

THESIS
3
2007



This is to certify that the
dissertation entitled

COLLEGE STUDENTS' REASONS TO ATTEND COLLEGE
AND LEARNING COMMUNITY PARTICIPATION

presented by

Jennifer P Hodges

has been accepted towards fulfillment
of the requirements for the

Ph.D. degree in Educational Administration

Kirk A. Kern
Major Professor's Signature

5/3/07
Date

PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.
MAY BE RECALLED with earlier due date if requested.

DATE DUE	DATE DUE	DATE DUE
04/03/10 2010		
MAY 18 2012 11 2 5 11		

**COLLEGE STUDENTS' REASONS TO ATTEND COLLEGE
AND LEARNING COMMUNITY PARTICIPATION**

By

Jennifer P. Hodges

A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of**

DOCTOR OF PHILOSOPHY

Department of Educational Administration

2007

ABSTRACT

COLLEGE STUDENTS' REASONS TO ATTEND COLLEGE AND LEARNING COMMUNITY PARTICIPATION

By

Jennifer P. Hodges

The purpose of the current study was to investigate the potential relationship between reasons for attending college and participation in a learning community. I was particularly interested in investigating the processes by which students shaped their own educational environments through the choices they made regarding curricular, co-curricular, and extra-curricular opportunities and the role reasons for attending college played in those processes. The specific focus of the study was the question: What relationship, if any, exists between Michigan State University College of Natural Science students' reasons to attend college and whether or not they participate in the Lyman Briggs School (LBS), a residential learning community. I used a mixed method approach, utilizing both a survey and semi-structured interviews.

The primary purpose of the survey was to explore the importance that participants placed on 30 specific reasons for attending college and whether or not those reasons were related to participation in a residential learning community. Factor analysis suggested five subscales of reasons for attending college: Individual Development, Civic Leadership, Personal Connections, Default-Indifferent, and Expectation-Driven. Demographic characteristics were examined for significant differences in learning community participation. There were no differences in participation based on sex, racial/ethnic identification, or social class. Degree aspiration and parent's educational attainment did show a significant difference between those who chose to participate in a

learning community program and those who did not. Both the individual survey questions and the subscales were examined to determine if any of these items was related to the decision to participate in a learning community program. Five individual items were significantly different.

The 23 semi-structured interviews resulted in four themes about the purpose of college: preparing for life after college, broadening horizons, meeting new people, and taking advantage of the opportunity in order to be a role model to others. The first theme had five components: determining their calling, learning to be an adult/growing up, acquiring general knowledge needed for life after college, gaining the credential necessary for their chosen career, and learning specific skills/knowledge. The participants also talked about how their ideas about the purpose of college were shaped by parents and other family members, high school teachers and counselors, peers, higher education institution official representatives, the media, and current college students.

In addition to talking about their goals for college, participants also shared their reasons for participation in a number of different curricular, co-curricular, and extra-curricular activities. These decisions were shaped by not only their reasons for attending college, but also by the perceptions they had about the value of the opportunities and the formulas they had developed for being a college student and for preparing for medical and/or graduate school. Regarding participation in the learning community, participants said that the LBS provided prestige, educational benefits, and logistical benefits. Non-participants expressed concern about not experiencing diversity of thought, the perceived difficulty of the LBS program, and the extra courses that would be involved.

Copyright by

JENNIFER P. HODGES

2007

ACKNOWLEDGEMENTS

An endeavor as significant as pursuing a doctoral degree is not simply one individual's journey but the culmination of interactions with and support provided by colleagues, friends, students, faculty, and family. My successful completion of this journey, my dissertation, could not have been possible without the support and encouragement of the individuals I acknowledge here.

First, I want to thank my committee: Kristen Renn, Jim Fairweather, Geoff Habron, and Matt Wawrzynski. I especially want to recognize the role Kris played in my development as a scholar. She encouraged me to take full advantage of opportunities to stretch my research wings beyond the capacity I thought possible. She is an inspiring mentor and a much valued friend. I am also indebted to Jim for his thoughtful comments on my papers and projects from my first course in the program to my last.

I am grateful for my cohort who shared my journey through classes and intellectual discussions over countless cups of coffee. I would not be the person I am today without the friendships I formed with my cohort mates. I am particularly thankful for Melissa McDaniels and all of our nerdy discussions about theoretical frameworks (or is it conceptual frameworks) and other occasionally haughty topics.

A number of my colleagues and friends at Michigan State and beyond encouraged me along the way by helping me balance my professional and personal obligations with my doctoral adventures. I extend a hearty thank you to Julie Amon, Bernadette Friedrich, Anne Hornak, Nancy Lange, Amy Radford-Popp, and Mary Woerner. I am indebted to

Philip Strong and Steve Poullos for assistance with contacting professors and gaining access to students.

Several faculty members provided me with access to their classes in order to recruit participants. I am very appreciative of their willingness to support my research. I also thank the 600+ students who took the time to complete my survey. I am particularly grateful to the 23 students who shared their goals and expectations for college with me during the interview portion of my study.

Finally, none of this would have been possible without the love and encouragement of my family. Although they can't always explain what I do for a living and often wonder why I seem to have spent most of my life in school, I have benefited from their support and their pride in me. I am particularly thankful for my mom, Judy Parker, and my dad, John Hodges. They have supported me in all of my academic endeavors and provided the foundation for my success.

TABLE OF CONTENTS

LIST OF TABLE	ix
LIST OF FIGURES	xi
CHAPTER 1	
Introduction	1
Measuring Students' Reasons for Attending College	4
Linking Students' Reasons for Attending College to Student Learning Outcomes	6
Conceptual Framework	7
Purpose of the Study.....	9
Research Design	10
CHAPTER 2	
Introduction	12
Students' Reasons for Attending College	12
Theoretical Framework	26
Learning Communities	33
Purpose of the Study.....	37
CHAPTER 3	
Introduction	38
Purpose of the Study.....	38
Research Approach.....	39
Research Design	40
Conclusion	66
CHAPTER 4	
Introduction	68
Scale Analysis	68
Reasons for Attending College Profiles	75
Difference Exploration	82
Conclusion.....	88
CHAPTER 5	
Introduction	90
Participant Description	91
The Purpose of a College Education	93
The Perception of the Lyman Briggs School as a Learning Environment ..	107
Formulas for Reaching College Goals	114
Conclusion.....	125

CHAPTER 6	
Introduction	126
A Model of the Relationship between Reasons for Attending and Participation	127
Conclusion.....	147
CHAPTER 7	
Introduction	148
The Findings from Phase 1: The Survey	149
The Findings from Phase 2: The Semi-Structured Interviews	153
Limitations.....	163
Implications for Practice	165
Areas for Future Research	169
Conclusions	171
APPENDICES	
Appendix A – Survey Instrument	172
Appendix B – Interview Protocol	175
Appendix C – Survey Consent Form	176
Appendix D – Interview Consent Form	177
REFERENCES	178

LIST OF TABLES

Table 1	First-Year, First-Time Student Demographics	47
Table 2	CEM 141 Fall 2006 enrollment	49
Table 3	Survey Respondent Demographics	52-53
Table 4	Survey Respondents, First-Year, First-Time Students	55-56
Table 5	Survey Items by Category.....	59
Table 6	Internal Consistency of Initial Subscales.....	69
Table 7	Comparison of Eigenvalues and Parallel Analysis	70
Table 8	Pattern Matrix for Five Factor Solution.....	71
Table 9	Structure Matrix for Five Factor Solution	72
Table 10	Component Correlation Matrix.....	73
Table 11	Factored Subscales with Coefficient Alpha.....	74
Table 12	Individual Development Subscale	77
Table 13	Civic Leadership Subscale.....	78
Table 14	Personal Connections Subscale	78
Table 15	Default-Indifferent Subscale.....	79
Table 16	Expectation-Driven Subscale.....	79
Table 17	Descriptive Statistics for Subscale Scores, Full Sample.....	80
Table 18	Descriptive Statistics for Subscale Scores, Cluster 1	81
Table 19	Descriptive Statistics for Subscale Scores, Cluster 2	81
Table 20	Descriptive Statistics for Subscale Scores, Cluster 3	81

Table 21 Learning Community Participants and Non-Participants by Cluster	
Group	82
Table 22 Degree Aspiration	84
Table 23 Mother’s Level of Education	85
Table 24 Father’s Level of Education.....	85
Table 25 Individual Item Comparisons for full sample	86
Table 26 Individual Item Comparisons for LBS and CNS non-participants	87
Table 27 T-test results.....	88
Table 28 Interview participant demographics.....	92

LIST OF FIGURES

Figure 1. A Model of the Relationship between Reasons to Attend College and Participation	129
Figure 2. Julie's participation in LBS	131
Figure 3. Drew's non-participation in LBS	131
Figure 4. Bryan's non-participation in LBS	132
Figure 5. Maggie's participation in LBS	132
Figure 6. Kathie's participation in LBS	133
Figure 7. Maggie's participation in LBS	133
Figure 8. Mingmei's participation in LBS	134
Figure 9. Maggie's participation in LBS	135
Figure 10. Ildi's non-participation in LBS	135
Figure 11: Maggie's decision to attend MSU	136
Figure 12: Anya's participation in volunteer activities	137
Figure 13. Kevin's plan to participate in research activities	137
Figure 14. Charlie's plan to be a Mentor	138
Figure 15. Jasmin's decision to participate in the Indian student organization	139
Figure 16. Anya's participation in Service	139
Figure 17. Anne's non-participation in Service	140
Figure 18. Natalie's willingness to explore the social aspects of the residence hall	140
Figure 19. Mingmei's participation in the PA program	141

Figure 20. Anne's non-participation in Study Abroad.....	142
Figure 21. John's decision to not pursue an engineering major	142
Figure 22. Ildi's explanation for not participating in Study Abroad	143
Figure 23. Kathie's search for involvement activities	144
Figure 24. Bryan's attendance at an opera	144
Figure 25. Heather's attendance at the Women's Leadership Conference	145
Figure 26. Dan's participation in the sailing club	145
Figure 27. Drew's participation in Study Abroad	147

CHAPTER 1

Introduction

When students come to college they are faced with a number of choices regarding their education. Prior to matriculation, students make choices about which institutional characteristics are most important to them (e.g., size, cost, academic selectivity) with input from a variety of sources, such as family, educators, peers, and information from higher education institutions (Hossler, Schmit, & Vesper, 1999). Much of the research on college choice has focused on who chooses to attend college and how factors leading to college attendance impact retention and degree completion (e.g., Cabrera, Burkum, & La Nasa, 2003; Tinto, 1993). Not as much is known about how students' reasons for attending college affect their learning and development.

Even after students have made their choices regarding whether to attend college and where to attend, they still have a number of decisions to make that will shape how they experience college. Although institutional policies sometimes restrict their options (e.g., on-campus residence requirements, remedial courses, financial aid requirements), students shape their own educational environments through the choices they make regarding curricular, co-curricular, and extra-curricular opportunities. Astin (1993b) referred to this phenomenon as “self-produced environmental experiences” (p. 83).

Research on the impact of college on students has often focused on Astin's (1984) proposition that the amount of student learning is proportional to the quantity and quality of student involvement (Pascarella & Terenzini, 1991, 2005). Astin (1984) posited that “the effectiveness of educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement” (p. 308). Similarly, recent

research by Kuh, Kinzie, Schuh, and Whitt (2005a, 2005b) has focused on how institutions can promote student engagement, defined as “the amount of time and effort students put into their studies and other activities that lead to the experiences and outcomes that constitute student success” (2005a, p. 4).

Increased interest in how institutions can encourage students to engage more purposefully in the college experience has led to a variety of suggestions about how to enhance the quality of undergraduate education. These recommendations have focused on the outcomes of a college education as well as on how institutions should structure the delivery of educational opportunities. The Association of American Colleges and Universities (AAC&U) (2002, 2005) argued that fostering liberal education outcomes is the best way to prepare students for the future. The American College Personnel Association (ACPA) and the National Association of Student Personnel Administrators (NASPA) advocated for an integration of curricular and co-curricular learning that would lead to transformative education (Keeling, 2004). Chickering and Gamson (1987) proposed that good practice in undergraduate education encourages student-faculty contact, cooperation among students, and active learning; gives prompt feedback; emphasizes time on task; communicates high expectations; and respects diverse talents and ways of learning.

These recommendations have spurred a number of pedagogical innovations and programmatic initiatives such as: collaborative learning, active learning, experiential education, service learning, online and hybrid courses, study abroad programs, and learning communities (Keeling, 2004; Poindexter, 2003; Schoem, 2002; Steffes, 2004). Cross (1998) noted that learning community programs are especially popular because

they provide a space for the social construction of knowledge, they allow for more faculty-student interaction, and they help institutions “meet their missions of educating students for lives of work and service” (p. 11). The efficacy of any of these strategies for enhancing undergraduate education is contingent on students’ participation and quality involvement.

Bloomer and Hodkinson (1997, 1999, 2000) posited that students’ approaches to college, such as decisions about participating in specific learning opportunities, are influenced by their ideas about the purpose of college. A greater understanding of how students construct their reasons for attending college and how those reasons influence their choices regarding involvement in the college experience could help educators develop a more nuanced understanding of why a common learning experience might result in a variety of learning outcomes.

Students’ views about the purposes of postsecondary education have been referred to by a number of labels such as: motivations (e.g., Côté & Levine, 1997), goals (e.g., Stark, Shaw, & Lowther, 1989), purposes (e.g., Bloomer & Hodkinson, 2000), aspirations (e.g., Hossler, Schmit, & Vesper, 1999), expectations (e.g., Miller, Bender, Schuh, & Associates, 2005), dispositions (e.g., Terenzini & Reason, 2005), and reasons (e.g., Pryor et al., 2005). Throughout this dissertation, I will use the phrases *reason for attending college* or *reason to attend college* to represent all of these terms. When referring to specific studies, I will use the term chosen by the researcher. In the remainder of this chapter, I will introduce information regarding students’ reasons for attending college, discuss how students’ reasons for attending interact with their learning outcomes, and

propose the use of an ecology lens to explore the potential relationship between reasons for attending college and participation in a learning community.

Measuring Students' Reasons for Attending College

Since 1966 the Cooperative Institutional Research Program (CIRP) has surveyed first-time, full-time freshmen at American colleges and universities about their values, attitudes, and attributes to produce the annual *The American Freshmen National Norms*. Each year between 350,000 and 400,000 students from approximately 700 institutions participate in the survey (Sax, 2003). Included in the annual survey are questions about how important various reasons were in students' decisions to go to college. Survey participants are also asked about the importance of a number of general life goals.

Two pairs of questions often receive notice in the trends reports that CIRP produces every five years. From the question about reasons for deciding to go college, the answers for *To be able to make more money* and *To find my purpose in life* are often contrasted. From the question about general life goals the answers for *Being very well off financially* and *Developing a meaningful philosophy of life* are often contrasted. When the survey began in 1966, both *To find my purpose in life* and *Developing a meaningful philosophy of life* were viewed by students as much more important than *To be able to make more money* and *Being very well off financially* (Astin, Parrott, Korn, & Sax, 1997; Astin, Oseguera, Sax, & Korn, 2002). Since the late 1970s, the answers have reversed in priority. For 2005, 71% of students marked *To be able to make more money* as essential or very important while only 51.7% marked *To find my purpose in life* as essential or very important (Pryor et al., 2005). The gap between *Being very well off financially* and *Developing a meaningful philosophy of life* is even wider, 74.5% and 45% respectively.

Sax (2003) noted that trends in the *National Norms* are a reflection of not only changes in college students but also changes in American society. In a report commissioned by the AAC&U, Hart (2004) found that parents ranked the following outcomes of college as most important: sense of maturity, critical thinking skills, communication skills, problem-solving skills, and computer skills. The general public agreed that a sense of maturity was most important, but expressed that leadership skills and civic responsibility were also of high importance. Although business executives (potential employers of college graduates) agreed with parents that critical thinking skills, communication skills, problem-solving skills, and computer skills were of high importance, they also expected that the college experience would instill strong work habits, self-discipline, teamwork skills, and cultural/global awareness (Hart, 2004).

Hart (2004) found that students were focused on outcomes they felt would best serve them in future career success: sense of maturity, time-management skills, strong work habits, self-discipline, and teamwork skills. Though these student expectations mirror the more concrete outcomes employers are seeking, students do not seem to embrace the liberal education expectations that are endorsed by both employers and educators. It is not surprising that college students are commonly focused on developing career skills they think will benefit them in their immediate future. In a longitudinal study of the ambitions and educational plans of teenagers, Schneider and Stevenson (1999) found that “Most young people are worried about their futures and believe attaining a college degree is critical for finding a first real job” (p. 4).

Linking Students' Reasons for Attending College to Student Learning Outcomes

Although efforts to collect data regarding students' expectations of college outcomes are not uncommon, most research regarding institutional effectiveness has focused on whether students have adopted the institution's values and objectives regarding their education (Stark, et al., 1989). For example, Kuh, et al. (2005a, 2005b) recommended that to enhance student engagement institutions should strive to create an environment of shared responsibility for educational quality and student success based on a "shared commitment to the institution's mission" (2005a, p. 36). Educators disagree about the usefulness of incorporating students' goals because those goals are perceived to be career focused rather than intellectually focused (Stark & Lattuca, 1997). Tagg (2004) noted that students put more energy into personally selected goals, but educational goals prescribed by others are given priority through external mechanisms such as grading and certification. Because students' goals can contribute to their success or failure, Stark and Lattuca recommended that faculty at least be aware of, and ideally try to create a bridge between, students' learning goals and their teaching goals.

Utilizing Astin's (1993b) input-environment-output (I-E-O) model as a framework, Côté and Levine (1997, 2000) conceptualized motivation for college attendance as an input variable. They posited that motivation for college attendance, shaped by prior experiences with family, earlier educational environments, and the workplace, could be used as an input factor to predict college outcomes. They detailed five categories of motivation for college attendance: careerism-materialism, personal-intellectual development, humanitarian, expectation-driven, and default. They found that goodness of fit between a student's motivation for college and the institution's goals was

a better predictor of skills acquisition and academic achievement than intelligence, measured by IQ (2000).

Bloomer and Hodkinson (Bloomer, 1996, 1997; Bloomer & Hodkinson, 1997, 1999, 2000) proposed the concept of learner dispositions to shed light on how students shape their educational experiences. Learner dispositions are shaped by the social, cultural, political, economic, and other contexts within which the learning experiences occur and are composed of: learners' beliefs about the nature of knowledge, their views about the purpose of postsecondary education, the values they place on particular areas of study and learning experiences, their assessment of their abilities based on prior learning experiences, and their approaches to learning. Learner dispositions influence the learner's choice of learning opportunities with which to engage as well as the strategies to utilize in those various learning opportunities (Bloomer & Hodkinson, 1999).

Conceptual Framework

Astin (1993b) noted that understanding the effects of "self-produced environmental experiences" (p. 83) on students' learning outcomes presents a challenge to researchers because the variety of environmental experiences produced is as diverse as the number of students at an institution. Renn and Arnold (Renn 2003, 2004; Renn & Arnold, 2003) recommended the use of Bronfenbrenner's (1976, 1979, 1989, 1993, 1995) human ecology model of development, the *process-person-context-time* (PPCT) model, to study the processes that shape the college student experience. Renn (2004) noted that in the PPCT model, "the environment and the individual shape – and are shaped by – one another; the model represents a dynamic, shifting relationship of reciprocal influence" (p.

29). Bronfenbrenner's model provides a framework for studying not only the outcomes of the college experience, but also the processes that shape those outcomes.

In the PPCT model (Bronfenbrenner, 1976, 1973, 1989, 1993), the *person* is made up of the characteristics of the person, the person's subjective view of the situation, and the reciprocity between the person and the environment. Consequently, the impact of college on students cannot be understood without considering how the students conceived the educational environments with which they interacted. Prior to attending college, students' conception of the college environment is shaped by various aspects of the contexts in which they grew up, such as family, prior educational experiences, and the workplace (Côté & Levine, 1997).

Bronfenbrenner (1976, 1979, 1989, 1993) conceptualized the *context* as a hierarchy of systems at four levels moving from proximal to distal: the microsystem, the mesosystem, the exosystem, and the macrosystem. The contexts Côté and Levine (1997) noted, family, previous educational experiences, and the workplace, are examples of microsystems. Bloomer and Hodkinson (1997, 1999, 2000) focused on macrosystems, the larger social, cultural, political, economic contexts within which learners interact. Learning community programs represent mesosystems because the structures of the programs allow for students' different microsystems to interact. The forces that prompt institutions to develop innovative pedagogies and educational programs, such as institutional missions and calls for accountability, are examples of exosystems.

The *process* aspect of this study is focused on how students' characteristics interact with the structures created by the higher education environment to result in the outcome of participation in a learning community. Bronfenbrenner (1989, 1993)

introduced the concept of developmentally instigative characteristics (DIC) to explore how a person's characteristics evoked certain responses from the environment that might enhance or impede development. Similarly, learner dispositions influence the likelihood that a student will interact with various aspects of the educational environment (Bloomer & Hodkinson, 1997, 1999, 2000). Institutions provide students with a variety of learning opportunities that can potentially result in desired student learning outcomes.

Bronfenbrenner (1989) referred to these types of opportunities as ecological niches or "regions in the environment that are especially favorable or unfavorable to the development of individuals with particular personal characteristics" (p. 194).

Purpose of the Study

Examining all aspects of learner disposition or all ecological niches in the higher education environment was outside the scope of the current study. Instead I focused on reasons for attending college and the decision to participate in a learning community program. The aim of this study was to investigate the potential relationship between reasons for attending college and participation in a learning community. In addition, both the processes through which students develop their reasons for attending college and how students perceive the value of learning community participation were explored. Although the context of this study was learning communities, the findings may also shed light on students' decisions regarding participation in other pedagogical innovations and programmatic initiatives.

Specifically, this study was designed to address the following research question: What relationship, if any, exists between Michigan State University College of Natural Science students' reasons to attend college and whether or not they participate in the

Lyman Briggs School, a residential learning community? In order to explore the potential relationship, I also investigated the following:

- A. What are the profiles of reasons for attending college among first-year students enrolled in the College of Natural Science at Michigan State University?
- B. Are there differences between those students who chose to participate in the College of Natural Science's residential learning community program, the Lyman Briggs School, and those who chose not to participate in terms of their reasons for attending college?
- C. Through what processes do students develop their reasons for attending college?
- D. How do students perceive the impact learning community participation will have on their ability to achieve their reasons for attending college?

Research Design

The research design I used for this study is a sequential exploratory, mixed method design (Creswell, 2003; Creswell, Plano Clark, Gutmann, & Hanson, 2003; Onwuegbuzie & Teddlie, 2003). Phase one of the study involved a survey that focused on how relevant a variety of reasons for attending college are to the participants. Demographic data were also gathered through the survey. Phase two involved semi-structured interviews that focused on the processes used by the participants in constructing their reasons for attending college and their perceptions of the usefulness of the learning community opportunity.

The remainder of this dissertation consists of a literature review, the methodology used, the findings from both the survey and the semi-structured interviews, a proposed model of the relationship between reasons and participation, and implications of the

findings. Chapter 2 is an overview of the literature related to students' reasons for attending college. Chapter 3 consists of information regarding the methodology used for this study and includes an explanation of the conceptual framework, a discussion of the research approach, and a description of the study design. In Chapter 4, I present the findings from the survey. Chapter 5 contains the findings from the semi-structured interviews. In Chapter 6, I propose a model of the relationship between reasons to attend college and participation in curricular and co-curricular programming. The final chapter contains the implications of this study, a discussion of the limitations of the study, and areas of future inquiry.

CHAPTER 2

Introduction

This literature review includes four sections. The first section contains an overview of the research related to traditional age college students' reasons for attending college. The next section consists of a discussion of the use of Bronfenbrenner's (1976, 1979, 1989, 1993, 1995) human ecology model as a lens through which to study students' reasons for attending college. The third section covers the growing utilization of learning communities in American higher education. In the final section, I describe the purpose of this study.

Students' Reasons for Attending College

Although there is a plethora of research on students' experiences in college (e.g., Pascarella & Terenzini, 1991, 2005), students' reasons for attending college are not often the specific focus of research on American college students. Instead, information about students' reasons is incorporated within research on topics such as college choice (e.g., Cabrera & La Nasa, 2000) and peer cultures (e.g., Astin, 1993a). In this section of the literature review, I will explore research in which students' reasons for attending college was included. This includes research on college choice, societal views about the purpose of college, and typologies of peer culture. I will finish this section with an exploration of studies that have connected students' reasons for attending college to the outcomes of their college experiences.

Students' views about the purposes of postsecondary education have been referred to by a number of labels such as: motivations (e.g., Côté & Levine, 1997), goals (e.g., Stark, Shaw, & Lowther, 1989), purposes (e.g., Bloomer & Hodkinson, 2000), aspirations

(e.g., Hossler, Schmit, & Vesper, 1999), expectations (e.g., Miller, Bender, Schuh, & Associates, 2005), dispositions (e.g., Terenzini & Reason, 2005), and reasons (e.g., Pryor et al., 2005). Throughout this literature review, I will use the phrases *reason for attending college* or *reason to attend college* to represent all of these terms. When referring to specific studies, I will use the term chosen by the researcher.

College Choice

In order to understand the relationship between students' reasons for attending college and the choices they make within the college environment, it is important to consider the processes that shaped their initial interest in going to college. Hossler, Schmit, and Vesper (1999) explored how parents and students negotiated the decision to apply to and attend college. During an eight year longitudinal study, they surveyed close to 5000 families. In addition, they interviewed 56 of the families surveyed. The longitudinal design allowed them to examine students' aspirations for college attendance as ninth graders and then compare those aspirations with educational achievements four years after high school graduation.

Hossler et al. (1999) looked at four stages of college choice: predisposition, search, choice, and actualization. They found that students had developed stable postsecondary education plans by the time they had completed ninth grade and that those plans were most strongly shaped by parents. During the search stage, which takes place primarily during the sophomore and junior years, students made decisions about the institutional characteristics that were most important to them (e.g., size, cost, academic selectivity). In this stage, students were primarily influenced by external sources of information such as teachers, guidance counselors, and college admissions personnel.

During the choice stage, the realities of cost and high school performance played a significant role in determining the schools to which students eventually applied. Once students were offered admission, the most important factor in whether students actually went to college, the actualization stage, was strong support and encouragement from their parents.

College Choice of Specific Populations

Much of the recent research on college choice has built on the work of Hossler et al. (1999) and has focused on the college going choices of high-risk populations such as: underrepresented minorities, first-generation college students, and low socioeconomic status (SES) students (e.g., Cabrera, Burkum, & La Nasa, 2003; Cabrera & La Nasa, 2000; Hamrick & Stage, 2004). These studies have considered not only how high-risk students entered the college going pipeline but also how these students fared once in college. Research has consistently found that SES is one of the best predictors of degree attainment.

Perna (2000) suggested that research which included social and cultural capital in addition to economic factors would provide a better understanding of the full impact of SES. She posited that social capital and cultural capital can both contribute to a student's success in college. Social capital includes networks of information regarding resources, norms, values, and expected behaviors which enable a person to achieve their goals (Coleman, 1998). Cultural capital involves the factors that make up a person's social class (Bourdieu & Passeron, 1990).

From the research on college choice, there is evidence that parents, previous schooling, and SES have an impact on whether and how students matriculate into

postsecondary education. In addition, students' social capital and cultural capital equip them with cues about what to expect and how to act within the college environment. The next section explores the messages that students receive from society about the reasons for attending college.

Societal Views on the Purpose of College

As college attendance and college costs have grown, a variety of constituents have weighed in on the role that postsecondary education should play in American society. For example, in September 2005 the Secretary of Education created the Commission on the Future of Higher Education to devise a comprehensive national strategy for higher education's future (Field, 2005a; Office of the Secretary, 2005a). The commission was charged with focusing on issues such as access, affordability, accountability, work-force preparedness, quality, and global competitiveness (Field, 2005b; Office of the Secretary, 2005b).

The federal government is not alone in its efforts to determine the appropriate outcomes of college attendance. The Association of American Colleges and Universities (AAC&U) (2002, 2005) suggested that in order to prepare students for the future, institutions of higher education should foster liberal education outcomes, including: knowledge of human cultures and the natural and physical world; intellectual and practical skills; individual and social responsibilities; and integrative learning. In *Learning Reconsidered* (Keeling, 2004), the American College Personnel Association (ACPA) and the National Association of Student Personnel Administrators (NASPA) advocated for transformative learning which would result in student learning outcomes in the following areas: cognitive complexity; knowledge acquisition, integration, and

application; humanitarianism; civic engagement; interpersonal and intrapersonal competence; practical competence; and persistence and academic achievement.

Attempts have also been made to determine what parents, the general public, employers, and students themselves feel are the most important outcomes of higher education. In a report commissioned by the AAC&U, Hart (2004) found that parents ranked the following outcomes of college as most important: sense of maturity, critical thinking skills, communication skills, problem-solving skills, and computer skills. The general public agreed that a sense of maturity was most important, but expressed that leadership skills and civic responsibility were also of high importance. Although business executives (potential employers of college graduates) agreed with parents that critical thinking skills, communication skills, problem-solving skills, and computer skills were of high importance, they also expected that the college experience would instill strong work habits, self-discipline, teamwork skills, and cultural/global awareness (Hart, 2004).

Hart (2004) found that students were focused on outcomes which they felt would best serve them in future career success: sense of maturity, time-management skills, strong work habits, self-discipline, and teamwork skills. Though these student expectations mirror the more concrete outcomes employers are seeking, students do not seem to embrace the liberal education outcomes that are endorsed by both employers and educators. It is not surprising that college students are commonly focused on developing career skills they think will benefit them in their immediate future. In their longitudinal study of high school students' goals and expectations, Schneider and Stevenson (1999) found that "Most young people are worried about their futures and believe attaining a college degree is critical for finding a first real job" (p. 4).

ti

In

to

h

In

in

c

fo

L

o

e

e

f

i

i

f

g

h

i

The Cooperative Institutional Research Program's (CIRP) annual survey of first-time, full-time freshmen at American colleges and universities has found similar results. In 2005, when students were asked about their reasons for attending college, three of the top four responses were related to future employment: *To be able to get a better job*, *To be able to make more money*, and *To get training for a specific career* (Pryor et al.). Interestingly, the reason that received the largest percentage of essential or very important responses was *To learn more about things that interest me*.

Educators disagree about the usefulness of incorporating students' goals into curricular and pedagogical planning because those goals are perceived to be career focused rather than intellectually focused (Stark & Lattuca, 1997). Stark, Shaw, & Lowther (1989) noted that most research regarding institutional effectiveness has focused on whether students have adopted the institution's values and objectives regarding their education. For example, Kuh, et al. (2005a, 2005b) recommended that to enhance student engagement institutions should strive to create an environment of shared responsibility for educational quality and student success based on a "shared commitment to the institution's mission" (2005a, p. 36). Tagg (2004) noted that students put more energy into personally selected goals, but educational goals prescribed by others are given priority through external mechanisms such as grading and certification. Because students' goals can contribute to their success or failure, Stark and Lattuca recommended that faculty at least be aware of, and ideally try to bridge between, the fact that students' learning goals may differ from their teaching goals.

Typologies of Collegiate Peer Groups

Since the 1960s, typologies of student peer culture have been created to examine and explain the impact of peer cultures on student learning and development (Renn & Arnold, 2003). Several of these typologies have used *reasons for attending college* as one of the characteristics for classification or group membership (e.g., Astin, 1993a; Katchadourian & Boli, 1985). One of the most widely cited is that of Clark and Trow (1966). Clark and Trow were interested in the impact of social structures on student life and relationships, and viewed “the college peer group as the locus for a set of processes which intervene between the larger social systems and the outcomes of college education” (p. 18). Clark and Trow defined four subcultures of college students based on their orientations to college emerging from two variables: identification with their college and involvement with ideas.

Students who had a high level of identity with their college and were highly involved with ideas were classified as Academics. Collegiates, on the other hand, identified with their college but were not very involved with ideas; they were focused on campus fun and had little interest in demanding academic pursuits. The two groups who did not identify with their college were the Nonconformists and the Vocationals. Nonconformists were involved with the ideas they encounter both within the classroom and from the larger society. The Vocationals had a low level of involvement with ideas; they were attending college to gain useful job skills and credentials (Clark & Trow, 1966).

By examining recent research that has referenced the typology above (e.g., Astin, 1993a; Kuh, Hu, & Vesper, 2000; Luo & Jamieson-Drake, 2004), it would appear that

Clark and Trow (1966) were only concerned with peer culture, but like the models of Tinto (1993), Weidman (1989), and Terenzini and Reason (2005), Clark and Trow were also focused on the impact of the larger organizational culture of college campuses. After outlining the four orientations, Clark and Trow posited that students are not only influenced by the peer subcultures on a college campus, but also by the institutional mission, the objectives of faculty and administrators, and the structural aspects of the institution, such as size, authority structure, and selectivity.

Careerism and Intellectualism

In the late 1970s, college students' reasons for attending college started to shift from being primarily intellectually focused to being predominantly career focused (Astin, Parrott, Korn, & Sax, 1997; Astin, Oseguera, Sax, & Korn, 2002). Curious about this trend and the impact it was having on their students, Katchadourian and Boli (1985) designed a study to explore the "meaning and significance of intellectualism and careerism for college students themselves" (p. 4). They were interested in the factors that shaped students academic and career attitudes and how those attitudes impacted major and career choices.

Katchadourian and Boli (1985) developed a typology of academic orientation based on students' reasons for attending college, the characteristics students desired in a major, and the characteristic students desired in a career. The four types, Careerists, Intellectuals, Strivers, and the Unconnected, were developed based on students' rankings of items related to careerism and intellectualism. Katchadourian and Boli's typology is different from Clark and Trow's in that the variables, careerism and intellectualism, were

not considered mutually exclusive. For example, the Striver is a person who scored high on both careerism and intellectualism.

Katchadourian and Boli (1985) found that parents, teachers, peers, and academic background all contributed to the academic and career attitudes of students at Stanford. Through their longitudinal design, they were able to explore how students' academic orientations shaped their college experiences. Careerists were less likely to change their career plans and interact with faculty; they engaged in fewer extracurricular activities and had average grades. Intellectualists were more likely to interact with faculty and participate in study abroad; they earned higher grades and were more satisfied with their college experience. Strivers were focused on both achieving career success and taking advantage of intellectual opportunities; they were active in both extracurricular activities and special academic projects. The Unconnected were more likely to stop out and were less involved in extracurricular activities; they had average grades and were less satisfied with their college experience.

