher Education*, 57, 153-174.
- Patton, L. C., Morelon, D., Whitehead, D., & Hossler, D. (2006). Campus-based retention initiatives: Does the emperor have clothes? In E. P. St. John & M. Wilkerson (Vol. Eds.), New Directions for Institutional Research: Vol. 130. Reframing Persistence Research to Improve Academic Success (pp. 9-24). San Francisco: Jossey Bass.
- Phillipe, K.A., & Sullivan, L.G. (2005). *National profile of community colleges: Trends and statistics* (4th ed.). Washington, DC: Community College Press.
- Pike, G. R., & Kuh, G. D. (2005). A typology of student engagement for American colleges and universities. *Research in Higher Education*, 46, 185-209.
- Popkewitz, T. S. (1980). Paradigms in educational science: Different meanings and purpose to theory. *Journal of Education*, *162*, 28-46.
- President's Commission on Higher Education. (1947). *Higher Education for American Democracy*. Washington, DC: Government Printing Office.
- Proust, Marcel. (1941). Remembrance of things past. London: Chatto and Windus.
- Reason, R. D., Terenzini, P. T, & Domingo, R. J. (2007). Developing social and personal competence in the first year of college. *The Review of Higher Education*, 30, 271-299.
- Rendon, L. I. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education*, 19 (1), 33-50.

- Rhodes, L., & Carifio, J. (1999). Community college student' opinions regarding the value of their freshman seminar experience. *Community College Journal of Research and Practice*, 23, 511–523.
- Rosenbaum, J. E., Deil-Amen, R., & Person, A.E. (2006). *After admission: From college access to college success*. New York: Russell Sage Foundation.
- Roueche, J. E., & Baker, G. A. III. (1987). Access and excellence: The open-door college. Washington, DC: The Community College Press.
- Roueche, J. E., Ely, E. E, & Roueche, S. D. (2001). *In pursuit of excellence: The Community College of Denver*. Washington, DC: The Community College Press.
- Roueche, J. E., & Jones, B. R. (2005). The entrepreneurial community college. Washington, DC: The Community College Press.
- Roueche, J. E., Johnson, L.F., & Roueche, S. D. (1997). *Embracing the tiger: The effectiveness debate and the community college*. Washington, DC: The Community College Press.
- Roueche, J.E., McClenney, K. M. & Milliron, M.D. (2006). *Strengthening student success: An integrated strategy with three components*. Grant proposal. The University of Texas at Austin.
- Roueche, J. E., Milliron, M. D., & Roueche, S. D. (2003). *Practical magic: On the front lines of teaching excellence*. Washington, DC: The Community College Press.
- Roueche, J. E., & Roueche, S. D. (1993). *Between a rock and a hard place: The at-risk student in the open-door college*. Washington, DC: The Community College Press.
- Roueche, J. E., & Roueche, S. D. (1999). *High stakes, high performance: Making remedial education work.* Washington, DC: The Community College Press.
- St. John, E. P. (2006). Lessons learned: Institutional research as support for academic improvement. In E. P. St. John & M. Wilkerson (Vol. Eds.), New Directions for Institutional Research: Vol. 130. Reframing Persistence Research to Improve Academic Success (pp. 95-107). San Francisco: Jossey Bass.

- St. John, E. P., & Wilkerson, M. (2006) Editors' Notes. In E. P. St. John & M. Wilkerson (Vol. Eds.), New Directions for Institutional Research: Vol. 130. Reframing Persistence Research to Improve Academic Success (pp. 1-7). San Francisco: Jossey Bass.
- St. Philip's College. (2008). *St. Philip's College bulletin 2008-2009*, *110* (1). San Antonio: Author. Retrieved January 11, 2009, from http://www.accd.edu/spc/main/catalog/cat08_09.pdf
- San Antonio College. (2008). *San Antonio College bulletin 2008-2009*, *81* (6). San Antonio: Author. Retrieved January 7, 2009, from http://www.accd.edu/sac/sacmain/schedule/bulletin_08-09/2008-2009%20Complete%20College%20Bulletin.pdf
- Schuetz, P. (2005). UCLA Community College Review: Campus environment: A Missing link in studies of community college attrition. *Community College Review*, 32, 60-80.
- Schuetz, P. G. (2007). *Influences of campus environment on adult community college* student engagement. (Doctoral dissertation, University of California at Los Angeles, 2007). Dissertation Abstracts International, 68, 11.
- Servicemen's Readjustment Act of 1944, Pub. L. No. 346-268, § 58, Stat. 284 (1944).
- Spady, W. G. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange*, 1, 109-121.
- Spady, W. G. (1971). Dropouts from higher education: Toward an empirical model. *Interchange*, 2, 38-62.
- Stovall, M. (2000). Using success courses for promoting persistence and completion. In P. Aragon (Vol. Ed.), New Directions for Community Colleges: Vol. 112. Beyond access: Methods and models for increasing retention and learning success among minority students (pp. 45-54).). San Francisco: Jossey Bass.
- Summerskill, J. (1965). Dropouts from college. In N. Sanford and J. Adelson (Eds.), *The American College*. New York: Wiley, 1965.
- Terenzini, P. T., Pascarella, E. T., & Blimling, G. S. (1996). Students' out-of-class experiences and their influence on learning and cognitive development: A literature review. *Journal of College Student Development* 37, 149–162.