Other Typologies

Several recent typologies have been developed using statistical techniques, such as factor analysis and cluster analysis, to reduce large sets of survey data into student categories (Astin, 1993a; Kuh, Hu, & Vesper, 2000; Luo & Jamieson-Drake, 2004). Astin used data gathered through the CIRP annual survey of freshmen and defined seven student types: the Scholar, the Social Activist, the Artist, the Hedonist, the Leader, the Status Striver, and the Uncommitted student. Kuh, et al. (2000) used data gathered from the College Student Experiences Questionnaire (CSEQ) and identified 10 student groupings "based on the nature of the college activities in which they engaged" (pp. 236-

237). The outcomes of both of these studies corroborated the results of other studies designed to delineate student peer groups.

Luo and Jamieson-Drake (2004) built on Astin's (1993a) work by utilizing CIRP data in conjunction with an exit survey. Their intent was to develop a typology which could be used to predict student learning outcomes and guide institutional decision making. They identified five student types, all of which paralleled at least one of Astin's groups. Utilizing the exit survey data, they were able to show that, by type: students displayed different interests in college activities, reported different levels of skill development, and expressed differing levels of satisfaction with the institution. Luo and Jamieson-Drake (2004) noted that recent studies (e.g., Astin, 1993a; Kuh et al., 2000) "left students' actual behaviors during their collegiate years unexamined or failed to take students' precollege characteristics into account" (p. 8).

Millennials

The typologies mentioned above were constructed by considering college students' values, attributes, attitudes, and actions. Another way to conceive peer groups is by their generational cohort (Coomes & DeBard, 2004). The current generation of traditional age college students is commonly referred to as the Millennial generation (Howe & Strauss, 2000, 2003; Strauss & Howe, 1991). This generation was born between 1982 and 2002 and first hit college campuses in 2000. In his conversation with Lowery (2001), Strauss described the Millennials as more sheltered and protected than previous generations, traditional yet comfortable with fresh approaches, pressured to succeed, and team oriented.

Coomes (2004) pointed out that technological advances such as cell phones, blogs, and instant messaging have allowed Millennials to experience relationships and connections in a different way than previous generations. Howe and Strauss (2003) noted that institutions of higher education will need to consider the following when working with Millennials: that they have a close relationship with their parents; that they are extremely focused on grades and performance; that they have been brought up in very busy and scheduled environments; that they are conventionally minded and prefer regulated environments; and that although they are ethnically diverse and majority female, they are less interested than previous generations in questions of racial and gender identity.

Whether based on generational cohort or attitudes and values, typologies of college students have been used to examine how students interact with the college environment. Several of these typologies (e.g., Astin, 1993a; Katchadourian & Boli, 1985) have specifically included *reasons to attend college* as a classification characteristic. Some (e.g., Kuh, Hu, & Vesper, 2000; Luo & Jamieson-Drake, 2004) have grouped students by their actions once on campus. In the next section, I will explore how *reasons to attend college* have been utilized to explore college outcomes.

Connecting Motivations and Learning Outcomes

As evidenced by the research discussed above, students arrive at college with a variety of reasons for attending. These reasons are shaped by their interactions with family, their prior educational experiences, and their peers. Although considerable research on college impact has included demographic factors (e.g., Pascarella &

Terenzini, 1991, 2005), not as much is known about the influence reasons for attending college have on college outcomes.

Motivation as an Input Variable

Utilizing Astin's (1993b) input-environment-output (I-E-O) model as a framework, Côté and Levine (1997, 2000) conceptualized motivation for college attendance as an input variable. They posited that motivation for college attendance, shaped by prior experiences with family, earlier educational environments, and the workplace, could be used as an input factor to predict college outcomes. Building on typologies of college students (e.g., Astin, 1993a), the work of Yankelovich (1972), and some of Côté's previous research (1984), they developed the Student Motivation for Attending University (SMAU) Scale. The SMAU includes five categories of motivation for college attendance: careerism-materialism, personal-intellectual development, humanitarian, expectation-driven, and default.

Côté and Levine (1997, 2000) suggested that in order for learning outcomes to be successfully obtained, students and the learning environment must meet halfway in a bilateral relationship. They also noted that particular student characteristics, such as an interest in intellectual development, may evoke a particular response from the learning environment, such as increased attention from faculty. To test this notion, they explored whether intelligence or motivation was a better predictor of skills acquisition and academic achievement. They found that goodness of fit between a student's motivation for college and institutional goals was a better predictor of skills acquisition and academic achievement than intelligence, measured by IQ (Côté & Levine, 2000).

When compared with other student typologies, it is interesting to note that Côté and Levine (1997) did not include a collegiate or social motivation in the SMAU. This type of motivation for college might be characterized as having a strong identification with their college, being interested in sports and student organizations, and being heavily involved in co- and extra-curricular activities (Clark & Trow, 1966; Horowitz, 1987; Kuh, et al., 2000). This motivational characteristic could very well have an impact on potential student learning outcomes. Côté and Levine's (1997, 2000) findings show the utility of considering motivation for college, a component of learner disposition, as an important input variable when assessing student learning outcomes.

Learner Disposition

From 1995 to 1997 Bloomer and Hodkinson (1997, 1999) conducted a longitudinal study of the experiences of British students as they transitioned into post-16 education (i.e., postsecondary education). The study took place amid increased calls for accountability of educational outcomes and return on investment in Further Education (FE), similar to those American institutions of higher education are experiencing today. Bloomer and Hodkinson used a sociological lens to explore students' goals for college attendance. They posited that students' views about the purpose of postsecondary education contributed to their learner disposition.

Learner dispositions are shaped by all aspects of a learner's life and influence the learner's choice of learning opportunities with which to engage as well as the strategies to utilize in those various learning opportunities (Bloomer & Hodkinson, 1999). Bloomer and Hodkinson focused on students' perceptions of their learning experiences and how those perceptions were shaped by the social, cultural, political, economic, and other

contexts within which the learning experiences occurred: “Learning and dispositions to learning are seen in terms of their relationship with other material and cultural phenomena, including the meaning which learners attribute to those phenomena” (Bloomer & Hodkinson, 2000, p. 591).

The concept of learner disposition (Bloomer, 1996, 1997; Bloomer & Hodkinson, 1997, 1999, 2000) can be broken down into two components, perceptions of learning and approaches to learning. Perceptions of learning are shaped by: learners’ beliefs about the nature of knowledge, their views about the purpose of postsecondary education, the value they place on particular areas of study and learning experiences, and their personal assessment of their abilities based on prior learning experiences. Bloomer and Hodkinson’s (1997, 1999) findings regarding beliefs about the nature of knowledge are consistent with the findings of cognitive development theorists such as Perry (1999) and Baxter Magolda (2002). Also, their findings regarding personal assessment of abilities are consistent with Bandura’s (1997) work on academic self-efficacy.

Bloomer (1996) introduced the term *studentship* to describe the ways in which learners approached learning opportunities. Similar to the phenomenon of self-produced environmental experiences (Astin, 1993b), through studentship learners “*act upon* the learning opportunities offered to them by *making* their own curriculum” (p. 141, italics in original). He found that students’ values, beliefs, and expectations regarding what, how, and why to learn were often in contradiction with those presented by the instructors in their courses. When those contradictions occurred, students’ responses took the following forms: strategic compliance, retreatism (absenteeism), rebellion (petty disruptions), or innovation. Innovation involved students devising novel ways of achieving the learning

they desired outside of the requirements of the course. When students' expectations corresponded with those of the instructor, students conformed to expectations and objectives of the instructor. This finding reinforces Stark and Lattuca's (1997) recommendation that educators attend to students' learning goals to create a bridge between institutional and student expectations of college outcomes.

Although some of the components of learner disposition, such as cognitive development, have already been explored within the context of American higher education, the concept of learner disposition is unique in its attempt to situate learners' perceptions and approaches within their habitus, the social conditions through which the learners themselves develop (Bourdieu & Passeron, 1990; Bloomer, 1996, 1997; Bloomer & Hodkinson, 1997, 1999, 2000). A learner's habitus is shaped by a number of external influences mentioned previously, such as peers, family, and previous schooling. In addition, broader social, cultural, and economic issues shape habitus.

In this section of the literature review, I provided an overview of the literature related to students' reasons for attending college. This included research related to college choice, society's views on the purpose of college, and typologies of college student peer culture. A common theme among this research was that students' ideas about college were shaped by their families and their prior learning experiences. In the next section, I will present a theoretical lens through which to explore how these forces shape students' reasons for attending college.

Theoretical Framework

Research on the impact of college on students has examined several aspects of the college experience, such as the transition to college (e.g., Tinto, 1993), outcomes of a

college education (e.g., skill acquisition, cognitive development, psychosocial development), and peer influences on the college experience (e.g., Renn & Arnold, 2003). While much evidence has been gathered to show that college impacts students (e.g., Pascarella & Terenzini, 1991, 2005), little is known about the processes that culminate in college outcomes. Renn and Arnold recommended the use of an ecology model of student development, based on Bronfenbrenner's (1976, 1979, 1989, 1993, 1995) *process-person-context-time* (PPCT) model, to explore the processes, as well as the outcomes, of students' interactions with the college environment. The model has primarily been used in the study of children's development in a variety of setting such as daycare, family, and school, but it has also recently been applied to the collegiate context (Renn, 2003, 2004; Renn & Arnold, 2003).

Person

In his early iterations of the ecology model, Bronfenbrenner's (1976, 1979) consideration of the person in his model was focused on the person's subjective view of the situation and the reciprocity between the person and the environment: "The impact of the setting cannot be understood without some information on how the setting, and its various elements, were perceived by the participants" (1976, p. 8). Consequently, the impact of college on students cannot be understood without considering how the students conceive the educational environment. This concept is similar to Bloomer and Hodkinson's (2000) contention that learner dispositions shape the meaning which learners attribute to their learning experiences.

In later iterations, Bronfenbrenner (1989, 1993) expanded his view of the person and acknowledged that the characteristics of the developing individual should be

considered more explicitly in examining the impact of interactions with the environment. He stressed that the characteristics of the person (e.g., personality, cognitive development, psychosocial development) constitute both the product and partial producer of development processes: “Personal characteristics are distinguished in terms of their potential to evoke response from, alter, or create the external environment, thereby influencing the subsequent course of the person’s psychological growth” (1989, p. 203).

Astin (1993b) viewed this prospect of self-produced environmental experiences as a challenge in studying the outcomes of a college education. The PPCT model allows for, in fact requires, inclusion of self-produced environmental experiences as part of the process. Côté and Levine’s (1997, 2000) finding that students with a personal-intellectual development motivation for college attendance received more attention from faculty than those with other types of motivations illustrates the impact of self-produced environmental experiences. Bronfenbrenner referred to these personal attributes that shape developmental processes as developmentally instigative characteristics.

Developmentally instigative characteristics influence the likelihood of interaction between the person and two aspects of the environment: the people present in the environment and the physical and the symbolic features of the environment.

Bronfenbrenner (1989, 1993) outlined four types of developmentally instigative characteristics. The first type, stimulus attributes, consists of “personal qualities that invite or discourage reactions from the environment of a kind that can disrupt or foster processes of psychological growth” (1993, p. 11). The second type is selective responsivity, “individual differences in reaction to, attraction by, and exploration of particular aspects of the physical and social environments” (1993, p. 12). Structural

proclivities relate to “the tendency to engage and persist in progressively more complex activities” (1993, p. 12). Participation in a residential learning community could be considered a more complex way to interact with the college environment than not participating. The last type, directive beliefs, are beliefs “about the relation of the self to the environment” (1993, p. 13). This last concept is related to the concepts of locus of control and self-efficacy (Bandura, 1997).

Process

Bronfenbrenner (1976, 1979, 1989, 1993, 1995) used the term proximal processes to describe the reciprocal interactions between the person and the environment that have the potential to impact development. In order to impact development, these interactions should occur on a regular basis over an extended period of time, be progressively more complex, and involve reciprocal interactions between the developing person and the other people, objects, or symbols in her or his environment (Renn, 2004). Both the person and the environment play an active role in constructing proximal processes.

Bronfenbrenner noted that “developmentally instigative characteristics do not *determine* the course of development; rather, they may be thought of as ‘putting a spin’ on a body in motion. The effect of that spin depends on the other forces, and resources, in the total ecological system” (Bronfenbrenner, 1993, p. 14, italics in original). In postsecondary education, students’ personal qualities may impact the attention and responses they receive from faculty, peers, and administrators. The students may or may not engage in learning opportunities they perceive as challenging based on their structural proclivity and sense of self-efficacy. Educators attempt to influence this engagement

through providing both challenges (forces) and supports (resources) (Sanford, 1962, 1967).

Institutions intentionally provide challenges and supports through both individual interactions between students and institutional agents (e.g., faculty, academic advisors, resident advisors) and through institutional structures such as academic curriculum, residential learning communities, intramural sports, and greek life. Bronfenbrenner (1989) referred to these types of opportunities as ecological niches or “regions in the environment that are especially favorable or unfavorable to the development of individuals with particular personal characteristics” (p. 194). Within the collegiate environment, learning communities could be considered ecological niches created for particular groups of students based on characteristics such as their academic interests, their residential locations, or their year in school.

Central to the process component of the PPCT model is the reciprocity involved in the person-environment interaction. Proximal processes not only affect the person, but also the environment. Renn (2004) noted that “this ongoing mutual accommodation manifests itself in changes in the individual and changes to the environment” (p. 33). For example, as the characteristics of the American college student have evolved (i.e., more non-traditional age students needing additional education), the landscape of higher education has evolved to include online options (e.g. the University of Phoenix). In turn, institutions have adapted pedagogies for online learning and these pedagogies impact the learning and development of students.

Context

Interactions between the student and various aspects of the environment happen within a context. Bronfenbrenner (1976, 1979, 1989, 1993) conceptualized the context as a hierarchy of systems at four levels moving from proximal to distal: the microsystem, the mesosystem, the exosystem, and the macrosystem. He noted that studies that do not consider the context implicitly presume that “the characteristics of the person have the same meaning irrespective of the culture, class, or setting in which they are observed, or in which the person lives” (1989, p. 202). A microsystem is an immediate setting containing the person, such as a family, peer group, residence hall, or major. Each microsystem provides opportunities for the person to interact with others persons who in turn belong to multiple microsystems.

The mesosystem is composed of the interactions among an individual’s various microsystems. Studies of the mesosystem allow for the consideration of not only the additive effects of researching more than one microsystem, but also the synergism of two or more elements. Experiences in one environment may influence a person’s behavior and development in another (Bronfenbrenner, 1976, 1979, 1989, 1993). Residential learning communities provide a mesosystem for a student’s residential and classroom microsystems to interact. A student may receive a number of messages (forces and resources) about reasons for attending college from his/her multiple microsystems. How a student makes meaning of those messages contributes to the student’s developmentally instigative characteristics, which in turn shape her/his interactions with the college environment.

The two outer systems are made up of environments with which the person does not directly interact, but that still impact the interactions that take place within the micro- and mesosystems. The exosystem contains events that “indirectly influence processes within the immediate setting in which the developing person lives” (Bronfenbrenner, 1989, p. 24). For example, external calls for accountability which lead to the creation of learning community programs or faculty reward structures which may or may not encourage participation in residential learning communities.

The macrosystem includes the characteristics of the culture, subculture, or other social structure within which the micro-, meso-, and exosystems reside. Bronfenbrenner (1993) suggested that developmental processes are likely to differ substantially by macrosystem and that culture should be represented in research designs rather than being controlled for. Bloomer and Hodkinson (1997, 1999, 2000) incorporated the macrosystem by focusing on how learner dispositions are shaped by the social, cultural, political, economic, and other contexts within which the learning experiences occurred.

Time

The final aspect of the PPCT model, time (chronosystem), has two components: the timing of biological and social transitions within the individual’s lifespan and the historical time period within which the person lives (Bronfenbrenner, 1995). As noted above, the current generation of traditional age college students, the Millennials (Howe & Strauss, 2000, 2003), have different characteristics than previous generations. Renn (2004) noted that the chronosystem is particularly pertinent to research on college students because of the evolution of access to higher education throughout American history.

10-11-12

S

b

f

R

U

C

The *process-person-context-time* (PPCT) model provides a unique lens for studying the experiences, learning, and development of college students. The model builds on the foundation of person-environment interaction theory (Lewin, 1935) by focusing on the processes that enhance or impede development. The PPCT model provides a framework for exploring the “differential outcomes of students who appear to be similar... [and] the similar outcome of students who appear to be very different from one another” (Renn, 2004, p. 47). For this study, I will focus on just one of the many ecological niches in the higher education environment, learning communities.

Learning Communities

As mentioned above, within the PPCT model (Bronfenbrenner, 1976, 1979, 1989, 1993, 1995) learning community programs could be thought of as ecological niches. Cross (1998) noted that learning community programs are popular because they provide a space for the social construction of knowledge, they allow for more faculty-student interaction, and they help institutions “meet their missions of educating students for lives of work and service” (p. 11). One of the challenges of understanding the impact of learning community programs is that the term is used to describe a variety of types of programs from clustered classes to residential living-learning programs (Taylor, Moore, MacGregor, & Lindblad, 2003). In this section, I will provide a description of the landscape of learning community programs, explore the research on the impact of learning communities on students learning outcomes, and discuss why students opt to take advantage of learning community opportunities.

The Landscape of Learning Community Programs

Learning community programs have experienced phenomenal growth in the last 25 years. Smith, MacGregor, Matthews, and Gabelnick (2004) noted that by 2000 over 500 institutions had adapted the learning community approach to their institutions. Smith et al. offered this definition for learning communities, “a variety of curricular approaches that intentionally link or cluster two or more courses, often around an interdisciplinary theme or problem, and enroll a common cohort of students” (p. 20). Curricular settings in which learning communities are used include: general education, first year initiatives, honors programs, developmental education, within the major, and within vocational and professional programs.

Shapiro and Levine (1999) noted that there was no common definition of what constituted a learning community program. Instead they enumerated characteristics shared by learning community initiatives, such as: small cohorts of students, integration of curriculum, academic and social support networks, socialization to the expectations of college, faculty collaboration, focus on learning outcomes, and community-based academic support. Shapiro and Levine (1999) also described four general configurations of learning communities: paired or clustered courses, cohorts in larger courses, team-taught programs, and residence-based programs.

The Impact of Learning Communities

Learning community programs exist at almost every type of postsecondary institution, public and private, two-year and four-year, urban and rural, and residential and commuter (Smith et al., 2004). Taylor et al. (2003) reviewed 32 formal research studies and 119 assessment reports to discern what conclusions could be drawn about

learning community impact. They found that, regardless of institutional characteristics, learning community programs had a positive impact on retention, GPA, and both student and faculty satisfaction. Taylor et al. noted that synthesizing the various research studies and assessment reports was challenging because of the diversity of program missions and configurations, and because of the range of methodologies used. They also commented on the lack of multi-institutional and national level studies.

An ongoing, multi-institutional study, funded by the Association of College and University Housing Officers International (ACUHO-I) has begun to address the need for multi-institutional research on residential learning communities. The National Study of Living-Learning Programs (NSLLP) began with a pilot study in 2003 and full scale data collection in 2004. The project is currently accepting participants for the next phase of data collection. Thirty-four institutions participated in 2004, representing over 270 different programs. Both living-learning program participants and non-participants were invited to complete a survey about their college experiences. Almost 24,000 students responded, a 33% response rate. Approximately 51% of respondents were living-learning program participants and 49% were non-participants (Inkelas et al., 2004).

Preliminary analysis of the study data indicated that students in living-learning programs were more likely to have positive peer interactions, perceive a positive residence hall climate, have a smoother transition to college, achieve academically, and be retained. They also had higher levels of civic engagement and lower levels of binge drinking. Surprisingly, there was no significant difference between participants and non-participants in cognitive development, self-confidence, and appreciation of racial/ethnic diversity. Inkelas et al. (2004) speculated that "It is possible that these higher order

psychosocial and cognitive indicators become more evident as long-term outcomes, and since this sample is predominated by first-year and sophomore students, the impact of L/L programs is not yet perceivable” (p. V-1).

Why Students Choose to Participate

The case for the expansion of learning community programs seems to operate under the assumption that increased offerings will automatically translate into increased student participation and with increased participation, increased learning outcomes. Although there is a growing body of research that supports the claim that learning community participation has a positive impact on college outcomes, not all researchers agree that learning communities are the best option for every student (Talbert & Boyles, 2005). Jones, Levine Laufgraben, and Morris (2006) examined the assumption that learning community participation benefits all students by exploring the reasons why students enrolled in learning communities and how students perceived the usefulness of various activities included in the learning community programs. They found that students’ reasons for registering for a learning community influenced how they perceived the helpfulness of the learning community experience. They recommended that faculty and those who evaluate learning communities be aware of the potential impact that students’ goals and reasons for registering can have on the outcomes of learning community participation.

Not much is known about the factors that shape a student’s decision to participate in a learning community. Few studies have focused specifically on the reasons students participate in learning communities, although some researchers have included reason for participation as a component in their research designs (e.g., Jones, et al., 2006). Some

reasons for learning community participation that have been explored include: convenience of scheduling, inclusion of required courses, interest in the learning community topic, opportunity to build connections with other students, support for the transition to college, additional support for difficult courses, and recommendation of advisor or peer (Jones et al., 2006; Shapiro & Levine, 1999; Smith et al., 2004). These reasons are primarily focused on specific aspects of the learning community program. Less is known about how students perceive the contribution learning communities could make to their ability to reach their goals. A more nuanced understanding of the decision to participate in a learning community may further educators' understanding of the differential outcomes of learning community participation.

Purpose of the Study

Students' arrive at college with a variety of ideas about the purpose of postsecondary education and the value of specific learning experiences. The literature on college choice and collegiate peer groups shows that these ideas are shaped by parents, previous schooling, peers, work experiences, and the broader social and cultural contexts in which they were raised. The purpose of this study was to explore what relationship, if any, exists between students' reasons to attend college and whether or not they participate in a residential learning community program. Although the context of the current study was learning communities, the findings may also shed light on students' decisions regarding participation in other pedagogical innovations and programmatic initiatives.

In the next chapter, I provide information regarding the methodology I used for the current study. The chapter also includes a discussion of the research approach and a description of the study design.

CHAPTER 3

Introduction

The purpose of this chapter is to describe the methodology I used for the current study. The chapter includes a discussion of the research approach and a description of the study design. The description of the study design includes a description of the research site and details about both the quantitative and the qualitative components of the study. The details of each component include information about the sampling procedures, the data collection, the instrument development, and an overview of the data analysis.

Purpose of the Study

The purpose of this study was to explore what relationship, if any, exists between Michigan State University College of Natural Science students' reasons to attend college and whether or not they participate in the Lyman Briggs School, a residential learning community. I used a mixed method approach, utilizing both a survey and semi-structured interviews. Although the context of this study was learning communities, the findings may also shed light on students' decisions regarding participation in other pedagogical innovations and programmatic initiatives. In order to explore the potential relationship, I also investigated the following:

- A. What are the profiles of reasons for attending college among first-year students enrolled in the College of Natural Science at Michigan State University?
- B. Are there differences between those students who chose to participate in the College of Natural Science's residential learning community program, the Lyman Briggs School, and those who chose not to participate in terms of their reasons for attending college?

- C. Through what processes do students develop their reasons for attending college?
- D. How do students perceive the impact learning community participation will have on their ability to achieve their reasons for attending college?

Research Approach

I used the *process-person-context-time* (PPCT) model (Bronfenbrenner, 1976, 1979, 1989, 1993, 1995) as a framework for this study. The research design I used in this study is a sequential exploratory, mixed method design (Creswell, 2003; Creswell, Plano Clark, Gutmann, & Hanson, 2003; Onwuegbuzie & Teddlie, 2003). In mixed method research, the researcher mixes or combines qualitative and quantitative techniques, methods, approaches, concepts or language in a single study (Johnson & Onwuegbuzie, 2004). Mixed method research is often criticized by paradigmatic purists because the approach does not support the superiority of either the objective scientific method or the constructivist interpretive approach (Teddlie & Tashakkori, 2003). The mixed method approach is focused on matching research methods and paradigms to the research questions posed by recognizing that both qualitative and quantitative methods are useful and important (Johnson & Onwuegbuzie; Rocco, Bliss, Gallagher, & Perez-Prado, 2003).

I view the viability of mixed method design for this study from both a pragmatic and a dialectical position. Pragmatists focus on the practical consequences of ideas in order to determine what actions to take next within real-world situations (Johnson & Onwuegbuzie, 2004). Their focus is on combining methods in order to find the best answer to the questions at hand. Creswell (2003) noted that “pragmatists agree that research always occurs in social, historical, and political contexts” (p. 12), thus the pragmatic position toward mixed method is congruent with the PPCT model.

The dialectical position focuses on the synergistic benefit of integrating qualitative and quantitative approaches. Mixing paradigms leads to “a fuller understanding of human phenomena” (Rocco et al., 2003, p. 21). For example, from the dialectic perspective using both forced-choice questions on a survey as well as open-ended questions provides a fuller view of the phenomenon in question than either objective or subjective questions could if used independently.

The focus of the current study was the potential relationship between reasons for attending college and participation in a learning community program. The purpose was not to determine the most prevalent reason for attending college or to test a hypothesis regarding specific reasons and their impact on participation. The intention was to explore the potentially reciprocal interaction between reasons for attending college, perceptions of the value of the learning community opportunity, and participation. The research design can be represented as “quan→QUAL” (Johnson & Onwuegbuzie, 2004; Onwuegbuzie & Teddlie, 2003), meaning that the quantitative portion was completed prior to the qualitative portion but the primary theoretical drive (Morse, 2003) was inductive.

Research Design

As mentioned above, I utilized a sequential exploratory, mixed method design for this study. Phase one of the study involved a survey that focused on how relevant a variety of reasons for attending college are to the participants. Demographic data were also gathered through the survey. Phase two involved semi-structured interviews that focused on the processes used by the participants in constructing their reasons for attending college and their perceptions of the usefulness of the learning community

opportunity. In this section, I will describe the research site for this study, give an overview of the research design, and provide details regarding sampling, data collection, instrument construction, and data analysis for both the survey and the interviews.

Research Site

This research was conducted at Michigan State University (MSU). MSU is a large, land-grant institution of approximately 45,000 students. Roughly, 35,500 of those students are undergraduates. Each year approximately 7,000 first-year undergraduates matriculate. Almost all first-year students attend full-time (98%) and live on campus (90%). Most are from Michigan (85%). Less than 1% of first-year students are 25 years of age or older and only 5% of undergraduate students are 25 years of age or older (Office of Planning and Budgets, 2006). By all accounts, MSU represents a traditional undergraduate institution.

President Lou Anna K. Simon has instigated a strategic plan for MSU “to become recognized worldwide as the United States’ leading land-grant research university for the 21st century” (MSU Board of Trustees, 2005, p. 1). One of the strategic imperatives of the President’s plan is to *Enhance the Student Experience*. One of the key recommendations proposed by the task force charged with creating a plan for the accomplishment of this strategic imperative was to enhance the first year experience by focusing on learning communities (Enhancing the student experience task force, 2006). Consequently, the university has experienced a renewed interest in the impact of residential learning communities. Currently about 20% of first-year students at MSU participate in residential learning communities each year.

In the 2006-2007 academic year, MSU offered 10 residential learning communities. The institution refers to these programs as Living-Learning Programs. Three of these programs are by invitation only and geared toward high achieving students, the Honors College, Academic Scholars, and the Broad Residential Option for Academic Distinction (for College of Business students). Two of the programs are degree-granting. James Madison College is a degree-granting, residential college with its own faculty and courses taught within the residence hall. Similarly, the Lyman Briggs School (LBS), within the College of Natural Science, is degree-granting and offers courses within the residence hall. The five remaining programs are each organized around a particular theme or disciplinary focus: the Residential Initiative on the Study of the Environment, the Residential Options In Arts and Letters, the Residential Option for Science and Engineering Students, Connections (a program for students who have not declared a major), and the Multi-Racial Unity Living Experience.

The Lyman Briggs School (LBS) was chosen as the focus of this study because of its size, its relationship to the College of Natural Science, and its programmatic structure. Living-Learning Programs at MSU range in size from 24 to 625 first-year students. The LBS is one of the largest Living-Learning Programs at MSU, with a first-year enrollment of 625 students for Fall 2006. The LBS is currently a part of the College of Natural Science (CNS). Approximately 40% of first-year CNS students participate in the LBS (Office of Planning and Budgets, 2006). Any undergraduate who is admitted to MSU can enroll in the LBS as long as space remains available. Students indicate their interest by choosing one of the LBS majors on their admission applications.

The LBS is a degree-granting, residential learning community program located in Holmes Hall. Classrooms, laboratories, and faculty and staff offices are located within the hall. The LBS offers degree programs parallel to those offered in the CNS. LBS faculty are typically on a 75% contract with LBS and 25% with their disciplinary department. During the first two years in the program, students take their prerequisite courses through LBS. Students take most of their upper-level courses through the home department of their academic major. Not all students graduate in their initial LBS major¹. Of those who do not graduate in LBS, approximately one-third switch to another major offered by the CNS, and the rest choose majors from across the other 10 academic colleges with Social Science and Engineering receiving the most students outside of CNS (Philip Strong, personal communication, February 4, 2007).

The LBS is marketed to all students interested in “studying the natural sciences and their impact on society” (Lyman Briggs School, 2006, ¶ 1). A majority of students who enter MSU in both the CNS generally and the LBS specifically are interested in pursuing professional degrees in fields such as general medicine, veterinary medicine, dentistry, and nursing (Debra Dotterer, personal communication, August 8, 2006; Philip Strong, personal communication, May 31, 2006). Students who consider themselves “pre-med” have been described as extremely motivated but academically narrow (Church, Berg, & Robinson, 2006; Engel, 2005). Although much research has indicated that pre-med students are cynical about the value of liberal education and are overly competitive (e.g., Brieger, 1999), other studies have found that pre-med students have a positive attitude toward liberal education and are cooperative rather than competitive (e.g., Conrad, 1986; Simmons, 2005). Research has also shown that pre-med students are

¹ Exact data about the percentage of students who leave LBS were not available.

concerned about admission to medical school and often have misconceptions about the attributes and skills medical schools consider in the admission process (Brieger, 1999; Glicksman, 2000).

The LBS can be categorized as an alternative college within a large traditional institution (Smith et al., 2004). It has a specific academic focus in the sciences and, as mentioned above, attracts a large number of pre-med students in addition to students interested in science generally. As noted in Chapter 2, most of the research on residential learning communities has been focused on general outcomes such as retention and GPA (Taylor et al., 2003). A few recent studies have examined programs specifically designed for science and engineering students. These studies have focused on: the differential impact of active learning pedagogies on engineering learning community participants and non-participants (Castro-Cedeno, 2005), the GPA and retention rates of students in an agriculture learning community (Kelsey & Sexten, 2003), and students' achievement and retention in math-based majors (Howell, 2006). The research on learning communities in science and engineering disciplines has been focused primarily on program components and outcomes as opposed to students' reasons for attending college and their reasons for participating in the learning community.

Two recent studies of discipline specific learning communities have included reasons for participation in their research designs. Dabney, Green, and Topalli (2006) found that a criminal justice learning community was appealing to students because it eased their anxiety about transitioning to college, provided a framework for getting academic assistance, and gave them a "ready-made pool of prospective friends" (p. 64). Light (2005) found that students signed up for an engineering and biotech science

learning community because of the expectation that it would make forming study groups easier and be a way to make good “academic” friends (p. 23). Students’ reasons for participation in discipline specific programs appear to be focused on gaining tools for academic achievement and meeting people with similar interests during the first year of college.

Although students can participate in the LBS for their entire undergraduate career (i.e., graduate with a degree from the LBS), students indicate their interest in the LBS on their admission applications. Thus, students in their first year at MSU are the population for this study. Learning community programs are often used “to create a more coherent and connected curriculum, promote student success, and create community, particularly for first-year students” (Levine Laufgraben, 2005). Though the LBS program as a whole could be categorized as a Curriculum-Based Program, a program that focuses on a particular area of study or research, for first-year students it could also serve as a Transition Program (Inkelas & Weisman, 2003).

Overview of the Research Design

Because the components of this study were conducted sequentially, I will describe the sampling, data collection, instrument design, and data analysis for the survey and for the semi-structured interviews in separate sections below. After each phase is described, I will discuss how the quantitative and qualitative data were synthesized to address the primary research question. In mixed method research, the data can be analyzed separately to answer different aspects of the research question and/or be combined to creating a more intricate answer to the research questions (Johnson & Onwuegbuzie, 2004). I used both of these approaches.

Phase 1: Survey

The population for the current study was first-year students in the College of Natural Science at MSU. The College of Natural Science (CNS) is one of the largest undergraduate colleges at MSU, with typically around 1500 first-year students each year (22% of the first-year class). As mentioned above, approximately 40% of CNS students are enrolled in the college's residential learning community, the Lyman Briggs School (LBS). The first-year class of the CNS and the LBS appears to be similar to that of MSU as a whole in percentage of females (57%) and males (43%). The CNS has a slightly higher percentage of Asian American and American Indian students than the overall MSU first-year population and a slightly lower percentage of Blacks/African Americans and Chicano/Hispanics (Office of Planning and Budgets, 2006). Detailed information about the demographics of the 2006 first-year class at MSU and within the CNS and the LBS is provided in Table 1.

Table 1
First-Year, First-Time Student Demographic

Variable	MSU 7244		CNS 1594		LBS 625	
Sex						
Female	4101	56.6%	904	56.7%	358	57.3%
Male	3143	43.4%	690	43.3%	267	42.7%
Racial/Ethnic Identification						
White/Caucasian	5546	76.6%	1,214	76.2%	503	80.5%
Black/African American	638	8.8%	126	7.9%	33	5.3%
Chicano/Hispanic/Latino	228	3.1%	39	2.4%	16	2.6%
American Indian/Alaskan Native	46	0.6%	18	1.1%	8	1.3%
Asian American/Pacific Islander	431	5.9%	155	9.7%	50	8.0%
Other/Blank	92	1.3%	18	1.1%	11	1.8%
International Student	263	3.6%	24	1.5%	4	0.6%
College						
Undergraduate University Division	1,000	13.8%				
Agriculture & Natural Resources	254	3.5%				
Arts & Letters	383	5.3%				
Business	1,129	15.6%				
Communication Arts & Sciences	447	6.2%				
Education	322	4.4%				
Engineering	661	9.1%				
James Madison College	334	4.6%				
Natural Science (includes LBS)	1,594	22.0%	1594	100.0%	625	100.0%
Nursing	223	3.1%				
Social Science	721	10.0%				
Veterinary Medicine	176	2.4%				

Survey Sampling

The survey was distributed to first-year students in the CNS through introductory chemistry courses. Almost all CNS students take an introductory chemistry course in the first semester of their first year (Philip Strong, personal communication, May 31, 2006; Steve Poullos, personal communication, June 1, 2006). The surveys were distributed through two of the four courses that satisfy the introductory chemistry requirement: CEM

1

1

th

1

0

6

6

s

s

s

6

141 (General Chemistry) and LBS 171 (Principles of Chemistry I). The other two courses that satisfy the requirement, CEM 151 (General and Descriptive Chemistry) and CEM 181H (Honors Chemistry I), were not utilized because of advice regarding the potential of accessing those courses (Debra Dotterer, personal communication, August 8, 2006).

Students must be a member of the LBS to enroll in LBS 171. Thus, all students enrolled in LBS 171 are from the CNS. In the fall 2006 semester, 469 students were enrolled in LBS 171. CEM 141 is open to students from any college. In the fall 2006 semester, 37% of the students enrolled in CEM 141 were from the CNS. Of the 2086 students enrolled in CEM 141, 1511 (72%) were first-year students. Of the first-year students, 620 (41%) were from the CNS. Detailed demographic information about the enrollment in CEM 141 is presented in Table 2.

Table 2
CEM 141 Fall 2006 enrollment

Variable	All Students 2086		First Year Students 1511		CNS 1 st years 620	
Sex						
Female	1094	52.4%	770	51.0%	355	57.3%
Male	992	47.6%	741	49.0%	265	42.7%
Racial/Ethnic Identification						
White/Caucasian	1657	79.4%	1190	78.8%	458	73.9%
Black/African American	152	7.3%	106	7.0%	45	7.3%
Chicano/Hispanic/Latino	41	2.0%	26	1.7%	15	2.4%
American Indian/Alaskan Native	18	0.9%	11	0.7%	8	1.3%
Asian American/Pacific Islander	151	7.2%	129	8.5%	78	12.6%
Other/Blank	24	1.2%	17	1.1%	4	0.6%
International Student	43	2.1%	32	2.1%	12	1.9%
College						
Undergraduate University Division	106	5.1%	78	5.2%		
Agriculture & Natural Resources	182	8.7%	65	4.3%		
Arts & Letters	31	1.5%	15	1.0%		
Business	46	2.2%	30	2.0%		
Communication Arts & Sciences	26	1.2%	11	0.7%		
Education	113	5.4%	36	2.4%		
Engineering	399	19.1%	361	23.9%		
James Madison College	3	0.1%	1	0.1%		
Natural Science (includes LBS)	763	36.6%	620	41.0%		
Nursing	200	9.6%	171	11.3%		
Social Science	115	5.5%	30	2.0%		
Veterinary Medicine	97	4.7%	93	6.2%		
Lifelong Education	5	0.2%	0	0.0%		

Survey Data Collection

After IRB approval was obtained, I contacted the four CEM 141 lecturers and three LBS 171 professors and arranged to distribute the surveys at the end of a class period. The survey was distributed during the second and third weeks of classes. The surveys were available at the end of the lecture and students had one week to return them.

The survey was printed on an Optical Character Reader (OCR) type answer sheet (a.k.a., a bubble sheet) and scored at the MSU scoring office. I chose to use a paper-and-pencil form of survey distribution rather than an online, electronic form because of concerns about return rate. Poullos (2005) achieved an 84% response rate using an OCR form distributed through an academic course. Electronic surveys conducted by the Department of Residence Life at MSU typically achieve just under a 20% response rate (Nancy Lange, personal communication, May 18, 2006).

In his study, Poullos (2005) offered an incentive of extra credit points for survey participation. During the IRB process, I was advised against this type of incentive. Instead a drawing for one of four \$50.00 bookstore gift certificates was offered as incentive. A small percentage of students returned the survey at the end of the course in which they received it. Umbach (2005) recommended contacting participants multiple times and also using mixed-modes of survey distribution. So, I created an on-line version of the survey. Students enrolled in CEM 141 and LBS 171 received an email reminder about returning the survey they had received the previous week which included a link to the online version of the survey.

I collected 643 surveys, 466 from the CEM 141 class and 177 from the LBS 171 class. Of the surveys collected, 301 were the OCR version and 342 were completed online. Thirty-three (33) surveys were unusable due to duplicates (from the online returns) or errors in filling out the OCR form. Of the remaining 610 surveys, 60 respondents indicated that they were 17 or younger. Due to IRB requirements, these surveys could not be used for data analysis. That left me with 550 usable surveys. The focus of this study is first-year students. As noted above, not all students enrolled in CEM

12

ye

u

4

(

n

o

f

b

(

P

C

C

C

C

C

C

C

C

C

C

C

C

C

141 are first-year students and consequently not all of the survey respondents were first-year students. Three hundred and eighty-three first-year students returned usable surveys.

The response rate for the LBS 171 class was 38% (177/469), but only 149 were usable. The overall response rate for the CEM 141 class was 22% (466/2086), but only 401 were usable. For first-year students enrolled in CEM 141, the return rate was 18% (273/1511) for all students and 18% (111/620) for CNS students (but only 241 and 95 respectively were usable). Combining the two courses, LBS 171 and CEM 141, the overall return rate for all first-year students enrolled was 22% (443/1980) and for CNS first-year students was 26% (288/1089).

The return rate was considerably less than what Poullos (2005) achieved (84%) but slightly more than that achieved by similar surveys of first-year students at MSU (20%). I speculate that this was due in part to the type of incentive offered for participation. Perhaps students perceived extra credit points as more valuable than the chance to win a \$50.00 bookstore gift certificate. Also, Poullos worked for the chemistry department and may have been perceived as an authority figure whereas I had no official connection to the course or the students. Porter (2004) noted that “people are more likely to comply with a request when it comes from an authority viewed as legitimate” (p. 8).

When compared to the first-year students enrolled in CEM 141 and LBS 171, a higher percentage of female and White students returned surveys and a lower percentage of men and students of color returned surveys. Porter (2004) found that in surveys of college students “females, whites, and first- and second-year students are more likely to respond to surveys than are other student groups” (p. 6). Although my survey respondent sample is consistent with surveys of college students, the lower percentage of males and

students of color should be taken into consideration when interpreting and applying the findings.

Survey Respondent Description

Of the 550 usable surveys, 383 were filled out by first-year students 18 years of age or older. Although only 244 (64%) of the 383 first-year respondents were from the College of Natural Science (CNS), all 383 surveys were used in the analysis presented in Chapter 4 because roughly two-thirds of Lyman Briggs School (LBS) participants who do not graduate in LBS graduate in a major outside of the CNS (Philip Strong, personal communication, February 4, 2007). Detailed information about respondent demographics is available in Table 3.

Table 3
Survey Respondent Demographics

Variable	Initial 610		At least 18 years old 550		First-year 383	
Sex						
Female	413	67.7%	364	66.2%	246	64.2%
Male	195	32.0%	184	33.5%	136	35.5%
Trans	1	0.2%	1	0.2%	1	0.3%
No Answer	1	0.2%	1	0.2%	0	0.0%
Racial/Ethnic Identification						
White/Caucasian	493	80.8%	448	81.5%	319	83.3%
Black/African American	21	3.4%	18	3.3%	5	1.3%
Chicano/Hispanic/Latino	8	1.3%	8	1.5%	5	1.3%
American Indian/Alaskan Native	5	0.8%	5	0.9%	3	0.8%
Asian American/Pacific Islander	37	6.1%	30	5.5%	26	6.8%
Multiracial	11	1.8%	10	1.8%	7	1.8%
Other	11	1.8%	9	1.6%	9	2.3%
International Student	5	0.8%	4	0.7%	0	0.0%
I Prefer Not to Answer	16	2.6%	15	2.7%	8	2.1%
No Answer	3	0.5%	3	0.5%	1	0.3%

Table 3 (cont'd)

College						
Undergraduate University Division	62	10.2%	55	10%	30	7.8%
Agriculture & Natural Resources	38	6.2%	38	6.9%	10	2.6%
Arts & Letters	3	0.5%	3	0.5%	0	0.0%
Business	4	0.7%	4	0.7%	0	0.0%
Communication Arts & Sciences	3	0.5%	2	0.4%	0	0.0%
Education	19	3.1%	19	3.5%	4	1%
Engineering	56	9.2%	54	9.8%	47	12.3%
James Madison College	3	0.5%	2	0.4%	0	0%
Natural Science (includes LBS)	341	55.9%	297	54%	244	63.7%
Nursing	29	4.8%	27	4.9%	24	6.3%
Social Science	21	3.4%	21	3.8%	0	0.0%
Veterinary Medicine	31	5.1%	28	5.1%	24	6.3%
No Answer	0	0.0%	0	0.0%	0	0.0%

The 383 first-year students who responded to the survey included 246 females (64.2%), 136 males (35.5%), and 1 transgender student (0.3%). The respondents reported their racial/ethnic identification as follows: 319 White (83.3%), 5 African American (1.3%), 5 Hispanic/Latino (1.3%), 3 American Indian (.8%), 26 Asian American (6.8%), 7 Multiracial (1.8%), 9 Other (2.3%), and 9 provided no answer to this question. When compared with the overall MSU first-year class of 2007, the sample includes a higher percentage of female, White, American Indian, and Asian American students and a lower percentage of Male, Black/African American, and Hispanic/Latino students. The university does not report percentage of Multiracial students, although students are provided the option to mark more than one race on their applications.

The majority of the students who responded to the survey were from the College of Natural Science (63.7%). The colleges of Agriculture and Natural Resources (2.6%), Education (1.0%), Engineering (12.3%), Nursing (6.3%), Veterinary Medicine (6.3%), and the Undergraduate University Division (7.8%) were also represented. The most

commonly reported degree aspiration was Medical Degree (43.9%). Only 7.6% indicated they planned to pursue only a Bachelor's Degree and 13.8% were not sure of the highest degree they planned to eventually pursue. About one-third of respondents (34.7%) indicated that they planned to pursue a graduate degree.

Most participants indicated that their social class growing up was either Upper-middle or Professional class (41.3%) or Middle-class (43.9%). Only 4.7% indicated they grew up Wealthy, 8.2% marked Working-class, and 1.8% Low income or Poor. Most participants (72.3%) indicated that both of their parents had completed at least a Bachelor's Degree. Some (15.4%) marked that neither parent had completed a college degree. A small number of participants (7.6%) had at least one parent who had completed a Medical Degree. Table 4 provides the demographic variables broken down by the following categories: LBS participant, other learning community participant, and non-learning community participant.

Table 4
Survey Respondents, First-Year, First-Time Students

Survey Respondents, First-Year, First-Time Students						
Variable	LBS 149		Other LC Program 20		No Program 214	
Sex						
Female	99	66.4%	4	20.0%	143	66.8%
Male	50	33.6%	16	80.0%	70	32.7%
Trans	0	0.0%	0	0.0%	1	0.5%
No Answer	0	0.0%	0	0.0%	0	0.0%
Racial/Ethnic Identification						
White/Caucasian	128	85.9%	14	70.0%	177	82.7%
Black/African American	1	0.7%	1	5.0%	3	1.4%
Chicano/Hispanic/Latino	2	1.3%	0	0.0%	3	1.4%
American Indian/Alaskan Native	1	0.7%	0	0.0%	2	0.9%
Asian American/Pacific Islander	10	6.7%	1	5.0%	15	7.0%
Multiracial	2	1.3%	1	5.0%	4	1.9%
Other	2	1.3%	0	0.0%	7	3.3%
International Student	0	0.0%	0	0.0%	0	0.0%
I Prefer Not to Answer	2	1.3%	3	15.0%	3	1.4%
No Answer	1	0.7%	0	0.0%	0	0.0%
College						
Undergraduate University Division	0	0.0%	0	0.0%	30	14.0%
Agriculture & Natural Resources	0	0.0%	1	5.0%	9	4.2%
Arts & Letters	0	0.0%	0	0.0%	0	0.0%
Business	0	0.0%	0	0.0%	0	0.0%
Communication Arts & Sciences	0	0.0%	0	0.0%	0	0.0%
Education	0	0.0%	0	0.0%	4	1.9%
Engineering	0	0.0%	15	75.0%	32	15.0%
James Madison College	0	0.0%	0	0.0%	0	0.0%
Natural Science (includes LBS)	149	100.0%	4	20.0%	91	42.5%
Nursing	0	0.0%	0	0.0%	24	11.2%
Social Science	0	0.0%	0	0.0%	0	0.0%
Veterinary Medicine	0	0.0%	0	0.0%	24	11.2%
No Answer	0	0.0%	0	0.0%	0	0.0%

Table 4 (cont'd)

Table 1 (cont.)

Variable	LBS 149		Other LC Program 20		No Program 214	
Social Class						
Wealthy	8	5.4%	0	0.0%	10	4.7%
Upper-middle/Professional	64	43.0%	6	30.0%	87	40.7%
Middle-class	68	45.6%	10	50.0%	89	41.6%
Working-class	5	3.4%	4	20.0%	22	10.3%
Low income or poor	2	1.3%	0	0.0%	5	2.3%
No Answer	2	1.3%	0	0.0%	1	0.5%
Degree Plan						
Bachelor's Degree	3	2.0%	4	20.0%	22	10.3%
Master's Degree	23	15.4%	5	25.0%	54	25.2%
Doctorate	15	10.1%	6	30.0%	28	13.1%
Medical Degree	83	55.7%	2	10.0%	83	38.8%
Law Degree	0	0.0%	1	5.0%	1	0.5%
Don't Know Yet	25	16.8%	2	10.0%	26	12.1%
Mother's Education						
No HS Diploma	0	0.0%	1	5.0%	2	0.9%
High School Diploma/GED	17	11.4%	5	25.0%	39	18.2%
Some College but No Degree	15	10.1%	2	10.0%	27	12.6%
Associate's Degree	13	8.7%	4	20.0%	27	12.6%
Bachelor's Degree	47	31.5%	2	10.0%	72	33.6%
Master's Degree	41	27.5%	5	25.0%	26	12.1%
Doctorate	3	2.0%	0	0.0%	3	1.4%
Medical Degree	4	2.7%	0	0.0%	3	1.4%
Law Degree	0	0.0%	0	0.0%	3	1.4%
Don't Know Yet	9	6.0%	1	5.0%	12	5.6%
Father's Education						
No HS Diploma	0	0.0%	0	0.0%	7	3.3%
High School Diploma/GED	20	13.4%	2	10.0%	41	19.2%
Some College but No Degree	11	7.4%	1	5.0%	21	9.8%
Associate's Degree	15	10.1%	2	10.0%	16	7.5%
Bachelor's Degree	34	22.8%	10	50.0%	57	26.6%
Master's Degree	28	18.8%	2	10.0%	43	20.1%
Doctorate	11	7.4%	1	5.0%	3	1.4%
Medical Degree	15	10.1%	1	5.0%	10	4.7%
Law Degree	5	3.4%	0	0.0%	6	2.8%
Don't Know Yet	10	6.7%	1	5.0%	10	4.7%

Survey Instrument Development

The purpose of the survey instrument was to explore the importance students placed on a number of reasons for attending college. In addition, the survey asked about current involvement in various programs available to first-year students at MSU. Participants were also asked about their future plans regarding the programs offered by the institution. Demographic items were included as well. Please see Appendix A for the complete survey instrument.

As noted in Chapter 2, many studies have included questions regarding students' reasons for attending college (e.g., Hart, 2004; Pryor et al., 2005; Stark, Shaw, & Lowther, 1989). The items included in this study were based primarily on those used by Côté and Levine (1997) for *The Student Motivation for Attending University Scale (SMAU)*. This scale included 23 questions that fell into five categories: Careerism-Materialism, Personal-Intellectual Development, Humanitarian, Expectation-Driven, and Default. After comparing the SMAU categories to a number of college student typologies (Astin, 1993a; Clark & Trow, 1966; Horowitz, 1987; Katchadourian & Boli, 1985) and general surveys of college student attitudes (Hart, 2004; Johnson & Duffett, 2005; Pryor et al., 2005; Stark, et al., 1991; Stark, et al., 1989; Thomson, 2006), I decided that the categories should be modified to better represent the literature on college students.

When compared with college student typologies (Astin, 1993a; Clark & Trow, 1966; Horowitz, 1987; Katchadourian & Boli, 1985; Kuh, et al., 2000), it is interesting to note that Côté and Levine (1997) did not include a collegiate or social motivation in the SMAU. This type of motivation for college might be characterized as having a strong identification with their college, being interested in sports and student organizations, and

being heavily involved in co- and extra-curricular activities, for example Clark and Trow's Collegiate group or Horowitz's College Men. To determine specific items to include to represent this category, I examined the questions used on several surveys and research studies including: the Cooperative Institutional Research Program's annual survey of first-time, full-time freshmen (Pryor et al., 2005), Katchadourian and Boli's study of careerism and intellectualism, the Student Goals Exploration inventory (Stark, et al., 1991; Stark, et al., 1989), Hart's (2004) study of attitudes toward liberal education outcomes, the College Student Experiences Questionnaire (Kuh et al., 2000), and the National Study of Student Engagement (Kuh et al., 2005a. 2005b).

This examination led to the final survey instrument used in this study, which included 30 items representing six categories of reasons to attend college (See Table 5). The categories of reasons for attending college were: Career Preparation, Personal-Intellectual Development, Civic-Humanitarian Engagement, College-Social Experience, Expectation-Drive, and Default-Indifferent. Participants were asked to mark how important or true each item is for them on a six-point Likert scale.

Table 5

Survey Items by Category

Career Preparation

- To achieve personal success
- To be able to make more money
- To get into an interesting and satisfying career
- To prepare for graduate or professional school
- To achieve a position of higher status in society

Personal-Intellectual Development

- To discover what kind of person I really want to be
- To gain a general education and appreciation of ideas
- To learn more about things that interest me
- To develop an in-depth understanding of a specific field of study
- To understand the complexities of life in the modern world

Civic-Humanitarian Engagement

- To be able to contribute to the welfare of others
- To be able to contribute to the improvement of the human condition
- To develop skills to work effectively with different kinds of people
- To prepare for a life of meaningful participation in society
- To become an informed citizen and voter

College-Social Experience

- To establish meaningful relationships
- To enjoy my college years before assuming adult responsibilities
- To become actively involved in student life and campus activities
- To meet new people
- To take advantage of leadership opportunities on campus

Expectation-Driven

- My parent(s) would be very disappointed in me if I didn't get a college degree
- I basically had no choice but to come to college, it was expected of me
- To achieve a high GPA
- A mentor/role model encouraged me to go to college
- To meet family expectations

Default-Indifferent

- I often ask myself why I'm in college
 - I am in college because I could not find a job
 - To get away from home
 - I am in college because I didn't know what I wanted to do after high school
 - I am in college because there was nothing better to do
-

Pilot Testing of the Survey Instrument

A pilot version of the survey instrument was distributed to 16 volunteers. The volunteers were all undergraduate students who lived on-campus and worked for the Department of Residence Life. After the students filled out the survey, they were asked about whether the list of reasons made sense and seemed comprehensive. The volunteers were asked to suggest any reasons they thought were missing and to comment about any reasons that seemed redundant. No additional reasons were suggested. One volunteer voiced concern about the reason *A mentor/role model encouraged me to go to college*. This question was not changed because the other 15 volunteers thought the question was clear. The volunteers were also asked about whether any of the demographic questions seemed inappropriate. No concerns were voiced about the demographic questions.

Survey Data Analysis

The findings from the analysis of the survey data are presented in detail in Chapter 4. In this section, I will provide a brief overview of the data analysis that was conducted. The survey data analysis served several purposes: to examine the scale items used, to profile survey respondents based on their reasons for attending college, and to explore the differences between learning community participants and non-participants.

Scale Analysis. To assess the internal consistency of the *Reasons to Attend College* scale, Cronbach's alpha was calculated for the original scale and subscales. To explore the possibility of alternative subscales, principle components analysis was used. Direct Oblimin oblique rotation was used to extract factors. Cronbach's alpha was then calculated on the new subscales.

Profiling Survey Respondents. Two approaches to profiling the participants regarding their reasons for attending college were used. First I examined the participants' raw answers to see which reasons were deemed most important and least important. Using the factor score generated during the scale analysis, I then used hierarchical cluster analysis to sort the respondents into groups based on their survey responses. This approach was utilized because it correlates respondents rather than reasons with each other.

Exploring Differences. Chi-square test for independence was used to explore whether groups based on the demographic categories of sex, racial/ethnic identification, social class, degree aspiration, and parent education were more or less likely to participate in a learning community program. Chi-square was used because I was exploring the relationship between two categorical variables. Significant differences were found for the categories of degree aspiration, mother's education, and father's education. These demographic categories were further explored using the Mann-Whitney U test.

In addition to exploring differences in learning community participation by demographic category, both the individual questions in the RAC scale and the subscales were examined for statistical differences between learning community and non-learning community participants. The Mann-Whitney U test was used to examine the individual reasons because the answer choices were on an ordinal, and not interval, scale. In comparing the learning community participants to non-participants, the subscales were examined using independent-samples t-tests.

Phase 2: Semi-Structured Interviews

The purpose of the semi-structured interviews was to explore students' reasons for attending college and the processes through which they developed their reasons. In addition, students' perceptions of the value of the LBS opportunity were discussed. Semi-structured interviews were used so that each interview had a consistent framework but also allowed for the investigation of each individual's perceptions and experiences (Miles & Huberman, 1994). The interview protocol begins with general questions about the participant's reasons for attending college and how they had developed those reasons. The questions then become more specific about the curricular and co-curricular opportunities available at MSU, including the LBS. The interview protocol can be found in Appendix B.

Sampling

Participants for the semi-structured interview phase of this study were chosen using a purposeful, maximum variation sampling approach (Glesne, 1999; Isaac & Michael, 1995; Miles & Huberman, 1994). Maximum variation sampling allows for the exploration of the uniqueness between diverse members of a population as well as the search for common patterns among them. Variation was sought on four criteria: gender, racial or ethnic identification, learning community participation, and reason for attending college cluster (resulting from the survey data analysis mentioned above).

Only LBS participants and non-learning community participants who filled out the survey were recruited for interviews. CNS students who are not in LBS but are in another learning community were not included because they did not represent maximum variation from the LBS students. Within the two groups (LBS and non-LBS), I strove for

variation on the remaining criteria: gender, racial or ethnic identification, and reason for attending college cluster. Participants were recruited via email, which they had provided on their survey form.

The concepts of sufficiency and saturation (Jones, 2002; Ortiz, 2003) were used to determine the number of participants. The number of participants is sufficient when the range of experiences within the population is reflected. Saturation is achieved when participant information begins to be redundant. I recruited 23 students to participate in the interviews.

Interview Data Analysis

The interviews were audio recorded, transcribed, and coded for themes. Inductive reasoning was used to analyze the interview data. Because I was investigating the processes students' utilized for developing their reasons, the reasons themselves, and the relationship between those reasons and participation in a residential learning community, my analysis went through several iterations. In my initial examination of each transcript, I was most interested in understanding the story each student had to tell. I used memoing (Miles & Huberman, 1994) to construct a conceptual idea of the processes each student used to make sense of the opportunities MSU provided her/him. I was also paying special attention to the levels of contexts (i.e., microsystem, mesosystem, exosystem, macrosystem) (Bronfenbrenner, 1976, 1979, 1989, 1993) within which the student was interacting.

In my second analysis of each interview transcript, I used a constant comparative approach to build codes (Boyatzis, 1998; Corbin & Strauss, 1990). The constant comparative approach involves building codes by looking at each unit of data and

comparing it with existing categories and either adding it to a category or using it to create a new category. This approach seemed appropriate because although categories of *reasons to attend college* exist in the literature, codes pertaining to the relationship between these reasons and participation in learning communities do not exist. I then used axial and selective coding to group the data into themes.

The themes that emerged focused not only on the research question at hand, the potential relationship between reasons and participation, but also on other aspects of the college experience. These additional codes included areas such as career and major selection, and experiences in the classroom. I included in the findings only the themes that shed light on the potential relationship between reasons and participation. The other data could be used in future studies (see Chapter 7 for a discussion of areas of future research).

Trustworthiness

I relied on two methods of establishing the trustworthiness of my analysis, member-checking and peer debriefing. Member-checking involves providing interview participants the opportunity to examine and comment on the accuracy of descriptions and themes in order to check for accuracy (Creswell, 2003; Glesne, 1999). I sent a summary of the themes from the semi-structured interview to two of the participants who had expressed interest during their interviews in learning about my findings. I asked them to share any comments they had about the themes. Neither recommended any changes be made.

A researcher not involved with this project was recruited to act as a peer debriefer, a person who reviews the study and checks for accuracy of themes and findings

(Creswell, 2003). This colleague was chosen because she had been involved in a research project centered around learning communities at MSU and was familiar with the LBS. The peer debriefer coded four interviews (2 LBS participants and 2 non-participants). Her coding of the interviews largely agreed with my own. The only difference was the emphasis the peer debriefer placed on the role of parents in shaping students' reasons and participation. After reviewing additional transcripts, we decided that this emphasis was not as prevalent in the other participants' transcripts and the original coding scheme was sufficient.

Role of the Researcher

In qualitative research, it is important to consider the role of the researcher because the researcher is the primary data collection and analysis tool. Glesne (1999) recommended that qualitative researchers be aware of and examine their subjective lenses within each research setting. The subjective lens that was most salient for me in this research was my academic advisor lens. If my academic advisor self had been allowed to speak, I would have challenged the participants about their reasons for attending college and their perceptions of the value of the learning community opportunity. As an academic advisor, I would have felt compelled to try to help students develop a more complex way of making sense of their educational opportunities. Many times during the interviews, I also felt the advising inclination to help students work through their choices about majors, careers, and future involvement in curricular and co-curricular activities. I chose to keep my academic advisor self internal during the interviews in order to maintain open communication with the participants. I did not want to shut down my participants by challenging them on their current opinions.

Synthesizing the Interview and Survey Data

One of the strengths of maximum variation sampling is that it allows for exploration of both differences and similarities. The primary characteristic of variation that guided my synthesis of the data is LBS participation or non-participation. I used both the survey and interview data to shed light on the relationship between reasons for attending college and participation in the LBS and other co-curricular opportunities. I found that both the survey and interview data contributed to my understanding of the processes by which students came to participation in the various opportunities MSU makes available to them. In sequential exploratory mixed method research, the quantitative data and results can be used “to assist in the interpretation of qualitative findings” (Creswell, 2003, p. 215). Thus, I included select survey findings within the discussion of the interview themes. Both survey and interview data were also used to build the model presented in Chapter 6.

Conclusion

In this chapter, I provided a description of the methodology I used for this study. The research approach and study design were discussed. Details about the sampling procedures, the data collection, the instrument development, and an overview of the data analysis were provided for both the survey portion of the study and the interview portion of the study.

In the next four chapters, I present the findings from this study, propose a model, discuss implications for practice and future research, and address the limitations of the study. Chapter 4 includes details about the findings from the survey portion of the study. In Chapter 5, I present the findings from the semi-structured interviews while

interweaving data from the survey. Chapter 6 contains a proposed model of the relationship between reasons for attending college and learning community participation. In Chapter 7, I suggest implications for practice and future research.

CHAPTER 4

Introduction

The purpose of this chapter is to present the findings from Phase 1 of this study, the survey data collection. The purpose of the survey portion of this study was to explore the importance students placed on 30 reasons for attending college. In addition, the survey asked about current and future involvement in a number of programs offered by MSU. Demographic items were also included. Please see Appendix A for the complete survey instrument.

I used the survey data to explore the potential relationship between reasons to attend college and learning community participation as well as the sub-questions: What are the profiles of reasons for attending college among first-year students enrolled in the College of Natural Science at Michigan State University? and Are there differences between those students who chose to participate in the College of Natural Science's residential learning community program, the Lyman Briggs School, and those who chose not to participate in terms of their reasons for attending college? I will present the survey findings in three sections: scale analysis, reasons for attending profiles, and difference exploration. Each section will include a brief description of the analysis performed and details about the findings.

Scale Analysis

The Reasons to Attend College (RAC) Scale consisted of 30 items divided into six subscales: Career Preparation, Personal-Intellectual Development, Civic-Humanitarian Engagement, College-Social Experience, Expectation-Drive, and Default-

Indifferent. This section includes an analysis of both the original scale and subscales as well as an exploration of alternative subscales.

Internal Consistency of Original Subscales

To test the internal consistency of the overall scale and subscales, I used Cronbach's coefficient alpha. The results of this initial test of internal consistency are located in Table 6. The overall internal consistency was .87. Four of the six subscales had an acceptable internal consistency with an alpha of at least .70. For the Expectation-Driven subscale, if the item *A mentor/role model encouraged me to go to college* is dropped, the resulting alpha is .71. For the Default-Indifferent subscale, if the item *To get away from home* is dropped, the resulting alpha is .66.

Table 6
Internal Consistency of Initial Subscales

Subscale	α level
Career Preparation	.72
Personal-Intellectual Development	.73
Civic-Humanitarian Engagement	.76
College-Social Experience	.77
Expectation-Drive	.67/.71
Default-Indifferent	.59/.66

Exploratory Factor Analysis

To explore the possibility of alternative subscales, I conducted a factor analysis using principle components analysis. To determine the appropriateness of using factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were calculated. An acceptable KMO of .85 indicated factorability. Bartlett's test of sphericity ($\chi^2 = 4152.33$, $p = .000$) indicated rejection of the null hypothesis that all correlation coefficients are 0.

To determine the number of factors to be extracted, I utilized eigenvalues, screeplot, and parallel analysis. Seven components had eigenvalues greater than 1. These seven components explained a total of 58.54% of the variance. The screeplot indicated retaining two to five components. Parallel analysis suggested five components (see Table 7). Based on these results, I used Direct Oblimin oblique rotation to examine the results of two-, three-, four-, five-, and six-component solutions. I chose the Direct Oblimin oblique rotation because the components were likely to be highly related due to the nature of the questions and Varimax orthogonal rotation assumes that the components are independent.

Table 7
Comparison of Eigenvalues and Parallel Analysis

Component number	Actual eigenvalue from PCA	Criterion value from parallel analysis	Decision
1	7.21	1.55	Accept
2	3.12	1.48	Accept
3	1.91	1.42	Accept
4	1.70	1.37	Accept
5	1.35	1.33	Accept
6	1.18	1.29	Reject
7	1.10	1.25	Reject

After analyzing the results of the two-, three-, four-, five-, and six-component solutions, the five factor solution was chosen. One item, *A mentor/role model encouraged me to go to college*, was not included in any of the factors because its single-factor loading was less than .30. Tables 8, 9, and 10 provide the pattern matrix, structure matrix, and the component correlation matrix respectively for the five factor solution.

Table 8
Pattern Matrix for Five Factor Solution

	Component				
	1	2	3	4	5
2. To be able to contribute to the welfare of others	0.76	-0.09	0.17	-0.10	-0.11
8. To be able to contribute to the improvement of the human condition	0.72	0.02	0.04	-0.02	0.18
12. To take advantage of leadership opportunities on campus	0.70	0.07	-0.04	0.14	-0.05
20. To prepare for a life of meaningful participation in society	0.51	0.05	0.13	-0.04	0.35
16. To understand the complexities of life in the modern world	0.47	0.16	-0.10	0.17	0.31
14. To develop skills to work effectively with different kinds of people	0.46	-0.08	-0.04	0.20	0.26
26. To become an informed citizen and voter	0.35	0.12	0.11	0.27	0.14
7. A mentor/role model encouraged me to go to college	0.25	0.21	0.16	0.13	-0.03
29. I often ask myself why I'm in college	-0.16	0.79	-0.10	0.04	0.04
23. I am in college because I could not find a job	-0.02	0.77	-0.11	0.03	-0.05
11. I am in college because there was nothing better to do	0.05	0.67	0.14	-0.09	0.11
5. I am in college because I didn't know what I wanted to do after high school	0.18	0.52	0.04	0.05	-0.17
19. To meet family expectations	0.08	-0.03	0.79	0.20	0.01
1. I basically had no choice but to come to college, it was expected of me	0.02	-0.02	0.77	-0.07	-0.07
13. My parent(s) would be very disappointed in me if I didn't get a college degree	0.04	0.00	0.75	0.01	0.16
6. To meet new people	0.04	-0.07	-0.08	0.79	-0.02
30. To establish meaningful relationships	0.00	-0.04	0.02	0.75	0.11
24. To enjoy my college years before assuming adult responsibilities	-0.07	0.08	0.15	0.68	0.03
17. To get away from home	-0.11	0.05	0.06	0.63	-0.07
18. To become actively involved in student life and campus activities	0.50	-0.05	0.00	0.50	-0.10
4. To discover what kind of person I really want to be	0.22	0.04	-0.11	0.43	0.11
21. To be able to make more money	-0.34	0.08	0.15	0.09	0.76
22. To develop an in-depth understanding of a specific field of study	0.13	-0.03	-0.09	-0.12	0.75
9. To achieve personal success	-0.12	-0.25	0.03	0.13	0.66
27. To achieve a position of higher status in society	0.00	0.16	0.19	0.06	0.64
10. To learn more about things that interest me	0.20	-0.09	-0.27	0.05	0.54
28. To gain a general education and appreciation of ideas	0.24	0.11	0.03	0.03	0.53
15. To prepare for graduate or professional school	0.28	-0.18	0.02	-0.10	0.48
3. To get into an interesting and satisfying career	0.11	-0.25	-0.11	0.13	0.45
25. To achieve a high GPA	0.11	-0.06	0.25	0.16	0.42

Extraction Method: Principal Component. Rotation Method: Oblimin w/ Kaiser Normalization. 13 iterations.