- Texas Higher Education Coordinating Board (THECB). (2009). Higher Education Accountability System. Retrieved February 5, 2009 from Texas Higher Education Data Web site: http://www.txhighereddata.org/Interactive/accountability/
- Tierney, W. G. (2000) Power, identity, and the dilemma of college student departure. In J. M. Braxton, *Reworking the Student Departure Puzzle*, Nashville, TN: Vanderbilt UP.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45, 89-125.
- Tinto, V. (1982). Limits of theory and practice in student attrition. *Journal of Higher Education*, 536, 687-700.
- Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition (1st. ed.). Chicago: University of Chicago Press.
- Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition (2nd. ed.). Chicago: University of Chicago Press.
- Tinto, V. (2002). Taking student retention seriously: Rethinking the first year of college. speech presented at the annual meeting of the American Association of Collegiate Registrars and Admission Officers, April 15, 2002, Minneapolis, Minnesota.
- Tinto, V. (2006, September-October). Most colleges aren't like Derek Bok's. *Academe*, 92, n.p.
- Tinto, V., & Pusser, B. (2006). Moving from theory to action: Building a model of institutional action for student success. Retrieved April 24, 2008, from http://nces.ed.gov/IPEDS/research/pdf/Tinto_Pusser_ExecSumm.pdf
- Tobolowsky, B. F. (2005). *The 2003 national survey on first-year seminars: Continuing innovations in the collegiate curriculum* [Monograph No, 41]. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.
- Townsend, B. K., Donaldson, J., & Wilson, T. (2005). Marginal or monumental? Visibility of community colleges in selective higher education journals. *Community College Journal of Research and Practice*, 29, 123–135.

- Trochim, W. M. K. (2006). The social research methods knowledge base. Retrieved January 12, 2009, from http://www.socialresearchmethods.net/kb/
- Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (2005). Challenging and supporting the first-year student: A handbook for improving the first year of college. San Francisco: Jossey-Bass.
- U.S. Census Bureau. 2005-2007 American community survey. Retrieved December 29, 2008, from http://factfinder.census.gov/servlet/ACSSAFFFacts?_event=& ActiveGeoDiv=geoSelect&pctxt=fph&_lang=en&_sse=on&geo_id=16000US48 65000& state=04000US48
- U.S. Census Bureau. (2007). American factfinder. Retrieved December 29, 2008, from http://factfinder.census.gov/servlet/ACSSAFFFacts?_event=&ActiveGeoDiv=ge oSelect&pctxt=fph&_lang=en&_sse=on&geo_id=16000US4865000&_state=04 000US48
- U.S. Beacon (2009). Demographic information for San Antonio, Retrieved January 30, 2009 from http://www.usbeacon.com/Texas/San-Antonio.html
- U.S. Department of Education. (2006). A test of leadership: Charting the future of U.S. higher education. Washington, D. C.: U.S. Government Printing Office.
- U.S. Department of Veterans Affairs. (2007). *Born of controversy: The GI Bill of Rights*. Retrieved October 31, 2007, at the GI Bill *Web site*: http://www.gibill.va.gov/GI Bill Info/history.htm
- Valencia, R. R., Ed. (1997). The evolution of deficit thinking: Education thought and practice. London: The Falmer Press.
- Wild, L. & Ebbers, L., (2002). Rethinking student retention in community colleges. *Community College Journal of Research and Practice*, 26: 503 519.
- Wirt, J., Choy, S., Rooney, P., Sen, S. P. A., & Tobin, R. (2004). *The condition of education 2004* (NCES 2004–077). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Yin, R. K. (2009). Case study research: Design and methods, 4th ed. Thousand Oaks, CA: Sage.
- Zeidenberg, M., Jenkins, D., & Calcagno, J. C. (2007, June). *Do student success courses actually help community college students succeed?* New York: Community College Research Center.

Zwerling, L.S. (1976). Second best: The crisis of the community college. New York: McGraw-Hill.

VITA

Maryellen Temple Mills completed her Bachelor of Arts in English in 1976 at

Campbell College in Buies Creek, North Carolina. Upon graduation, she entered East

Carolina University in Greenville, North Carolina where she completed a Master of Arts

in Education in educational counseling in 1977. A few years after beginning her career

at Halifax Community College, she met and married a U.S. Air Force pilot and moved to

Australia. Two children and two moves later, she entered George Mason University in

Fairfax, Virginia, where she completed a Master of Arts in English. Subsequent moves

to Abilene, Texas; Burlington, New Jersey; Ramstein, Germany; and Alamogordo, New

Mexico presented opportunities to practice her skills as an educator in a variety of

settings. In 2003 the Mills family returned to Texas and settled in San Antonio. In May

of 2006, Maryellen entered the Graduate School at the University of Texas at Austin.

Maryellen is married to Col. Bryon M. Mills (USAF, Ret.). They have a son and

grandson in San Antonio and a daughter in Australia.

Permanent Address: 2030 Green Valley Road, Cibolo, Texas 78108

This manuscript was typed by the author.

326