Table 9
Structure Matrix for Five Factor Solution

	Component				
	1	2	3	4	5
2. To be able to contribute to the welfare of others	0.77	0.03	0.15	0.25	0.39
8. To be able to contribute to the improvement of the human condition	0.73	0.12	0.08	0.34	0.19
12. To take advantage of leadership opportunities on campus	0.72	-0.02	0.21	0.11	0.13
20. To prepare for a life of meaningful participation in society	0.63	0.04	0.24	0.25	0.51
16. To understand the complexities of life in the modern world	0.62	0.07	0.12	0.62	0.21
14. To develop skills to work effectively with different kinds of people	0.61	0.14	0.05	0.41	0.46
26. To become an informed citizen and voter	0.59	-0.08	0.07	0.39	0.46
7. A mentor/role model encouraged me to go to college	0.49	0.18	0.23	0.45	0.32
29. I often ask myself why I'm in college	0.31	0.28	0.25	0.26	0.07
23. I am in college because I could not find a job	-0.11	0.76	0.06	0.12	-0.13
11. I am in college because there was nothing better to do	-0.01	0.75	0.05	0.12	-0.18
5. I am in college because I didn't know what I wanted to do after high school	0.11	0.67	0.29	0.09	0.02
19. To meet family expectations	0.17	0.57	0.15	0.15	-0.18
1. I basically had no choice but to come to college, it was expected of me	0.24	0.17	0.83	0.35	0.19
13. My parent(s) would be very disappointed in me if I didn't get a college degree	0.18	0.14	0.77	0.18	0.27
6. To meet new people	0.07	0.14	0.75	0.04	0.01
30. To establish meaningful relationships	0.26	0.07	0.14	0.78	0.33
24. To enjoy my college years before assuming adult responsibilities	0.26	0.05	0.04	0.78	0.22
17. To get away from home	0.17	0.22	0.28	0.71	0.21
18. To become actively involved in student life and campus activities	0.07	0.17	0.15	0.59	0.07
4. To discover what kind of person I really want to be	0.37	0.08	0.01	0.51	0.28
21. To be able to make more money	0.32	-0.18	-0.01	0.12	0.75
22. To develop an in-depth understanding of a specific field of study	0.11	-0.33	0.07	0.24	0.70
9. To achieve personal success	-0.06	-0.01	0.23	0.24	0.68
27. To achieve a position of higher status in society	0.25	0.11	0.31	0.30	0.66
10. To learn more about things that interest me	0.43	0.05	0.15	0.28	0.61
28. To gain a general education and appreciation of ideas	0.35	-0.21	-0.19	0.21	0.60
15. To prepare for graduate or professional school	0.40	-0.26	0.06	0.09	0.57
3. To get into an interesting and satisfying career	0.26	-0.32	-0.08	0.23	0.55
25. To achieve a high GPA	0.32	-0.05	0.32	0.34	0.54

Extraction Method: Principal Component. Rotation Method: Oblimin w/ Kaiser Normalization.

Table 10
Component Correlation Matrix

Component	1	2	3	4	5
1	1.000	.044	.123	.301	.309
2	.044	1.000	.209	.164	-.156
3	.123	.209	1.000	.161	.121
4	.301	.164	.161	1.000	.283
5	.309	-.156	.121	.283	1.000

Extraction Method: Principal Component. Rotation Method: Oblimin w/ Kaiser Normalization.

Internal Consistency of Factored Subscales

The five components, subscales, described above were named: Individual Development, Civic Leadership, Personal Connections, Default-Indifferent, and Expectation Driven. To test the internal consistency of each new subscale, I used Cronbach's coefficient alpha. Four of the five subscales had an acceptable internal consistency with an alpha of at least .70. Table 11 provides the alpha for each subscale as well as the questions that make up each subscale.

The combination of items in the Individual Development subscale is interesting in that the items included bring together two categories, Careerism and Intellectualism, that have previously been examined as contrary to one another (e.g., Clark & Trow, 1966; Katchadourian & Boli, 1985). For example, Katchadourian and Boli split their participants into four types based on students' rankings of items related to careerism and intellectualism: Careerists, Intellectuals, Strivers, and the Unconnected. The Individual Development subscale includes both career-focused items, such as *To be able to make more money* and *To get into an interesting and satisfying career*, as well as intellectual items, such as *To learn more about things that interest me* and *To gain a general education and appreciation of ideas*. This finding will be explored further in Chapter 7.

Table 11
Factored Subscales with Coefficient Alpha

Individual Development ($\alpha = .82$)
<ul style="list-style-type: none"> • To achieve personal success • To be able to make more money • To get into an interesting and satisfying career • To learn more about things that interest me • To develop an in-depth understanding of a specific field of study • To gain a general education and appreciation of ideas • To achieve a high GPA • To prepare for graduate or professional school • To achieve a position of higher status in society
Civic Leadership ($\alpha = .82$)
<ul style="list-style-type: none"> • To be able to contribute to the welfare of others • To be able to contribute to the improvement of the human condition • To develop skills to work effectively with different kinds of people • To prepare for a life of meaningful participation in society • To take advantage of leadership opportunities on campus • To understand the complexities of life in the modern world • To become an informed citizen and voter
Personal Connections ($\alpha = .76$)
<ul style="list-style-type: none"> • To establish meaningful relationships • To enjoy my college years before assuming adult responsibilities • To become actively involved in student life and campus activities • To meet new people • To get away from home • To discover what kind of person I really want to be
Default-Indifferent ($\alpha = .66$)
<ul style="list-style-type: none"> • I often ask myself why I'm in college • I am in college because I could not find a job • I am in college because I didn't know what I wanted to do after high school • I am in college because there was nothing better to do
Expectation-Driven ($\alpha = .74$)
<ul style="list-style-type: none"> • My parent(s) would be very disappointed in me if I didn't get a college degree • I basically had no choice but to come to college, it was expected of me • To meet family expectations

The Civic Leadership, Personal Connections, Default-Indifferent, and Expectation-Driven subscales are consistent with previous survey research on students' reasons for attending college (e.g., Astin 1993a; Côté & Levine, 1997; Stark, Shaw, &

Lowther, 1989). The Civic Leadership subscale is focused on contributing to society through leadership and participation. The Personal Connections subscale includes items focused on relationships and identity. The Default-Indifferent subscale represents a lack of direction. The Expectation-Driven includes items that illustrate an external motivation for attending college.

Reasons for Attending College Profiles

To explore the profiles of students' reasons for attending college, I first examined the participants' aggregate answers to examine which reasons were deemed most important and least important. The percentage of respondents who marked either Essential or Very Important is provided by subscale in Tables 12 through 16 and is broken down by the following categories: LBS participant, other learning community participant, and non-learning community participant. In addition, I performed a hierarchical cluster analysis to examine whether individuals fell into different groups based on the similarity of their survey answers.

The five reasons marked as Essential or Very Important by the largest percentage of respondents were all from the Individual Development subscale: *To achieve personal success* (87.4%), *To get into an interesting and satisfying career* (87.2%), *To develop an in-depth understanding of a specific field of study* (76.0%), *To learn more about things that interest me* (75.7%), and *To be able to make more money* (72.4%). Both the other learning community participant group and the non-participant group had the same items as their top five, although in a slightly different order. For the LBS participant group, *To be able to make more money*, was not one of the top five reasons. Instead, *To prepare for*

graduate or professional school, was in the top five with 82.5% of LBS participants marking it Essential or Very Important.

The reasons with the largest percentage of respondents marking Not True were all from the Default-Indifferent subscale (this subscale used Not True to Absolutely True instead of Not Important to Essential): *I am in college because I could not find a job* (84.3%), *I often ask myself why I'm in college* (67.6%), *I am in college because there was nothing better to do* (62.9%), and *I am in college because I didn't know what I wanted to do after high school* (60.3%). Both the LBS group and the non-participant group had very similar answers to these four questions. Interestingly, the other learning community participant group appeared more unclear about their purpose for being in college. For the question, *I often ask myself why I'm in college*, 35.0% of respondents marked Not True (in contrast to 75.8% for LBS and 65.0% for non-participants) and 20.0% marked Absolutely or Very True. Similarly, only 40.0% of non-participants marked *I am in college because I didn't know what I wanted to do after high school* as Not True. This item was Not True for 62.4% of LBS participants and 60.7% of non-participants.

Tables 12 through 16 provide the percentage of respondents who answered Not Important (NI) and Essential or Very Important (E or VI) for each question within each subscale.

Table 12
Individual Development Subscale

	All Participants		LBS		Other LC Program		No Program	
	NI	E or VI	NI	E or VI	NI	E or VI	NI	E or VI
To achieve personal success	0.8%	87.4%	1.3%	86.6%	0.0%	90.0%	0.5%	87.9%
To get into an interesting and satisfying career	2.1%	87.2%	2.0%	87.9%	5.0%	80.0%	1.9%	87.4%
To develop an in-depth understanding of a specific field of study	1.0%	76.0%	1.3%	79.2%	0.0%	75.0%	0.9%	73.9%
To learn more about things that interest me	1.3%	75.7%	0.7%	79.2%	0.0%	80.0%	1.9%	72.9%
To be able to make more money	1.3%	72.4%	0.7%	63.7%	0.0%	85.0%	1.9%	77.1%
To prepare for graduate or professional school	2.1%	72.3%	0.7%	82.5%	10.0%	45.0%	2.3%	67.8%
To achieve a high GPA	4.2%	58.2%	5.4%	53.0%	5.0%	45.0%	3.3%	63.1%
To achieve a position of higher status in society	2.9%	52.2%	3.4%	48.3%	5.0%	50.0%	2.3%	55.2%
To gain a general education and appreciation of ideas	2.3%	51.5%	2.0%	46.3%	10.0%	55.0%	1.9%	54.7%

Table 13
Civic Leadership Subscale

	All Participants		LBS		Other LC Program		No Program	
	NI	E or VI	NI	E or VI	NI	E or VI	NI	E or VI
To prepare for a life of meaningful participation in society	1.3%	54.0%	0.0%	55.7%	5.0%	45.0%	1.9%	53.7%
To develop skills to work effectively with different kinds of people	1.6%	45.9%	0.0%	46.3%	10.0%	35.0%	1.9%	46.7%
To be able to contribute to the improvement of the human condition	4.4%	43.9%	2.7%	51.6%	20.0%	40.0%	4.2%	38.8%
To be able to contribute to the welfare of others	6.0%	35.5%	4.7%	39.6%	10.0%	15.0%	6.5%	34.6%
To understand the complexities of life in the modern world	2.6%	34.7%	2.0%	33.6%	5.0%	30.0%	2.8%	35.9%
To become an informed citizen and voter	8.9%	27.4%	11.4%	22.9%	5.0%	35.0%	7.5%	29.9%
To take advantage of leadership opportunities on campus	10.4%	16.4%	7.4%	21.5%	15.0%	15.0%	12.1%	13.1%

Table 14
Personal Connections Subscale

	All Participants		LBS		Other LC Program		No Program	
	NI	E or VI	NI	E or VI	NI	E or VI	NI	E or VI
To discover what kind of person I really want to be	5.2%	49.3%	4.0%	52.3%	0.0%	40.0%	6.5%	48.1%
To establish meaningful relationships	4.7%	43.3%	4.7%	36.3%	15.0%	50.0%	3.7%	47.7%
To meet new people	4.2%	36.5%	4.0%	30.2%	10.0%	35.0%	3.7%	41.1%
To become actively involved in student life and campus activities	4.4%	28.2%	6.0%	28.9%	5.0%	15.0%	3.3%	28.9%
To get away from home	21.1%	27.1%	18.8%	18.8%	15.0%	40.0%	23.4%	31.8%
To enjoy my college years before assuming adult responsibilities	11.7%	25.6%	12.8%	16.8%	10.0%	25.0%	11.2%	31.8%

Table 15
Default-Indifferent Subscale*

	All Participants		LBS		Other LC Program		No Program	
	NI	E or VI	NI	E or VI	NI	E or VI	NI	E or VI
I am in college because I could not find a job	84.3%	2.3%	88.6%	1.4%	80.0%	0.0%	81.8%	3.3%
I often ask myself why I'm in college	67.6%	6.5%	75.8%	4.7%	35.0%	20.0%	65.0%	6.5%
I am in college because there was nothing better to do	62.9%	6.7%	61.1%	7.4%	65.0%	0.0%	64.0%	7.0%
I am in college because I didn't know what I wanted to do after high school	60.3%	5.7%	62.4%	6.0%	40.0%	0.0%	60.7%	6.1%

*These four items used the scale Not True to Absolutely True instead of Not Important to Essential
This scale is in order by percentage of Not True responses

Table 16
Expectation-Driven Subscale

	All Participants		LBS		Other LC Program		No Program	
	NI	E or VI	NI	E or VI	NI	E or VI	NI	E or VI
My parent(s) would be very disappointed in me if I didn't get a college degree	6.3%	48.8%	7.4%	46.9%	15.0%	40.0%	4.7%	51.0%
I basically had no choice but to come to college, it was expected of me	21.9%	36.1%	18.8%	36.2%	15.0%	30.0%	24.8%	36.5%
To meet family expectations	7.0%	36.0%	6.7%	36.9%	15.0%	25.0%	6.5%	36.5%

In addition to examining the aggregate percentage for each item, I also calculated a subscale score for each respondent on each subscale. For each item a participant could receive a score from 0 to 5 based on their answer choice. The subscale score was calculated by adding together the scores for the items within that subscale. Descriptive data for each subscale is provided in Table 17.

Table 17
Descriptive Statistics for Subscale Scores, Full Sample

	N	Min	Max	Mean	Std. Dev
Individual Development	383	5.00	45.00	35.34	6.75
Civic Leadership	383	4.00	35.00	20.55	6.43
Personal Connections	383	1.00	30.00	16.71	5.86
Expectation-Driven	383	.00	15.00	8.56	3.96
Default-Indifferent	383	.00	20.00	2.57	3.32

After looking at the scores for the entire sample, I then used cluster analysis to sort the respondents into groups based on their survey responses. This approach was utilized because it correlates respondents rather than reasons with each other. I chose hierarchical cluster analysis because I had a small number of cases (less than 1,000) and I did not have a predetermined number of cases for which I was looking (Norusis, 2003). I used the factor scores for the five subscales generated during the factor analysis as the criterion for determining the similarity of respondents. Using Ward's method, the agglomeration schedule indicated a three cluster solution.

For all three clusters, the five subscales were ranked in the same order of importance with Individual Development being the most important and Default-Indifferent being the least. In comparison to the other clusters, participants in the first cluster reported a medium level of importance for the items in the Individual Development, Civic Leadership, and Personal Connections subscales. They also seemed to be the least externally motivated (lowest scores on the Expectation-Driven and Default-Indifferent subscales). Participants in the second cluster reported that items in all five subscales were of relatively high importance. These students appeared to be the most externally motivated (highest scores on the Expectation-Driven and Default-Indifferent subscales). The third cluster included participants who ranked the items in the Individual

Development and Civic Leadership subscales relatively low in importance while ranking Personal Connections, Expectation-Driven, and Default-Indifferent at a medium level of importance. Descriptive statistics for each of the three clusters are provided in Tables 18 through 20.

Table 18
Descriptive Statistics for Subscale Scores, Cluster 1

	N	Min	Max	Mean	Std. Dev
Individual Development	147	22.00	45.00	34.12	5.74
Civic Leadership	147	4.00	31.00	19.23	5.78
Personal Connections	147	1.00	27.00	14.12	5.04
Expectation-Driven	147	.00	14.00	5.33	2.99
Default-Indifferent	147	.00	7.00	1.11	1.63

Table 19
Descriptive Statistics for Subscale Scores, Cluster 2

	N	Min	Max	Mean	Std. Dev
Individual Development	121	23.00	45.00	40.31	3.75
Civic Leadership	121	13.00	35.00	26.51	4.48
Personal Connections	121	5.00	30.00	21.35	5.07
Expectation-Driven	121	2.00	15.00	11.30	2.87
Default-Indifferent	121	.00	18.00	3.49	4.03

Table 20
Descriptive Statistics for Subscale Scores, Cluster 3

	N	Min	Max	Mean	Std. Dev
Individual Development	115	5.00	45.00	31.67	7.36
Civic Leadership	115	5.00	24.00	15.97	3.69
Personal Connections	115	4.00	24.00	15.13	4.66
Expectation-Driven	115	.00	15.00	9.81	3.08
Default-Indifferent	115	.00	20.00	3.46	3.45

I used the chi-square test for independence to explore whether members of certain clusters were more likely to participate in a learning community program. The proportion of learning community participants and non-participants in each cluster approached

significance ($\chi^2 = 1.18$, $df = 2$, $p = .55$) with the highest percentage of learning community participants in Cluster 1 and the lowest percentage in Cluster 3. Table 21 provides information about the proportion of learning community participants and non-participants in each cluster.

Table 21
Learning Community Participants and Non-Participants by Cluster Group

	Participants	Non-Participants	Total
Cluster 1	41.1%	36.0%	38.4%
Cluster 2	30.2%	32.7%	31.6%
Cluster 3	28.4%	31.1%	30.0%

Difference Exploration

I used statistical techniques that explore relationships and compare groups to explore the question Are there differences in the profiles of reasons for attending college between those who chose to participate in the College of Natural Science's residential learning community program, the Lyman Briggs School, and those who chose not to participate? Demographic data pertaining to sex, racial/ethnic identification, social class, degree aspiration, and parent education were explored to determine if any of these factors were related to learning community participation. For the purpose of comparing groups, the 383 participants were grouped in two ways: those who were participating in any learning community program (not just LBS) and those who were participating in no learning community program; and LBS participants, other learning community participants, CNS non-participants, and non-participants from other colleges. I examined both individual questions in the RAC scale and the subscales for statistical differences between learning community and non-learning community students.

Demographic Factors

Chi-square test for independence was used to explore whether groups based on the demographic categories of sex, racial/ethnic identification, social class, degree aspiration, and parent education were more or less likely to participate in a learning community program. Chi-square was used because I was exploring the relationship between two categorical variables. Chi-square test for independence indicated that there was no difference between female and male² students' rates of participation in learning communities ($\chi^2 = 1.32$, $df = 1$, $p = .25$). There was also no difference between White and non-White (because of the small number of students in several racial/ethnic categories, non-white students were grouped together) students' rates of participation in learning communities ($\chi^2 = .17$, $df = 3$, $p = .68$). Social class differences did not affect the likelihood of participation in a learning community ($\chi^2 = 4.0$, $df = 4$, $p = .40$).

Degree aspiration ($\chi^2 = 11.92$, $df = 5$, $p = .04$) and both mother's ($\chi^2 = 15.79$, $df = 9$, $p = .03$) and father's ($\chi^2 = 14.94$, $df = 9$, $p = .04$) educational attainment did show a significant difference between those who chose to participate in a learning community program and those who did not. To explore these relationships further, I used the non-parametric Mann-Whitney U Test to determine which level of degree aspiration was more likely than others to result in participation in a learning community program. Students who were not sure of their degree aspirations ($p = .02$) were more likely to participate than students who plan to pursue a bachelor's degree. Students who planned to pursue a medical degree ($p = .01$) were more likely to participate than students who plan to pursue a bachelor's degree. Students who planned to pursue a medical degree ($p = .01$) were also more likely to participate than students who planned to pursue a master's degree.

² The one transgender student was not included in this analysis.

There were no other significant differences resulting from the Mann-Whitney U Test.

Table 22 shows the percentages of learning community participants and non-participants by degree aspiration.

Table 22
Degree Aspiration

	LC participants	Non- participants
Bachelor's	4.1%	10.3%
MA/MS	16.6%	25.2%
PhD	12.4%	13.1%
MD	50.3%	38.8%
JD	0.6%	0.5%
Don't Know	16.0%	12.1%

To explore the impact of mother's and father's level of education, I used the Mann-Whitney U Test. Students whose mothers had completed a Master's degree were more likely to participate in a learning community than those whose mothers had completed High School or Less ($p = .00$), some college ($p = .01$), an Associate's degree ($p = .01$), or a Bachelor's degree ($p = .00$). Students whose fathers had completed a PhD or JD were more likely to participate in a learning community than those whose fathers had completed High School or Less ($p = .00$), some college ($p = .03$), a Bachelor's Degree ($p = .05$), or a Master's degree ($p = .03$). Also, students whose fathers had completed a Medical degree were more likely to participate than those whose fathers had completed High School or Less ($p = .01$). There were no other significant differences resulting from the Mann-Whitney U Test. Table 23 shows the percentages of learning community participants and non-participants by mother's highest level of education. Table 24 shows the percentages of learning community participants and non-participants by father's highest level of education.

Table 23
Mother's Level of Education

	LC participants	Non- participants
HS or less	13.6%	19.2%
Some College	10.1%	12.6%
Associate's	10.1%	12.6%
Bachelor's	29.0%	33.6%
MA/MS	27.2%	12.1%
MD	2.4%	1.4%
PhD/JD	1.8%	2.8%
Don't Know	5.9%	5.6%

Table 24
Father's Level of Education

	LC participants	Non- participants
HS or less	13.0%	22.4%
Some College	7.1%	9.8%
Associate's	10.1%	7.5%
Bachelor's	26.0%	26.6%
MA/MS	17.8%	20.1%
MD	9.5%	4.7%
PhD/JD	10.1%	4.2%
Don't Know	6.5%	4.7%

Reasons to Attend College

The first 30 questions on the survey were a list of reasons to attend college. Participants were asked to indicate how important or true each reason was for them. These 30 questions were then factored into five subscales. Both the individual questions and the subscales were examined to determine if any of these items was related to the decision to participate in a learning community program. I used the Mann-Whitney U test to examine the individual reasons because the answer choices were on an ordinal, and not

interval, scale. In comparing the learning community participants to non-participants, the subscales were examined using independent-sample t-test.

Individual Items

I used the Mann-Whitney U Test to explore the differences between learning community participants and non-participants regarding their answers to the 30 items on the RAC scale. For the sample of 383 first-year students, five items were significantly different. Learning community participants ranked *To be able to contribute to the human condition* as more important than did non-participants. Non-participants ranked *To achieve personal success*, *To be able to make more money*, *To enjoy my college years before assuming adult responsibilities*, and *To achieve a high GPA* as more important than did learning community participants. Table 25 contains mean rank, Mann-Whitney U, the Z-value, and the P-value for the sample of 383.

Table 25
Individual Item Comparisons for full sample

	LC Mean Rank	Non-LC Mean Rank	Mann-Whitney U	Z	p
To be able to contribute to the human condition	205.34	181.46	15,828	-2.14	.03
To achieve personal success	178.97	202.29	15,880.5	-2.37	.02
To be able to make more money	178.54	202.63	15,808.5	-2.25	.02
To enjoy my college years before assuming adult responsibilities	177.8	203.21	15,684	-2.27	.02
To achieve a high GPA	179.64	201.76	15,994	-2.01	.05

When only LBS participants and CNS non-participants were compared, four items were significantly different. CNS non-participants ranked *To meet new people*, *To enjoy my college years before assuming adult responsibilities*, *To achieve a high GPA*, and *To achieve a position of higher status in society* as more important than did LBS

participants. Table 26 contains mean rank, Mann-Whitney U, the Z-value, and the P-value for the LBS/CNS non-participant comparison.

Table 26
Individual Item Comparisons for LBS and CNS non-participants

	LC Mean Rank	Non-LC Mean Rank	Mann- Whitney U	Z	p
To meet new people	112.89	132.96	5646	-2.22	.03
To enjoy my college years before assuming adult responsibilities	110.4	137.03	5275	-2.93	.00
To achieve a high GPA	112.38	133.8	5569.5	-2.41	.02
To achieve a position of higher status in society	111.9	134.59	5497.5	-2.53	.01

RAC Subscales

I conducted an independent-samples t-test to compare the subscale scores on each of the five subscales for learning community participants and non-learning community participants. For the sample of 383 first-year students, there was no significant difference in scores for participants and non-participants on any of the subscales. When only current CNS students were compared, there was also no significant difference in scores for participants and non-participants on any of the subscales. Table 27 contains the mean, standard deviation, t-value, p-value, and magnitude of difference for each subscale. Data are presented for the comparison between learning community participants and non-participants as well as LBS and CNS non-participants.

Table 27
T-test results

Subscales	LC		Non-LC		t(383)	p	eta squared
	M	SD	M	SD			
Individual Development	35.02	6.20	35.59	7.16	-0.82	.41	.003
Civic Leadership	20.82	6.26	20.34	6.57	0.72	.47	.003
Personal Connections	16.26	5.59	17.06	6.06	-1.33	.19	.003
Default-Indifferent	2.41	2.89	2.69	3.62	-0.80	.43	.003
Expectation-Driven	8.43	4.02	8.66	3.92	-0.56	.58	.003

Subscales	LBS		CNS non-LC		t(240)	p	eta squared
	M	SD	M	SD			
Individual Development	35.23	6.13	36.42	6.82	-1.40	.16	.004
Civic Leadership	21.15	6.17	20.96	6.92	0.22	.82	.004
Personal Connections	16.13	5.45	17.41	5.90	-1.70	.09	.004
Default-Indifferent	2.31	2.92	2.56	3.65	-.59	.56	.004
Expectation-Driven	8.53	3.96	9.46	3.94	-1.77	.08	.004

Conclusion

In this chapter I presented the findings from the survey data collection. The primary purpose of the survey was to explore the importance that participants placed on 30 specific reasons for attending college and whether or not those reasons were related to participation in a residential learning community. Factor analysis suggested five subscales of reasons for attending college: Individual Development, Civic Leadership, Personal Connections, Default-Indifferent, and Expectation-Driven. In many ways, these subscales are similar to previous research. One way in which the results differ from previous research is the combination of Career-focused and Intellectual-focused items into one factor. This finding will be discussed further in Chapter 7.

In addition to the scale analysis, this chapter included the aggregate responses by subscale for individual RAC items and information about how participants could be sorted into groups or clusters. I examined these clusters to determine if difference in

cluster had any impact on learning community participation. In addition, demographic characteristics were examined for significant differences in learning community participation. The learning community participants and non-participants were found to be significantly different on very few items or demographic characteristics. Thus, the survey alone does not shed much light on the question What relationship, if any, exists between Michigan State University College of Natural Science students' reasons to attend college and whether or not they participate in the Lyman Briggs School, a residential learning community.

This result is not altogether surprising based on Bloomer and Hodkinson's (1997, 1999, 2000) assertion that *reasons for attending college* is only one interacting dimension that shapes learner disposition. Similarly, the conceptual framework for this study, Bronfenbrenner's (1976, 1979, 1989, 1993, 1995) *process-person-context-time* (PPCT) model, suggests a reciprocal interaction between the person and the environment that could potentially shape participation. In the next chapter, the data collected through semi-structured interviews is examined to further explore the potential relationship between reasons and participation and the processes by which those relationships take place.

CHAPTER 5

Introduction

Phase 2 of this study involved 23 semi-structured interviews that took place between the 12th and 14th week of classes. The interview questions (see Appendix B for the interview protocol) were designed to explore the potential relationship between reasons to attend college and learning community participation as well as the sub-questions: Through what processes do students develop their reasons for attending college? and How do students perceive the impact learning community participation will have on their ability to achieve their reasons for attending college? Because both learning community participants and non-participants were included in the interviews, the interview questions also probed how students perceived the usefulness of other curricular and co-curricular activities. The purpose of this chapter is to present the findings from these interviews.

Bloomer and Hodkinson's (1997, 1999, 2000) concept of learner disposition and Bronfenbrenner's (1976, 1979, 1989, 1993, 1995) *process-person-context-time* (PPCT) model were used as frameworks for organizing the interview data. Learner dispositions influence the learner's choice of learning opportunities with which to engage as well as the strategies to utilize in those various learning opportunities (Bloomer & Hodkinson, 1999). Learner disposition is composed of perceptions of learning and approaches to learning. Perceptions of learning are shaped by: learners' beliefs about the nature of knowledge, their views about the purpose of postsecondary education, the value they place on particular areas of study and learning experiences, and their personal assessment of their abilities based on prior learning experiences. For this study, I focused on how

students' views about the purpose of college (i.e., reasons to attend college) and the value they placed on a specific learning experience, the Lyman Briggs School (LBS), shaped their approaches to learning (i.e., participation in the LBS). The PPCT model provides a framework for exploring the reciprocal nature of the interaction between the person and the environment.

After a description of the survey participants, I will present the participants' views about the purpose of higher education and how they formed those views. Next their perceptions of the value of the LBS as a learning experience will be explored. A theme that emerged from the semi-structured interviews was that of formulas for reaching these goals. This chapter will end with a discussion of these formulas. The only thematic area of the interview data in which I observed differences between the LBS participants and the non-participants was their perceptions of the value of the LBS as a learning experience. So, I only note LBS participation in that section.

Participant Description

Twenty-three first-year College of Natural Science students participated in the interviews. I used maximum variation sampling (Glesne, 1999; Isaac & Michael, 1995; Miles & Huberman, 1994). Variation was sought on four criteria: gender, racial/ethnic identification, learning community participation, and reason for attending college cluster. Fifteen of the participants were Lyman Briggs School (LBS) participants, seven were not a member of a residential living-learning program, and one was living on an Honors College floor. Fifteen of the participants were female and eight were male. Fourteen of the participants were White, seven were Asian American, one was Hispanic/Latina, and one marked other as her racial/ethnic identification. Of the 15 LBS participants, 10 were

female and 5 were male. The racial/ethnic identification of the LBS participants was 11 White, 3 Asian American, and 1 Hispanic/Latina. Of the Non-LBS group, five were female and three were male. The racial/ethnic identification of the Non-LBS group was three White, four Asian American, and 1 other. Ten participants were from cluster 1, five from cluster 2, and eight from cluster 3. Table 28 provides additional demographic information about the interview participants.

Table 28
Interview participant demographics

Name	Sex	Race/ Ethnicity	Cluster	Social Class	Degree Aspiration	Mom Ed	Dad Ed
Non-LBS							
Ildi	F	White	2	Working	Medical	Master's	Bachelor's
Anne	F	Asian Am	3	Middle	Master's	Bachelor's	Bachelor's
Sona	F	Asian Am	3	Upper-mid/ Professional	PhD	Bachelor's	Master's
Jasmin	F	Asian Am	3	Upper-mid/ Professional	Medical	Bachelor's	Master's
Anyia	F	Other	1	Working	Master's	Bachelor's	Bachelor's
Bryan	M	White	3	Upper-mid/ Professional	PhD	Bachelor's	Bachelor's
Charlie	M	White	2	Upper-mid/ Professional	PhD	Bachelor's	Bachelor's
Drew	M	Asian Am	1	Middle	Medical	High School	Master's
LBS							
Lisa	F	White	1	Middle	Medical	Bachelor's	Master's
Cassie	F	White	2	Working	Don't Know	Some college	Bachelor's
Julie	F	White	1	Working	Medical	Master's	Bachelor's
Kathie	F	White	1	Upper-mid/ Professional	Medical	High School	Some college
Natalie	F	White	3	Working	Bachelor's	Bachelor's	Bachelor's
Jamie	F	White	1	Working	PhD	Master's	Some college
Heather	F	White	3	Middle	Don't Know	Bachelor's	Bachelor's
Maggie	F	Hispanic	3	Middle	Medical	High School	High School
Vun	F	Asian Am	2	Middle	Medical	Master's	PhD
Mingmei	F	Asian Am	1	Middle	Don't Know	Master's	PhD
Dan	M	White	1	Middle	PhD	High School	Master's
Doug	M	White	1	Middle	Medical	High School	Some college
John	M	White	2	Upper-mid/ Professional	Master's	Master's	High School
Kevin	M	White	3	Middle	Don't Know	Some college	High School
Chung	M	Asian Am	1	Upper-mid/ Professional	Medical	Associate's	Associate's

The Purpose of a College Education

Although participants had already responded to a list of reasons for attending college on the survey they had filled out in September, I was interested in exploring which aspects of those reasons were particularly salient for them now that they had been in college for at least 12 weeks. Participants were asked about both the general purpose of college as well as their specific college goals. Their responses resulted in four themes: preparing for life after college, broadening horizons, meeting new people, and taking advantage of the opportunity in order to be a role model to others. For each theme, related survey questions will also be discussed. I did not observe differences between the LBS participant group and the non-participant group regarding the purpose of college, and thus the responses will be presented together without noting whether or not the respondent is an LBS participant. This section will end with a discussion of how the participants formed their reasons for attending college.

Preparing for Life after College

For most traditional age students, college is their last stretch of continuous formal education before entering the “real world.” So, it is not surprising that students would identify preparation for life after college as one of the primary reasons for attending college. Participants identified five components of preparation for life after college: determining their calling, learning to be an adult/growing up, acquiring general knowledge needed for life after college, gaining the credential necessary for their chosen career, and learning specific skills/knowledge.

Determining a Calling

Although most (17) of the interview participants indicated an interest in a pre-professional track (i.e., Pre-medical, pre-dental, pre-veterinary), several students had not yet declared a major and viewed college as an opportunity to explore the possibilities. Sona noted, “I want to experience as much as possible, like new things... to actually figure out what I want to do for the rest of my life.” Most students connected this exploration to finding a career path that would be both lucrative and also something in which they were truly interested. When asked about the general purpose of college Ildi answered:

I guess in today's world it would be to get a degree and get a job but for me it's more to gain more knowledge about things and what I'm interested in, so I guess I would get it two ways, financially and then for knowledge.

When asked about his specific goals for college, Kevin replied, “I would like to have something that I can say, ‘This is what I'm good at. This is what I'm interested in and really want to do.’”

The theme *Determining a Calling* can be compared to several survey questions. Two related questions are from the Individual Development subscale: *To learn more about things that interest me* and *To get into an interesting and satisfying career*. These two items were marked essential or very important by 75.7% and 87.2% of respondents respectively. A question from the Personal Connection subscale, *To discover what kind of person I want to be* (49.3%), could also be related to this theme. Two items from the Default-Indifferent subscale might also relate to this theme: *I often ask myself why I'm in college* (6.5%) and *I am in college because I didn't know what I wanted to do after high*

school (5.7%). The survey data reinforce the importance of *Determining a Calling* as a reason to attend college.

Learning to be an Adult/Growing Up

Although the premise that college is a time of maturing and taking on adult roles is not uncommon in student development theory research (i.e., Chickering & Reisser, 1993), I was surprised that over half (13) of participants mentioned this as a specific purpose of college. For participants, learning to be an adult involved becoming independent and being able to take care of themselves. For some this was a general idea, “I don’t know, kind of growing as a person, an intermediate step between being completely dependent on somebody and being completely independent” (Julie). For others this involved specific skills and knowledge, “I can cook a few things. I’ve done my laundry for years” (Bryan). In spite of its predominance in the interviews, this theme was not well represented by the items on the survey.

Acquiring General Knowledge for Life after College

A theme that emerged from both the question about the general purpose of college as well as participants’ specific goals was the accumulation of knowledge as preparation for life after college. For some this was directly connected to preparing for the work world, “To become more experienced and broaden your horizons in order to do better in a job, and try and get an education to get into a job that needs specific education” (Charlie). Other participants had an interest in exploring general ideas that were related to their career interests, “Beyond medicine and med school, I’m also very interested in just scientific concepts in general” (Doug). Mingmei articulated a cognitive development (i.e., Perry, 1999) outcome of college:

To learn more knowledge, I guess, and I guess to really get into serious studying, like where you actually think about – you use your mind in classes and stuff to prepare for whatever job – It might not be specific job training, but just ways of thinking that help you.

Two of the survey items related to the theme *Acquiring General Knowledge for Life after College* are from the Individual Development subscale: *To learn more about things that interest me* and *To gain a general education and appreciation of ideas*. These two items were marked essential or very important by 75.7% and 51.5% of respondents respectively. Two items from the Civic Leadership subscale are also related: *To understand the complexities of life in the modern world* (34.7%) and *To become an informed citizen and voter* (27.4%). This theme is not as strongly reinforced by the survey data as *Determining a Calling*, although a couple of the items were essential or very important to more than half of the respondents.

Getting the Credential Necessary for Their Chosen Career

Consistent with previous research on reasons to attend college (i.e., Katchadourian & Boli, 1985), students viewed a college degree as a necessary credential for future employment and success. Drew viewed college attendance as a determinant of success, “I mean cause if you go to college there’s a very good chance that you’ll succeed whereas if you don’t there’s a slim chance.” Maggie was more specific about the impact of the credential:

I believe the purpose is to actually get an education and be able to go somewhere in life, you know, have a decent lifestyle, make a good amount of money, ‘cuz,

you know, if you're looking at nowadays, you're hardly gonna get anything with a high school graduation diploma.

Bryan focused on the specific credential he needed for his career choice, "I'm personally at college because I want to be a professor. So, I'm gonna be at college for a very long time." Similarly, Doug mentioned, "I'm planning to go to med school after college, so obviously you have to be in college to get there."

All four survey items that are related to this item are from the Individual Development subscale: *To achieve personal success*, *To be able to make more money*, *To prepare for graduate or professional school*, and *To achieve a position of higher status in society*. On the first three items, a high percentage of survey respondents (87.4%, 72.4%, and 72.3% respectively) marked essential or very important. Only 52.2% marked essential or very important for the last item, *To achieve a position of higher status in society*.

Learning Specific Skills or Knowledge

Beyond the credentialing aspect of college, participants mentioned developing both general and specific skills and knowledge for their professional life after college. Heather noted that "taking the classes kind of prepares you for the business world and being able to get a job that would be more professional, so it's kind of a career prep." Julie connected the purpose of college to specific job preparation, "You wouldn't want somebody who didn't know what they were doing operating on you or doing your taxes." When discussing her own goals for college, Jasmin said:

... but going to college to further your education and what you're more interested in and, you know, kind of specialize in what you're interested in doing. Like I

want to become a doctor, so you have to go to college because you need to learn more.

This theme is not directly represented on the survey, although there are many questions that talk about general skills or knowledge needed for professional life after college. For example, *To develop skills to work effectively with different kinds of people* and *To develop an in-depth understanding of a specific field of study*. Only 45.9% of respondents marked the first item essential or very important, while 76% marked the second item essential or very important.

Broadening Horizons

As noted above, some students thought about exploring general knowledge as a part of preparation for their lives after college. Consistent with Astin's (1993a) *Scholars*, Katchadourian and Boli's (1985) *Intellectualist*, and Clark and Trow's (1966) *Academics*, several participants also mentioned an interest in taking advantage of their time in college to explore new ideas for the sake of exploring new ideas, to broaden their horizons. When explaining the purpose of college, Julie responded, "Well, I could use the economics excuse and say that it's to increase human capital, but probably more to broaden horizons." Ildi mentioned, "I know what I'm interested in but I also like learning other things just to be more open minded." When asked to explain what she meant by learning new things, Jamie responded, "To broaden my scope of what the world can offer: what's in the books, and what's not in the books, you know." Sona noted, "So it's fun to learn new things on the side when it's not like required to know it, when you don't have to be tested on it or anything." Charlie provided an example of how he had experienced this purpose of college, "I'm in a Social Differentiation and Inequality ISS [Integrative

Studies in Social Science] class, and they often talk about the liberalizing effects of college.”

Because this theme is similar to *Acquiring General Knowledge for Life after College*, the related survey items are the same: *To learn more about things that interest me* (75.7%), *To gain a general education and appreciation of ideas* (51.5%), *To understand the complexities of life in the modern world* (34.7%), and *To become an informed citizen and voter* (27.4%). It is interesting that as the items become less self-focused (from *things that interest me* to *complexities of the modern world*) fewer survey respondents marked essential or very important.

Meeting New People

The importance of social integration (Tinto, 1993) to a student’s college experience is not a new concept. The participants put a new spin on the idea by defining it as one of the main purposes of a college education. Seventeen (17) people specifically mentioned meeting new people in their answer to what is the purpose of college. Although 74% of the interview participants mentioned meeting new people as one of the purposes of college, only 36.5% of survey respondents marked it as essential or very important on the survey and 43.3% marked *To establish meaningful relationships* as essential or very important. The interview participants’ explanations of the importance of meeting new people fell into four categories: to make new friends, as a way to develop life skills, as a strategy for success, and as a mechanism for broadening their horizons.

John explained, “That’s a good part of college, meeting new friends and everything.” Lisa commented, “I expect that I would have a great time and meet a whole bunch of people.” When asked about her specific goals for college, Julie said, “Well, I’d

like to make some friends, which I already have.” Many participants expected these to be lasting friendships. Vun explained, “just developing long-lasting relationships.”

A few participants wanted to meet new people in order to build social skills, break out of their shells, and be able to adjust to meeting new people in the future. Julie mentioned:

I hope to come out not feeling like I’m a fish out of water in my new job when I finally start a career... I see it as a way to get ready for what comes later for the future, the work world and, I don’t know, you make – you work on forming relationships, and your social skills.

This is similar to the survey question *To develop skills to work effectively with different kinds of people*. Almost half (45.9%) of survey participants marked this item essential or very important.

Meeting new people was also seen as a strategy for both academic and social integration (Tinto, 1993). Natalie explained:

I think your first year especially, I think is a lot about making connections with people around you, both professors and fellow students because I had a roommate who just dropped out. About a month ago now, and she just didn’t make the connections here and she would just stay in the room the whole time kind of thing. So I just think the relationships that you make are so essential in success here. In a big school, you need to feel like you’re at home.

Several participants mentioned that one of their goals for college was to meet new people as a way to expand their exposure to diverse ways of thinking and being. Charlie

explained, “Meeting more people, more experiences, kind of experiencing diversity in all sorts of ways.” Julie pointed out:

I love the international atmosphere, and everybody’s kinda laid back and open, and you can just sit on a bus and talk to the person next to you and they don’t think you’re weird, and I really like that... and if you walk past the International Center, you can hear 10 different languages. It’s really cool.

Several students contrasted the opportunities to meet new people on campus to that in their home towns. Vun explained, “It’s just different than like what you’re used to from back home, everyone’s just different like perspectives and like backgrounds, so – it’s nice.” Heather noted, “You get to meet a lot of people from a lot of different cities, they have different opinions on stuff, you get to participate in different things that weren’t available at home or anything.”

Taking advantage of the opportunity in order to be a role model

Although most participants viewed attending college as an automatic next step after a high school, a few had considered a number of other options. Most, but not all, of these participants could be considered first-generation college students (neither parent earned a college degree). For some of these students, college was viewed as a way to find an alternative to the lifestyle modeled by other family members. Kevin explained:

Looking at my family, I see what can happen when you don’t have a college education. My aunt and uncle, my mom’s brother – my mom’s brother and sister-in-law, aren’t the most well off. He works in a factory, a milk carton factory and I think he’s in parchment or something like that. And she works in a middle school library, and they get by, but it’s just – for me, it was a matter of I didn’t want to

be a manual worker... So, for me, college was – it wasn't just something, it wasn't just the next step. But to me, it was – the purpose of it was more than just the next step.

Dan did not feel pressured to go to college; he viewed it as one of many options:

As far as my parents being disappointed if I didn't get a college degree – they – I don't know if disappointed would be the word. They wouldn't be like, very pleased about it, but if I found something else that I really liked, then they would support me in it... There's not that high of an expectation [in my family], I guess. A lot of people have gone to college, but I mean, the only – the first person to complete college in my family was my dad. Like, in my history of the family. So like, other people have gone, but no one had ever really finished before him. So there's not a long-lasting expectation or some kind of lineage going on there... My dad, he equally supported me to go to the Marine Corp. And I finally decided on college cuz there's just a lot more things that I wanted to know that I really didn't think I could learn in the military.

Kathie felt supported, although not pressured, to pursue a college education:

My parents are really – I guess they're really proud of what I want to do. I'm the first generation college student, so they basically didn't – they said, "Whatever you want to do is fine." So, they were pretty excited that's the route I'm trying to get to.

A few students mentioned that their pursuit of a college education made them a role model for others in their family. Cassie explained:

I think the expectations are – like have gone up, because I have like, my uncle calling me, the one whose kids don't go to college, and saying how proud he is of me, because he realizes that his kids don't have the same drive. Because I asked my cousin, he's a junior in high school, I asked him, "Are you getting ready for the tests?" "Where do you want to think about applying?" He's like, "I don't want to go at all." So, I know that when I got my acceptance letter, my uncle was proud of me, saying, like, "I'm pretty sure my kids won't get this, so I'm glad you are." So, I think that has like, driven me even more, so I don't go the same way that they are.

Talking about her two little brothers, Cassie added:

Yeah, that's why it's expected more of me, so I can – because then I can help my little brothers. They still look up to me, so I have to go somewhere good where they know it's respectable, and show them what's right.

This theme is most related to the Default-Indifferent and Expectation-Driven subscales. The four items in the Default-Indifferent subscale received the highest percentage of not important/not true responses of any questions on the survey. Relevant to this theme, 67.6% marked *I often ask myself why I'm in college* as not true and 60.3% marked *I am in college because I didn't know what I wanted to do after high school* as not true. Although about half (48.8%) of respondents marked *My parent(s) would be very disappointed in me if I didn't get a college degree* as absolutely or very true, only 36.0% marked *To meet family expectations* as essential or very important. These survey responses do not seem consistent with this theme. This could be a function of social class and parent education. A higher portion of the interview participants are from Working

Class families than is present in the survey participants. Also, a higher percentage of the interview participants were first-generation college students.

Messages about the Purpose of College

When asked how they had formed their reasons for attending college, many participants had a hard time coming up with an answer. Julie replied, “Just off the top of my head.” Perhaps for some students this was due to the fact that college was something expected or automatic as Julie further explained, “So, I don’t know, for me, it was always just assumed that I’d come.” Whether students felt that college was automatically the next step after high school, or as was mentioned above, college was something to take advantage of because others had not had the chance, students heard messages about the purpose of college from a number of different constituents. Consistent with previous research (i.e., Bloomer & Hodkinson, 1997, 1999, 2000; Côté & Levine, 1997; Hossler, Schmit, & Vesper, 1999) students’ ideas about the purpose of college were shaped by parents and other family members, high school teachers and counselors, peers, and higher education institution official representatives. In addition, participants mentioned messages they had heard from the media and from current college students.

From parents and from high school teachers and counselors, the messages about college focused on academic rigor and studying and the impact of college on career opportunities. Heather commented, “My parents were kind of like, ‘Oh, you’re gonna have to study a lot. You’re gonna have to work really hard to get good grades, and you want to make sure you do that.’” Drew explained, “I think it’s like, you know, with my parents, it’s always been, ‘You need to get into college, then you need to get into medical college.’ And there’s never been anything else.” Participants also described messages

from their parents about setting priorities, that academics should be more important than other pieces of the college experiences. Describing what her parents told her about college, Jasmin said:

Work, study, nothing else. No friends. They were like, “You don’t need friends.”

You know, like they were joking, but it was, “It’s going to be really hard and you need to study and keep your head straight. Don’t get involved in too much.”

Kathie mentioned the contrast between the messages she had heard and what she now thought after being exposed to the college experience:

I think before I got here it was more like, it’s kind of drilled into you in high school that you’re going there to get ready for your job and that’s it. But then you get here and there’s so much more to it than that, I think. There’s so many things that you do outside the classroom, that’s only a portion of your time, and I think that’s what a lot of focus is put on, when you’re kind of being steered in the direction of coming to college, I think. So, I think in that way, it’s different.

The messages participants received from university representatives, current college students, peers, and the media focused more on the social aspects of the college experience. For some the importance of meeting people and taking advantage of positive new experiences was most salient. Jasmin explained, “You hear about like I guess a couple new friends that they made, but then you kind of just formulate in your own head, ‘Oh, well, they meet all these people.’” Doug mentioned:

I was in a college preparatory program called Upward Bound in high school and they let us tour colleges and stuff like that so really the expectations I had were

generally positive because you know I had the university fed, kind of sugar coated, this is what college is going to be like.

For others the pros and cons of partying was the primary message. Heather mentioned, “I heard about the partying. Definitely.” When discussing what he had heard from current college students and the university about social life at MSU, Kevin explained:

Some were kids who went to college at a local community college or Western [Michigan University]. I’m from around Kalamazoo, and they just said, “Oh, yeah, went to Michigan State at a party this weekend.” ... Also, in AOP [summer orientation], they show you a video of welcome week, just literally kids laying on the sidewalk, drunk. I mean, they even said, “This is what it’s probably gonna be like here in opening week.” So, I got different viewpoints from not only my friends, also from AOP.

A few participants mentioned similar ideas about the college experience that they had formed from media coverage of college students. Kevin mentioned, “Frankly, I expected just parties, non-stop parties, because that’s the image you get of college, I mean, on the majority of television shows.” Ildi explained:

It’s just the stereotype... A lot of it is the media and how they portray college. Because you always hear about college parties, everyone’s partying but it’s not like that... The media only concentrates on the bad aspects you know. You know the killings, or the getting raped or something. They don’t concentrate on anything good. I guess it isn’t newsworthy.

In this section of the interview findings, I presented participants’ ideas about the purpose of college and their individual goals for college participation. Their reasons fell

into four themes: preparing for life after college, broadening horizons, meeting new people, and taking advantage of the opportunity in order to be a role model to others. In many ways, the four themes described above are consistent with previous research on students' reasons for attending college (e.g., Astin, 1993a; Côté & Levine, 1997; Katchadourian & Boli, 1985). Because much of the previous research has been quantitative, the interview data provide a more nuanced understanding of students' reasons than the previous research and this study's survey responses. In order to explore how these reasons might shape participation in the LBS residential learning community, I examined not only participants' reasons but also the value the participants' placed on the residential learning community experience.

The Perception of the Lyman Briggs School as a Learning Environment

This section will explore interview participants' views about the value of LBS participation. Although the participants' ideas about the purpose of college were similar across the LBS and non-LBS groups, their views about the value of the LBS experience were different. First, I will share the LBS participants' perceptions of the value of the LBS experience. Next, the views of the non-participants will be explored. I will also discuss dissenting views (i.e., LBS participants who don't plan to stay in LBS, and non-participants who wish they'd signed up) within each group.

LBS Students' Reasons to Participate

The 15 LBS participants shared a number of reasons for their participation in the residential learning community. These reasons centered around three main themes: the prestige of the LBS program, the educational characteristics of the program, and the logistical characteristics of the program. The prestige of the program was often discussed

in relation to the choice between Michigan State University (MSU) and the University of Michigan (U of M). The educational characteristics of the program included the intentional focus on the sciences, being surrounded by like-minded students, and getting the best of both worlds (i.e., a small community experience on a large campus). The logistical characteristics included the smaller class size, the convenience of having classes in their residence hall, and living with students who are also in the same courses.

The Prestige of Participating in LBS

Because there are two large research institutions in the state of Michigan, many participants were looking at both the U of M and MSU as an option for college. Several participants commented that LBS added to the educational opportunities at MSU in a way that exceeded the opportunities available at the U of M. Doug noted, “I chose MSU mainly because of Briggs and because of the Honors College. I thought that those two things paired together would give me a better opportunity than say U of M or anywhere else.” Lisa shared:

Well, it’s always been, at least where I’m from, seemed like U of M is better than Michigan State academically, but then I started looking into the Lyman Briggs program, and started to realize that it’s actually better for what I’m going into.

The Educational Benefits of LBS

Several students described the educational benefits of participation in the LBS. The learning experience is perceived as more advanced because of the way courses are taught and the specific focus on the sciences. Cassie explained:

It seems like they’re more advanced [LBS courses compared to non-LBS courses]
... so we can – like, if we can get it done quicker we can go like, elaborate,

through more. Like in my math class, we actually go through science problems and how they're applied to biology and my teacher always brings up different things. If you're gonna go into this field, this is something you should go through. So, I like that more. Yes, it's kind of like, it's interweaving everything. I like how it's more science based.

In addition to the teaching style and the focus on the sciences, several participants mentioned the benefit of being surrounded by like-minded students. Vun explained, "And it just seems like everyone in this place has the same goals and stuff as you, and like people aren't as wild here, I guess."

Participants described LBS as a small college experience on a large university campus. John commented, "I figured I could get the best of both worlds... There's Michigan State all around me, and little Lyman Briggs on the corner of the east side of campus." Kathie explained:

Just, basically, the whole small school atmosphere, I thought that I would be more comfortable in that, because I'm kind of shy, so I thought that I would do better in a smaller environment, but after talking to some people, you kind of get the small environment within the larger one, here, especially at Lyman Briggs.

The Logistical Benefits of LBS

Consistent with previous research on students' reasons for participating in residential learning communities (Jones et al., 2006; Shapiro & Levine, 1999; Smith et al., 2004), participants cited reasons such as convenience, small class sizes, and access to peers. Cassie mentioned, "I really like the idea that I can wake up and go to class, and if I need help, I can go across the hall." Heather explained:

The classes are smaller, definitely... You get to have more one on one time with students, especially because you see them more often. They'll be in your chemistry class and your lab class, or your math and different classes like that, so you'll see them around because they live in the building. It's also nicer to have, like a smaller class because you get more one on one time with professors. They know your name, they know how you can kind of perform, because some of the teachers will come up to you in class and kind of check over what you're working on and stuff.

Lisa summed up the benefits in this way:

Hopefully I'll have a better foundation in sciences, because the classes are smaller, so the professors are really easy to get hold of. So I should be learning more, or like learning more than I'm memorizing. And I really like the community, like a living and learning community, because there are many times that I walk down the hall to get homework help.

Questioning their decision to participate

Almost all of the current LBS participants whom I interviewed were happy with their decision to join LBS and planned to graduate with an LBS major. Twelve weeks into the semester, two students were considering leaving the LBS program and continuing at MSU in another degree program. Natalie expressed that she would have made a different choice about LBS had she understood how it fit with her interest in nursing:

I wish that I personally had had someone to tell me that Lyman Briggs isn't absolutely necessary for the nursing program, just because it's kind of like

double-majoring for me. So I mean, I'm going to get out of the Briggs program, but I wish I had had that honesty, I guess.

When asked how long she planned to continue, Natalie responded,

Actually, depending on which courses I need to take for next semester, I mean, I love living in Holmes because I've made friends here and I'm comfortable now.

But all the classes are unnecessary for me to take them all to graduate from Briggs so really, I mean, I was thinking now, you know.

Although John said that he appreciated the small school atmosphere and felt that he was learning more than he might in non-LBS courses, he expressed concern about the impact the difficulty level of LBS would have on his ability to get into medical school:

So, that's pretty good in the learning aspect, but I question the – my question is – and some people on my floor that felt this way, too... Some people say they think they would rather take university [classes instead of LBS classes] just for the fact that, you know, you can pretty much just – smarter people will just always get the better grade. Here [in LBS], you know, they'll just – You got to think about stuff. You just might get screwed over just because you signed up for the Briggs program, you know what I mean? So, like sometimes I feel if I took a normal university class, you know, it'd be a lot easier. I don't even know how relevant Briggs is to a degree, anyway... If you apply to some grad school anywhere, are they gonna know what Lyman Briggs is compared to a normal university?

John was the only LBS participant who was unhappy with his academic experience in LBS. He was very concerned that even though he might learn more in the LBS classes, he would be disadvantaged in the medical school admission process because his grades

might be lower than other applicants who had taken easier version of the required coursework. He expressed that it was unfair that no official recognition (such as an honors notation on a transcript) was given to LBS students to show external audiences the advanced level of the coursework.

Reasons Not to Participate in LBS

The eight non-LBS participants had differing reasons for their decision regarding the residential learning community opportunity. In some cases, the non-participants felt that the characteristics marketed as reasons to participate, such as small class sizes and living with like-minded peers, would stifle their college experience. Others were concerned about the perceived difficulty level of the LBS courses and did not want to take courses that were not specifically required for their majors. One interviewee did not pursue the option because she was confused about the opportunity and another wished he had participated.

Sona was looking for variety in her peer group, rather than homogeneity of interests:

The Lyman Briggs thing, I didn't want to do because you're with people who are exactly what you want to do, which doesn't give me a chance to interact with people who have different opinions, different views and different majors.

Whereas my roommate has forensic science as a major, which is completely different, and I love learning about like forensic science and all that stuff.

Jasmin was concerned about feeling isolated on one end of campus:

I did know about Lyman Briggs, but like a lot of people I knew at Lyman Briggs hated it. They were like very secluded, were in Holmes [Hall] and that's it. And I didn't want that. I want to be out and about and seeing stuff.

The impression that LBS was more difficult and required extra courses was a negative factor for some students. Anne said, "Isn't that like honors students?" Ildi shared:

I did look at it but I talked to people who were in the program and they said for a pre-med major you end up dropping it after two years because you're required to take some courses that don't really apply to the major I guess. So I was advised not to.

Two of the non-LBS participants did not specifically decide against participating in LBS. Instead their decision making process did not correspond to the timeline for indicating an interest in participating. Anya had heard about LBS but wanted to wait and learn more before deciding:

They sent me information about them, but I didn't really understand what they did. So I said, I'll go in and find out more about it throughout my first semester, and yet I haven't learned much about it. I know it's in Holmes Hall, that's about it.

Reflecting on his decision, Charlie explained that he wished he had participated:

Well, actually I was in mechanical engineering and thought about ROSES [Residential Option for Science and Engineering Students], but then I kinda got out of mechanical engineering... I wish I would have gone to Lyman Briggs, now that I got here, and I'm all acclimated. I didn't really think about it at the time. I don't think I really knew anything about 'em... I had mechanical engineering

declared, so I knew about ROSES because I got some stuff in the mail about it, but once I changed that, I didn't really think about anything.

This section presented students' perceptions of the value of participating in the residential learning community the Lyman Briggs Schools. Participants said that the LBS provided prestige, educational benefits, and logistical benefits. Non-participants expressed concern about not experiencing diversity of thought, the perceived difficulty of the LBS program, and the extra courses that would be involved. It is interesting that the perception of the value of LBS was the only thematic area of the interview data where differences between the two groups of participants (LBS and non-LBS) were apparent. In the next section I will discuss the formulas students used for being a college student and preparing for medical and/or graduate school.

Formulas for Reaching College Goals

As participants discussed their reasons for attending college and their decision about participation in the LBS and other curricular and co-curricular activities, it became apparent that one of the factors shaping their actions was the formulas they had developed for being a college student. In addition participants were utilizing a formula for preparing for medical and/or graduate school to make decisions that shaped their educational experiences. The concept of following formulas is not new to research on college students. Baxter Magolda (2001) found that through college and even into the post-college years, her participants relied on "external formulas for success in the absence of their own internal belief system" (p. 41). This section will explain the components of the participants' formulas for being a college student and for preparing for medical and/or graduate school. Similar to the reasons for attending college, the

participants' formulas were not particularly different based on whether or not they were in the LBS. Thus, the responses will be presented together without noting whether or not the respondent is an LBS participant.

Formulas for Being a College Student

The interview participants' formulas for being a college student both reflect and expand upon research on today's college students. The participants discussed issues of social and academic integration (Tinto, 1993). They also focused on finding balance after experiencing very scheduled high school lives and on wanting to contribute to their local community, both reflective of their being Millennials (Howe & Strauss, 2000, 2003; Lowery, 2001; Strauss & Howe, 1991). In addition, the participants expressed an awareness of being in transition and the importance of creating a strong foundation during their first semester for success in the rest of their college career. This is perhaps a function of higher education's increased focus on retention and first year experience programs.

Formulas for Social Integration

As discussed above, Meeting New People was mentioned as a specific purpose of college by 17 of the participants. This goal for college was reflected in the formulas students had developed for integrating into the MSU social atmosphere. This integration involved meeting new people and finding their niche on campus as well as redefining their relationships with family members. Also, a few participants mentioned an intentional plan to expand their social group by evading others who had attended their same high school.

Julie's approach to "dorm life" helped her connect to new people, "I'd say go into the whole dorm life, like don't pick a roommate. Leave your door open and kind of just enjoy yourself." Jamie explained the process of establishing a close group of college friends:

Meet a lot of people really fast, because after welcome week everything sort of settles down. You're meeting people like crazy for the first month and then you kind of find out who your circle is – who you hang around the most, and you settle down into that. I mean, you still meet people, but not as much, not as at fast of a rate, as you do during welcome week.

A few students talked about choosing MSU because of its distance from home. Jamie explained, "It's far away enough that you have to live on campus but it's close to home enough where you can get home for dinner, or an emergency or in a flash." Maggie was still adjusting to being away from home:

I think sometimes they [my family] wish that I would stay up here just so I meet more people and get more involved. But sometimes it's just hard for me, because I need to be at home sometimes.

A couple of participants felt that MSU was just an extension of their high school because so many people they had gone to high school with also attended MSU. Charlie said, "It's like [Name of High School] 2, cuz you can't go anywhere without seeing anybody. So I really wanted to not do that and meet new people." Sona explained:

I come from [Name] High School and like Michigan State is called [Name of High School] Part 2... I have to take like different routes now because I run into

them [my classmates] all the time... Even on the way here, I ran into an old friend.

Formulas for Academic Integration

The participants' strategies for managing their academics were similar to the types of topics often covered in study skills workshops and first year transitions courses (e.g., time management, test taking skills, note taking, etc.). Students also talked about the importance of finding guidance and focusing on learning over grades. Participants looked to older students as well as academic advisor for guidance about their college careers. Natalie mentioned:

I found it really helpful to ask students who have been through the nursing program or who have just been accepted into it just to see like what classes they've been taking and so to plan my course schedule, that way through other students, has been really helpful and making connections with advisors has been helpful, too.

Sona was pleased with the easy access to resources, "Just anywhere you go, there's always someone to assist you or help you like further yourself in what you want to do with your life or just like basic problems."

Participants explained that part of being academically successful is adjusting to a new way of learning. Drew commented, "You actually have to learn it. If you memorize, you pretty much well get screwed over." Natalie explained, "There's a lot of self-teaching which I hadn't really thought much about going into." Ildi was looking forward to a change from high school learning, "You go to college to learn and not just like pass it

and get your degree.” When explaining her response to the survey question, *To achieve a high GPA*, Mingmei said:

And having a good grade is very important too, but I guess I gave it a low score because actually you’re learning something. I would be very disappointed if I don’t get a good grade, but actually really knowing it is more important, I guess.

Millennials

Howe and Strauss (2003) noted that, among other things, Millennials are active in volunteer activities and have been brought up in very busy and scheduled environments. These two characteristics were illustrated by the focus participants placed on giving back and also their rationale for not getting too over-involved but exploring non-academic involvement. Doug described his reasons for participating in H-STAR, an honors college recruiting group, “You know that’s just another leadership skill and another chance to kind of open the doors to high schoolers, the same doors that were opened to me when I was in that position.” When asked about his interest in being a Mentor (Resident Assistant), Dan noted, “What would make it a really great time would be making friends with a lot of other mentors, and in knowing you made a difference.” Lisa explained her motivation for auditioning to be a squad leader for marching band:

Just from being a freshman this year and seeing how much I’ve improved and how much like the influence of this year’s squad leaders, how big of an influence that had on me. I would love to have that much of an influence on somebody else.

Although a few students described schedules full of student group meetings every night, many viewed college as a time to relax and enjoy not being busy every day of the week. Kevin explained, “I was a leader all through high school. Between being a captain

of a football team or any other teams, or some things in class, it was just, you know, I want to take a break.” Jamie was excited to have the opportunity in college to explore out-of-class opportunities, “because the specialized high school [I attended], they overloaded us with homework, so much so, that’s why I never had a chance to do drama or sports, or really anything like that.”

Transition Awareness

Another aspect of the participants’ formulas for being a college student was an awareness of being in transition. Listening to them was like reading a UNV 101 (transition to college/success skills course) textbook. Drew described his college experience thus far as both the worst and yet best time of his life, “The worst is basically the transition from high school to college... Our habits from high school are still there and we’re trying to get rid of that.” When talking about his choices of which organizations to be involved in, Doug commented, “I haven’t really been able to maintain those [sports related activities] as well as my academic based ones mainly because I’m still a little over my head being in the freshmen year experience.” When asked about whether she had joined any organizations, Sona responded:

Not yet. I’ve been focusing on school mostly, like they all tell you the first 16 weeks are your most important. So, I mean, I have another four years ahead of me so I figure if I can just keep my GPA up at this point, then I’ll have all the time in the world to participate in those types of things.

When discussing her response to the survey item *To take advantage of leadership opportunities on campus*, Natalie commented, “I don’t think it’s – I think, for some

people, it works, jumping in right away. To establish yourself here first, I think that's pretty important." Kevin explained his response, of little importance, by saying:

I guess I picked one for that, of little importance, and it still is a little bit to me, right now, because I'm a freshman, and I don't want to just jump on the podium right away. I just – I want to sit back and see how people do things.

Several students commented that balance was the key to making it through the transition. Participants also mentioned that a mix of non-academic and academic activities can be beneficial. Ildi explained, "You either balance or you'll just fall into the party scene completely because once you fall behind there's no coming back really."

Natalie illustrated the importance of balance talking about family and friends:

It's really a balance. Balance was the first word that came into my mind.

Balancing friends and family, for one. Sometimes you get caught up with new friends and so, I don't know. You still have to stay connected with family, too, and that can be kind of difficult because you're living your own life here.

Doug commented, "You've got to have your things that focus on academics... And then you have the things that are totally in their own realm but I think everything is helpful in its own way." Anya noted, "And there's also a lot of activities going on, but you don't want to get overly involved, and you don't want to be involved in nothing as well."

The participants' formulas for being a college student included a focus on both their social lives as well as their academic lives. They talked about balance and not wanting to be as overly scheduled as they had been in high school. The participants placed value on giving back to their communities. They also displayed an awareness of

being in transition and felt that the transition to college required specific strategies that could impact their future at MSU.

Formulas for Getting into Medical School and/or Graduate School

As noted above in the section *Preparing for Life After College*, most (17) of the interview participants were interested in pre-professional careers. A few (3) mentioned an interest in pursuing graduate degrees. These participants shared how they thought their undergraduate experience would prepare them to reach their goal of further education. As mentioned above, participants pointed out the importance of the credential of a bachelor's degree in continuing their education. High grades and specific courses were seen as important pieces of the credential. They also discussed the personality traits and specific skills they hoped to develop to prepare for graduate school, such as learning to work with different types of people and dealing with stress. In addition, they shared their impressions of how medical and graduate schools would value service and leadership activities. Several interviewees also mentioned the importance of hands-on experience.

Grades and Specific Coursework

Several students expressed concerns about keeping their GPA high enough for medical school admission. Charlie commented:

I've done some research and talked to some academic advisors for medical and dental schools. I know how tough it is to get in... So if all goes well, I want to get accepted in dental school. So I'm just trying to get very good grades and fulfill all those requirements, and then pick a major that I enjoy and can fall back on if that doesn't work out.

Anya equated high grades in the right classes as a sign of thoroughly learning the material she would need to know for medical or graduate school:

But having a higher GPA, I would say that's probably my top priority, just because if I take the right classes and have a higher GPA, then I know that I have the knowledge with that class, and that maybe I can just go on to med school or go on to graduate school.

Personality Traits and Skills

Having a high GPA and taking specific coursework were not the only aspects of students' formulas for getting into medical and/or graduate school. A few participants explained the overall traits that they thought medical and/or graduate schools would look for during the admission process. Lisa said:

I want to look like the ideal, hardworking, intelligent—like overall – good personality-wise, good with animals, good with people. Good leadership qualities, good group working qualities. I would love to graduate with a four-point, and I guess just like positive qualities that you would ever think of being like in someone in the medical field, like good bedside manner and stuff like that. I would hope that they would think that I have either potential to have those qualities, or already have those qualities.

Several students hoped that college would help them develop skills for interacting with people in their capacity as health care providers. Jasmin explained:

I think you need to be able to work with people, talk to people, because you're going to be meeting new people right away. You know, you need to be able to make them feel comfortable and like feel safe enough to open up to you and tell

you everything. So you need to be able to establish almost like a relationship or like a bond right away with a person.

In preparation for a medical career, Cassie hoped that college would help her “to learn how to deal with stress.” Jasmin explained how her college experience had contributed to this skill:

Also how to work under stress, especially if you’re a doctor, you need to know how to work under stress, which I’m learning here. And like I love sleep and that’s one thing I miss in college because it seems like I don’t sleep here at all. And so, you know, I’m actually learning how to work without sleep. And I know doctors do that a lot, too.

Service and Leadership Activities

As noted above, the Millennial generation is said to be very active in service (Howe & Strauss, 2003). When the interview participants talked about community service and participation in student organizations as part of their formulas for getting into medical and/or graduate school, they were both strategic and altruistic. Maggie mentioned specifically that participation was a resume builder, “Also, trying to get into a few clubs, which, obviously, looks better on resumes, and applying to graduate school and all that stuff.” Doug was looking for organizations that are “designed to prepare you to get into med school” such as the Pre-Med Association and the Physiology Society.

Dan almost seemed apologetic that he was thinking not only about service, but also about graduate school, “Another reason, in all honesty, it’s just a credential for grad school.” Lisa mentioned, “I am looking for leadership things, ‘cause like I’m kind of a little bit focused towards like vet school applications,” and then went on to talk about

how she could use that leadership position to benefit others. Charlie shared, “I’m going on Alternative Spring Break this spring to Georgia to work in a hospital for a week. So, that should be fun, give me some experience to put on my application.” Charlie also mentioned, “I know on the Service Learning website there’s some dentist stuff that I tried to get into, but it was filled almost instantly when that opened up this semester.”

Hands-on Experience

Several students had participated in internships and job-shadowing prior to beginning college and these experiences shaped their motivations for pursuing their chosen career path. Others commented that hands-on experience was something they hoped to include in their college experience to confirm their choice. Charlie mentioned, “You need experience in the field to know that that’s what you wanna do.” Drew explained that an internship would help him discover “what it’s really like inside the field instead of hearing or seeing what people make it out to be like.”

In addition to using hands-on experiences to confirm their motivation toward medical or graduate school, participants also saw it as a way to prepare for, and be attractive to, medical and graduate schools. When asked how she could prepare for vet school, Lisa answered:

The experience, like animal experience. And I haven’t gotten in with the vet program here, like actual hands-on experience, but I’m going to be working on that now with my free time. But I do have like a year and a half of hands-on working with a vet, experience from a job that I had in high school. So I was in there like holding the animals, for the appointments and the surgeries, and various things.

Jamie explained the advantages of hands-on experience:

Where you're in an environment and you get to see how it happens and see how people react and how they process their thoughts. How they think on the spot, to different situations and all that. Being in that whole situation, seeing how people do it, could probably help me get ready by showing me how I would do it.

In this section I provided details about students' formulas for being a college student and for preparing for medical and/or graduate school. The participants' formulas for being a college student included strategies related to both the social and academic aspects of their experience as well as an awareness of being in transition. Their formulas for getting into medical/graduate school included a focus on earning high grades, developing skills to work effectively with people, service and leadership activities, and the importance of hands-on experience.

Conclusion

The purpose of this chapter was to present the findings from the interview phase of this study. The chapter included a description of the survey participants, a discussion of participants' views about the purpose of higher education and how they formed those views, and an exploration of their perceptions of the value of the LBS as a learning experience. Also in this chapter, I described the participants' formulas for being a college student and for getting into medical and/or graduate school. In Chapter 6, I will present a model of the relationship between reason for attending college and participation in a residential learning community or other co-curricular opportunities.

CHAPTER 6

Introduction

The purpose of the current study was to explore the relationship between reasons for attending college and participation in a learning community. I was particularly interested in investigating the processes by which students shaped their own educational environments through the choices they made regarding curricular, co-curricular, and extra-curricular opportunities and the role reasons played in those processes. Astin (1993b) referred to this phenomenon of students shaping their education as “self-produced environmental experiences” (p. 83). I also wanted to examine the role the environment played in shaping both students’ reasons for attending college as well as the choices they made in the college environment.

Both the *process-person-context-time* (PPCT) model (Bronfenbrenner, 1976, 1979, 1989, 1993, 1995) and the concept of learner disposition (Bloomer & Hodkinson, 1997, 1999, 2000) suggest that a person’s subjective view of the situation, or the meaning that learners attribute to their learning experiences, shape the outcomes of a person-environment interaction. Consequently, I was intrigued by not only participants’ reasons for attending college but also their perceptions of the value of the learning community opportunity. In the interview data, the finding that *perception of the value of LBS as a learning experience* was the only thematic area in which I observed differences between the LBS participants and the non-participants confirmed the role of a person’s subject view of the learning experience.

In the previous chapters, I presented the findings from the survey and the interview phases of this study. In this chapter, I will synthesize these findings by

proposing a model of the relationship between reasons for attending college and participation in curricular, co-curricular, and extra-curricular opportunities.

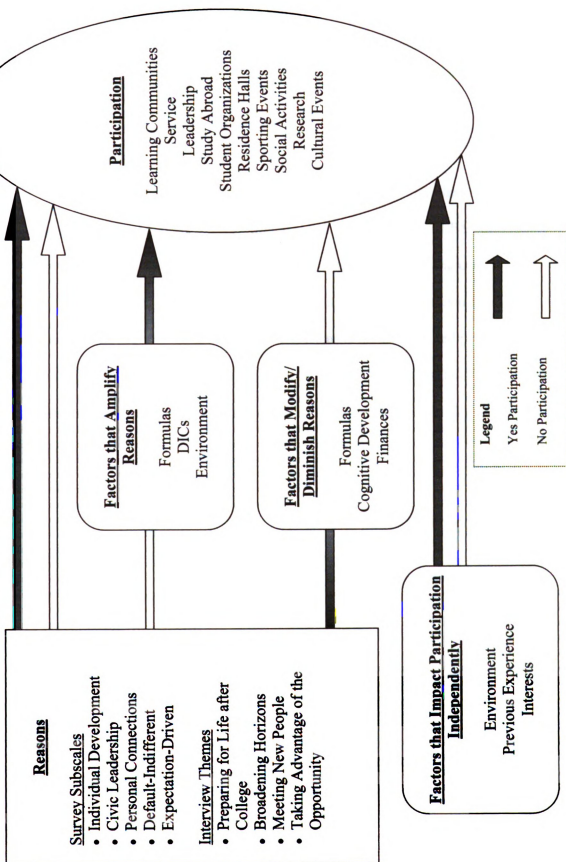
A Model of the Relationship between Reasons to Attend College and Participation

Although the primary focus of this research was learning community participation, both learning community participants and non-participants were included in the interviews. Because the interviews were conducted near the end of the students' first semester, participants had had occasion to make choices regarding participation in not only the Lyman Briggs School (LBS) but also other curricular and co-curricular activities. Consequently, the model presented in Figure 1 represents the relationship between reasons to attend college and participation in a number of different activities. After a brief description of the model, specific examples from the interviews will be used to illustrate how the model can be applied to the participants' decisions regarding participation in the LBS. Then I will explore how specific participants' stories demonstrate the connection between reasons to attend college and participation in other curricular and co-curricular activities.

The model includes six paths to participation. Four of these paths begin with reasons to attend college. In some cases, participants' decisions about participation were directly related to their reasons for attending college. This direct path from reasons can lead to either participation or non-participation. More often, another factor shaped the influence reasons had on participation. Some factors amplified the impact of reasons on participation, while others modified or diminished the impact of reasons on participation. In several cases, the participants' decisions regarding participation were a function of previous experience, interests, and the environment, and were not directly related to a

specific reason for attending college. The gradation of the arrows represents the impact of the factors with a clear arrow signifying non-participation and a darkened arrow signifying participation. Following the model, I will use excerpts from the interviews to illustrate the paths to participation.

Figure 1. A Model of the Relationship between Reasons to Attend College and Participation



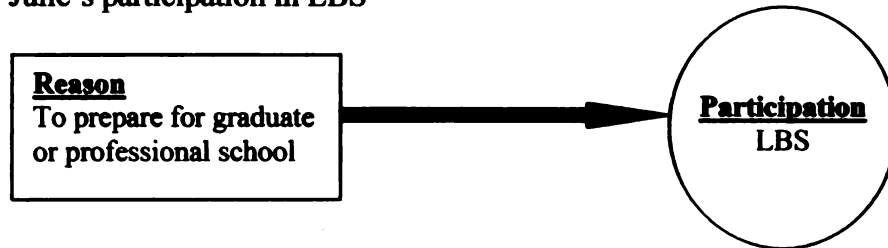
Participation in the Lyman Briggs School

As I presented in Chapter 5, the 15 LBS participants had a number of reasons for participating in the residential learning community. These reasons centered around three main themes: the prestige of the LBS program, the educational characteristics of the program (e.g., the intentional focus on the sciences and being surrounded by like-minded students), and the logistical characteristics of the program (e.g., smaller class sizes and the convenience of having classes in their residence hall). The eight non-LBS participants had a variety of reasons for their decision regarding the residential learning community opportunity. In some cases, the non-participants felt that the characteristics marketed as reasons to participate, such as small class sizes and living with like-minded peers, would stifle their college experience. Others were concerned about the perceived difficulty level of the LBS courses and did not want to take courses that were not specifically required for their majors.

The Direct Path from Reasons to Attend to LBS Participation

The participants' explanations of how they decided whether or not to participate in the LBS illustrate three of the paths to participation represented in the Model of the Relationship between Reasons to Attend College and Participation: the direct path from reasons to participation; the amplifying effect of factors such as formulas, DICs, and the environment; and the path not directly related to reasons to attend college. In many cases, reasons for attending college had a direct impact on a student's participation in the LBS. For example, Julie's choice to participate in the LBS was directly related to her career goals, "I figure to get into medical school, it's probably beneficial to stay in the same major, especially Lyman Briggs."

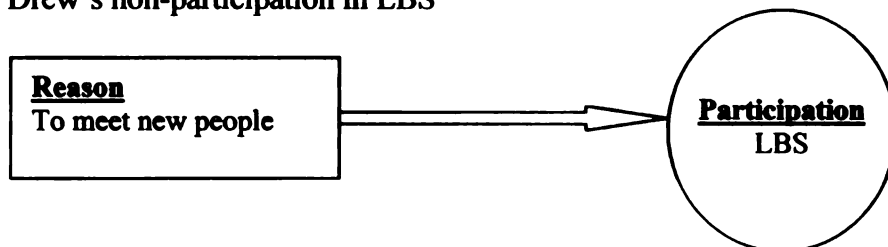
Figure 2. Julie's participation in LBS



Drew decided against participating in the LBS because of his focus on meeting new people:

I didn't really like the fact that Lyman Briggs was centered in one hall, classes where you are just in that hall. Basically it's like saying your classmates are the people that you know in your dorm. I'd like to meet more people and all. Rather than just stay with the same routine.

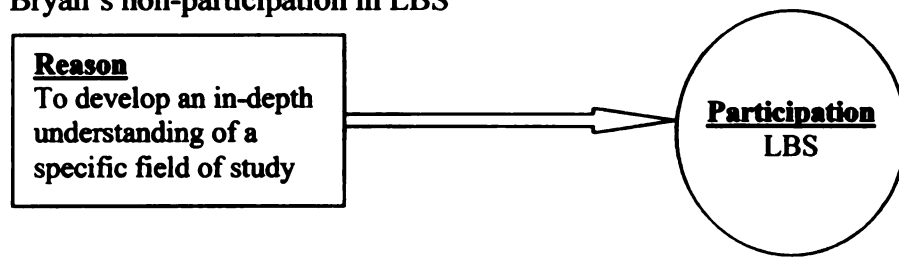
Figure 3. Drew's non-participation in LBS



Bryan's reason for not participating in LBS was directly related to his desire to study mathematics in depth:

I looked at it [LBS]... From what I heard it's not as "math-y."... Lyman Briggs felt like I was going to be going through – well, you're in this great science program, but that's not what I wanna do. I don't wanna be a scientist. I wanna be a mathematician. And it's a very fine line, but if you're – if you just love math, you know where it is, and that Lyman Briggs was barely on the other side of that, you know.

Figure 4. Bryan's non-participation in LBS

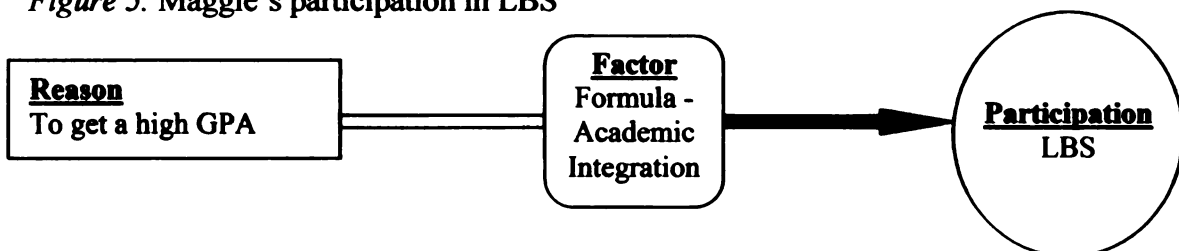


The Amplifying Effect of Formulas on Participation in LBS

In many instances the formulas that students had developed for being a college student reinforced their reasons for attending college and resulted in participation in the LBS. When choosing to participate in the LBS, several participants tied their decision to the perception that Holmes Hall (where LBS is housed) would provide a good environment for studying. Maggie commented:

Holmes isn't a huge party atmosphere... And I think I kind of like that better because I get all my school work done and I don't – you know, and that's what I was also afraid of because at Michigan State, I hear it's like the big party school and I didn't want that to distract me from my classes. So, I think it helps that I'm in Holmes, rather than in some other dorm where everyone's loud and just wants to party all the time.

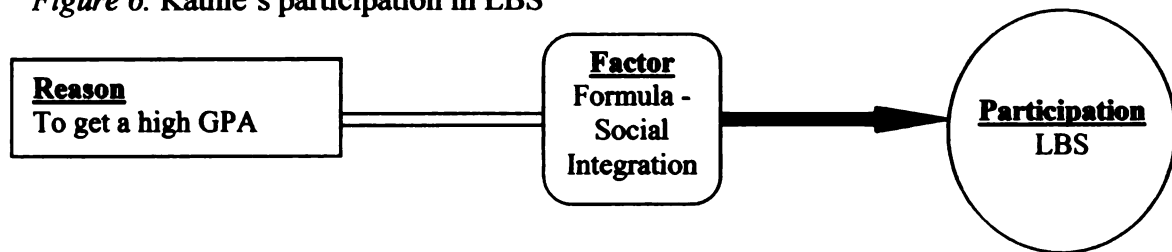
Figure 5. Maggie's participation in LBS



Kathie's decision to participation in the LBS was amplified by her concern about feeling comfortable in the social environment of college:

Just, basically, the whole small school atmosphere, I thought that I would be more comfortable in that, because I'm kind of shy, so I thought that I would do – do better in a smaller environment, but after talking to some people, you kind of get the small environment within the larger one, here, especially at Lyman Briggs.

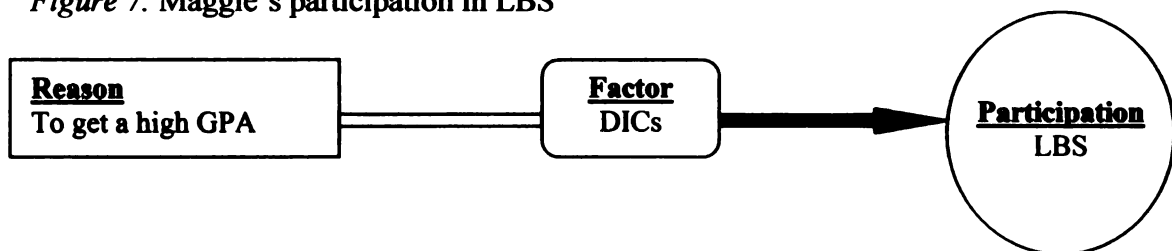
Figure 6. Kathie's participation in LBS



The Amplifying Effect of DICs on LBS Participation

In a few cases, the participants' developmentally instigative characteristics (DICs) (Bronfenbrenner, 1976, 1979, 1989, 1993, 1995), personal attributes that shape developmental processes such as the willingness to engage in increasingly more complex activities, played a role in the student's decision to participate in the LBS. As noted in Chapter 5, LBS courses are perceived as more academically challenging than non-LBS courses. Maggie welcomed this challenge, "I did hear that it was a little bit harder than the regular university, but I was willing to challenge myself and I was willing to go through with it."

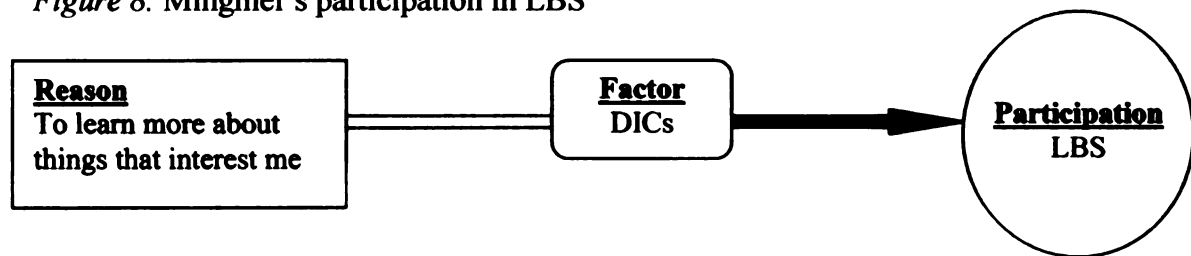
Figure 7. Maggie's participation in LBS



Mingmei chose to participate in LBS even though she did not have a strong background in science:

I looked at what it [LBS] was about, and I thought it was cool, because it also included many different areas, but it kind of focused on the science, even though I'm not exactly sure about that either. But I didn't have a lot of science experiences in my secondary education, I guess, because throughout elementary school, we just had science classes and electives, and then I had two years in middle school, and my high school – their English program was very – English history was very strong, but not so much the sciences, so –

Figure 8. Mingmei's participation in LBS

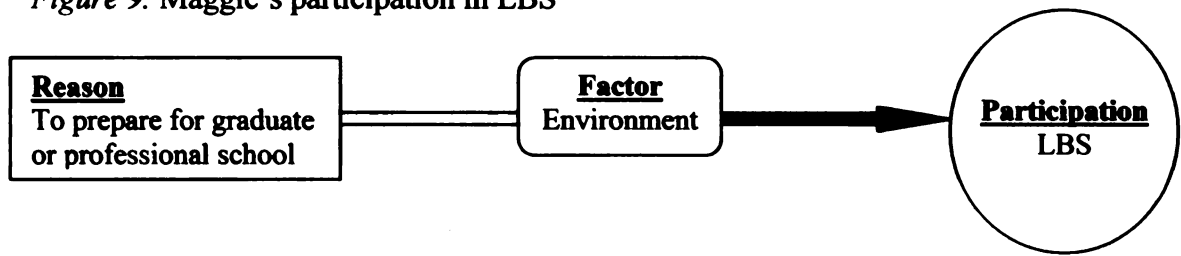


The Environment and Participation in the LBS

A few students mentioned that they made their decision about LBS participation based on information or advice they had received from someone within the collegiate environment. Maggie's decision to participate in LBS because it would help her prepare for graduate school was amplified by the information she received:

When I came in the summer, for like, a tour type thing... I just happened to go to Lyman Briggs, and then they started talking about how it would be a good place to go if you were going in a pre-professional program, so then I figured that I should probably be a part of Lyman Briggs, it would probably help me out.

Figure 9. Maggie's participation in LBS

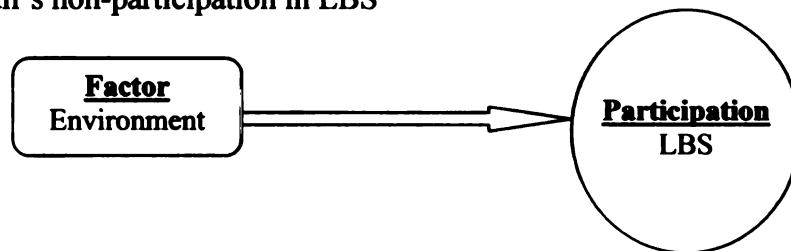


For Ildi, the environment was the sole influence on her decision not to participate in LBS.

Her decision was not directly connected to her reasons for attending college:

I did look at it [LBS] but I talked to people who were in the program and they said for a pre-med major it — you end up dropping it after two years because you're required to take some courses that don't really apply to the major I guess. So I was advised not to.

Figure 10. Ildi's non-participation in LBS



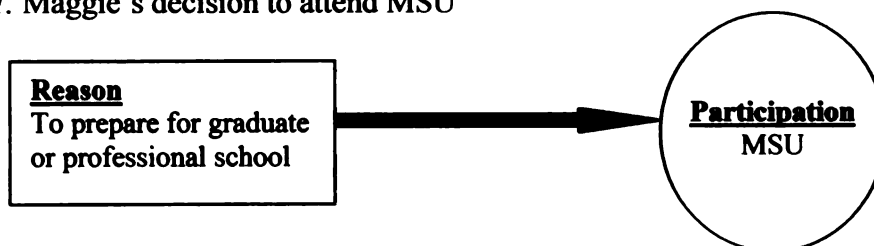
In this section, I demonstrated how the interview participants' decisions about participation in the LBS are represented in the Model of the Relationship between Reasons to Attend College and Participation (Figure 1). LBS participation followed three of the six paths to participation: the direct path from reasons to participation; the amplifying effect of factors such as formulas, DICs, and the environment; and the path not directly related to reasons to attend college. In the remainder of this chapter, I will use excerpts from the interviews regarding participation in a variety of other curricular and

co-curricular opportunities to illustrate the six paths to participation presented in the model.

The Direct Path from Reasons to Participation

Reasons for attending college had a direct impact on students' participation in opportunities beyond the LBS. For several participants, their decision to attend MSU over other institutions was directly related to a major or career specific reason for coming to college. Dan explained why he chose MSU, "Because I'm majoring in astrophysics and Michigan State has one of the top three astrophysics programs in the nation for undergraduates." Maggie stated, "Well I want to be a vet, and Michigan State has the best vet program."

Figure 11. Maggie's decision to attend MSU

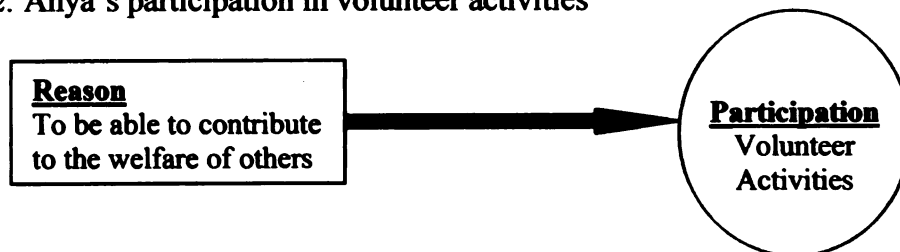


When talking about her goals for college, Cassie said, "Just like broaden my horizons. I really want to do the alternative spring break, or study abroad." On the survey, Anya marked *To be able to contribute to the welfare of others* as essential. This value is illustrated by the activities in which she has become involved:

Yeah, I started volunteering last week, actually... So I want to continue that, it's really fun, or maybe even continue volunteering somewhere else, different kinds of places... I think it's kind of nice to help people out, and since I'm not working – I've always been working, I kind of want to stop working a little bit, kind of

experience new things, meeting new people, and contribute. It might help someone else.

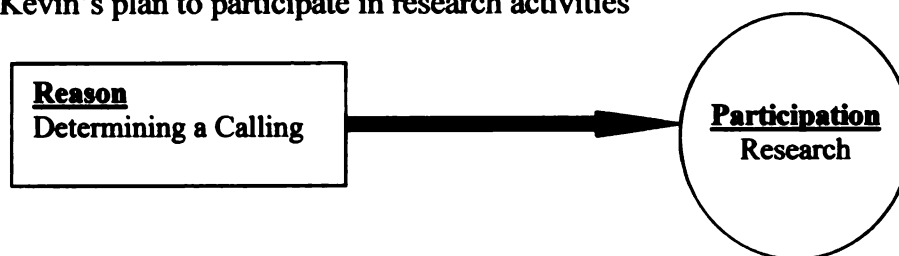
Figure 12. Anya's participation in volunteer activities



Kevin expressed an interest in research opportunities as a way to figure out what he might want to declare as a major:

What I want to know is if that's really what I want to do. If I – 'cuz you know, I looked at fields of astronomy, but they didn't look too appealing. But I think if I can get my foot in the door and some kind of lab to see, "This is what you'd be doing." You might be taking data analysis all the time, doing experiments. Just to see what it's like, see if I like spending time in a lab or something like that.

Figure 13. Kevin's plan to participate in research activities



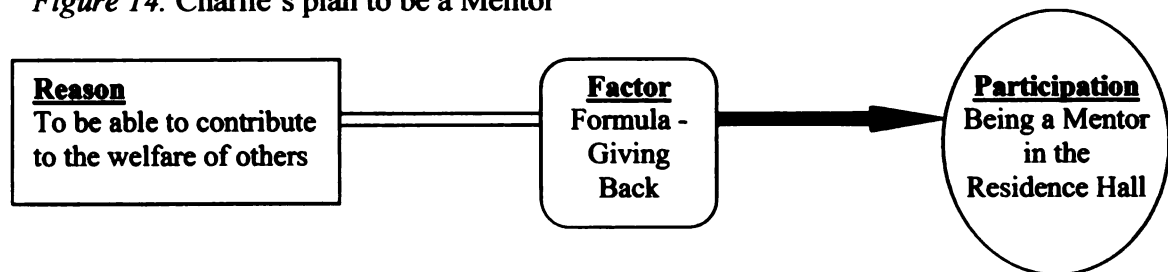
The Amplifying Effect of Formulas

In many instances the formulas that students had developed for being a college student reinforced their reasons for attending college and resulted in participation in a variety of curricular and co-curricular activities. A few participants mentioned an interest in getting a job as a Mentor (Resident Assistant). This desire was often related to the

concept of giving back as part of the formula for being a college student. Charlie explained:

I wanted to be a mentor next year. I just really liked the college experience of just the big campus, meeting people, all the stuff to do, clubs to join, people with your same interests, and I kind of wanted to share that.

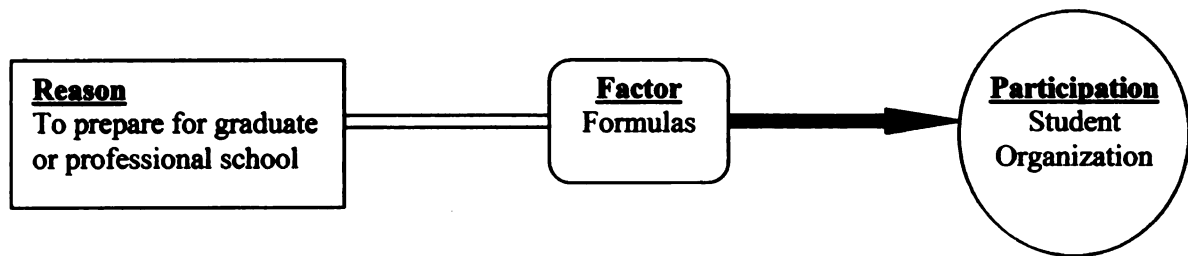
Figure 14. Charlie's plan to be a Mentor



In Jasmin's case, her decision to get involved with an Indian student organization was shaped by both her formula for integrating socially as well as her formula for preparing for medical school:

I kind of grew up with all White people and so, like I'm very traditional. Like I have all my traditions oriented. I speak my language completely fluently. I actually learned English second... I know about the culture, politics, economics, everything I know about that, but like I've never really lived with Indians. So I think that [getting involved with the Indian student organization] will also help me like see more different races which will be good because as a doctor, you'll definitely encounter different things.

Figure 15. Jasmin's decision to participate in the Indian student organization

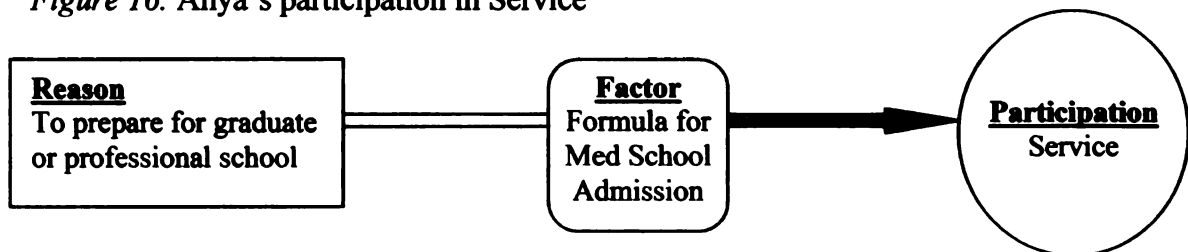


The Modifying and Diminishing Effects of Formulas

In some cases, the participants articulated that their actions were driven by their ideas, or formulas, about how to attain their goals. Although students might be acting on similar formulas, for example the importance of volunteer experience for admission to medical school, the resulting participation was not always the same. Both Anya and Anne were interested in volunteering but had different reactions to the information they learned about the opportunities that were available. Anya commented:

We have a service learning center website. So I went on there, and then I was looking at kind of things toward the medical field. And a lot of it was taken up, so I said, why don't I just try something else, so I just went to a different category and found it [the agency for which she is volunteering] there.

Figure 16. Anya's participation in Service



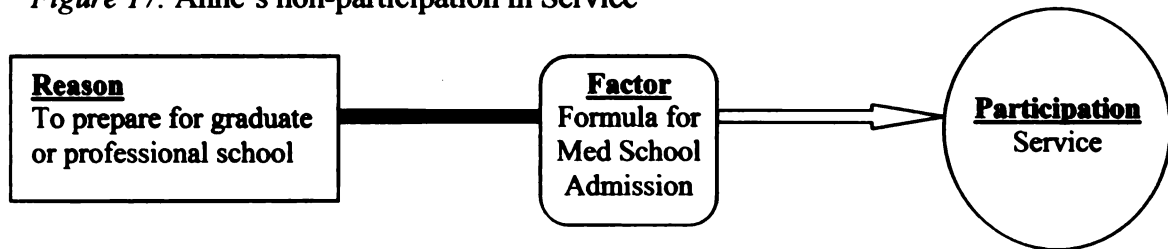
Anne explained her participation in this way:

Yeah, I've volunteered like three to four times, and well – that didn't help me.

The dental school wants me to volunteer in a dentist office. I didn't do that,

though... That's why I stopped doing volunteering, like, that's not really necessary for dental school.

Figure 17. Anne's non-participation in Service

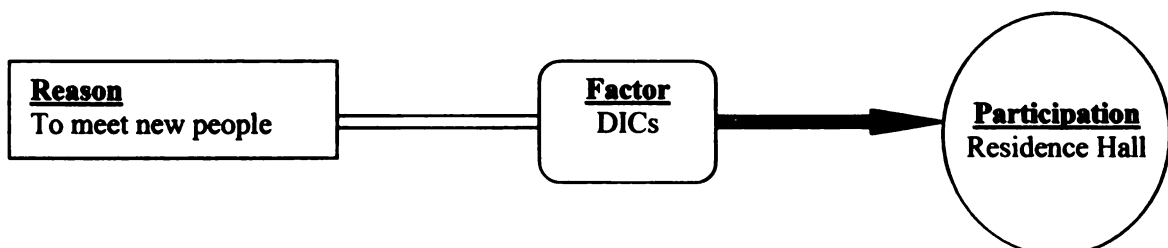


The Amplifying Effect of DICs

In a few cases, the participants' developmentally instigative characteristics (DICs) (Bronfenbrenner, 1976, 1979, 1989, 1993, 1995), personal attributes that shape developmental processes such as the willingness to engage in increasingly more complex activities, also played a role in the actions students took to achieve their goals. When talking about how she went about meeting new people, Natalie described actions that required a certain structural proclivity, willingness or comfort level with challenging situations:

I know like the first week and a half or so, I just went down to the cafeteria by myself every time. Specifically so that I could look for someone new or a new group to sit with, so that's kind of like just going out of your comfort zone a little bit just to find someone new, because there's so many people.

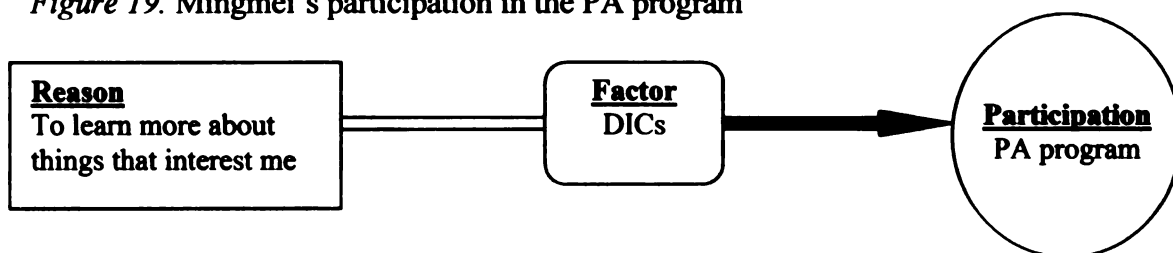
Figure 18. Natalie's willingness to explore the social aspects of the residence hall



Describing the process through which she set up her Professorial Assistantship (PA), Mingmei also exhibited a willingness to seek out and engage in complex situations:

Every step of the way, it has its advantages, like first is finding your PA. I didn't have somebody look for one for me. I just took the list, and I saw the descriptions, and I called the professors that I wanted to work with, and then we had interviews. So that was an experience all by itself, and there's some troubleshooting in that... And so, it's a lot of how you think and how you initiate this learning, so that'll be important to me.

Figure 19. Mingmei's participation in the PA program

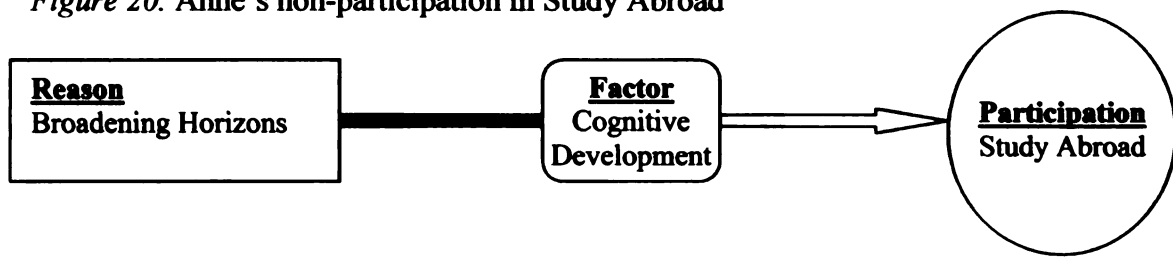


The Diminishing Effect of Cognitive Development

In some cases participants exhibited a less complex level of cognitive development in their decision making regarding participation. They relied heavily on external authorities. When asked about her plans for the next several years, Anne mentioned different opportunities she had considered but had already decided against. For example, Study Abroad:

I want to [do Study Abroad] but I have no time. Because I have my goal already set, so – So I don't really have time for all this. That's my goal in my life [to get into dental school], so – I really wanna, like, go study abroad, because it sounds fun. But I can't.

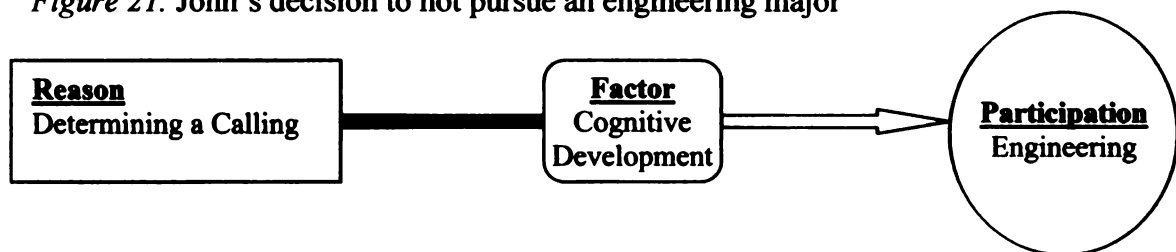
Figure 20. Anne's non-participation in Study Abroad



Similarly, John decided on his major based on what external authorities, in this case his mother, had told him about the job market. John still appears to be unsure of his decision, though:

I was originally going to be an engineer. Engineering market didn't look that good. So, well my mom is an engineer. She even told me, "I'd rather have you study – try something else, you know, like, you're gonna get a better job. There's more demand for, especially some health profession." So I figured, I'll just go with that right now, and see where that takes me. So, right now I'm kind of taking classes geared towards medicine, but with no real direction. I don't know if I want to, you know, be a doctor. Or just even study chemistry, or maybe I'll go back to engineering in the end.

Figure 21. John's decision to not pursue an engineering major



When asked about his participation in co-curricular activities, John said, "No, I just bounce back and forth. I really don't know what to go to. It's kind of big, confusing. No one tells you what to do." Jasmin found someone to tell her what to do, "I finally visited

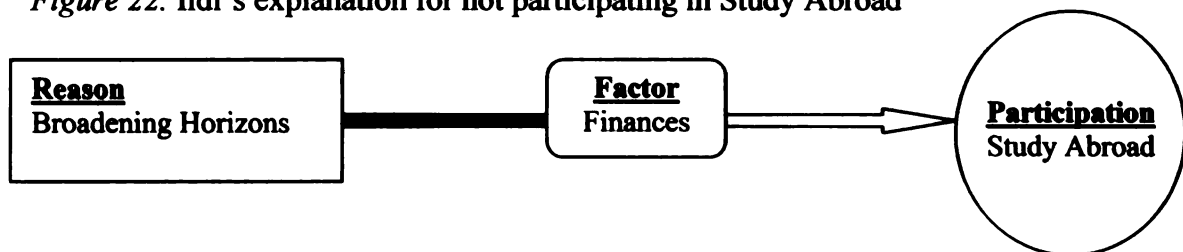
my counselor so next semester I'm joining the pre-med health organization, association, whatever it is."

The Diminishing Effect of Finances

For several participants, the connection between reasons and participation was limited by finances. Ildi explained:

I would love to study abroad but the financial aspect kind of — I know that there's scholarships and so that's — I would love to but financially it could be kind of difficult. Because even if there's scholarships you still need spending money, you know, extra meals. So I would love to but I don't know if that's going to be a possibility anytime soon.

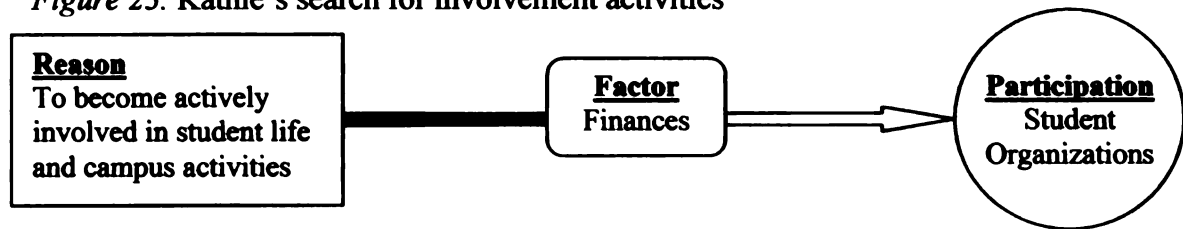
Figure 22. Ildi's explanation for not participating in Study Abroad



Kathie was interested in several organizations but was limited by her financial situation:

So I was going to joining Circle K, but I forgot about the \$40 that I don't have that they need, so I didn't join. And actually, I was going to join the Anime Club, because I'm kind of a nerd. But they wanted \$10, which I didn't have, either.

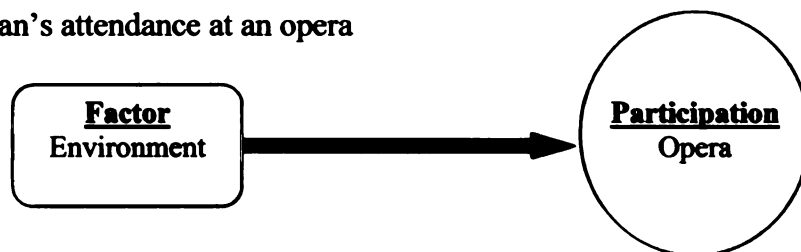
Figure 23. Kathie's search for involvement activities



The Environment and Participation

Many interviewees mentioned that they were participating in activities that they had been introduced to in college or by someone within the collegiate environment. These activities were not necessarily connected to the students' reasons for attending college. For example, Bryan mentioned, "I've gone to the Wharton Center a few times. Actually, I did not expect that I would ever go to an opera. Some of the people on the floor dragged me." Doug shared, "I think one of the biggest things is that I'd never really been into sports before I came here. And now, I'm at every football game, despite how bad we lose."

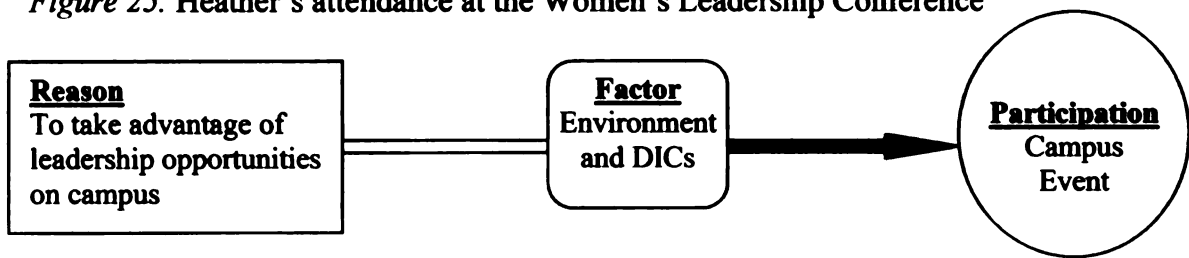
Figure 24. Bryan's attendance at an opera



Heather's story about how she decided to attend the Women's Leadership Conference on campus is an example of the reciprocal relationship between the environment and Heather's personal characteristics. In this particular situation, the environment provided the matching stimuli (her friends were gone for the weekend and a leadership program was offered) to Heather's goals and her structural proclivity:

There were signs kinda posted up – and I guess like I’d been in Girl Scouts and stuff, so I kinda figured I should try and figure out what the leadership thing was. Plus, that weekend most of my friends were gone, and there wasn’t much to do and I didn’t want to just sit around. And I was kind of hoping that it would make me a stronger person by getting out and doing something that I was kind of unsure about. To kind of get out and go to a conference like that, on my own especially.

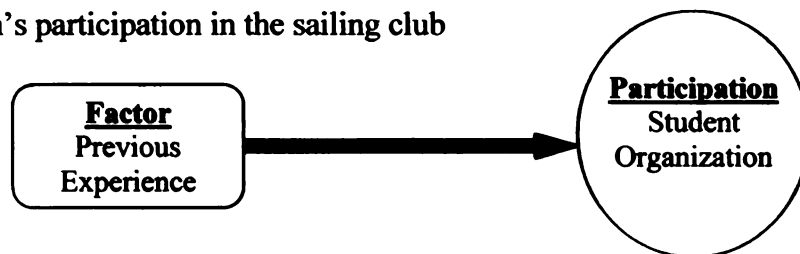
Figure 25. Heather’s attendance at the Women’s Leadership Conference



Previous Experience and Participation

Many students had become involved in activities similar to those they had been a part of in high school. For the most part, these activities were not directly tied to the students’ reasons for attending college. For example, Dan mentioned, “Well, right now I’m on the sailing team, and it’s a lot of fun. And I enjoy sailing. I raced sailboats before I came here, so I just continued that.” Similarly, Cassie played hockey in high school and sought out the opportunity at MSU, “I’ve been e-mailing the coach since last year. That was one of my main reasons for coming here.”

Figure 26. Dan’s participation in the sailing club



Interests and Participation

Similar to the impact of previous experience on participation, students talked about plans to get involved in certain activities because they were interested in them. This was particularly true when the interviewees talked about planning to participate in Study Aboard. Although a couple of students tied the Study Abroad opportunity to one of their reasons for attending college, such as broadening horizons, most talked about going just because they were interested. For some, the interest was strong despite the fact that they perceived no impact on their future careers. Charlie commented:

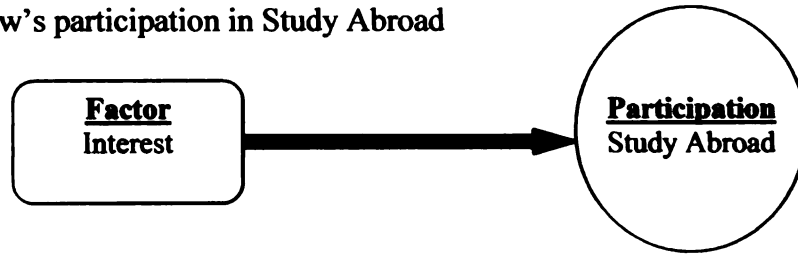
I don't really think that it [Study Aboard] fits in and like, as if you're an International Relations major or something. I don't really think it like goes in the curriculum at all to benefit you academically. I definitely think it helps just as a person in growing and experiencing new things... And if I did go, I'd want to go somewhere kinda crazy, like I was looking at Antarctica, which has some science stuff, and I think that'd be really cool just to go somewhere that not too many people have been.

Kevin explained his interest, "I've never been out of the country. I've never been farther than Mississippi. So, I just want to get out, travel, see the world, see parts of it at least."

Drew had a specific skill in mind that he wanted to develop through Study Abroad:

If I do it I'd be a little more fluent in Japanese. It would take out some of the accent I might have because of being American and all. I mean to other people, to other Americans who don't even know the language you might sound fluent but if you go to the country and study, speak a little there, you'll be able to fit in. They won't be able to tell — I went back — my parents are from Taiwan originally.

Figure 27. Drew's participation in Study Abroad



Conclusion

As the stories shared in this chapter illustrate, the participants' reasons for attending college frequently influenced their decisions regarding participation in curricular, co-curricular, and extra-curricular opportunities. Much of the time, the impact of this influence was shaped by other factors, including: the formulas the students' were following for being a college student and for preparing for medical and/or graduate school; the students' developmentally instigative characteristics (DICs) and cognitive development; people and events within the environment; finances; previous experiences; and interests. Reasons could lead to both participation and non-participation. Formulas both amplified and diminished the influence of reasons. In some instances the environment amplified the influence of reasons on participation and in other situations the environment was shaping participation apart from reasons. Low levels of cognitive development and lack of finances often led to non-participation despite reasons. Previous experience and interests shaped participation independent of reasons.

In the last chapter, I will discuss the implications of the survey and interview findings, as well as the model, for practice and future research. I will also address the limitations of the study.

CHAPTER 7

Introduction

The purpose of the current study was to investigate the potential relationship between reasons for attending college and participation in a learning community. I was particularly interested in investigating the processes by which students shaped their own educational environments through the choices they made regarding curricular, co-curricular, and extra-curricular opportunities and the role reasons for attending college played in those processes. To give the study boundaries, I focused on one residential learning community at one institution. The specific focus of the study was the question: What relationship, if any, exists between Michigan State University College of Natural Science students' reasons to attend college and whether or not they participate in the Lyman Briggs School, a residential learning community. I used a mixed method approach, utilizing both a survey and semi-structured interviews. In order to explore the potential relationship, I also investigated the following:

- A. What are the profiles of reasons for attending college among first-year students enrolled in the College of Natural Science at Michigan State University?
- B. Are there differences between those students who chose to participate in the College of Natural Science's residential learning community program, the Lyman Briggs School, and those who chose not to participate in terms of their reasons for attending college?
- C. Through what processes do students develop their reasons for attending college?
- D. How do students perceive the impact learning community participation will have on their ability to achieve their reasons for attending college?

In this chapter I will discuss the findings of the two phases of the study, the survey and the semi-structured interviews, and the resulting model. I will also address the limitations of the study. In addition, I will suggest implications for practice and areas for future research.

The Findings from Phase 1: The Survey

The research design I used for this study was a sequential exploratory mixed method research design (Creswell, 2003; Creswell, Plano Clark, Gutmann, & Hanson, 2003; Onwuegbuzie & Teddlie, 2003). Consequently, the quantitative data and results were primarily used “to assist in the interpretation of qualitative findings” (Creswell, 2003, p. 215). Despite the subordinate role the survey data played, the survey did result in some interesting findings. In this section, I will compare the factored subscales to those of previous research. I will also discuss the lack of statistically significant differences in the survey responses between the learning community group and the non-participant group.

The Subscales in Relation to Previous Research

Using principle components analysis, I extracted five factors from the Reasons to Attend College (RAC) scale. Because the scale items were based on previous research, I was expecting that the factors would be similar as well. The Civic Leadership, Personal Connections, Default-Indifferent, and Expectation-Driven subscales are consistent with previous survey research on students reasons for attending college (e.g., Astin 1993a; Côté & Levine, 1997; Stark, Shaw, & Lowther, 1989). The combination of items in the Individual Development subscale is interesting in that the items included bring together two categories, Careerism and Intellectualism, that have previously been examined as

contrary to one another (e.g., Clark & Trow, 1966; Katchadourian & Boli, 1985). For example, Katchadourian and Boli split their participants into four types based on students' rankings of items related to careerism and intellectualism: Careerists, Intellectuals, Strivers, and the Unconnected.

This difference may be due in part to the way I structured my analysis. I did not structure my study to compare the two areas of Careerism and Intellectualism as Katchadourian and Boli (1985) had. I was looking at how the items related to each other and was speculating that there might be differences between the importance stressed by the LBS group and the non-participant group. It is interesting to note that the top five items for the LBS group and the non-participant group are almost identical, with only one item being different (LBS had *To prepare for graduate or professional school* in their top five rather than *To be able to make more money*). In both groups' top five items, three are from a traditional career focus and two are from a more intellectual focus.

Two additional reasons why respondents in my sample may have emphasized both career and intellectual goals as one concept are: the fact that my sample is made up of science students and that this generation of college students has an increased access to information. Kuh, Hu, and Vesper (2000) found that students in their *Scientist* type spent more time on school work and reported high gains in both Intellectual Skills and Vocational Preparation. Holland (1985) classified those in scientific fields as Investigative. Investigative environments and careers require analytical skills and involve intellectual activities.

Several students mentioned using online sources and cable television programs to explore their interests and potential career paths. This increased access to information

exposes students to a wider array of career options than in previous generations. Dan exemplifies this effect of access to information and an Investigative vocational personality (Holland, 1985), in his explanation of why he chose to pursue astrophysics:

Well, I knew I liked science and math just because I enjoyed them. And my parents eventually got digital cable at home, and one of the channels was the science channel. And so I watched it a lot... I found myself skipping going out and doing stuff that normally is fun to watch like, a show on black holes or on dark matter cuz I really wanted to. I remember one time I was hanging out with my girlfriend and I said like, no we gotta go home. We were at dinner. We had to leave kinda early cuz I wanted to see this thing on dark matter. So we watched that and then I took her out for ice cream to make up for it.

Learning Community Participants and Non-Participants at MSU

One of the sub-questions I explored was, Are there differences between those students who chose to participate in the College of Natural Science's residential learning community program, the Lyman Briggs School, and those who chose not to participate in terms of their reasons for attending college? I was surprised (and a little bit disappointed) that none of the RAC subscales showed a significant difference between learning community participants and non-participants. I speculate that this may be due to two factors: the inclusion of only science students in this study and the increasing academic preparedness of students admitted to MSU. As mentioned above, this study included only students interested in science. Previous research (e.g., Holland, 1985; Kuh, Hu, & Vesper, 2000) has indicated that science students as a group may have similar academic motivations.

According to the MSU Office of Admissions (2006), the Fall 2006 undergraduate entering class “is the most academically talented in the school’s history” (p. 2). Over the past 10 years, MSU has experienced a steady increase in the median composite ACT scores and the median combined SAT scores of its applicants. This high level of academic preparedness may also impact students’ ideas about the purpose of college and their goals for college attendance, thus resulting in more similarity among the students overall regardless of learning community participation.

Five individual items were significantly different based on learning community participation. Learning community participants (LBS, ROSES, etc.) ranked *To be able to contribute to the human condition* as more important than did non-participants. Non-participants ranked *To achieve personal success*, *To be able to make more money*, *To enjoy my college years before assuming adult responsibilities*, and *To achieve a high GPA* as more important than did learning community participants. Also, four items were significantly different when only LBS participants and College of Natural Science non-participants were compared (*To meet new people*, *To enjoy my college years before assuming adult responsibilities*, *To achieve a high GPA*, and *To achieve a position of higher status in society*). These differences were not substantiated by the interview data. This could be a function of the demographics of the interview participants in comparison to the demographics of the survey participants, particularly in the areas of social class and parent education. A higher portion of the interview participants are from Working Class families than is present in the survey participants. Also, a higher percentage of the interview participants were first-generation college students. This is an area that could be explored in future research.

The Findings from Phase 2: The Semi-Structured Interviews

The focus of the semi-structured interviews was the potential relationship between reasons to attend college and learning community participation as well as the sub-questions: Through what processes do students develop their reasons for attending college? and How do students perceive the impact learning community participation will have on their ability to achieve their reasons for attending college? Because both learning community participants and non-participants were included in the interviews, the interview questions also probed how students perceived the usefulness of other curricular and co-curricular activities. I will use the *process-person-context-time* (PPCT) model (Bronfenbrenner, 1976, 1979, 1989, 1993, 1995) as a framework for discussing the interview findings as well as the model I proposed in Chapter 6.

After a brief overview of the themes that emerged from the interviews, I will discuss the *Process* and *Person* aspects of the findings by examining the impact of students' perceptions of the value of LBS as a learning experience. The influence of family and peer microsystems, as well as the state of Michigan as an exosystem, will be also be explored. Finally, I will discuss one aspect of *Time*: the Millennial cohort characteristics. At the end of this section, I will also share some observations about the utility of collecting data about students' reasons for attending college through a survey rather than through interviews.

Overview of the Interview Findings

In the interviews, I asked the participants about both the general purpose of college as well as their specific college goals. Their responses resulted in four themes: preparing for life after college, broadening horizons, meeting new people, and taking

advantage of the opportunity in order to be a role model to others. The first theme had five components: determining their calling, learning to be an adult/growing up, acquiring general knowledge needed for life after college, gaining the credential necessary for their chosen career, and learning specific skills/knowledge. The participants also talked about how their ideas about the purpose of college were shaped by parents and other family members, high school teachers and counselors, peers, higher education institution official representatives, the media, and current college students.

In addition to talking about their goals for college, participants also shared their reasons for participation (or planned future participation) in a number of different curricular, co-curricular, and extra-curricular activities. These areas of participation included the LBS and other learning community programs, Study Abroad, service and leadership opportunities, student organizations, research, sports, marching band, academic majors and minors, specific classes, and jobs. These decisions were shaped by not only their reasons for attending college, but also by the perceptions they had about the value of the opportunities and the formulas they had developed for being a college student and for preparing for medical and/or graduate school. The only thematic area of the interview data in which I observed differences between the LBS participants and the non-participants was their perceptions of the value of the LBS as a learning experience. I did not observe differences between the LBS participant group and the non-participant group regarding the purpose of college or the formulas for being a college student and for preparing for medical and/or graduate school.

Process and Person

Both the PPCT model (Bronfenbrenner, 1976, 1979, 1989, 1993, 1995) and the concept of learner disposition (Bloomer & Hodkinson, 1997, 1999, 2000) suggest that a person's subjective view of the situation, or the meaning that learners attribute to their learning experiences, shapes the outcomes of a person-environment interaction. This concept was clearly illustrated by the different perceptions that LBS participants and the non-participants had of the value of participation in LBS. LBS participants said that the LBS provided prestige, educational benefits, and logistical benefits. Non-participants expressed concern about not experiencing diversity of thought, the perceived difficulty of the LBS program, and the extra courses that would be involved.

What is particularly interesting about these perceptions is that in several instances the same characteristic of the LBS was seen as a positive attribute by participants and a negative attribute by non-participants. This phenomenon is represented in the model (in Figure 1) by the fact that reasons to attend college, and other factors, can lead to both participation and non-participation. For example, the location of the program and being surrounded by like-minded peers were cited as reasons to participate as well as reasons to not participate. It was also notable that the perception that LBS provided a more intense academic experience was seen as both a negative and a positive. Although this aspect was appealing to most of the LBS participants, one student was thinking about leaving the program because of this characteristic and several non-participants mentioned that this was a reason to not participate.

The LBS and other learning community programs at MSU are intentionally structured to provide the educational and logistical benefits several of the students

mentioned. Bronfenbrenner (1989) referred to these types of opportunities as ecological niches or “regions in the environment that are especially favorable or unfavorable to the development of individuals with particular personal characteristics” (p. 194). The developmentally instigative characteristics (DICs) of the participants and non-participants in this study, such as their willingness to engage in increasingly more complex activities (i.e., participate in a program that is perceived to be more academically challenging), seem to shape learning community participation in addition to the students’ perceptions of the value of the LBS. The impact of DICs is also represented in the model.

Context

Bronfenbrenner (1976, 1979, 1989, 1993) conceptualized the context as a hierarchy of systems at four levels moving from proximal to distal: the microsystem, the mesosystem, the exosystem, and the macrosystem. Within this study, two microsystems and one exosystem had a noteworthy impact on the themes that emerged. The influence of both family and peer microsystems was a consistent part of the interviewees’ stories. Also the role of the state of Michigan as an exosystem seemed to shape students’ reasons to attend college and participation.

Parent and Family Influence

The participants articulated a more direct influence from parents and other family members when discussing their ideas about the purpose of college and their goals for college than when discussing their participation in curricular, co-curricular, and extra-curricular programs. When I was constructing the model, I considered adding parents/family as a factor in both the amplifying and diminishing categories. As I reviewed the interview transcripts for evidence of this influence, it became apparent that

the impact of the family microsystem on participation is indirect because of the role the people in that microsystem play in shaping students' ideas about the purpose of college.

Peer Influence

The use of the PPCT model to examine peer influence within the college setting is not new. Renn and Arnold (2003) used the PPCT model to study “peer influence on racial identity of mixed-race students and talent development of high-school valedictorians and American Rhodes Scholars” (p. 263). The influence of peers in this current study was described by the interview participants as having a more direct impact on participation than the influence of parents and family members. Within the model, I represent this impact within the environment. For example, Bryan’s story about going to the opera was a result of peers on his floor encouraging him to go. The availability of an instant peer group was also attractive to students who chose to participate in the LBS. In many cases, the peer influence was a result of the ecological niches that had been constructed by the institution.

The state of Michigan

There were two specific ways in which Michigan, as the context for this study, had an impact on the findings: the postsecondary education opportunities in Michigan and the economic situation in Michigan. There are 15 public four-year institutions, 28 public two-year institutions, and over 50 private institutions in the state of Michigan. Several students mentioned the types of institutions they had considered and the role that the LBS played in their decision to attend MSU. Many participants were looking at both the U of M and MSU as an option for college. Several participants commented that LBS added to the educational opportunities at MSU in a way that exceeded the opportunities

available at the U of M (the prestige factor). This phenomenon may be particular to states that have two large public research universities, such as Michigan, Texas, and Iowa. Students who were considering both large institutions, such as MSU, and smaller institutions, cited the LBS as an enticing option that provided a small school atmosphere on a large campus.

The economic status of Michigan had more of an indirect influence on how students developed their reasons for attending college and made decisions about educational opportunities. A few participants talked about how they did not want to work in the blue collar industries in which their family members had worked. Some mentioned that they were worried that the availability of these jobs was waning and others mentioned that they wanted a different lifestyle than the one a blue collar job provided. The financial and educational background of participants' families (potentially a function of Michigan's economic past and present) was apparent in both the survey and the interview data. In the survey data both mother's and father's educational attainment had an impact on learning community participation. In the interview data, finances had a diminishing effect on participation.

Time – Generational Effects

The final aspect of the PPCT model, *Time*, has two components: the timing of biological and social transitions within the individual's lifespan and the historical time period within which the person lives (Bronfenbrenner, 1995). The current generation of traditional age college students, the Millennials (Howe & Strauss, 2000, 2003), have different characteristics from those of previous generations. These characteristics are shaping how they approach higher education.

Participants discussed *Meeting New People* as one of the purposes of attending college. Coomes (2004) pointed out that technological advances such as cell phones, blogs, and instant messaging, have allowed Millennials to experience relationships and connections in a different way from previous generations. This may be contributing to the value they place on meeting new people. Howe and Strauss (2003) noted that, among other things, Millennials are active in volunteer activities and have been brought up in very busy and scheduled environments. These two characteristics were illustrated by the focus participants placed on giving back and also their rationale for not getting too over-involved but exploring non-academic involvement.

The current focus within higher education on retention issues and first-year programs also appears to be shaping how current students are thinking about college. I was surprised by the transition awareness the interview participants displayed. A few used terminology, such as first year experience, that I assumed was only a part of the rhetoric of higher education administrators. Others talked about the importance of the first few weeks of classes and the first semester in creating a strong foundation for success, a common theme in first-year seminar or UNV 101 courses (transition to college and success skills courses).

The PPCT model (Bronfenbrenner, 1976, 1979, 1989, 1993, 1995) provides a useful framework for discussing the interview findings. The *Process* and *Person* aspects of the PPCT model are useful in examining the influence on participation of students' perceptions of the value of the LBS as a learning experience. The *Context* aspect is helpful in understanding the role of parents and peers as well as Michigan as the context for the study. Bronfenbrenner's concept of *Time* in the PPCT model provides a lens for

understanding generation effects. In the next section, I will comment on students' reflections on their survey answers.

How the interviews shed light on the survey answers

During the interviews, I asked participants to look at their survey answers and talk about how well they thought those answers reflected their current reasons for attending college. Because the interviews took place in the 12th week of classes, I was curious about the impact that the college environment may have had on their ideas about the purpose of college. Sixteen participants (70%) mentioned that they would change at least one of their answers. A few mentioned that they were not sure why they had answered the way they did and maybe they had just made a mistake. When reacting to his answer for the item *To gain a general education and appreciation of ideas*, John remarked "Yeah, that's a lie. I don't really care... This is something that people like to see, so I put very important for it." Although the issue of socially desirable responses is not uncommon in survey research (DeVellis, 2003) and can be viewed as a threat to reliability (Isaac & Michael, 1995), Astin (1993b) noted that "Measures that are relatively unreliable on an individual basis can yield highly reliable results when the scores are aggregated across a number of individuals" (p. 137). Thus, when aggregated, students' responses to survey questions about their reasons to attend college are useful in creating a broad picture of an entering class (such as those produced annually by the Cooperative Institutional Research Program), but individual students' answers may need to be interpreted in a different way.

In some cases, students' formulas for being a college student had an impact on their answers to the survey. A few people commented that they had marked certain items,

such as *To take advantage of leadership opportunities on campus*, low thinking about their freshman year, but that those items might be more important later in their college careers. Although Natalie expressed an interest in getting involved in leadership at some point during her college years, she explained her answer to the question above in this way:

Oh, to take advantage of leadership opportunities on campus. I rated it pretty low, somewhat important. And I did that just because I think your first year especially, I think is a lot about making connections with people around you... Yeah, so that's why I rated relationships before that [leadership].

The historical time period (Bronfenbrenner, 1995) within which the participants filled out the survey and participated in the interviews also had an influence on the students' interpretations of their survey answers. The reaction to the item *To become an informed citizen and voter* illustrates this influence. A few participants noted that they had marked this item low but after experiencing the November elections, they would now mark it as more important. For example, Bryan said, "It's become a little bit more important to me now since we voted just recently, but it wasn't important to me then [beginning of September]."

A couple of students noted that *To become an informed citizen and voter* was important but that they did not associate it with going to college. Dan commented, "The whole informed citizen thing, I think the best thing to do with that is look what's going on around you now, rather than look in some book for an answer." Mingmei remarked, "I said of little importance, not because it's not important to become an informed citizen

and voter, it's just I don't relate that to college a lot, I guess." Dan made a similar comment about the item *To discover what kind of person I really want to be*:

I don't think there's a day when you discover what you really wanna be, and I'm not even sure that college helps you discover that. I think that's something that changes as you go. And obviously, college will help me do that, but then again, so will the day after college also. You know, every day does.

Eight people commented that they should have marked either *To meet new people* or *To establish meaningful relationships* as more important than they had originally indicated. This is consistent with the interview theme Meeting New People. Several students mentioned that the importance they placed on meeting new people and forming relationships had been shaped by their college experience thus far. Julie commented, "I would make that [*To meet new people*] important, instead of somewhat important. Just because I have met a lot of new people and it's nice to make new relationships." Jasmin made a similar comment about another item, "To enjoy my college years before assuming adult responsibilities, that's important to me now that I'm here."

The participants' reflections on their survey answers struck me as noteworthy for a number of reasons. Some students displayed a complex level of meaning-making in their reflections, while others were guided by external expectations when they initially completed the survey. Their comments illustrate that the salience of specific reasons for attending college may change as students interact with the college environment. For example, prior to matriculation the social aspects of college are not emphasized as strongly as the academic aspects but the importance of social connections is revealed as students transition to campus.

The participants' comments about their survey answers also shed light on the relationship between reasons for attending college and participation in curricular, co-curricular, and extra-curricular activities. Doug's reflection on his survey answers illustrates how the environment shapes participation:

I think my general motivation for why I'm here has remained the same but I've also learned a lot more about the opportunities that are available here that I didn't know about. I think definitely what I'm going to do while I'm here may have changed but I think my general motivation for being here has stayed the same. There's a lot more, you don't really realize how much there is to do here until you're actually submerged in it.

His comment also reinforces the role of the environment as a factor that amplifies reasons to attend college, as represented in the model I proposed in Chapter 6. Collecting both survey and interview data helped me to better understand the relationship between reasons to attend college and students' decisions regarding participation in curricular, co-curricular, and extra-curricular opportunities.

Limitations

As with any study, there are important limitations that must be addressed. By design, this study only included participants from one institution. This limits the applicability of the findings. In addition, I only surveyed students in one disciplinary course, chemistry. Consequently, the factored subscales may be representative of students interested in science, but a wider array of students should be surveyed to determine if the subscales are also applicable to students in other areas of study. I did not survey students in honors chemistry or in remedial math courses (there is a math prerequisite for the

chemistry course). High achieving and under-prepared students may have different reasons for attending college.

Another limitation is the sample size for both the survey and the interviews. The return rate for the survey was 19%. Although the survey respondents were demographically similar to the population, caution should still be taken when generalizing the results. Perhaps distributing the survey during summer orientation or offering a more desirable participation incentive could have improved the response rate. The interview sample size was relatively small as well. I interviewed 23 people. These 23 were from two groups, 15 from LBS and 8 non-LBS participants. Almost all of the interview participants were either White or Asian American. Future research should include a more racially and ethnically diverse sample.

Finally, the timing and duration of the study are limitations. The survey and interviews occurred within one semester. The survey was distributed during the second and third weeks of classes. Although this is still early in the semester, the survey responses may reflect some effect of being on campus for a few weeks. The interviews took place between the 12th and 14th weeks of classes. This did allow students to reflect on their first semester and talk about the types of activities within which they had already become involved and those they were considering in the future. In many cases though, the examples used within the model are students' future plans and not necessarily what they are doing right now. So, it would be beneficial to check in with them at a later date to see if they had participated in the programs in which they had expressed an interest.

Implications for Practice

In spite of the limitations addressed above, this study has a number of practical implications for learning communities and other curricular, co-curricular, and extra-curricular programs. In this section, I will focus on implications for the promotion, design, and assessment of learning communities. Although the context of this study is learning communities, the findings may also shed light on students' decisions regarding participation in other pedagogical innovations and programmatic initiatives. I will also discuss the implications for academic advising and first-year seminar courses (e.g., UNV 101).

The Promotion of Learning Communities

In Chapter 2, I mentioned that learning community programs have become a popular mechanism for addressing calls for accountability and an increasing focus on the assessment of learning outcomes. I also noted that the case for the expansion of learning community programs seems to operate under the assumption that increased offerings will automatically translate into increased student participation and with increased participation, increased learning outcomes. The findings from this study indicate that the simple availability of learning community programs does not necessarily translate into participation.

Those charged with promoting learning community programs should keep in mind that the characteristics of the programs (e.g., location on campus, a common disciplinary focus) may both encourage and discourage participation. Learning community program coordinators should investigate how their programs are perceived by both participants and non-participants to discern which characteristics are most influential

in the decision whether or not to participate. The findings also show that the availability of learning community programs can be a powerful marketing tool, particularly in states where similar types of institutions (e.g., large, public, research institutions) are competing for the same students.

Another implication for the promotion of learning community and other programs is the importance of consistent communication about the availability and purpose of these programs. This is particularly important in the case of students who change their majors at some point during the admission/matriculation process. For example, Charlie noted that he had considered the Engineering learning community (ROSES) because initially he had declared engineering, but when he switched to a science major he was not notified about the LBS.

The Design of Learning Communities

The findings from this study also have implications for the design of learning communities. Residential learning community programs can act as ecological niches (Bronfenbrenner, 1989) that provide students with opportunities to explore majors and careers (i.e., Determine their calling), meet new people, and broaden their horizons. Although these outcomes may happen simply as a result of students' interaction with the college environment, learning communities could also be intentionally structured to encourage these interactions. As represented in the Model of the Relationship between Reasons to Attend College and Participation, the environment can influence participation on its own as well as amplify the impact of reasons to attend college on participation. An important part of the design of intentional programming should be clear communication

to students that connects the programming to their reasons for attending college so that students perceive the programming as valuable.

An additional implication for the design of learning community programs is the role that students' formulas for being a college student can play in diminishing participation. Several participants mentioned waiting to participate until they had transitioned to college. In recent years, the growth of learning community programs has been largely connected to first-year experience initiatives (Smith et al., 2004). The availability of learning community programs for sophomores might appeal to students like Anya who chose to find out more about the LBS program throughout her first semester before participating. Learning community program coordinators should consider creating programs that are available to, or specifically designed for, second year and upper-class students. These programs could be residential or non-residential in design and might appeal to students who initially were hesitant to participate.

The Assessment of Learning Communities

Although this study was conducted over a short period of time, one semester, the findings indicate potential implications for assessing the outcomes of participation in learning communities, as well as other curricular, co-curricular, and extra-curricular programs. The survey data showed very little difference between the learning community participant and non-participant groups. If learning community participants exhibit more growth in learning outcomes, this initial similarity could be cited as an indication that participation in the learning community program had an impact on those outcomes. This study also reinforces the utility of using *reasons for attending college* as an input variable in assessing outcomes, as suggested by Côté and Levine (1997, 2000). In addition, the

findings support the importance of considering students' perceptions regarding the value of the learning experience, as proposed by Bloomer and Hodkinson (1997, 1999, 2000).

Implications for Academic Advising

As I mentioned in Chapter 3, the subjective lens that was most salient for me in this research was my academic advisor lens. Consequently, I identified a number of implications for academic advising throughout the study. I think the survey could serve as a powerful learning and reflection tool to be used in advising. Advisors are in a unique position to assist students in making sense of their college experience. Helping students understand their own reasons for attending college could encourage them to engage more purposefully in the opportunities provided by the college environment. Also, the Model of the Relationship between Reasons to Attend College and Participation could be used in advising sessions to illustrate how students' reasons might be shaping their decisions about participation. Additionally, academic advisors could focus not only on the availability of curricular, co-curricular, and extra-curricular programs, but also on students' perceptions of the value of those opportunities in order to encourage participation.

Implications for First-Year Seminar Courses

One of the curricular components that is commonly included in learning community programs is a first-year seminar or University 101 (UNV 101) course (Smith et al., 2004). These courses often focus on issues that impact retention, such as: study skills, time management, and strategies for academic success; career development and academic major decisions; and connecting to faculty and peers. The interview findings show that students are thinking about these issues as they matriculate and are likely to be

receptive to UNV 101 course content. The model illustrates that the formulas students have developed for being a college student can both amplify and diminish participation in various learning opportunities.

The challenge for UNV 101 instructors is to help students learn strategies for college success while at the same time encouraging them to develop increasingly complex ways of making meaning of their experience (i.e., cognitive development). When students rely on authorities and external formulas they may be less likely to take advantage of the wide array of opportunities provided by the college environment. For example, Anne decided to end her volunteer work because what she was doing was not an exact fit with her formula for getting into dental school. In this section, I discussed the practical implications of my findings for the promotion, design, and assessment of learning communities. I also discussed implications for academic advising and first-year seminars. In the next section, I will suggest areas for future investigation generated by this research.

Areas for Future Research

As noted previously, this study was designed to examine one learning community program at one institution. Broadening the scope of this research to include students from different types of institutions and within different disciplines would provide a richer understanding of the relationship between reasons for attending college and participation in learning communities. In addition, participation in other types of curricular, co-curricular, and extra-curricular programming could serve as the focus of future studies.

In addition to providing a richer understanding of the relationship between reasons for attending college and participation in learning communities, broadening the

scope of the research would also allow for further testing and refining of the Reasons for Attending College scale. The insight provided by the interview participants could potentially be used to modify the scale items to better represent students' reasons for attending college. Also, the strength of the subscales could be examined by looking at the responses of students from different disciplines and different types of institutions.

The Model of the Relationship between Reasons to Attend College and Participation is a source of areas for future research. I am especially interested in exploring in more depth students' formulas for reaching their college goals because these formulas had both an amplifying and diminishing effect on participation. I would speculate that prior to matriculation students' formulas are shaped by similar influences as those that shaped their reasons (parents, peers, teachers, etc.). What was only hinted at in my data was the role that the college environment played in shaping students' formulas. As I mentioned above, retention efforts, such as UNV 101 courses, provide students with success strategies. By providing these formulas for success, are institutions reinforcing students' reliance on formulas rather than encouraging more complex ways of knowing (Baxter Magolda, 2001)? Several participants commented that they had used the institutions' and other websites to develop their formulas for preparing for medical and/or graduate school. Is there a way that institutions could present this information so that participation in curricular, co-curricular, and extra-curricular activities is encouraged rather than discouraged by the formulas students develop using the information available on the web?

Finally, a more detailed model of the relationship between reasons for attending college and participation in curricular, co-curricular, and extra-curricular activities could

be developed through a longitudinal study. As noted above, several of the examples used within the model are students' future plans and not necessarily what they are doing right now. It would be useful to investigate the decisions these students' make regarding those plans and to explore the factors that shape those decisions. It would also be interesting to see whether, and how, the environment continues to shape students' ideas about the purpose of college and the value of various learning opportunities.

Conclusions

The purpose of the current study was to explore the relationship between reasons for attending college and learning community participation. The results support the contention that reasons for attending college do shape participation. In addition, the results show that students' decisions regarding participation in curricular, co-curricular, and extra-curricular opportunities are shaped by not only their reasons for attending college, but also a number of other factors, such as: the environment; the students' formulas for being a college student and for getting into medical and/or graduate school; and students' characteristics, finances, previous experiences, and interests. Finally, the results illustrate the strong influence that students' perceptions of the value of the learning opportunity have on their participation in that learning opportunity. In an age of increased accountability for student learning outcomes, a better understanding of how students shape their own learning environments by the decisions they make regarding participation could help educators develop a more nuanced picture of why a common learning experience might result in a variety of learning outcomes. In addition, helping students understand their own reasons for attending college could encourage them to engage more purposefully in the opportunities provided by the college experience.

APPENDIX A: SURVEY INSTRUMENT

For questions 1 to 30, please use the following scale to indicate how important or true the reason for attending college is to you:

- A = not important / not true
- B = of little importance / a little bit true
- C = somewhat important / somewhat true
- D = important / true
- E = very important / very true
- F = essential / absolutely true

1. I basically had no choice but to come to college, it was expected of me
2. To be able to contribute to the welfare of others
3. To get into an interesting and satisfying career
4. To discover what kind of person I really want to be
5. I am in college because I didn't know what I wanted to do after high school
6. To meet new people
7. A mentor/role model encouraged me to go to college
8. To be able to contribute to the improvement of the human condition
9. To achieve personal success
10. To learn more about things that interest me
11. I am in college because there was nothing better to do
12. To take advantage of leadership opportunities on campus
13. My parent(s) would be very disappointed in me if I didn't get a college degree
14. To develop skills to work effectively with different kinds of people
15. To prepare for graduate or professional school
16. To understand the complexities of life in the modern world
17. To get away from home
18. To become actively involved in student life and campus activities
19. To meet family expectations
20. To prepare for a life of meaningful participation in society
21. To be able to make more money
22. To develop an in-depth understanding of a specific field of study
23. I am in college because I could not find a job
24. To enjoy my college years before assuming adult responsibilities
25. To achieve a high GPA
26. To become an informed citizen and voter
27. To achieve a position of higher status in society
28. To gain a general education and appreciation of ideas
29. I often ask myself why I'm in college
30. To establish meaningful relationships

For questions 31 to 49, please use the following scale to indicate your participation in any of the following programs (please mark only one response):

- A = I've never heard of this program
- B = I am currently participating in this program
- C = I participated in this program in the past, but am not participating now
- D = I plan to participate in this program in the future
- E = I do NOT plan to participate in this program while at MSU

31. Honors College
32. Academic Scholars
33. Professorial Assistantship Program
34. College Achievement Admissions Program (CAAP)
35. College Assistance Migrant Program (CAMP)
36. Lyman Briggs School
37. Residential Initiative on the Study of the Environment (RISE)
38. Residential Option in Arts and Letters (ROIAL)
39. Residential Option for Science and Engineering Students (ROSES)
40. Connections
41. Bailey Scholars Program
42. Drew Laboratory Program
43. MD or OD Medical Scholars Program
44. Kellogg Biological Station Seminar in Environmental Studies
45. Freshmen Seminars Abroad
46. PRO 101 Freshman Seminar
47. Undergraduate Research
48. Study Abroad
49. Service Learning (through MSU)

50. Sex
- A. Female
 - B. Male
 - C. Trans

51. How old were you on September 1, 2006?
- A. 17 or younger
 - B. 18
 - C. 19
 - D. 20
 - E. 21
 - F. 22
 - G. 23
 - H. 24
 - I. 25
 - J. 26 or older

52. What was your high school GPA?
- A. 4.0 or higher
 - B. 3.5-3.99
 - C. 3.0-3.49
 - D. 2.5-2.99
 - E. 2.0-2.49
 - F. 1.5-1.99
 - G. 1.0-1.49
 - H. 0.0-0.99

53. From what kind of high school did you graduate?
- A. Public School (not charter or magnet)

- B. Public charter school
- C. Public magnet school
- D. Private religious/parochial school
- E. Private independent college-prep school
- F. Home school

54. When you applied to college, was MSU your:
- A. First choice
 - B. Second choice
 - C. Third choice
 - D. Less than third choice

55. In what year did you graduate from high school?
- A. I haven't graduated yet
 - B. 2006
 - C. 2005
 - D. 2004
 - E. 2003 or earlier

56. First semester at MSU
- A. Fall 2006
 - B. Summer 2006
 - C. Spring 2006
 - D. Fall 2005
 - E. Summer 2005
 - F. Spring 2005
 - G. Fall 2004
 - H. Summer 2004 or earlier

57. Are you a transfer student?

- A. Yes
- B. No

58. Enrollment this semester

- A. Full-time (at least 12 credits)
- B. Part-time (less than 12 credits)

59. Are you an International Student?

- A. Yes
- B. No

60. What is your racial or ethnic identification?

- A. White/Caucasian Non-Hispanic
- B. Black/African American Non-Hispanic
- C. Chicano/Mexican American
- D. Hispanic/Latino
- E. American Indian/Alaskan Native
- F. Asian/Pacific Islander (Asian American)
- G. Multiracial
- H. Other
- I. International Student
- J. I prefer not to respond

61 & 62. Which College are you in? (please mark only one answer for either question 61 or 62)

- 61A. Undergraduate University Division (No-Preference)
- 61B. Agriculture and Natural Resources
- 61C. Arts and Letters
- 61D. Business
- 61E. Communication Arts and Sciences
- 61F. Education
- 61G. Engineering
- 61H. James Madison College
- 61I. Natural Science
- 61J. Nursing
- 62A. Social Science
- 62B. Veterinary Medicine

63. Which of the following best describes your social class when you were growing up?

- A. Wealthy
- B. Upper-middle or professional middle class

C. Middle-class

D. Working-class

E. Low income or poor

64. What is the highest academic degree that you plan to eventually earn?

- A. None
- B. Associate's Degree
- C. Bachelor's Degree
- D. Master's Degree (e.g., MA, MS, MBA, MSW)
- E. Doctorate (e.g., Ph.D., Ed.D.)
- F. Medical Degree (e.g., M.D., D.O., D.D.S., D.V.M.)
- G. Law Degree (e.g., JD)
- H. I do not know yet

65. What is the highest level of education that your MOTHER completed?

- A. Did not finish high school
- B. High school graduate or GED
- C. Attended college but did not complete a degree
- D. Associate's Degree
- E. Bachelor's Degree
- F. Master's Degree (e.g., MA, MS, MBA, MSW)
- G. Doctorate (e.g., Ph.D., Ed.D.)
- H. Medical Degree (e.g., M.D., D.O., D.D.S., D.V.M.)
- I. Law Degree (e.g., JD)
- J. I do not know

66. What is the highest level of education that your FATHER completed?

- A. Did not finish high school
- B. High school graduate or GED
- C. Attended college but did not complete a degree
- D. Associate's Degree
- E. Bachelor's Degree
- F. Master's Degree (e.g., MA, MS, MBA, MSW)
- G. Doctorate (e.g., Ph.D., Ed.D.)
- H. Medical Degree (e.g., M.D., D.O., D.D.S., D.V.M.)
- I. Law Degree (e.g., JD)
- J. I do not know

APPENDIX B: INTERVIEW PROTOCOL

1. In your opinion, what is the purpose of college? How did you develop that opinion? What is it based on? {probe role of family, peers, prior educational experience, mentors, work, interactions with [institution], pop culture, societal messages}
2. Describe your reasons for attending college and what you hope to get out of the experience.
3. How did you come up with your reasons for attending college? {probe role of family, peers, prior educational experience, mentors, work, interactions with [institution], pop culture, societal messages}
4. How did you come up with what you hope to get out of your college experience? {probe role of family, peers, prior educational experience, mentors, work, interactions with [institution], pop culture, societal messages}
5. What did you hear about college from your friends, family members, teachers, and others?
6. Describe the choices you've made about your college experience so far. What factors have influenced those choices?
7. What experiences or activities during college do you think will help you fulfill your reasons for attending college? {probe curricular, co-curricular, extra-curricular}
8. What experiences or activities during college do you think will help you fulfill what you hope to get out of your college experience? {probe curricular, co-curricular, extra-curricular}
9. In what ways has your first few months of college met your expectations? Exceeded your expectations? Not met your expectations?
10. How well do your answers on the survey represent how you currently view your college experience?

For [Science Learning Community] participants

1. Describe how you came to be in the [Science Learning Community]. What factors influenced your decision to participate?
2. What expectations do you have about the benefits of participation in the [Science Learning Community]?
3. In what ways do you expect your participation in the [Science Learning Community] to contribute to the fulfillment of your reasons for attending college?
4. In what ways do you expect your participation in the [Science Learning Community] to contribute to the fulfillment of what you hope to get out of your college experience?

For non-[Science Learning Community] participants

1. [Institution] offers a number of optional programs, such as Study Abroad, Service Learning, Student Government, Student Organizations, Learning Communities, Honors College, etc. What are your plans regarding these opportunities?
2. One of your options as a College of Natural Science student was to enroll in the [Science Learning Community]. Describe why you decided not to participate in this option.

APPENDIX C – SURVEY CONSENT FORM

College Students' Reasons to Attend College and Learning Community Participation Survey Consent Form

You are invited to participate in a study that will explore what relationship, if any, exists between students' reasons to attend college and their decision whether or not to participate in a residential learning community. The researcher is interested in the opinions of current MSU students regarding why they're in college and in which academic programs they are participating.

Your participation is voluntary. You can choose not to participate at all, or answer some questions and not others. You indicate your voluntary agreement to participate in this study by completing and returning the attached survey.

The survey will take approximately 10 minutes to complete take.

The risks associated with participation in this study are minimal. One benefit of this study is that it will provide you with the opportunity to reflect on your reasons for attending college and how those reasons may have influenced your academic choices. All responses will be summarized. Your identity will remain confidential in all reporting of data. Your privacy will be protected to the maximum extent of the law.

If you have any questions about this study, please contact the investigator: Jennifer Hodges, by phone: (517) 282-0874, email: jphodges@msu.edu, or regular mail: G-68 Wilson Hall, East Lansing, MI 48825. You may also contact the faculty advisor, Dr. Kristen Renn, Higher, Adult, and Lifelong Education, by phone at (517) 353-5979, email: renn@msu.edu, or regular mail: 428 Erickson Hall, East Lansing, MI 48824.

If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact – anonymously, if you wish – Peter Vasilenko, Ph.D., Director of the Human Subject Protection Programs at Michigan State University, by phone: (517) 355-2180, fax: (517) 432-4503, email: irb@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48823.

Please include your name and email address below to be included in a drawing for one of four \$50.00 gift certificates to the MSU Bookstore.

Name of Participant (please print)

Email of Participant (please print)

Thank you for your participation!

APPENDIX D – INTERVIEW CONSENT FORM

College Students' Reasons to Attend College and Learning Community Participation Interview Participant Consent Form

Study Description: You are invited to participate in a study that will explore what relationship, if any, exists between students' reasons to attend college and their decision whether or not to participate in a residential learning community. The researcher is interested in the opinions of current MSU students regarding why they're in college and how they perceive the usefulness of learning community programs.

Procedures: I am requesting that you participate in a forty-five minute interview. During the interview you will be asked questions concerning your reasons for attending college and your reasons for choosing various academic programs. With your consent, the interview will be audio recorded. If you agree that I may do so, you may request at any time that the recorder be turned off. Recordings will be kept in a secure location until the project is complete, at which time they will be erased.

Risks and Benefits: The risks associated with participation in this study are minimal. One benefit of this study is that it will provide you with the opportunity to reflect on your reasons for attending college and how those reasons may have influenced your academic choices.

Payment: You will receive a \$10.00 Spartan Bookstore gift certificate as compensation for your participation in this study.

Subject's Rights: Participation in this project is entirely voluntary and you may withdraw at any time, with no penalty for doing so. You may also choose to not answer any individual question or leave the interview when/if you see fit. Your identity will remain confidential in all reporting of data. Only gender, learning community participation, and major identifiers (ie. male LBS biology student, female non-LBS chemistry major) will be used in reporting the data. No names will be associated with any comments or responses. Your privacy will be protected to the maximum extent of the law.

If you have any questions about this study, please contact the investigator: Jennifer Hodges, by phone: (517) 282-0874, email: jphodges@msu.edu, or regular mail: G-68 Wilson Hall, East Lansing, MI 48825. You may also contact the faculty advisor, Dr. Kristen Renn, Higher, Adult, and Lifelong Education, by phone at (517) 353-5979, email: renn@msu.edu, or regular mail: 428 Erickson Hall, East Lansing, MI 48824.

If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact – anonymously, if you wish – Peter Vasilenko, Ph.D., Director of the Human Subject Protection Programs at Michigan State University, by phone: (517) 355-2180, fax: (517) 432-4503, email: irb@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48823.

Your signature below indicates your voluntary agreement to participate in this study.

Signature of Participant

Date

Name of Participant (please print)

Your signature below indicates your voluntary agreement that this interview be audio recorded.

Signature of Participant

Date

Name of Participant (please print)

REFERENCES

- Association of American Colleges and Universities. (2002). *Greater expectations: A new vision for learning as a nation goes to college*. Washington, DC: Author.
- Association of American Colleges and Universities. (2005). *Liberal education outcomes: A preliminary report on student achievement in college*. Washington, DC: Author.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297-308.
- Astin, A. W. (1993a). An empirical typology of college students. *Journal of College Student Development*, 34, 36-46.
- Astin, A. W. (1993b). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. Phoenix, AZ: Oryx Press.
- Astin, A. W., Oseguera, L., Sax, L. J., & Korn, W. S. (2002). *The American freshman: Thirty-five year trends, 1966-2001*. Los Angeles: Higher Education Research Institute, UCLA.
- Astin, A. W., Parrott, S. A., Korn, W. S., & Sax, L. J. (1997). *The American freshman: Thirty year trends, 1966-1996*. Los Angeles: Higher Education Research Institute, UCLA.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Baxter Magolda, M. B. (2001). *Making their own way: Narratives for transforming higher education to promote self-development*. Sterling, VA: Stylus.
- Baxter Magolda, M. B. (2002). Epistemological reflection: The evolution of epistemological assumptions from age 18 to 30. In B. K. Hofer & P. R. Pintrich, *Personal epistemology, The psychology of beliefs about knowledge and knowing* (pp. 89-102). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bloomer, M. (1996). Education for studentship. In J. Avis, M. Bloomer, G. Esland, D. Gleeson, & P. Hodkinson, *Knowledge and nationhood: Education, politics and work* (pp. 140-163). London: Cassell.
- Bloomer, M. (1997). *Curriculum making in post-16 education: The social conditions of studentship*. New York: Routledge.
- Bloomer, M., & Hodkinson, P. (1997). *Moving into FE: The voice of the learner*. London: Further Education Development Agency.

- Bloomer, M., & Hodkinson, P. (1999). *College life: The voice of the learner*. London: Further Education Development Agency.
- Bloomer, M., & Hodkinson, P. (2000). Learning careers: Continuity and change in young people's dispositions to learning. *British Educational Research Journal*, 26(5), 583-597.
- Bourdieu, P., & Passeron, J. C. (1990). *Reproduction in education, society, and culture*. London: Sage.
- Boyatzis, R. E. (1998). *Transforming qualitative information*. Thousand Oaks, CA: Sage.
- Brieger, G. H. (1999) The plight of premedical education: Myths and misperceptions – Part 1: The “premedical syndrome.” *Academic Medicine*, 74(8), 901-904.
- Bronfenbrenner, U. (1976). The experimental ecology of education. *Educational Researcher*, 5(9), 5-15.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta (Ed.), *Six theories of development* (pp. 187-249). Greenwich, CT: JAI Press.
- Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and fugitive findings. In R. H. Wozniak & K. W. Fischer (Eds.), *Development in context: Acting and thinking in specific environments* (pp. 3-44). Hillsdale, NJ: Erlbaum.
- Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. H. Elder, Jr., & K. Luscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 619-647). Washington, DC: American Psychological Association.
- Cabrera, A. F., Burkum, K. R., & La Nasa, S. M. (2003, November). *Pathways to a four-year degree: Determinants of degree completion among socioeconomically disadvantaged students*. Paper presented at the meeting of the Association for the Study of Higher Education, Portland, OR.
- Cabrera, A. F., & La Nasa, S. M. (Eds.) (2000). Understanding the college choice of disadvantaged students. *New Directions for Institutional Research*, 107 (pp. 5-22). San Francisco: Jossey-Bass.
- Castro-Cedeno, M. H. (2005). A quantitative assessment of the benefit of a learning community environment. *Proceeding of the ASEE/IEEE Frontiers in Education Conference*, F4C-10–F4C-13.

- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 39(7), 3-7.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco: Jossey-Bass.
- Church, M., Berg, K., & Robinson, A. (2006, September 20) Advising students interested in medical school: What is the best approach? *The Mentor: An Academic Advising Journal*. Retrieved April 7, 2007, from <http://www.psu.edu/dus/mentor/060920mc.htm>
- Clark, B. R., & Trow, M. (1966). The organizational context. In T. Newcomb & E. Wilson (Eds.), *College peer groups: Problems and prospects for research* (pp. 17-70). Chicago: Aldine Publishing Company.
- Coleman, J. S. (1998). Social capital in the creation of human capital. *American Journal of Sociology*, 94(supplement), 95-120.
- Conrad, P. (1986). The myth of cut-throats among premedical students: On the role of stereotypes in justifying failure and success. *Journal of Health and Social Behavior*, 27(2), 150-160.
- Coomes, M. D. (2004). Understanding the historical and cultural influences that shape generations. In M. D. Coomes & R. DeBard (Eds.), *Serving the Millennial generation. New Directions for Student Services*, 106 (pp. 17-31). San Francisco: Jossey-Bass.
- Coomes, M. D., & DeBard, R. (2004) A generational approach to understanding students. In M. D. Coomes & R. DeBard (Eds.), *Serving the Millennial generation. New Directions for Student Services*, 106 (pp. 5-16). San Francisco: Jossey-Bass.
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3-21.
- Côté, J. E. (1984). *The identity crisis: A formulation and empirical test of Erikson's theory of ego identity formation*. Unpublished doctoral dissertation. York University, Toronto.
- Côté, J. E., & Levine, C. (1997). Student motivations, learning environments, and human capital acquisition: Toward an integrated paradigm of students development. *Journal of College Student Development*, 38(3), 229-243.
- Côté, J. E., & Levine, C. G. (2000). Attitude versus aptitude: Is intelligence of motivation more important for positive higher-educational outcomes? *Journal of Adolescent Research*, 15(1), 58-80.

- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 209-240). Thousand Oaks, CA: Sage Publications.
- Cross, K. P. (1998). Why learning communities? Why now? *About Campus*, 3(3), 4-11.
- Dabney, D. A., Green, L., & Topalli, V. (2006). Freshmen learning communities in criminology and criminal justice: An effective tool for enhancing student recruitment and learning outcomes. *Journal of Criminal Justice Education*, 17(1), 44-68.
- DeVellis, R. F. (2003). *Scale development: Theory and applications* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Engel, M. (2005). Achieving narrative flow: Pre-medical education as an essential chapter of a physician's story. *Journal of Medical Humanities*, 26, 39-51.
- Enhancing the student experience task force. (2006). *Enhancing the student experience task force report*. Retrieved June 4, 2006, from http://strategicpositioning.msu.edu/documents/BbDImperative1_002.pdf
- Field, K. (2005a, September 30). Education department panel will develop a 'National Strategy' for colleges. *Chronicle of Higher Education*. Retrieved December 9, 2005, from <http://chronicle.com/weekly/v52/i06/06a02902.htm>
- Field, K. (2005b, October 14). Educators cast a wary eye at U.S. panel. *Chronicle of Higher Education*. Retrieved December 9, 2005, from <http://chronicle.com/weekly/v52/i08/08a00101.htm>
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction* (2nd ed.). New York: Addison Wesley Longman.
- Glicksman, G. (2000). "It's déjà vu all over again!" An advisor reflects on pre-medical syndrome and on the pre-medical stereotype. *The Advisor*, 20(3), 15-21.
- Hamrick, F. A., & Stage, F. K. (2004). College predisposition at high-minority, low-income schools. *The Review of Higher Education*, 27(2), 151-168.
- Hart, P. D. (2004). *Summary of existing research on attitudes toward liberal education outcomes for the Association of America Colleges and Universities*. Washington, DC: Peter D. Hart Research Associates. Retrieved December 2, 2005, from <http://aacu.org/advocacy/pdfs/HartExistingResearchReport.pdf>

- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Edgewood Cliffs, NJ: Prentice-Hall.
- Horowitz, H. L. (1987). *Campus life: Undergraduate cultures from the end of the eighteenth century to the present*. New York: Alfred A. Knopf.
- Hossler, D., Schmit, J., & Vesper, N. (1999). *Going to college: How social, economic, and educational factors influence the decisions students make*. Baltimore, MD: The Johns Hopkins University Press.
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Vintage Books.
- Howe, N., & Strauss, W. (2003). *Millennials go to college*. Great Falls, VA: American Association of Collegiate Registrars and Admissions Officers and LifeCourse Associates.
- Howell, K. M. (2006). *An examination of the relationships between participation in academic-centered peer interactions and students' achievement and retention in mathematics-based majors*. Unpublished doctoral dissertation, University of Maryland, College Park.
- Inkelas, K. K., Brower, A. M., Crawford, S., Hummel, M., Pope, D., & Zeller, W. J. (2004). *National study of living-learning programs: 2004 report of findings*. Retrieved June 14, 2006, from <http://www.livelearnstudy.net/studyresults.html>
- Inkelas, K. K., & Weisman, J. L. (2003). Different by design: An examination of student outcomes among participants in three types of living-learning programs. *Journal of College Student Development*, 44(3), 335-368.
- Isaac, S., & Michael, W. B. (1995). *Handbook in research and evaluation for education and the behavioral sciences* (2nd ed.). San Diego, CA: EdITS.
- Johnson, J., & Duffett, A. (2005). *Life after high school: Young people talk about their hopes and prospects*. New York: Public Agenda.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Jones, P. R., Levine Laufgraben, J., & Morris, N. (2006). Developing an empirically based typology of attitudes of entering students toward participation in learning communities. *Assessment & Evaluation in Higher Education*, 31(3), 249-265.
- Jones, S. R. (2002). (Re)writing the word: Methodological strategies and issues in qualitative research. *Journal of College Student Development*, 43(4), 461-473.

- Katchadourian, H., & Boli, J. (1985). *Careerism and intellectualism among college students*. San Francisco: Jossey-Bass.
- Keeling, R. P. (Ed.). (2004). *Learning reconsidered: A campus-wide focus on the student experience*. Washington, DC: National Association of Student Personnel Administrators (NASPA) and American College Personnel Association (ACPA).
- Kelsey, K. D., & Sexten, A. (2003). A quasi-experiment of a residential learning community for College of Agriculture freshmen. *Journal of Southern Agricultural Education Research*, 52(1), 20-32.
- Kuh, G. D., Hu, S., & Vesper, N. (2000). "They shall be known by what they do": An activities-based typology of college students. *Journal of College Student Development*, 41(2), 228-244.
- Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2005a). *Assessing conditions to enhance educational effectiveness: The inventory for student engagement and success*. San Francisco: Jossey-Bass.
- Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J. & Associates. (2005b). *Student success in college: Creating conditions that matter*. San Francisco: Jossey-Bass.
- Levine Laufgraben, J. (2005). Learning communities. In M. L. Upcraft, J. N. Gardner, B. O. Barefoot, & Associates, *Challenging & supporting the first-year student: A handbook for improving the first year of college* (pp. 371-390). San Francisco: Jossey-Bass.
- Lewin, K. (1935). *A dynamic theory of personality*. New York: McGraw-Hill.
- Light, J. (2005). Developing and assessing a holistic living-learning community for engineering and science freshmen. Unpublished doctoral dissertation, Washington State University.
- Lowery, J. W. (2001). The Millennials come to college: John Wesley Lowery talks with William Strauss. *About Campus*, 6(3), 6-12.
- Luo, J., & Jamieson-Drake, D. (2004, June). *Linking student precollege characteristics to college development outcomes: The search for a meaningful way to inform institutional practice and policy*. Paper presented at the 44th Annual Forum of the Association for Institutional Research, Boston, MA.
- Lyman Briggs School. (2006). *About LBS*. Retrieved April 8, 2007, from: http://www.lymanbriggs.msu.edu/about_lbs/index.html
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

- Miller, T. E., Bender, B. E., Schuh, J. H., & Associates. (2005). *Promoting reasonable expectations: Aligning student and institutional views of the college experience*. San Francisco: Jossey-Bass.
- Morse, J. M. (2003). Principles of mixed methods and multimethod research design. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 189-208). Thousand Oaks, CA: Sage.
- MSU Board of Trustees. (2005). *Boldness by design*. Retrieved June 4, 2006, from <http://strategicpositioning.msu.edu/>
- Norusis, M. J. (2003). *SPSS 12.0 statistical procedures companion*. Upper Saddle River, NJ: Prentice Hall.
- Office of Admissions, Michigan State University. (2006). *The class of 2006*. East Lansing, MI: Author.
- Office of Planning and Budgets, Michigan State University. (2006). *Entering class and student profile reports*. Retrieved October 7, 2006, from <http://opbweb.opb.msu.edu/>
- Office of the Secretary, Department of Education. (2005a, September 29). A national dialogue: The secretary of education's commission on the future of higher education; Notice of establishment. *Federal Register*, 70(188). Retrieved December 9, 2005, from <http://www.ed.gov/legislation/FedRegister/other/2005-3/092905b.pdf>
- Office of the Secretary, Department of Education. (2005b, November 9). A national dialogue: The secretary of education's commission on the future of higher education; Notice of meeting. *Federal Register*, 70(216). Retrieved December 9, 2005, from <http://www.ed.gov/legislation/FedRegister/other/2005-4/110905b.pdf>
- Onwuegbuzie, A. J., & Teddlie, C. (2003). A framework for analyzing data in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 351-383). Thousand Oaks, CA: Sage.
- Ortiz, A. M. (2003). The ethnographic interview. In F. K. Stage & K. Manning (Eds.), *Research in the college context: Approaches and methods* (pp. 35-48). New York: Brunner-Routledge.
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students*. San Francisco: Jossey-Bass.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students, Volume 2*. San Francisco: Jossey-Bass.

- Perna, L. W. (2000). Racial and ethnic group differences in college enrollment decisions. In A. F. Cabrera & S. M. La Nasa (Eds.), *Understanding the college choice of disadvantaged students. New Directions for Institutional Research*, 107 (pp. 65-83). San Francisco: Jossey-Bass.
- Perry, W. G. (1999). *Forms of intellectual and ethical development in the college years: A scheme*. San Francisco: Jossey-Bass.
- Porter, S. R. (2004). Raising response rates: What works? In S. R. Porter (Ed.), *Overcoming survey research problems. New Directions for Institutional Research*, 121 (pp. 5-21). San Francisco: Jossey-Bass.
- Poulios, S. P. (2005). *Academic success in college general chemistry*. Unpublished doctoral dissertation, Michigan State University.
- Poindexter, S. (2003). The case for holistic learning. *Change*, 35(1), 24-30.
- Pryor, J. H., Hurtado, S., Saenz, V. B., Lindholm, J. A., Korn, W. S., & Mahoney, K. M. (2005). *The American freshman: National norms for fall 2005*. Los Angeles: Higher Education Research Institute, UCLA.
- Renn, K. A. (2003). Understanding the identities of mixed race college students through a developmental ecology lens. *Journal of College Student Development*, 44, 383-403.
- Renn, K. A. (2004). *Mixed race students in college: The ecology of race, identity, and community*. Albany: State University of New York Press.
- Renn, K. A., & Arnold, K. D. (2003). Reconceptualizing research on college student peer culture. *Journal of Higher Education*, 74, 261-291.
- Rocco, T. S., Bliss, L. A., Gallagher, S., & Perez-Prado, A. (2003). Taking the next step: Mixed methods research in organizational systems. *Information Technology, Learning, and Performance Journal*, 21(1), 19-29.
- Sanford, N. (1962). Developmental status of the entering freshman. In N. Sanford (Ed.), *The American college: A psychological and social interpretation of the higher learning* (pp. 253-282). New York: John Wiley & Sons.
- Sanford, N. (1967). *Where colleges fail: A study of the student as a person*. San Francisco: Jossey Bass.
- Sax, L. J. (2003). Our incoming students: What are they like? *About Campus*, 8(3), 15-20.

- Schneider, B., & Stevenson, D. (1999). *The ambitious generation: America's teenagers, motivated but directionless*. New Haven, CT: Yale University Press.
- Schoem, D. (2002). Transforming undergraduate education: Moving beyond distinct undergraduate initiatives. *Change*, 34(6), 50-55.
- Shapiro, N. S., & Levine, J. H. (1999). *Creating learning communities: A practical guide to wining, support, organizing for change, and implementing programs*. San Francisco: Jossey-Bass.
- Simmons, A. (2005). Beyond the premedical syndrome: Premedical student attitudes towards liberal education and implications for advising. *NACADA Journal*, 25(1), 64-73.
- Smith, B. L., MacGregor, J., Matthews, R. S., & Gabelnick, F. (2004). *Learning communities: Reforming undergraduate education*. San Francisco: Jossey-Bass.
- Stark, J. S., & Lattuca, L. R. (1997). *Shaping the college curriculum: Academic plans in action*. Boston, MA: Allyn and Bacon.
- Start, J. S., Lowther, M. A., Shaw, K. M., & Sossen, P. L. (1991). *Student goals exploration user's manual: Institutional research guide*. Ann Arbor, MI: National Center for Research to Improve Postsecondary Teaching and Learning.
- Stark, J. S., Shaw, K. M., & Lowther, M. A. (1989). *Student goals for college and courses: A missing link in assessing and improving academic achievement* (ASHE-ERIC Higher Education Report No. 6). Washington, DC: George Washington University and Association for the Study of Higher Education.
- Steffes, J. S. (2004). Creating powerful learning environments beyond the classroom. *Change*, 36(3), 46-50.
- Strauss, W., & Howe, N. (1991). *Generations: The history of American's future, 1584-2069*. New York: Morrow.
- Tagg, J. (2004). Alignment for learning: Reorganizing classrooms and campuses. *About Campus*, 9(2), 8-18.
- Talburt, S., & Boyles, D. (2005). Reconsidering learning communities: Expanding the discourse by challenging the discourse. *The Journal of General Education*, 54(3), 209-236.
- Taylor, K., Moore, W. S., MacGregor, J., & Lindblad, J. (2003). *Learning community research and assessment: What we know now*. Olympia, WA: Washington Center for Improving the Quality of Undergraduate Education.

- Teddlie, C., & Tashakkori, A. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 3-50). Thousand Oaks, CA: Sage.
- Terenzini, P. T., & Reason, R. D. (2005, November). *Parsing the first year of college: A conceptual framework for studying college impacts*. Paper presented at the meeting of the Association for the Study of Higher Education, Philadelphia, PA.
- Thomson, G. (2006, March). *New directions in the assessment of student development and proficiencies*. Paper presented at the meeting of the American College Personnel Association, Indianapolis, IN.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: The University of Chicago Press.
- Umbach, P. D. (2005). Getting back to the basics of survey research. In P. D. Umbach (Ed.), *Survey research: Emerging issues. New Directions for Institutional Research, 127* (pp. 91-100). San Francisco: Jossey-Bass.
- Weidman, J. C. (1989). Undergraduate socialization: A conceptual approach. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research, Volume 5* (pp. 289-322). New York: Agathon.
- Yankelovich, D. (1972). *Changing values on campus: Political and personal values of today's college students*. New York: Washington Square Press.

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 02956 1044